Understanding what Motivates Entrepreneurs to Engage and Sustain Engagement with Learning Networks over Time: a Longitudinal Study

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Prepared under the supervision of Prof. Bill O'Gorman

Dedication

To my parents Andrew and Diana O'Neill

And

To the memory of my Nanny O'Neill

Declaration

I hereby certify that this material, which I now submit for assessment, is entirely my own work and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.

Signed: _____

Date: _____

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I would like to acknowledge the support of the Irish Research Council and INTERREG IVA for providing the funding for this work to be completed. The Sustainable Learning Networks in Ireland and Wales (SLNIW[1]) project was the setting of the research and I need to highlight my appreciation of the exceptional team involved in that project and most importantly, I need to thank the SLNIW participants whom I studied for almost three years. Without their involvement, there would be no research to report!! Thank you.

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Understanding what Motivates Entrepreneurs to Engage and Sustain Engagement with Learning Networks over Time: a Longitudinal Study

Aisling O'Neill

Learning networks represent a highly effective and efficient means of enterprise development for entrepreneurs (Bessant and Tsekouras, 2001). The highly contextual, peer-to-peer nature of the learning that occurs in learning networks makes them a valuable vehicle for the development of indigenous enterprises. Prior research highlighted the need to examine the developmental dynamics of networks over time (Hoang and Antoncic, 2003; Provan, Fish and Sydow, 2007 and; Jack, Drakopoulou Dodd and Anderson, 2008) and the examination of gender-specific networks of entrepreneurs (Greve and Salaff, 2003; Hanson and Blake, 2009; Hampton, Cooper and McGowan, 2009). This research addresses these deficiencies by exploring what motivates entrepreneurs to engage and sustain engagement with learning networks over time. Utilising a longitudinal mixed method research design, six learning networks of entrepreneurs in Ireland and Wales were examined over a period of almost three years. Differences were examined across female, male and mixed-gender networks; using a series of data points: 350 hours of observations, 37 in-depth interviews, 46 personality inventories and 400 questionnaires and evaluations. This research identified a number of factors that impact sustained engagement with networks including: participant commitment to network purpose, valuable network engagement, high accountability between members, a positive network environment of openness and sharing, the presence of network champions and critically, routine structures and processes within network operations. In Ireland the networks continue to meet almost six years later as an amalgamated network; whereas, the networks in Wales ceased to meet after two years. This study contributes to existing research on the creation, development and sustaining of networks, to our knowledge of learning networks, and our understanding of what motivates entrepreneurs to engage with and remain engaged with networks over time. The research has implications for academics, consultants, practitioners and enterprise support agencies interested in setting up sustainable, self-propagating learning networks.

Research Dissemination and Publications

Conference Papers:

1. O'Neill, A. and O'Gorman, B. (2014) 'Should I stay or should I go? A longitudinal study to understand entrepreneurs' motivations to engage with and remain engaged with learning networks', presented at *GW October 2014*, Washington DC.

2. O'Neill, A and O'Gorman, B. (2013) "Longitudinal Research: Depth, Meaning and Understanding of Business Learning Networks through Mixed Method Design", *ISBE Conference – Putting research into policy and practice*, Cardiff, Wales.

3. Brett, V., O'Neill, A., O' Gorman, B., Fuller-Love, N. (2012) Observing entrepreneurs in learning networks: reflecting on the relationship between the researcher and the participants. *15th Uddevalla Symposium*, University of Algarve, Portugal.

4. O'Neill, A. and O'Gorman, B., (2012) "Understanding Entrepreneurs' Motivations to Engage and Sustain Engagement with Learning Networks: a Longitudinal Study" IFSAM Conference – Management re-imagined, University of Limerick, Ireland.

5. O'Neill, A. and O'Gorman, B. (2012) "Understanding Conditions for Network Success: longitudinal study of six learning networks across South East Ireland and West Wales", *RENT Conference - Entrepreneurship and creation of wealth for economies, organisations and people,* Lyon, France.

6. O' Neill, A. and O' Gorman, B. (2011) Understanding entrepreneurs' motivations to disengage from networks. *IAM Conference 2011: Making a World of Difference: Nation Building and the Role of Management Education*. National College of Ireland, Dublin, Ireland.

7. Power, J., O'Neill, A, and O' Gorman, B. (2011) Examining the influence of network attractiveness and commitment on network performance. *40th Annual Conference Regional Science Association International (RSAI) UK and Ireland Section*. Cardiff.

8. O'Neill A. and O'Gorman, B. (2011) Understanding entrepreneurs' motivations for sustaining engagement with learning networks: a longitudinal study. *RENT XXV – Research in Entrepreneurship and Small Business – 25th Anniversary Conference*. Bodø, Norway.

9. O'Neill, A., O'Gorman, B. and Fuller-Love, N. (2010) Initial motivations for entrepreneurs to join learning networks, *Proceedings from the 33rd Annual Institute for Small Business and Entrepreneurship (ISBE) Conference*, London.

Journal Article:

10. Brett, V., O'Neill, A., & O'Gorman, B. (2014). Observing entrepreneurs in networks: reflecting on the relationship between the researcher and the participants. *International Journal of Entrepreneurship and Small Business 15*, *21*(3), 275-287.

Book:

11. O'Gorman, B., and Fuller-love, N., (2011), Eds. Learning by Linking: Establishing Sustainable Business Learning Networks, Oak Tree Press, Ireland (author of some chapters and co-author of others).

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Chapter 1

Introduction and Background

1.0.   Motivation

This thesis explores the motivations of entrepreneurs to engage and sustain engagement with learning networks over time. For the purposes of this research, learning networks are understood as small groups of entrepreneurs coming together with learning as the key focus to develop their businesses with the help of the network (Alasoini, 2008). The development of indigenous[2] enterprise continues to be a popular topic for researchers and policy makers and learning networks represent an efficient means of enterprise development. Nations, and particularly regions, are endeavouring to create independent economic stability and fostering indigenous enterprise is integral to this process. Learning networks represent not only a cost effective means of enterprise development. They are also a highly contextual, efficient and credible means of learning for the entrepreneurs involved.

For the purposes of this study, an entrepreneur is defined as: *an "individual" who, influenced by their personality and values, is inclined toward the pursuit of the initiation and development of an entrepreneurial organisation for profit.* This definition was gleaned from the entrepreneurship literature which is explored in Chapter 2: Theoretical Framing in Section 2.2.1.: Defining Entrepreneurs.

The peer-to-peer learning context is particularly apt within the entrepreneurial context. Entrepreneurs find the experiences of other entrepreneurs to be the most credible source of actionable learning. As such, understanding the formation and development processes of learning networks is a fertile area of enquiry. This current research is specifically focussed upon the motivations of entrepreneurs to engage and sustain engagement with learning networks over time. Capturing the developmental dynamics of these structures represents a significant contribution to network theory.

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[2] For the purpose of this study, in line with the terminology utilised by Enterprise Ireland (see, for example, Enterprise Ireland's Strategy 2016, available at: https://www.enterprise-ireland.com/en/Publications/Reports-Published-Strategies/Strategy-2016.pdf) Irish indigenous enterprises refer to Irish-owned businesses. Thus, this is applied to the Welsh context also whereby Welsh indigenous enterprises refer to Welsh-owned businesses.

This current research was further designed to facilitate an examination of the role of gender in network development. This adds another layer of depth to the study, particularly given the dearth of research regarding the development of gender specific networks. Thus, the significance of the thorough examination of gender specific networks in this study contributes to network theory in a truly meaningful way.

1.1.   Background and Context

Ireland traditionally relied very heavily on Foreign Direct Investment (FDI) to develop its economy. In 2007, almost 1,000 foreign multinationals were in operation in Ireland, directly employing 153,000 people (Sweeney, 2008). At that point in time, unemployment in Ireland was at just 4.4% (CSO, 2010[3]). By 2008, with rising costs, many foreign owned companies elected to move their operations out of Ireland. The exit of these companies significantly contributed to the rising unemployment rate which increased dramatically reaching 14.2% in January 2012 (Government of Ireland, 2012).

As outlined in the Enterprise Strategy Group's 'Ahead of the Curve' report (2004) a large part of Ireland's economic growth and development was achieved from the amount of FDI in the country. It was the effect of these companies that masked how poorly the indigenous sector was truly performing. In 2002, the total stock of foreign direct investment in Ireland was $157 billion. This represents the second highest in the world in per capita terms. The main focus of these companies was to use Ireland as a manufacturing base leading to 95% of what was produced here being exported (Enterprise Strategy Group, 2004). This focus on production meant that very few of these organisations embedded their strategic operations in Ireland. Consequently, by 2008, with rising costs, Ireland had seen a mass exit of these production facilities. This resulted in a significant negative impact on the economic health of the country.

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[3] http://www.cso.ie/multiquicktables/quickTables.aspx?id=mum01

The exit of so many foreign-owned organisations highlighted the need for policy makers and implementers in Ireland to refocus on a critical ingredient of the national economy – indigenous industry. The indigenous industry base would need to be nurtured for job creation and sustainable development of the economy. In the 1990s, indigenous enterprises spent twice as much as a proportion of their output in the Irish economy as foreign enterprises in terms of materials, services and pay (O'Sullivan, 2000). Furthermore, by 2004, 80% of the Irish workforce was employed by the SME sector therefore emphasising the importance of indigenous enterprise in Ireland (Enterprise Strategy Group (ESG), 2004). This highlights that over a decade ago, this sector was already incredibly valuable to the Irish economy. The ESG report advocated fostering entrepreneurial attitudes and skills amongst the Irish population. Additionally, it encouraged the use of networking and clustering initiatives as a means of achieving this.

In 1998, O'Hearn had posed the question *'could an economy that depended so heavily on foreign capital ever achieve "development" in a more holistic and sustainable sense?'* (p. xi). O'Sullivan (2000) questioned the embeddedness of foreign enterprise in Ireland. She asserted that if these companies were not changing their patterns of behaviour, Ireland was experiencing the boom of a boom-bust cycle. The focus needed to be adjusted toward the indigenous enterprise base as the value of SMEs has been clearly identified with the economic development of regions in Europe (European Commission, 2010). Indeed, within European policy, the Commission has recommended fostering innovation-friendly business environments and regional clusters to promote the growth of the SME sector.

Entrepreneurship helps economic growth and development and creates new jobs; thus playing a key role in regional development in particular (Fitzsimons and O'Gorman, 2008). Entrepreneurship also generates economic growth by driving innovation and technical change (Schumpeter, 1934, cited in Shane, Locke and Collins, 2003). Therefore, it is important that firms with high growth expectations be supported and nurtured in order to realise their potential, to build the Irish economy to be a sustainable one of solid indigenous enterprises. With less focus on foreign-owned

enterprise, and more on Irish businesses, Ireland's economy could achieve truly sustainable development (O'Hearn, 1998).

The impact of the boom of the Celtic tiger to the bust of the recession which began in 2008/2009 was profound in Ireland. It resulted in a 104% increase in unemployment between the first quarter of 2008 and the first quarter of 2009 (Ruhs and Quinn, 2009). By 2012, employment in Irish SMEs was at 75% of the 2007 level (Government of Ireland, 2012). This current research was conducted between 2009 and 2012 which were particularly challenging years for business. Emerging from the Business in Ireland report (Government of Ireland, 2012), the average number of businesses surviving to between four and five years in Ireland was approximately 50%. In the context of this current research, only two of the businesses involved with the networks under study ceased trading in this time. This represents a business survival rate of 96% amongst network participants. This is almost double the national average. This suggests that networks may be instrumental in supporting the sustainable development of businesses or that businesses involved in networks have a higher likelihood of survival.

A barrier to the development of an entrepreneurial environment in Ireland noted in the GEM Ireland report (Fitzsimons, O'Gorman and Roche, 2002) was the shortage of managers with experience of growing international business. With the threat from globalisation upon the enterprises of Ireland, this means there is a need to address their ability to grow their businesses domestically and internationally. The Enterprise Strategy Group (2004) recommended business networks as a way forward for indigenous companies. Business networks provide many benefits to members including (i) shared costs and risks, (ii) enhanced learning, and (iii) development of market focus and platforms for industry. InterTradeIreland (Hunt, Doyle, McDermott and McCormack, 2006) concurred with these advantages while adding that networks can help firms achieve critical mass. This enables them to compete in larger and more diverse markets. A key to developing the competitiveness of Irish firms is the cultivation of innovation within them. In 2011, InterTradeIreland published a second report on Business Networks on the Island of Ireland which outlined the increased engagement by indigenous Irish companies with networks. It also highlighted the need

for network support to continue and take on board the developments in network research in the design of future networks. As business networks are facilitators of innovation within SMEs, they represent an attractive mechanism for research and policy to focus on to support the development of the indigenous enterprise base.

In order to foster entrepreneurship within indigenous enterprises in regional economies, it is apt that a sustainable model for the development of enterprises be devised. If regional development stakeholders (academics, policy makers, enterprise support agencies, local government, and practitioners) can understand what motivates entrepreneurs to engage with networks. And more importantly if they can understand how these motivations change over time, either encouraging or discouraging entrepreneurs to remain in or disengage from networks, a more sustainable model of networking could possibly be developed. Such sustainable networks would provide for the support and development of enterprises. This, in turn, will create more profitable and sustainable indigenous enterprises which are renowned for their expenditure within local economies (twice the level of foreign-owned organisations) leading to sustainable regional economies (O'Sullivan, 2000).

The next section of this chapter outlines the proposition of this thesis, highlighting the critical areas which will be addressed by this research.

1.2. Proposition

The proposition of this thesis is that with the right set of conditions and support, learning networks can provide an ideal environment where enterprise development can occur. Entrepreneurs can develop their businesses through learning networks in a bid to build and support sustainable indigenous enterprises. Integral to learning network development, is understanding the motivations of entrepreneurs to engage and sustain engagement with these structures. As such, learning networks can be designed to ensure they are attractive to potential participants in order to ensure their motivation to engage and sustain engagement with the learning networks.

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1.3.   Research Questions

This current research is concerned with understanding what motivates entrepreneurs to engage and sustain engagement with learning networks over time. This is important as learning networks represent an efficient and cost-effective means of enterprise development. Thus, understanding the motivations of the participants facilitates the design of effective and sustainable networks.

This is addressed via the research questions outlined in Table 1.1:

Research Question	Rationale
RQ1 – What motivates entrepreneurs to engage with learning networks?	Understanding the initial motivations of entrepreneurs to engage with learning networks will assist in identifying the critical components to attract participants.
RQ2 – What motivates entrepreneurs to sustain engagement with learning networks?	The heart of this research is to understand what motivates entrepreneurs to sustain engagement with networks over time. The time devoted to the development of relationships within learning networks is significant. Thus, the value the network provides over time to sustain the engagement of participants needs to be examined. There exists a significant gap in the literature with regard to the changing states of networks over time. Thus, examining networks longitudinally, as this study does, captures the dynamic nature of networks.
RQ3 – What motivates entrepreneurs to disengage with learning networks?	Understanding what factors cause entrepreneurs to disengage with networks will outline what should be avoided in the development of networks.
RQ4 – Are there differences across gender and culture in the motivations of entrepreneurs to engage and remain engaged with learning networks?	Network development in the context of gender requires attention within the literature. Specifically around the different ways that men and women form and develop their networks. Similarly, examining two different regions to investigate if differences occur across cultures in network development will provide for richer research results. The research design of this current study facilitates gender and culture comparisons to be drawn.

Table 1.1.: The Research Questions (Source: current research)

Using a longitudinal mixed methodology which heavily employed qualitative techniques, answers to these questions were sought in order to provide for a rich understanding of entrepreneurs' motivations at different stages throughout a 34 month period of network involvement. The research design was highly intense and required the author to embed herself in the networks in order to truly appreciate the networks dynamics at play. A number of different research techniques were employed and the resulting data was collected:

- 350 hours of direct participant observation data;

- 104 initial interviews with participants;

- 19 exit interviews (14 phone interviews with those participants who had limited engagement with the networks and 5 in-depth interviews with participants who elected to withdraw after a significant period of engagement)

- 32 in-depth interviews with participants at two time points (to capture the dynamic nature of motivation for engagement);

- 46 personality inventories completed by participants;

- 170 questionnaires collected at 6-monthly intervals;

- 223 monthly evaluation forms completed by participants.

The population of the study were the participants of six learning networks established by the Sustainable Learning Networks in Ireland and Wales (SLNIW) project (for detailed explanation of the project, see: Section 1.5).

The next section presents the Conceptual Framework of the current study.

1.4. Conceptual Framework

The conceptual framework of this current research, presented in Figure 1.1, depicts the entrepreneur, networks and the motivation of the entrepreneur to engage with networks over time; these represent the key constructs initially feeding into this research.
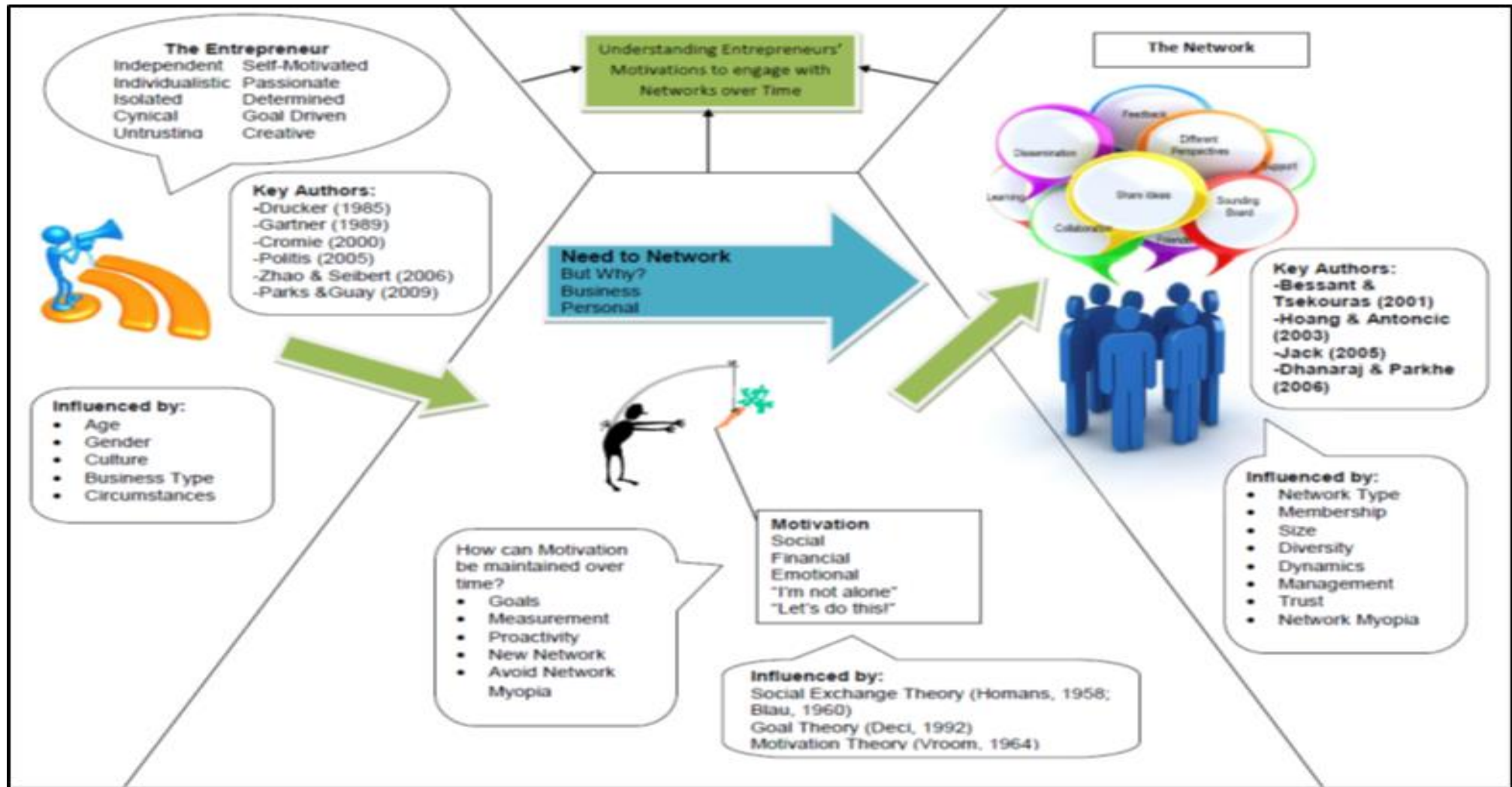
Fig. 1.1: Conceptual Framework (Source: current research)

Entrepreneurship literature is drawn upon to examine the definition of the entrepreneur within the fields of social psychology and personality in order to ascertain characteristics common to entrepreneurs that influence their behaviour. Entrepreneurs are the research subjects under examination in this current research and as such it is important that the theoretical underpinnings of entrepreneurship literature be explored.

Network theory highlights several advantages that can be attained by entrepreneurs through networking while also highlighting barriers to networking. Many factors have been reported to impact the manner through which networks work such as the size and membership of the networks and the extent of relationships formed in the networks. These variables have been derived from network theory as well as from the researcher's own observations of networks at work.

The key construct under examination in this study is the *motivation* of the entrepreneur to engage with the network and to understand how these motivations *change over time*. Basic theories of motivation along with goal theory and social exchange theory are addressed in the literature review to ascertain how motivation occurs in an individual and how that changes: for example, an individual with the initial goal of financial gain is motivated in a very different way to the individual with the goal of social gain but what is key is to understand how those motivations changed over time.

Within the context of this current research and in order to address the research questions, participants of six learning networks of entrepreneurs were studied longitudinally in order to gain an understanding of their motivations to engage and sustain engagement with networks over time. This was a mixed-method longitudinal study which incorporated both qualitative and quantitative research tools to ensure a significant depth of understanding of the motivation construct over time. These networks were part of the SLNIW project, described in detail in Section 1.5 as this represents the research context.

1.5.   Research Context: The SLNIW Project

The Sustainable Learning Networks in Ireland and Wales (SLNIW) project began in November 2008. The SLNIW project was part funded by the European Regional Development Fund (ERDF) through the INTERREG IVA Ireland-Wales programme 2007-2013. The Ireland-Wales Programme was part of the Strand A Cross-border Programmes, concentrating on co-operation between adjacent border regions to promote integrated regional development through shared strategies. The SLNIW project was focussed on increasing the innovative and creative capacities of entrepreneurs of indigenous enterprises from the regional economies of South East Ireland and West Wales. This was achieved through the development of six learning networks of entrepreneurs across the two regions. These networks were to be self-directed, self-perpetuating, self-facilitating learning networks of entrepreneurs focussed around innovative and creative means of business development. The research team conducted extensive research into network theory and practice to design the programme to be employed for the SLNIW networks. The author's research scholarship provided her an important role on the SLNIW research team resulting in maximum exposure and input into the networks' formation and development.

The network composition was such that in each region there was one female network, one male network and one mixed gender network. This allowed the research team to observe the formation and development dynamics of networks as influenced by gender composition. The networks ranged in size from 13 to 20 participants. There were a number of criteria that participants had to meet to become involved with the networks. They needed to:

- Be an owner/manager of an indigenous SME or micro-enterprise based in South East Ireland or West Wales;

- Be in business at least three years;

- Employ at least one person other than themselves, and;

- Demonstrate a clear desire to grow their businesses.

<div align="right">(O'Gorman and Fuller-Love, 2011)</div>

These selection criteria were devised by the SLNIW research team to ensure that the businesses of the entrepreneurs participating in the networks were sufficiently established to enable their involvement. For example, if they have no employees, the likelihood is that it will be more difficult for them to attend meetings. Similarly, the requirement that they were established for a minimum of three years meant that their businesses had already passed through the 'critical survival phase' and were more likely to survive as likelihood of survival increases with time[4].

The networks were designed by the SLNIW research team to promote self-direction and sustainability. Figure 1.2 depicts the formation and developmental processes of the networks:

Induction Phase- 5 facilitated meetings   Observed Self-Facilitation Phase - 11 meetings   Complete Network Independence

Fig.1.2: SLNIW Network Formation and Development Process (Source: current research)

All networks went through an introductory facilitated stage for the first five meetings whereby a member of the SLNIW research team facilitated them through a number of skills identified as important for the development of networks. These were: (i) innovation and creativity, (ii) team building and group dynamics, (iii) communication and managing conflict, (iv) managing change and (v) sustainability of the networks. Figure 1.3 outlines each of these sessions including: (a) the aim of the session, (b) the format of the session and (c) the result of the session. The induction period was important for the acceleration of trust formation among participants and in order to begin the networking process.

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[4] The Small Business Association assert that a firm's probability of survival increases with age. See: https://www.sba.gov/sites/default/files/FAQ_Sept_2012.pdf

Innovation and Creativity

- Aim - Opportunity to meet network participants and equip participants with innovative and creative thinking skills
- Format- Interactive and innovative workshop delivered by a network professional where networks worked together within their own networks; initiating relationship development
- Result - Successful in starting the networking process; however feedback was more positive in Ireland than in Wales

Team Building and Group Dynamics

- Aim - Fostering understanding of group dynamics within the networks
- Format - Full day event hosted in team building centres with discussion of participants' Belbin roles and the impact of their roles within their network
- Result - Very successful day, solidifying relationships and building trust between participants in attendance; however, attendance rates were disappointing and so events such as this should be a compulsory component in the development of networks

Communication and Managing Conflict

- Aim - Introduce communication and conflict management skills to participants as they continue to develop relationships with their peers in the networks
- Format - Different in Ireland and Wales; In both countries, communication and conflict management skills were addressed; Irish networks engaged in a formal facilitated network session to begin the networking process
- Result - Clearer understanding of communication and conflict within the networks and in Ireland, the beginning of the formal networking process

Managing Change

- Aim - Equip participants with skills for managing change within and outside their networks with an emphasis on the change they would experience moving into the self-facilitating stage of the networks
- Format - Interactive workshop, divided in Ireland between skills building and formal networking
- Result - Preparation of participants to become self-facilitating

Sustainability of the Networks

- Aim - Discussion on processes for network sustainability
- Format - Interactive discussion facilitated by a member of the SLNIW team on different formats for networking
- Result - In most cases, processes were put in place, agendas and rotas were set for chairing meetings and taking minutes.

Fig. 1.3: SLNIW Skill Building Sessions (Source: O'Gorman and Fuller-Love, 2011)

The SLNIW *research* team consisted of four post-doctoral researchers (two in Ireland and two in Wales) and two research assistants (one in Ireland and one in Wales) as well as the author who was also a research assistant. The research team were responsible for designing the network programme, outlining the selection criteria for participants, recruiting the participants and facilitating the induction phase of network meetings. Each member of the research team facilitated one learning network. In the case of the author, she facilitated the mixed network in Ireland. Alongside these activities, the research team conducted significant data collection and utilised a number of instruments including: 6-monthly questionnaires, monthly evaluation forms and observation reports. Given the author's role on the research team, she was able to include questions for her PhD study within these tools being utilised for the project itself. This meant that all the work conducted by the author as a research assistant on the SLNIW project was highly relevant and contributed significant value to the PhD study.

Network observations were an incredibly important research method for capturing network dynamics. The network facilitator did not observe the network they had facilitated. This was in order to minimise observer interaction with the network. Thus, the author did not observe the mixed network in Ireland after the induction period. However, after each network meeting, the research team met to discuss the observations and ensure clarity in what was observed. This allowed the author to maintain closeness to the data being collected.

After the facilitated induction period, the networks then became self-facilitating and continued to be observed monthly for almost a year before the SLNIW team completed the observation phase of the research. At this point, the networks were completely independent. Subsequently, after six months of independent networking, the author approached the networks to return for another period of observation over the course of six months, resulting in the last observation taking place over two years after network formation.

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The author was drawn to the SLNIW project due to the practical nature of the research being conducted through the project. The author's research is significantly influenced by pragmatism and thus, the practical value of research to the real world is of the utmost importance. The SLNIW research context represented an ideal environment for the author to conduct her research as it enabled her to immerse herself in the networks, facilitating great depth of understanding. Thus, there was a natural fit between the researcher and the SLNIW project.

1.5.1. SLNIW Geographical Consideration

The SLNIW project covered two regional areas: South East Ireland and West Wales. However, the geographical spread of participants in Wales was significantly greater than in Ireland. Furthermore, the road network in South East Ireland is better developed than that in West Wales, making travel easier and facilitating shorter travel times. WIT's ArcLabs Research and Innovation Centre was chosen as the location for meetings to take place in Ireland. This was a relatively central hub. In Wales, however, the travel distances were far greater for participants and they were more dispersed than the Irish participants. Thus, they elected to vary meeting locations so the participants could share the travel burden. In hindsight, this arrangement of varying the locations of network meetings may have represented a deterrent to engagement. See Figures 1.4 and 1.5 for maps depicting the greatest travel times required for participants in each region.

Fig. 1.4: Longest distance and travel time to network meetings in Wales (Source: google maps)
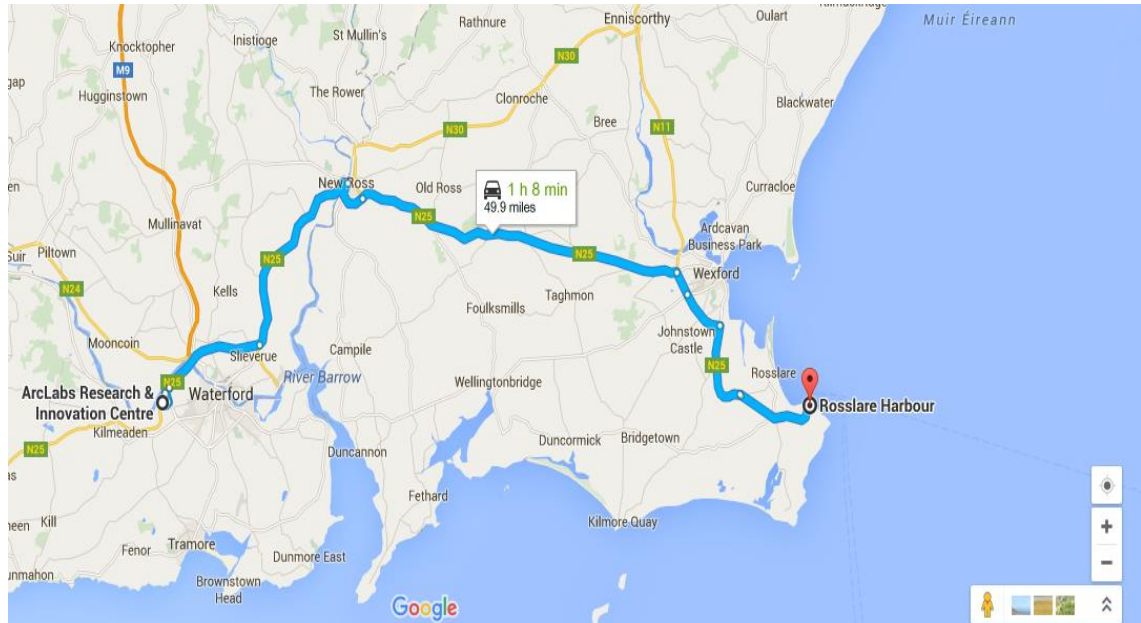
Fig. 1.5: Longest distance and travel time to network meetings in Ireland (source: google maps)

As demonstrated in Figures 1.4 and 1.5, the travel requirement for some participants in Wales was twice the amount of travel required from participants in Ireland. Figures 1.4 and 1.5 represent the participants who had the greatest distances to travel and thus, were in the minority. However, on average, while participants would travel approximately 30 minutes to meetings in South East Ireland, the average travel time to meetings in Wales would have been approximately an hour. This is a factor to be considered in examining motivations of participants to sustain engagement as the time commitment is significant when travel time doubles the amount of time required to attend a meeting.

1.6.   Contribution

Many authors within the field of network theory have called for studies to be conducted into the dynamic nature of networks (O'Donnell, Gilmore, Cummins and Carson, 2001; Hoang and Antoncic, 2003; Provan, Fish and Sydow, 2007 and; Jack, Drakopoulou Dodd and Anderson, 2008). The literature is populated primarily with cross-sectional studies which fail to capture the developmental dynamics of networks over time. Furthermore, qualitative studies are also rare (O'Donnell and Cummins, 1999; Jack, 2005). As such, while there is great breadth in the network research, the

real requirement is for deep understanding of network processes over time. This research answers the call from previous researchers to conduct longitudinal research in the network context. Using an intense mixed method longitudinal research design, the author has gained a thorough understanding of how networks develop over time. Specifically this current research focussed on the motivations of entrepreneurs to engage with networks over time. The research approach in itself has advanced the network literature in examining six networks longitudinally over the course of almost three years.

Another area of enquiry highlighted by researchers as lacking in the network domain, is in the examination of gender and networks whereby limited work has been conducted with regard to specifically examining the manner through which male and female networks develop (Greve and Salaff, 2003; Hanson and Blake, 2009 and; Hampton, Cooper and McGowan, 2009). This current research was conducted across six learning networks of entrepreneurs. There were two female networks, two male networks and two mixed gender groups. Examining these networks extensively within the longitudinal mixed method approach allowed for significant insights to be provided into the manner through which male and female networks differ. The female networks were highly effective. The male networks, however, were not. Even though the female networks worked well, there were many women opposed to the idea of single gender groups. As such, the conclusion drawn is that mixed groups are the most ideal composition in the development of learning networks. While this contribution would be expected, it is important, as the empirical research has been conducted to support this assertion.

In summary, the major contributions of this research to existing research are: (i) it furthers the understanding of the developmental dynamics of networks and (ii) it provides significant data regarding the impact of gender on network development. This research also provides significant knowledge for policy makers and implementers and enterprise support agencies as to how learning networks can support the development of entrepreneurs and their enterprises.

1.7. Thesis Structure

Figure 1.6 presents the breakdown of this thesis chapter by chapter outlining what is addressed in each section and particularly outlining where one can find the various Research Questions being put forward throughout.

Chapter 1 Introduction & Background	The Introduction outlines the motivation for the study as well as the background and context for the study. The research questions (**RQs**) are presented along with the contributions of the study.
Chapter 2 Theoretical Framing	Within this chapter the theoretical framework of the study is built drawing on theories of motivation, entrepreneurship, networks and community of practice theory
Chapter 3 Approaching Learning Network Research	This chapter outlines the author's research paradigm and research design. The research design was integral to addressing the research questions (**RQs**) emerging from the conceptual framework.
Chapter 4 Motivation to Engage	Chapter 4 presents the participant details as well as addressing the initial motivations of the entrepreneurs to engage. **RQ1** and **RQ4** addressed within this chapter
Chapter 5 Purpose, Structure and Processes	This chapter presents the findings in relation to network purpose and the role of structure and processes in motivating sustained engagement. These findings feed into all **RQs** of the study.
Chapter 6 Personality Characteristics	Chapter 6 presents findings related to personality characteristics and motivation to engage alongside loyalty and attraction measures.**RQ1, RQ2** and **RQ3** are all addressed.
Chapter 7 Network Environment	This chapter addresses the network environment and the conditions required in order for a learning network to be successful over time. This specifically addresses **RQ2** and **RQ4**.
Chapter 8 Bringing it all together - Summary of Findings	This chapter provides a concise overview of all the key findings (presented in Chapters 4 to 7) emerging from this current research.
Chapter 9 Blueprint for Enhancing Sustained Participant Engagement	This chapter discusses each of the research questions in turn, relating relevant theories and outlining the key contributions of this research.
Chapter 10 The Learning Network Research Journey	Within Chapter 10, a summary of the thesis is provided. The conclusions emerging from the research, limitations of the research, and recommendations for future work are presented.

Fig. 1.6 Thesis Outline (Source: current research)

1.8.   Summary

The purpose of this chapter was to present the backdrop to this research, providing the reader with an overview and justification for what is presented in this thesis. The background and context of this research were presented first to outline the position from which this research was approached. Following on from this, the proposition of the research and subsequent research questions were outlined. The research setting was described in detail as the research subjects in this current research were drawn from the participants of six learning networks established by the SLNIW project. Thus, it was important to provide an overview of the basis of that project and demonstrate where this current research sits within that framework. Finally, the conceptual framework, the contributions of this research and the structure of the thesis were presented. The next chapter provides the theoretical framework of this research, outlining the current knowledge deficiencies in the literature and highlighting the requirement for this current research to be conducted.

Chapter 2

Theoretical Framing

2.0 Introduction

The purpose of this chapter is to present a review of the specific fields of research feeding in to this work. This current research is focussed upon understanding the motivations of entrepreneurs to engage and sustain engagement with learning networks over time. Therefore, the chapter begins by addressing the construct of motivation and the various theories which are thought to impact motivated behaviour. The common characteristics of entrepreneurs are then explored and the various dynamics within this, specifically with regard to personality and motivated behaviour as well as looking at the role of learning networks in the entrepreneurial experience. Within the network literature, researchers have highlighted that what is required is an understanding of network dynamics over time. This current research aims to provide value in the presentation of research to address this need.

2.1 Motivation

Within this section, motivation of individuals and the different theories that impact them will be outlined. This section begins with an overview of Vroom's (1964) Valence Instrumentality Expectancy theory which forms the underpinning for the motivation theories which have followed. Within the field of motivation, values play a significant role in shaping the motivations and subsequently the behaviour of individuals. Goal theory and Social Exchange Theory are commonly studied theories of motivation and will be described and their relevance to this study outlined. The concept of self-efficacy is addressed as perceived self-efficacy may impact the motivations that drive individuals to behave in a certain manner. This will be addressed under motivation and cognition (see section 2.1.6). The aim of this section is to provide an overview of factors influencing how individuals are motivated so as to gain an appreciation of how to understand the processes of motivated behaviour of entrepreneurs in the context of learning network engagement.

2.1.1 VIE (Valence Instrumentality Expectancy) theory and Motivation theory

What forms the basis of this current research is why entrepreneurs behave the way they do in the context of engagement with learning networks over time. Vroom's work on motivation (1964) introduced the concept of VIE (Valence Instrumentality Expectancy) theory and how that forces (motivates) people to choose one behaviour over another in expectation of an outcome they believe to be positively valent. Valence, instrumentality and expectancy all refer to beliefs. Valence can be described as the affective orientations that individuals have towards outcomes; so, something that has positive valence for an individual represents an outcome that they believe they want (Vroom, 1964). For example, an entrepreneur may believe joining a network to have positive valence because they believe that they will make good contacts in that network. Instrumentality according to Vroom (1964) is a probability belief that links one outcome to another. Taking the previous example; a person may believe that the contacts they make in a network will be instrumental in growing their business. Expectancy refers to the strength of a person's belief that a certain outcome is possible (Vroom and Deci, 1992). Using the network example again; the expectancy belief that the entrepreneur will make ten good contacts may be very high while the expectancy belief that they will make a thousand good contacts may be significantly lower. It is the way in which valence, instrumentality and expectancy occur in an individual that creates the motivational force for them to choose to behave in one way over another (Vroom, 1964); in this example valence, instrumentality and expectancy interact to motivate the entrepreneur to choose to join a network over not joining a network for the expectancy that that action will be instrumental in making contacts and growing business which the entrepreneur believes to have positive valence for him/her.

Bandura (1977) expanded upon the theory of expectancy by differentiating between efficiency expectations and outcome expectations. The outcome expectation refers to the belief that a certain action will result in a certain outcome. Efficiency expectations however, relate to the individual's belief that they are capable of the action to achieve the outcome. In this respect, an individual may know what needs to be done to

achieve the outcome desired but may not be confident that they can behave accordingly.

Motivation consists of four key components as outlined by Locke (2000); these are needs, values, goals and emotions. Individuals are motivated to behave as they do as an interaction of these concepts. Therefore, an action that is considered in line with the values and goals of an individual will be employed over one that is not. Dependent upon the strength of the relevance of the action to those values and goals, individuals will exert effort accordingly and the persistence with which the action is carried out will again relate to how important that value and goal is to the individual. Emotions represent the psychosomatic form in which individuals experience their value judgements and to each emotion, there is an action link; for example, an individual who values honesty would feel the emotion of guilt after being dishonest. Needs drive the choice for the values individuals choose which in turn drives the choice for goals and subsequently for action. Therefore, when examining the motivations of individuals, it is important that all of these four components be addressed. The next section addresses the role of personality to motivation.

2.1.2 Motivation and Personality

Parks and Guay (2009) in their study of personality, values and motivations, reviewed the published works surrounding these themes in order to develop a series of propositions related to the inter-relationships between personality, values and motivation. They acknowledged the dynamic nature of personality constructs, though highlighted that evidence exists to support the relatively steady nature of these constructs and supports the development of certain generalisations around how they may impact human behaviour. For example, Conley (1985) conducted a study of personality in a group of 600 individuals over the course of 50 years. Participants in the study completed personality inventories at three different time points over the course of five decades. Naturally, by the third time point, a number of participants were deceased or failed to respond and as such, the number of individuals who completed the study at all three time points was 388. All participants in Conley's study were

adults and the study involved the completion of personality rating scales at three time points. The results of Conley's study indicated that there is stability in personality traits across adulthood making the personality construct sound for research on the impact of personality on motivated behaviour. This supports the hypotheses developed by Parks and Guay (2009) in their paper. In the context of this current research, entrepreneurs represent the subjects of this research. Parks and Guay (2009) surmised that individual attributes are likely to be observed with ease in the motivations of entrepreneurs due to the high level of autonomy that they hold over their work. These individuals do not experience constraints upon them in the same way that their staff would, for example. For this reason, entrepreneurs represent an ideal audience for the assessment of motivation as they are more likely to behave in line with their true motivations. Therefore, an understanding of the individual attributes of entrepreneurs and how these attributes drive entrepreneurs towards the goals they set and strive for themselves could lead to a clearer picture of entrepreneurial behaviour.

The personality characteristics that have been shown to impact motivational processes within individuals are those of (i) conscientiousness (the tendency to be organised, achievement-oriented, responsible etc) and (ii) emotional stability (self-confident, resilient, well-adjusted individuals). Conscientiousness was discovered to relate to a person's inclination to set goals and persevere with those goals once set and also have a positive effect on performance (Barrick, Mount and Strauss, 1993). Conscientiousness was also related to positive expectancy in a study by Gellatly (1996) where 117 individuals were asked to perform an everyday task in order for their personalities to be examined as opposed to examining their abilities and he found that personality; namely conscientiousness; impacted the way in which people approached the task. Conscientiousness can be broken down into the areas of dependability and achievement motivation where it is expected that entrepreneurs display high achievement motivation and are more motivated toward situations where they have control and responsibility over their performance. The area of dependability relates to an individual's preference for being organised, deliberate and methodical and inclination toward fulfilment of responsibilities (Zhao and Seibert, 2006). In their study, Zhao and Seibert (2006) conducted a meta-analysis of empirical studies of personality

traits of entrepreneurs and managers in order to determine what characteristics differentiate entrepreneurs from managers, as evidenced in available literature (after an extensive elimination process to ensure only studies that met the strict selection criteria for this paper, the meta-analysis was based on 23 empirical, statistically sound studies examining the personality constructs of entrepreneurs compared with managers). Conscientiousness was found to be the personality construct most indicative of entrepreneurial status in their analysis. Zhao and Seibert (2006) continued to define emotional stability through the characteristics of self-confidence and calmness in the face of stress. Emotional stability in relation to self-efficacy (confidence in one's own ability to achieve one's goals) beliefs was shown to impact motivation and performance levels for future action within individuals and entrepreneurs would be expected to have higher levels of emotional stability than their managerial counterparts. Trait anxiety, on the other hand, can inhibit an individual's motivation for a task when they are unable to overcome the negative emotions which lead to distraction, ultimately disabling them from achieving their goal and subsequently affecting their motivation for future action (Parks and Guay, 2009). It is the elements of conscientiousness and emotional stability which will be important to assess within this study as they relate so strongly to motivated behaviour, especially for entrepreneurs. Conscientiousness and emotional stability are two of the Big Five[5] factors to be examined within the International Personality Item Pool (IPIP) instrument to be administered to the research subjects as part of this study.

Researchers can assess individual values such as security, achievement, task-oriented, relationship-oriented, stimulation, hedonism, tradition and power and through an understanding of these values within individuals, predictions can be made as to what their goals and the valences of those goals would be (Bardi and Schwartz, 2003). Within expectancy theory, values are inherently related to valence (Feather, 1995). For example, an individual who valued security would place more positive valence (attractiveness) on the goal of securing a permanent job than would a person who valued freedom more and for whom the idea of permanency would hold little

[5] See section 2.2.4 (Entrepreneurship and Personality) for more detailed information regarding the Big Five personality markers

attractiveness (Parks and Guay, 2009). The self-concordance model of motivation holds that individuals are more likely to persevere at goals which are in keeping with their values, as determined by a longitudinal study of 169 students over the course of a semester whereby they identified ten goals at the beginning of the semester which they would like to achieve. Their progress and resulting effects were monitored at monthly intervals to reveal that those who were pursuing self-concordant goals persevered at the goals and as a result were more likely to achieve those goals (Sheldon and Elliot, 1999). Furthermore, these respondents enjoyed greater well-being as a result of pursuing these goals.

Individualistic theories of work motivation infer that individual's motivation comes from self-gratifying expectancy value calculations that stem from individual interests and needs, but also important to consider are the collectivist principles of motivation, specifically, identification within the group and group potency which can be thought of as a form of collective self-efficacy (Wegge, 2000). Wegge's study addressed the impact of participative group goal setting on group performance across 120 individuals (organised into 30 groups of four) and found this approach resulted in improved work motivation. Applying this theory in the context of this current research, allowing the networks to set their network's goals in a participatory manner, should result in increased work motivation toward those goals.

The next section addresses the theory of self-determination which represents another key construct within the field of motivation theory, and more specifically of goal theory.

2.1.3 Self-Determination Theory and Goal Theory

Self-determination theory as a theory of motivation, is concerned with understanding goal-directed behaviour and more specifically with understanding the three psychological needs of competence, relatedness and autonomy and how they interact to impact what goals an individual chooses to pursue and why they do so (Deci and Ryan, 2000). In the field of psychology research, a number of antecedents to motivated

behaviour have been identified and include an internal locus of control (Rotter, 1966), response-outcome dependence (Abramson, Seligman and Teasdale, 1978), self-efficacy (Bandura, 1977), high expectancy-valence products (Vroom, 1964) and difficult goals (Locke and Latham, 1990). Deci (1992) highlighted a limitation of these theories of motivation in the way that they view motivation as a singular concept, that it is there, or it is not, and that the only variable is the quantity of motivation the individual experiences. A specific distinction is drawn between motivated behaviour that is self-determined as opposed to controlled (Deci, 1992). Given the autonomous nature of the work of entrepreneurs, self-determination is highly applicable in the context of this current research.

When people are self-determined, they are 'acting as origins of their own behaviour, whereas when controlled, people are pawns to the coercive or seductive forces' (deCharm, 1968, cited in Deci, 1992, p.168). Several studies have shown the force of self-determination in individuals as it manifests in more creativity (Amabile, 1983), cognitive competence (Benware and Deci, 1984), higher satisfaction and trust (Deci, Connell and Ryan, 1989), and better health, both physical and psychological (Rodin and Langer, 1977). Self-determination theory is based around the three human needs of competence, relatedness and self-determination (Deci, 1992). Entrepreneurs by their very nature are self-determined and therefore, their motivations can be assessed under self-determination theory as an extension of goal theory.

The idea behind goal theory is that when a person is working toward a goal that is positively valent, the effort they exert in the attainment of that goal will be maximised and that this is what motivates people to behave in the manner that they do (Deci, 1992). Furthermore, Freitas and Higgins (2002) identified the heightened enjoyment individuals get when pursuing activities which are congruent to the achievement of their goals, promoting sustained engagement with these activities.

Eccles and Wigfield (2002) presented an overview of motivational beliefs, values and goals and presented goal theory as a theory focussed on individuals' reasons for engagement as their behaviour is intricately linked to goals that they have either

chosen or have had enforced upon them. Within the work of Parks and Guay (2009) they presented a model demonstrating the influence of personality and values on motivation (based upon a review of previous studies examining these constructs). They looked at motivation around the construct of goals as motivated behaviour is inherently goal-driven (Austin and Vancouver, 1996). The goal themes which were revealed as key in Parks and Guay's (2009) study were the areas of goal content and goal striving. Goal content, very simply, refers to the actual content of the goal. Goal striving refers to the lengths that individuals will go to in order to achieve the goal they have set. These concepts inherently affect the behaviour of individuals as they firstly, select which goals are important and meaningful for them and secondly, as they strive to achieve these goals.

Grant and Dweck (2003) presented conclusions based on five studies that they conducted surrounding the operationalisation of goals among 451 students in Columbia University. They classified two types of goals; performance goals, where the aim is to demonstrate ability, and learning goals, where the aim is to gain new knowledge or skills. They found the difference between these two is quite significant in measuring individuals' motivation. Those behaving in response to performance goals had their motivation severely constrained in the face of obstacles whereas those approaching the same task with learning goals perceived opportunity and increased understanding in the event of difficulties. Eccles and Wigfield (2002) highlighted the interchangeable uses of the terms ego-involved goals for performance goals and task-involved goals for learning goals within the literature and Grant and Dweck's (2003) conclusions supported their observation of increased motivation in the case of learning or task-involved goals where the learner is faced with an obstacle. As such, behaviour which is in keeping with learning goals is more likely to be sustained in the case of challenge.

In terms of motivation, individuals are either motivated to succeed or to avoid failure and these represent two very different forces (Vroom, 1964). In terms of goal theory, however, Grant and Dweck (2003) classified performance goals in terms of performance approach goals where individuals will aim to succeed and performance

avoidance goals where the aim is to avoid failure so it follows the same idea as Vroom's original theory. In the study of this phenomenon by Grant and Dweck (2003), it was found that those people who are motivated for avoidance will display significantly lower intrinsic motivation and in turn will perform less well. Within the context of this current research, in order to be selected to be involved in the research, the subjects had to demonstrate a desire to grow their business and as such, it is assumed that this represented a significant goal for these individuals. Mathews (2008) asserted that entrepreneurs' motivated behaviour is characterised by goal-oriented activity. What is important however, is to determine in the context of this research, whether the network activities and engagement were congruent to their achievement of these goals.

The next section presents social exchange theory as another theory of motivation. Within the context of this current research, it is particularly apt given the voluntary nature by which entrepreneurs engage with learning networks and share their knowledge and experience. Thus, social exchange theory provides a backdrop to understand the motivational processes behind these exchanges.

2.1.4 Social Exchange Theory

Within the context of learning networks, Social Exchange Theory (SET) is significant in terms of studying the motivational processes of entrepreneurs to engage with their networks. This is particularly apt in the networks being studied in this current research as there are no commercial ties to bind participants. The participants' engagement is solely based on the value the individuals perceive from their activities. Emerson (1976) identified Homans, Thibaut, Kelley and Blau as the key figures informing the body of work which is known as Social Exchange Theory (SET). Homans (1958, p.597) began by asserting that "interaction between persons is an exchange of goods, material and non-material". Using Homan's definition this interaction includes information exchanged between individuals which is the purpose and value of learning network engagement. Interestingly, Emerson's (1976) work was hugely valuable in terms of progressing SET as he focussed on analysing all the research that had been done in the

SET context to make the theory less ambiguous. Essentially, he analysed SET not as a theory but instead as "a frame of reference that takes the movement of valued things (resources) through social process as its focus" (Emerson, 1976, p,359). In 2005, Cropanzano and Mitchell conducted an interdisciplinary review of Social Exchange Theory as, from their experience, there was some ambiguity around it as different researchers brought different sets of ideas to the research they have conducted in the SET context. The key issues that they focussed on were (i) the basis of ambiguity within the concept, (ii) the rules of exchange, (iii) the resources being exchanged and (iv) the role of exchange relationships. While identifying that some authors differ on specific issues within SET, most notably, the vagueness of some formulations utilised by researchers which results in key variables being excluded and the results being left open to interpretation. However, through their review, they asserted that a general consensus among researchers across various disciplines is that: "social exchange comprises actions contingent on the rewarding reactions of others, which over time provide for mutually and rewarding transactions and relationships" (p. 890).

Within Social Exchange Theory (SET), it is noted that as a group becomes cohesive, the value of the input of members increases which in turn promotes a higher quantity of interaction. In the spirit of reciprocity, the more valuable the outcomes people get, the more value they must provide in return (Homans, 1958). This precedent sustains the engagement of the group. This is echoed in the sentiments of Cropanzano and Mitchell (2005) as they outlined how under SET, relationships form and develop over time and are characterised by trust, loyalty and mutuality. Trust was also revealed as highly important to the development on relationships in a longitudinal study of networks conducted in France (Lefebvre, Lefebvre Radu and Simon, 2015) whereby over time, the researchers observed that with heightened trust, the openness and honesty in relations between participants visibly increased. Gulati and Nickerson (2008) identified that trust enhanced the performance of inter-organisational exchange in the context of organisations and their suppliers, specifically in the automotive industry. However, Vanneste, Puranam and Kretschmer (2014) conducted a meta-analysis of research carried out on trust over time in exchange relationships and found that in two conditions, trust always increased over time: (i) "if partners identify more with each

other over time, then trust will increase over time" and (ii) "with de-selection of untrustworthy partners, the average trust in a portfolio of relationships will increase over time" (pp. 1897-1898). However, there were also two conditions that were not consistent in the prediction of their impact on trust development, that is, levels of trust could remain the same, increase or decrease depending on the relative intensity and direction of the mechanism; these were: (i) where initial bias required correction and (ii) where there were exogenous changes in relationship value. Therefore, the conditions around which a network develops can impact the levels of trust present in the relationships and time alone will not necessarily result in increased levels of trust.

Blau (1960, p.545) asserted that "a group is cohesive if bonds of attraction unite its members". Naturally, the attraction that individuals feel toward other members of their network will influence their motivation to engage. Blau (1960) also broke down the idea of social attraction into how attracted individuals are to a group and how attractive that individual is to the other group members. It is where these factors are in balance that group dynamics are most favourable. In the event of successful development of a cohesive group, it is hypothesised that the exchange of resources will occur freely and naturally with the bonds of reciprocity ensuring that all participants are achieving equal benefits. Cropanzano and Mitchell (2005) concurred with this sentiment, highlighting that reciprocity is the most well-known exchange rule in the context of SET. With the reciprocal exchange of valuable resources, relationships between individuals should sustain.

This current research is concerned with understanding how entrepreneurs are motivated to engage with learning networks over time. Therefore, understanding the conversion of motivation into behaviour is integral to this research. The next section addresses the relationship of motivation to behaviour.

2.1.5 Motivation and Behaviour

Human needs are integral in explaining the energisation of motivated behaviour. Deci (1992) put forward three arguments for why this is so. Firstly, human nature calls for a certain number of needs to be met by individuals and in the self-determination theory

camp, human nature has been characterised by the assumption that humans are growth-oriented, proactive beings who strive for autonomous action but can be subject to control by interpersonal forces (Deci, 1992). Secondly, needs theories are constructive in studies where many behaviours are explained by a small number of needs. If an attempt is made to address too many needs in a study, then the study will be too shallow. Thirdly, studying human needs should provide a contextual understanding of the promotion of motivation within individuals. Social contexts that satisfy human needs provide for maximum motivation within the individual (Deci, 1992).

Within inter-organisational network performance, Williams (2005) defined that motivation and behaviour of network partners is characterised by their willingness to volunteer effort or resources in the pursuit of common goals. Therefore, the activation of behaviour requires that both parties are motivated to achieve the goal. Bessant and Tsekouras (2001) looked at the theme of motivation and behaviour in their research which studied the development of learning networks and in order for individuals to participate fully in a learning network, they found that they must identify a learning need, be motivated to fulfil that need and subsequently engage in learning behaviour in response to that motivation.

When measuring performance, Vroom (1964) noted that it is impossible to create a psychological basis for evaluation, there is no way to define "good" or "bad" performance as this is strongly linked to individuals' value systems. Furthermore, Verplanken and Holland (2002) asserted that individuals behaving in accordance with their value systems are fulfilling very specific personal goals and thus will perceive performance positively when it is aligned. Furthermore, Niv, Joel and Dayan (2006) reported that an individual's motivation is optimal when it is goal-directed. Performance can be predicted as an interaction between ability and motivation so if an individual is motivated to act and has the ability to perform the task, then performance will be optimised (Vroom, 1964).

The areas of motivation and cognition are inherently linked and therefore the next section addresses the two themes and their inter-relationship.

2.1.6 Motivation and Cognition

While motivation attempts to answer the question "so what?", cognition brings us back a step by answering the question "what is?". Cognition refers to an individual's knowledge, including memory, skill and the ability to integrate perceptual knowledge. Common cognitive activities include learning, problem solving and decision making. With all this in mind, the relationship between cognition and motivation is apparent. It would be impossible for an individual to be motivated by something they did not know existed (Locke, 2000).

Self-efficacy is a cognitive assessment of an individual's personal skill and capability for a specific task (Bandura, 1977). However, it has motivational consequences as the higher the level of perceived self-efficacy for a task an individual has, the higher the effort they will exert, the more difficult the goals they will choose and the more perseverance they will display in the face of setbacks (Locke, 2000). This relates also to self-motivation as individuals set themselves standards against which to measure their performance and therefore, will persist in their action until they achieve this standard (Bandura, 1977).

The effect that failure can have on individuals differs. Mastery expectations are lowered in the event of successive failures. However, in the event of occasional failures and the eventual overcoming of the obstacles that were faced, mastery expectations are raised and an individual's self-motivated persistence is heightened as the failures come to be seen as opportunities to learn (Bandura, 1977). An understanding of individuals' attitudes to failure will assist in appreciating their level of motivation and persistence.

2.1.7 Summary

Understanding the construct of motivation is integral to this current research. It was important to address the various theories of motivation and identify from the previous research, the factors that influence motivated behaviour. The construct of VIE theory represents a robust and clear means of understanding motivated behaviour and thus is the dominant theory of motivation underpinning this study, though goal theory and social exchange theory inherently link to VIE theory in the perception of valence experienced. The participants under study in this current research are entrepreneurs who are participants of learning networks and as such, the next section of this chapter addresses the entrepreneur and the characteristics common to entrepreneurs to assist in understanding how entrepreneurs are influenced to engage in motivated behaviour.

2.2 The Entrepreneur

The purpose of this section is to outline and describe the entrepreneur for the purposes of this study. Within this section, common definitions of the entrepreneur will be presented alongside a discussion of what makes an entrepreneur and how and when demographics, personality characteristics and values play a role in entrepreneurs' motivations. Entrepreneurial learning is an important consideration of this work as this research addresses the motivations of entrepreneurs to engage with learning networks and as such the area of entrepreneurial learning is also examined.

2.2.1 Defining Entrepreneurs

Entrepreneurs have been widely researched, though authors have struggled to uniformly define these individuals, resulting in a myriad of definitions of the "entrepreneur". For example, in 1985, Drucker identified that the common definition of an entrepreneur was someone who started their own, new and small business. However, he argued, that not all small businesses are entrepreneurial. And similarly, entrepreneurship can be found in large organisations also. Thus, Drucker's focus in the definition of the entrepreneur is on the focus of the entrepreneur as the creator of

something new and diverse, which has the potential to change people's values. Zhao and Seibert (2006) defined an entrepreneur as: "someone who is the founder, owner and manager of a small business and whose principal purpose is growth" (p.263). Coulter (2001) defined the entrepreneur as: "someone who initiates and actively operates the entrepreneurial venture"(p.16). Greve and Salaff (2003) defined the entrepreneur as someone who "owns, launches, manages, and assumes the risks of an economic venture" (p.1). While Shefsky (1994) defined entrepreneurs as "people who enter businesses in time to form or change substantially that business's nerve centre" (p. 5). Shane and Venkatamaran (2000) characterised entrepreneurs as being concerned with the identification and exploitation of opportunities for profit. Bennet and Dann (2000) defined the entrepreneur as: "a person who has established the business as a new venture, where business growth is intended, for the prime reasons of generating profit and achieving personal satisfaction" (p.7). The inclusion of personal satisfaction within Bennet and Dann's definition of the entrepreneur is indicative of their psychological approach to entrepreneurship.

To sum up, in basic terms, an entrepreneur can be thought of as someone who starts and runs an entrepreneurial venture (Coulter, 2001). For the purposes of this research, taking from the various definitions presented in the literature:

> *an entrepreneur is understood to be an individual who, influenced by their personality and values, is inclined toward the pursuit of the initiation and development of an entrepreneurial organisation for profit.*

To understand entrepreneurs at a deeper level, a number of approaches are suggested in previous research such as demographic, sociological, behavioural and personality profiling (Bridge, O'Neill and Cromie, 1998). Particular emphasis is placed on personality, values, motivation and subsequent behaviour in studies by Schwartz (1992), Barrick, Mount and Strauss (1993), Feather (1995), Bardi and Schwartz (2003) and Parks and Guay (2009) as these researchers have revealed these factors to be significant in influencing motivated behaviour.

Within the demographic profiling approach to defining the entrepreneur, authors have looked at gender, birth order, experience in small business, education and entrepreneurial families as indicators of entrepreneurial intention (Coulter, 2001). This has proven problematic as a manner of defining entrepreneurs as people having these demographic characteristics are just as likely not to be entrepreneurs as to be entrepreneurs. This has led to the interest in personality profiling. While this too has its flaws, it has provided researchers with a clearer picture of who entrepreneurs are (Coulter, 2001). Zhao and Seibert's (2006) study referenced in section 2.1.2 Motivation and Personality, was concerned with identifying the relationship between the Big Five (the Big Five is discussed in more detail in section 2.2.4) Personality dimensions and entrepreneurial status. They conducted a meta-analysis of empirical studies of personality between managers and entrepreneurs to reveal the personality markers of entrepreneurial status. From their study, entrepreneurs demonstrated higher conscientiousness, emotional stability and openness to experience than managers. However, managers scored higher on agreeableness and both managers and entrepreneurs demonstrated similar levels of extraversion.

When reviewing entrepreneurship from the psychological viewpoint, it is the attitudes and values of the individual that define the entrepreneur. Bennet and Dann (2000) conducted a study of 197 female entrepreneurs in Australia who completed a questionnaire outlining their demographic and attitudinal profiles. It emerged from the research that the personality traits that entrepreneurs required were (i) internal locus of control, (ii) independence and need for achievement and (iii) a propensity for risk-taking.

Anderson, Drakopoulou Dodd and Jack (2009) conducted research in order to gain an understanding of people's perceptions, across cultures, of who an entrepreneur is. They wanted to devise an entrepreneurship education programme and understand how the perceptions of entrepreneurs across cultures would affect the way education should be shaped. They carried out their study across Ireland, the UK, Cyprus, Greece, Italy and Poland and had 374 participants. They asked their respondents to use metaphors to describe the entrepreneur. The sample consisted of high school pupils,

their parents and teachers, business association members and entrepreneurs. Each respondent was asked to finish the sentence "an entrepreneur is like…" five times; thus providing five metaphors each. Prominent in the Irish responses was the idea of the entrepreneur as a persistent, hard-working individual creating visions and ideas but who can sometimes achieve these things with excessive aggressiveness. In the UK, the predominant positive metaphors of the entrepreneur portray creators of the future while the negatives are similar to Irish perceptions of aggressive, individualistic rebellious individuals. The use of metaphor creation as a methodology allowed for the description of the social construction of the entrepreneur. Individuals were given the opportunity to express themselves in a creative way.

It is not possible to fully understand or define entrepreneurs without taking their environment into account. The external forces which impact entrepreneurial behaviour are numerous. The next section addresses this concept and presents the factors facilitating and impeding entrepreneurial behaviour.

2.2.2 Entrepreneurs and their Environment

Entrepreneurs do not exist in isolation but are part of a larger socio economic system which impacts their behaviour. Chell (2008) conceptualised this as follows:
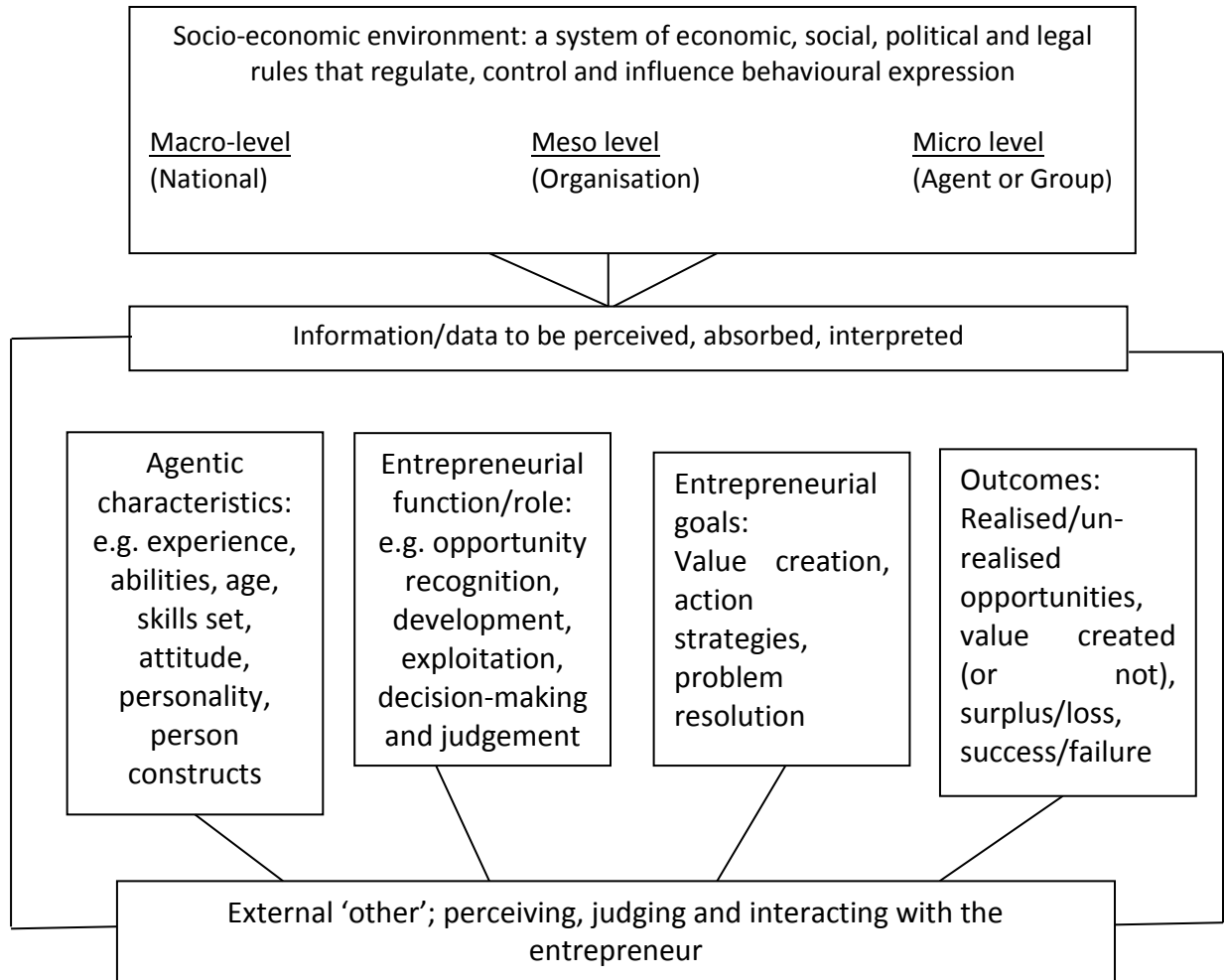
Fig.2.1: *The entrepreneur and the entrepreneurial process within the socio-economic environment. (Source: Chell, 2008, p.7)*

Figure 2.1 presents the entrepreneur within the socio-economic environment in which he/she operates, encompassing the rules and regulations that impact action. Between the environment and the agent, is the information to be perceived and understood by the individual. The individual's action is then affected by their characteristics, role, goals and opportunities as they interact with the external world that acts as judge as to the success or failure of the entrepreneurial venture. The figure represents a cycle to allow for the incorporation of learning and feedback into the process (Chell, 2008).

Gnyawali and Fogel (1994) developed a framework for studying environmental factors impacting entrepreneurship as at that point, they found previous research to be lacking in this regard. The factors that they focussed on were the (i) government policies and procedures, (ii) socioeconomic conditions, (iii) entrepreneurial and

business skills, (iv) financial assistance and (v) non-financial assistance. Their conclusion was that where the environment supports entrepreneurship, enterprise can flourish and thus, it is imperative for economic development that policy-makers focus upon the development of such an environment. Acs, Desai and Hessels (2008) also wrote about the impact of the environment on the entrepreneurial process and identified the roles that economic development and institutions had in the process and more specifically within the context of access to resources and finance and the perceptions of the entrepreneur. Their paper served as an introduction to the Global Entrepreneurship Monitor (GEM) conference which explored this topic across various contexts from papers exploring the impact of environmental factors on export orientations across the 34 countries who participated in the GEM survey between the years 2002 and 2005, which included Ireland and the UK (DeClercq, Hessels and van Stel, 2008) to a regional paper focussing on competitiveness in the economic environment of Latin American countries (Acs and Amoros, 2008). Henderson and Robertson (2000) highlighted that within the UK context that there was a specific need for policy makers to focus on the marriage of higher education and entrepreneurship in order to support an environment that would facilitate young people to view the entrepreneurship path more favourably.

This current research is concerned with understanding entrepreneurs' motivations to engage with networks over time; however, figures such as Chell's (2008) demonstrate the myriad of factors which can impact entrepreneurial behaviour.

The next section addresses the entrepreneur and motivation in terms of both what impacts their initial motivation to be entrepreneurs as well as their subsequent behaviour.

2.2.3 Entrepreneurs and Motivation

Entrepreneurs are naturally creative people, constantly looking to develop new products or new ways of doing things. It is important that entrepreneurs are energised and learn from other people's mistakes as well as accepting their own failures as

learning experiences without falling victim to the entrepreneurs curse of "public pride" whereby entrepreneurs attempt to mask their failures instead of seeing the value in them (Shefsky, 1994). Addressing the so-called "failures" in the entrepreneurs' lives will highlight the level of motivation (in terms of persistence) they have for their entrepreneurial ventures and potentially quantify their motivations for engaging in the behaviours they do to grow their businesses. Some of the most valuable learning for entrepreneurs comes from the discussion of their challenges with their peers and in the learning network context, it is this discussion that leads to the most valuable outcomes and information for entrepreneurs (Bergh, Thorgren and Wincent, 2011).

In many cases, entrepreneurs have been motivated to start their businesses to break free from the constraints of working for someone else which is part of their basic value system (Bridge et al., 1998). Values can be understood as conceptual structures that surround the beliefs individuals hold about attractive behaviours or end states; but they can also be understood as motives which serve to influence goal directed behaviour in terms of activity selection, persistence with tasks and responses to activities (Feather, 1995). Bardi and Schwartz (2003) described values as motivational constructs that inform individual's goals and that are relatively consistent over time. Relative to the individual's central values, the importance placed on each value will differ (Feather, 1995).

Personal values affect the way in which individuals behave. Schwartz (1992) outlined 10 broad values that affect the way people behave; power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity and, security. A study conducted by Feather (1995) found that values play a big role in the valence (attractiveness) individuals' associate with different situations. This study involved the examination of the values of 239 university students using the Schwartz Value Survey (1992) and after they had completed this, the students were presented with 10 hypothetical situations where they had to elect one behaviour over another based on the valence of the outcome to them which, it was found, was relative to the values previously selected by the students in the value survey. Values help individuals choose their actions in pressing situations but also contribute greatly to the long term

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goals people set themselves and the motivations they feel toward the actions they carry out in the pursuit of those goals (Feather, 1995).

Individual personality traits have been studied extensively and for the purposes of this research, the entrepreneurship context is addressed in the next section.

2.2.4 Entrepreneurship and Personality

Research in the field of entrepreneurship has uncovered a number of traits that can identify entrepreneurs from the general public. These include such things as: need for achievement; locus of control; risk taking; values and age, among others (Gartner, 1989). Research performed by Durham University Business School to gain a greater understanding of enterprising tendencies (1988, cited in Cromie, 2000) had already identified these traits but added that entrepreneurs are strongly proactive and independent and have a creative tendency as well as being calculated risk takers. Durham University Business School developed a "General Enterprising Tendency" (GET) test and Cromie's (2000) work focussed on analysing this test as a measure for entrepreneurial personality and found that it was a significantly valuable tool for measuring various entrepreneurial traits and applauded the ease with which it can be administered and analysed. Bridge et al. (1998) expanded on this in their further discussion of the personality theories of entrepreneurial definition and offered a number of qualities that they considered to be characteristic of entrepreneurs, including being dynamic, proactive, adaptable, determined, flexible, and trusting. This is also based on evidence emerging from the GET test. Bird and Jelinek (1988) and Shefsky (1994) also emphasised the importance of flexibility within entrepreneurs in order for them to have the ability to react to changing conditions which is integral to the entrepreneurship journey.

Bennett and Dann (2000) conducted research with a sample of Australian female entrepreneurs in a bid to understand if these entrepreneurs are characterised by the same characteristics outlined in the literature they had reviewed in the areas of entrepreneurship and entrepreneurial characteristics particularly through the feminist

perspective as they observed that the psychological and economic perspectives to date contained a male bias. A survey was distributed to 535 business women, 229 of whom completed and returned the questionnaire. Their analysis of this questionnaire concurred with previous research and identified that: (i) internal locus of control, (ii) risk taking propensity and (iii) independence and a need for achievement, were highly dominant characteristics among female entrepreneurs. However, these characteristics are in line with characteristics also reported for men suggesting that the differences between female and male entrepreneurs in their enterprising tendencies are being reduced (Bennett and Dann, 2000).

Internal locus of control refers to an individual's belief that they have the control to change the world around them and the ability to do so. Entrepreneurs tend to have an internal locus of control and it is this belief in their power over the environment which makes them more inclined toward entrepreneurial opportunities (Shane, 2000).

Risk taking propensity is characterised by the willingness to take risks and entrepreneurs as a group are regarded for their ability to believe in their ideas and themselves in order to undertake the risks of starting and sustaining their ventures; however, Brockhaus (1980) conducted research between entrepreneurs and managers on their risk-taking behaviours and found that there was no significant difference between the two groups and Drucker (1985) asserted that although entrepreneurship is commonly considered to be risky, entrepreneurs are more characterised by calculated risk. Furthermore, Bessant and Tidd (2007) also highlighted the calculated nature with which entrepreneurs engage with risk.

The last characteristic, as outlined by Bennett and Dann (2000) is that of independence and need for achievement that refers to the entrepreneur's tendency towards working on their own, in their own way in order to achieve business success, as the individual entrepreneurs define it. Bridge et al. (1998) also highlighted the prominence of the need for achievement within the profile of the entrepreneurial personality, as did Bessant and Tidd (2007).

Goldberg (1990) studied personality and the development of measures of the Big Five factor personality inventories which have been scientifically verified to quantify the preferences of individuals across the factors of extraversion, conscientiousness, agreeableness, emotional stability, and intellect. Goldberg (1992) developed a 100 factor instrument of trait descriptive adjectives which represented a highly efficient and effective manner of analysing individuals' personalities validated in 1996 by Smith and Snell and also by Gosling, Rentfrow and Swann in 2003. The development of the TDA (trait descriptive adjectives) by Goldberg in 1992 was a result of extensive research into the assessment of personality; this measure was found to be robust across various self and peer descriptors. The resulting instrument developed the work of Norman (1963). However, Goldberg (1996) continued to develop measures for personality resulting in the development of the IPIP (international personality item pool) Scales measuring the Big five factors of personality. This is the measure to be employed in this current research to measure the dominant personality characteristics across the entrepreneurs in this study due to the proven validity and ease of application and analysis of the tool (Gow, Whiteman, Patty and Deary, 2005). The scale consists of positive and negative statements that respondents must rate the accuracy of in relation to their own personality. For example, one of the positive statements relating to extraversion is: "I am the life of the party" while one of the negative statements relating to extraversion is: "I like to keep in the background". Respondents must indicate on a scale of 1 to 5 whether that statement is very inaccurate (1), inaccurate (2), neither accurate nor inaccurate (3), accurate (4) or very accurate (5). The use of IPIP scales extends to measures beyond the Big Five factors and researchers have actively used the instrument in their research due to the ease of access and lack of cost associated with it (Goldberg, Johnson, Eber, Hogan, Ashton, Cloninger and Gough, 2005). This is hugely beneficial as it validates the effectiveness of the instrument across various research contexts and represents an efficient means of measuring individuals' personality characteristics.

The context of this current research is the motivation of entrepreneurs to engage and sustain engagement with learning networks over time. Thus, it is hypothesised that

participants are motivated for learning and an appreciation of entrepreneurial learning is required. The next section addresses this theme.

2.2.5 Entrepreneurs and Learning

Organisational learning theories have traditionally been focussed upon the learning needs of large firms; however, given the increasing importance placed on the development of SMEs, attention is required for the learning processes within this context (Deakins and Freel, 1998). Deakins and Freel (1998) conducted in-depth interviews and case studies over time with four different entrepreneurs. Their research revealed that entrepreneurs in SMEs learn most significantly through experience and it is their reactions to critical events which occur within the development of their businesses that forms the foundations for their knowledge. They also identified the key role that networks play within the entrepreneurial learning space. This theme of critical events had also been highlighted by Sexton, Upton, Wacholtz and McDougall in 1997 in their analysis of learning for growth-oriented entrepreneurs. They conducted a survey with 142 growth-oriented entrepreneurs in the US. They highlighted the integral role of the real-world-problems of entrepreneurs for their learning processes and found that entrepreneurs' learning needs are highly focussed, contextual and valuable for overcoming the specific challenges they face. They also found that the most valuable learning setting was at a business roundtable with like-minded entrepreneurs (Sexton et al., 1997).

Easterby-Smith, Crossan and Nicolini (2000) wrote a paper detailing the past, present and future perspectives on organisational learning. They identified the nature and location of learning as important, highlighting the social constructionist perspective of learning which highlighted the value of learning which is created between individuals through their interactions. This has given rise to the Community of Practice (CoP) perspective of learning and the study of these CoPs was also identified within their paper as a qualitative means of investigating organisational learning (Communities of Practice are described in detail in section 2.3.8). Taylor and Thorpe (2004) also looked at this theme of interaction and analysed the learning of one entrepreneur to examine

hypotheses around the important role of networks within the entrepreneurial learning process and the impact of relationships. Their findings supported the positive influence of networks on business development.

Politis (2005) conducted an analysis of the process of entrepreneurial learning, synthesising the research published at that date. From this work, it was revealed that learning within the entrepreneurial space is predominantly experiential in nature and it is the transformation of the learning from these experiences that develops an entrepreneur's stock of knowledge (Politis, 2005). It is this stock of knowledge that informs the choices entrepreneurs make in the management and development of their businesses. Two key modes of transforming experiences into knowledge are identified; exploration and exploitation. Exploitation involves the employment of previously stored knowledge whereas exploration involves seeking out variety in experiences which lead to the development of new and diverse entrepreneurial knowledge (Politis, 2005). Minniti and Bygrave (2001) had outlined a framework for entrepreneurial learning with similar outcomes, that the experiential nature through which entrepreneurs learn facilitates the creation of a stock of knowledge that they utilise for future decisions to be taken based on the experiences they had that had the most favourable outcomes.

Also to be considered and understood, in the context of this current research is the impact of gender on the entrepreneurial learning process. Ekanem (2015) conducted research into the gender differences in entrepreneurial learning. He did this via a longitudinal study which followed the learning experiences of ten firms over five years. While in some elements, male and female entrepreneurs demonstrated broadly similar behaviours, an interesting finding from his research was the identification of the more involved and relational nature of the learning of male entrepreneurs. Male entrepreneurs' learning came from a broad group of people including all stakeholders (finance, accounting, marketing etc) in their business. Female entrepreneurs, however, tended to learn more from friends and family members. Male entrepreneurs were also more inclined to engage in learning 'outside the box' whereas female entrepreneurs

favoured more routinised learning (Ekanem, 2015). Thus, learning experiences can be, and should be, tailored to the preferences of the individual entrepreneur.

Within the context of this current research, the entrepreneurs being studied are from micro, small and medium sized companies and so it is important to consider this context in relation to their learning process. SMEs are not renowned for the formalisation of training and development within their enterprises and rarely undertake formalised training (Kotey and Folker, 2007). As such, a social constructionist view of learning is most appropriate in this context as learning which occurs through social development and engagement with the social world is most apt for these entrepreneurs. Wenger and Lave coined the term "Communities of Practice" in the late 1980's (Lave and Wenger, 1990) within their work on learning within social systems and defined them on three key principles; joint enterprise which refers to the focus of the community, mutual engagement meaning the manner in which the community functions and shared repertoire referring to the capabilities produced by community members over time. Brown and Duguid (1991) applauded Lave and Wenger's (1990) construction of learning in their analysis of organisational learning and communities of practice. Wenger's (1998) perspective of learning is placed within the context of individuals' lived experiences in their world and that it is these experiences which create the learning. Within this current research, the motivations of entrepreneurs to engage with learning networks over time are addressed. However, over time, these networks evolved into Communities of Practice.

Entrepreneurial learning is highly dynamic with the transformation of each experience creating and recreating the entrepreneur's knowledge (Politis, 2005). In this vein, the school of Action Learning has become a popular facilitator of learning for SMEs as it provides an experiential means for entrepreneurs to reflect on their experiences and the experiences of similar others in the design of solutions to problems they face within their own organisations (Clarke, Thorpe, Anderson and Gold, 2006). Traditionally, SMEs have been provided with government-run support programmes and these programmes have faced challenges with regard to engagement, context and value (Pittaway, Missing, Hudson and Maragh, 2009) but all these issues are overcome

with the ethos of Action Learning which is characterised by learning sets (groups of up to 8 diverse individuals coming together) who each bring a unique problem to the set thereby providing an attractive context and value for entrepreneurs as it is solutions to problems they face within their own organisations that they work with. Kyrö (2015) also advocated this need for focus on the context of the entrepreneur and action orientation in entrepreneurship education. Pittaway et al. (2009) asserted that in many cases, Action Learning Sets become longer-term Communities of Practice as a result of the social bonds and trust that develops within the groups.

Increasingly, research is focussing on the opportunities for entrepreneurs to learn together and from each other. Learning networks of entrepreneurs represent one forum where this can happen (Bergh et al., 2011). Research into the social constructionist nature of entrepreneurial learning through the ideas of co-participation and co-creation is also coming to the fore (Taylor and Thorpe, 2004; Smith, 2011 and Bergh et al. 2011). The research of Zhang and Hamilton (2009) was concerned with examining the impact of learning within a peer context for entrepreneurs. Specifically, their research focussed on a group of 67 entrepreneurs who participated on a leadership development programme over the period of a year where peer engagement was the pillar upon which the networks were developed and management learning occurred. Zhang and Hamilton (2009) highlighted the value of peer learning within their paper which examined the experiences of entrepreneurs engaging in Action Learning peer networks. They found that entrepreneurs benefitted greatly from the learning they derived from other entrepreneurs and that the peer context was highly effective (Zhang and Hamilton, 2009).

Community of Practice theory provides a social lens through which to view learning. Wenger, in 2009, wrote a series of essays in relation to learning and innovation in social spaces. Wenger continued by defining social learning spaces as "social containers that enable genuine interactions among participants, who can bring to the learning table both their experience of practice and their experience of themselves in that practice" (p.3). These social learning spaces are characterised by the mutual learning that takes place within them. In this vein, Smith (2011) further developed the

concept of learning spaces where entrepreneurial learning takes place. These learning spaces consider the Action Learning Set form in her study which were analysed taking account of Community of Practice theory. The four learning spaces Smith (2011) identified over the course of her research were peer-to-peer, social, reflective and peripheral. The peer-to-peer learning space is where knowledge and experience is shared within the learning set. The social learning space refers to the learning that takes place during social activities such as lunches or coffee breaks. The reflective learning space is where entrepreneurs individually and collectively with their group reflect on their experiences and the experiences of others to create new knowledge. The peripheral learning space is where the learning and knowledge acquired by the entrepreneurs is applied in different environments. The social learning environment provides a great outlet for group engagement among SMEs. The next section addresses the theme of isolation for entrepreneurs.

2.2.6 Entrepreneurs and Isolation

The purpose of this study is to understand what motivates entrepreneurs to engage with and sustain engagement with learning networks over time. Entrepreneurship is naturally a highly personal path with individuals who pursue it often falling victim to feelings of isolation. In 2002, Hamm wrote an article outlining his experience of over 100 entrepreneurs as they scaled their companies for growth and identified how the isolation of entrepreneurship can act as impediment to growth where the entrepreneur does not address the issue. Ruef, Aldrich and Carter (2003) identified two dimensions of difficulty in the context of entrepreneurial isolation, namely the functional difficulties concerned with the development of the business, as well as the personal social and psychological difficulties which isolation can arouse. In a study carried out by Kutzhanova, Lyons and Lichtenstein (2009), the researchers found that entrepreneurs benefitted greatly from interaction with peer groups. Their research analysed the cases of 17 entrepreneurs who had participated in an enterprise development programme in central Appalachia that had personal and peer group coaching facilitating the entrepreneurs' learning process as its foundation. In order to gain a greater understanding of the entrepreneurs' experiences, the researchers

conducted in-depth interviews with a sample of the candidates (17 out of a total population of 45). What was found was that the experience in the peer groups was highly valuable to the entrepreneurs in terms of the learning that occurred there and the validation of their business decisions, as well as the social support that the entrepreneurs experienced from each other. A key conclusion and recommendation of this research was the implementation of more programmes that encourage the facilitation of peer-based learning environments and less entrepreneurship development programmes that involve passive transference of knowledge (Kutzhanova et al., 2009). In considering the motivations of entrepreneurs to engage with learning networks, the area of isolation and opportunity for social interaction from a like-minded peer group must be addressed. In fact, in the work of Zhang and Hamilton (2009, 2010), they found that isolation was a significant indicator of the level of commitment that entrepreneurs were likely to have to the peer network; if entrepreneurs found that their opportunities for learning were limited elsewhere, they were more inclined to engage.

From a gender perspective, Ruef et al. (2003) found that female entrepreneurs were more likely to experience isolation due to the lower number of other female entrepreneurs for them to engage with. They observed that this reduces opportunities for overcoming isolation especially among female entrepreneurs.

2.2.7 Summary

For the purposes of this study, an entrepreneur is defined as an individual who, influenced by their personality and values, is inclined toward the pursuit of the initiation and development of an organisation for profit. In examining the motivations of the entrepreneur to engage with learning networks over time, research on the personality of the entrepreneur and the manner of learning for the entrepreneur were considered. The next section addresses the network construct which is integral to this current study.

2.3 Networks

The purpose of this section is to highlight the different types of networks entrepreneurs have. The commonly cited definitions are outlined and the characteristics of different networks discussed. Organisations cannot be studied as independent entities in the current business landscape which is so strongly characterised by the linkages firms are embedded in socially, professionally and relationally (Blankenburg Holm, Eriksson and Johanson, 1999; Gulati, Nohria and Zaheer, 2000). These linkages can be considered networks and can take varying forms. An interesting point to note before attempting to define networks was a theme that was prevalent at the Uddevalla Symposium (2012) where a debate centred around the fact that there is no common lexicon for network research; many terms are used to describe the same thing making network research challenging. However, researchers had already highlighted this difficulty in 2001 (O'Donnell, Gilmore, Cummins and Carson, 2001) when it was attempted to examine the network construct in entrepreneurship research with the outcomes of this research highlighting the ambiguity which exists around the network construct and while networks can be broadly divided into "inter-organisational" and "personal" or "formal" and "informal", the reality is that true networks tended to contain elements of both types. They also found the literature lacking in terms of addressing network dynamics and highlighted the significant need for network research to employ longitudinal methodologies with particular attention paid to observation and in-depth interviewing in a bid to capture these dynamics (O'Donnell et al. 2001).

Provan, Fish and Sydow (2007) examined network research to determine the themes emerging and to investigate the level of research that had been conducted at a whole network level, finding that this type of research was limited and necessary in order to develop the literature around network dynamics focussing on a number of key issues; namely, network structure, network governance, network development, and network outcomes. They studied 26 empirical whole network studies and found that before 1999, there was a focus on network studies within the healthcare system and hypothesised that it was only from this point on that business management scholars

really began to focus their studies on the impact of networks for business development. Even though there was a significant number of longitudinal studies within the research they reviewed, they found that evidence is still lacking into the dynamic evolution of networks over time. There was also a lack of research with regard to understanding the governance of inter-organisational networks identified with little attention paid to this in whole-network research. Similarly, Provan et al. (2007) raised questions with regard to the structures of networks and the determination of the most favourable structures for network success. Finally, there is a need for network outcomes to be addressed in terms of the learning and effectiveness of inter-organisational networks (Provan et al., 2007). The next section will review the various definitions of networks in order to provide a better understanding of the construct.

2.3.1 Defining Networks

There is a vast array of definitions for the term network. So, in broad terms, they can be thought of as any kind of collaboration among individuals. Himmelman (1996, p.28, cited in Huxham, 1996) defined collaboration as exchanging information, altering activities, sharing resources and enhancing the capacity of another for mutual benefit and to achieve a common purpose, while Carson, Cromie, McGowan and Hill (1995) defined networking for SMEs as "an activity in which the entrepreneurially oriented SME owners build and manage personal relationships with particular individuals in their surroundings" (p.205). In Ahlstrom-Soderling (2003), Dean, Holmes and Smith (1997) described networks as a type of collaboration where firms with a common objective agree to work together to exchange ideas, knowledge and or technology in some areas. Fuller-Love and Thomas (2004) defined networks as "voluntary arrangements between firms aimed at providing competitive advantage for the participants" (p.245).

Given the rising popularity of network based research in the last two decades, Hoang and Antoncic (2003) conducted a review of the network-based research in entrepreneurship to establish the themes that have been saturated and highlight the

gaps that exist. They found that over 70 papers had been published, at that time, on the role of networks in the entrepreneurial context. They identified three key constructs in the field; namely: the content of entrepreneurial relationships; the governance of entrepreneurial relationships and the structure of the ties that link the entrepreneurs together. Having conducted this extensive review, Hoang and Antoncic (2003) proposed a number of directions for future network research. They identified a need to "measure" networks to determine their influence on entrepreneurial success, though acknowledged the ambiguity and difficulty surrounding this as the entrepreneurial environment is so heavily impacted by many other components. Another area that they identified as lacking was within the context of network development and therefore highlighted the necessity for longitudinal work to identify the developmental patterns of networks (Hoang and Antoncic, 2003). Jack (2005) concurred with this assertion as through her work, she found that very little is understood in relation to what really goes on in networks. This current research is heavily focussed on capturing the dynamics of network development over time in order to bridge this research deficiency identified by Hoang and Antoncic (2003) and Jack (2005). The next section presents an overview of the various types of networks in existence.

2.3.2 Types of Networks

There is a wide variety of networks that entrepreneurs participate in and while O'Donnell et al. (2001) highlighted that these can be broadly divided between inter-organisational and personal or formal and informal, there are numerous network types within these categories.

When it comes to inter-organisational networks entrepreneurs can be part of horizontal business networks which refer to networks of organisations operating independently of each other while vertical business networks refer to networks of interconnected organisations such as suppliers etc (Gellynck and Kühne, 2010). Strategic networks can be conceptualised as the networks that firms engage in which consist of long-lasting ties which enhance the strategic behaviour of firms. They equip

firms with access to various resources including knowledge and new market opportunities through learning and resource sharing; such as, through joint production activities for instance. Gulati et al. (2000) asserted that the understanding of the role of strategic networks for firms should be the focus for researchers in understanding behaviour and performance.

Innovation networks have gained great ground in recent years as the policy focus has shifted toward the innovative development of businesses and regional development agencies have begun using networks in a bid to improve economic development (Bessant and Tidd, 2007). Dhanaraj and Parkhe (2006) developed a framework for orchestration in Innovation Networks through synthesis of the research and literature specifically around the themes of: (i) hub firms and orchestration, (ii) knowledge mobility, (iii) innovation appropriability and, (iv) network stability. This framework is presented in Figure 2.2. This highlights the components of network orchestration from the network recruitment process through the management activities of the network culminating in the desired output of the network. This model is exceptionally comprehensive in the presentation of the critical factors which influence network success.

Within the innovation network construct, Dhanaraj and Parkhe (2006) identified that there would normally be a hub firm orchestrating the process. However, this framework is highly adaptable to other inter-organisational network contexts, particularly learning networks, as whether it is formally specified or not, a network requires a leader or leadership group to ensure valuable outcomes (Bessant and Tsekouras, 2001). Dhanaraj and Parke (2006) developed this framework to provide a starting point for research to examine how to build effective networks as they found this theme to be under-explored within network theory. This framework is also incredibly valuable in terms of examining the dynamic nature of networks as further researchers, even after the date of publication of this framework (2006) highlighted that too many studies on networks have taken a cross-sectional approach and understanding the changing states of networks over time is key to developing effective networks (see: Jack et al., 2008; Martinez and Aldrich, 2011). Interestingly, Gausdal

and Nilsen (2011) took Dhanaraj and Parkhe's framework for network orchestration and combined it with Wenger, McDermott and Snyder's (2002) principles of Community of Practice leadership to elaborate the framework to include the principle of "Network Health" which is characterised by (i) the evaluation of the network contribution to members and (ii) the means for recovery of failing networks. Gausdal and Nilsen (2011) developed their framework through longitudinal, in-depth case analysis of the network processes of the development of one network over the course of two years. They found the network orchestrator to be key in maintaining "network health".
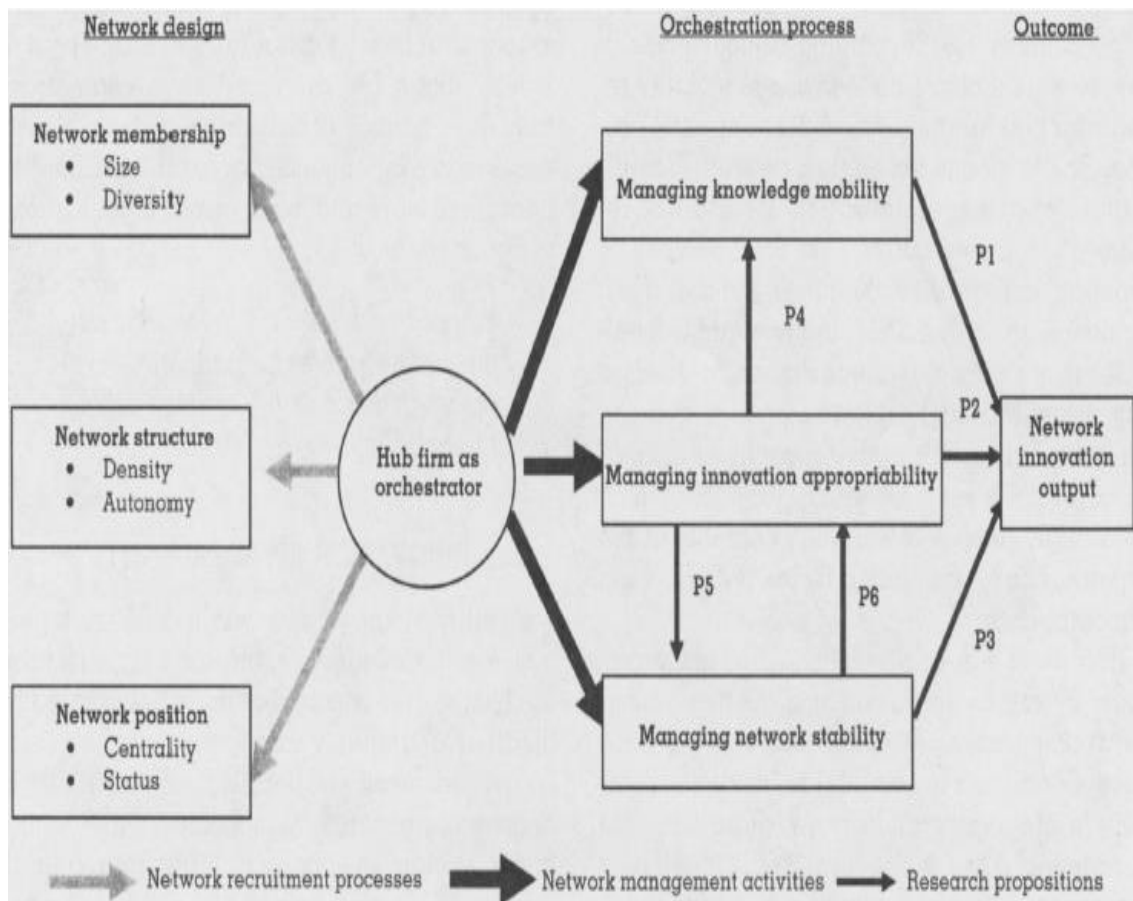
Fig. 2.2: A Framework for Orchestration in Innovation Networks (Source: Dhanaraj and Parckhe, 2006, p 661)

Aldrich and Kim (2007) conducted an analysis of network formation among entrepreneurs through the synthesis and modelling of research previously conducted and highlighted three specific styles of network: (i) random, (ii) small world and (iii) truncated scale free networks. Random networks present a world of individuals and

the opportunities to access other individuals are high with the only difficulty being in acquiring the necessary resources to make contact with distant individuals. Small world networks are characterised by clusters and access to individuals within other clusters is difficult as it is through ties that they must be accessed. The argument is made however, that a person in a small world network could reach someone further away in a shorter space of time than an individual operating in random networks through the bridging of ties. The last type of network they speak of is the truncated scale-free network where the network forms through a process that results in a hierarchical system whereby a small number of key individuals have many ties and the rest have very few. The focus of this current research is on the small learning cluster but the ties of each member amount to a greater reach for the entrepreneurs highlighting one element of the value to be sought from engagement. The next section addresses the entrepreneur and networks.

2.3.3 Entrepreneurs and Networks

Martinez and Aldrich (2011) reported numerous motivations for entrepreneurs to network such as facilitation of innovation in firms, cost advantages through economies of scale achieved through partnering with network members, enabling cooperation with strategic others and increased opportunities for growth. Zaheer and Soda (2009) asserted that a commonly accepted motivation for individuals to network is that networks provide individuals opportunities to achieve positive results for their organisations. Jørgenson and Ulhøi (2010) found that the initial motivation held by the entrepreneurs in their case study to network was the same motivation that encouraged their sustained engagement with their networks; the need for knowledge that they required to address their business goals. Learning to co-ordinate their networking activities were imperative to the development of innovative capacity within their organisation. In fact, network membership increased the opportunity for innovation across a broader geographical space where learning and development can take place (Jørgenson and Ulhøi, 2010).

The network approach at the inter-organisational level posits that organisations access resources through their networks of inter-firm linkages (Zaheer Gözübüyük and Milanov, 2010). Gulati and Gargiulo (1999) in their study of inter-firm networks found that the resources firms access through network involvement can explain the strategic behaviour they engage in. The emergence of the network resources that firms access is an important area of study as these resources represent the informational advantages available to firms through their participation in networks (Gulati and Gargiulo, 1999). Gulati, Nohria and Zaheer (2000) stated that the network of relationships a firm possesses, greatly influences their behaviour and performance.

Networks facilitate inter-firm alliance formation in a number of ways. Firstly, networks represent a social forum where entrepreneurs are exposed to more opportunities for alliance formation and secondly, networks reduce the risk associated with new alliance formation as the network membership could represent individuals who have previously engaged in alliances together and in the case of new tie formation, within the network environment, the referral from a trusted source is invaluable. Gulati and Gargiulo (1999) found that the likelihood of a firm's engagement with inter-firm alliances was significantly influenced by the network resources they possessed. Furthermore, Gellynck and Kühne (2010) posited that successful SMEs are the ones that can use their networks, and seek out appropriate networks, to overcome knowledge deficits and seek out opportunities to share costs and reduce risks in collaboration with network partners.

When it comes to the advantages associated with belonging to networks, Miller and Besser (2005) found that businesses involved in a network report higher levels of success in achieving business goals and greater gross sales than businesses that are not involved in a network. Networks also offer an ideal forum for problem solving for entrepreneurs (Huxham, 1996). The SMEs that featured in the research of Fuller-Love and Thomas (2004) found networks to be a cost effective means to improving their performance. De Witt and Meyer (1998, cited in Fuller-Love and Thomas, 2004) found that firms enter into network situations for strategic reasons. Networks are an efficient way for entrepreneurs to access additional assets that they may not already possess,

such as, human, financial, social, technical and market expertise (Jack et al. 2008). Bessant and Tidd (2007) identified building and managing networks as the key requirement for innovation in firms. However, Bessant and Tidd continued to assert that building and running knowledge networks to perform well is a big challenge for entrepreneurs and policy makers as there are many conditions required for these networks to be successful; such as basic logistics, participant composition, network design and trust issues. There are many benefits to being a part of an innovation network, they include such things as access to new markets, technology and knowledge sets as well as the opportunity to reduce risks by sharing them within the group (Bessant and Tidd, 2007). Businesses can overcome internal limitations they experience through joining a business network and collaborating with other businesses within that network (Gellynck, Vermeire and Viaene, 2007). This highlights the significant role of networks in business development.

International research carried out by Greve and Salaff (2003), where entrepreneurs' networks across the countries of Norway, Italy, Sweden and the United States were looked at, showed that culture differences did not play a major role in the way that entrepreneurs network. A survey instrument measuring the networks of respondents was administered to entrepreneurs in all four countries with 213 respondents in the US, 52 in Italy, 261 in Sweden and 62 in Norway. This research highlighted that cultural differences were not present across the networking activities of these entrepreneurs.

In terms of developing understanding of networks, Jack et al. (2008) called for a social constructionist assessment of entrepreneurial networks as this allows for the recognition, appreciation and understanding of how entrepreneurs use their networks to create an understanding of the world they live and work in and make that world work for them in the growth and development of their business. This is in line with the social constructionist view of entrepreneurial learning presented earlier in this thesis with regard to the social systems of learning which are most appropriate for entrepreneurs from the SME sector.

When looking at entrepreneurs' networks, it is important to address the amount of time that entrepreneurs dedicate to the development of their networks. The time required to build and manage relationships with appropriate contacts is by no means small (Greve and Salaff, 2003). Martinez and Aldrich (2011) looked at the network literature relating to the networking strategies of entrepreneurs over three stages within the development of their business from the initiation of the business right through to the development and exchange stages. What they were specifically addressing was the importance of relational diversity within the networks entrepreneurs build and the impact this has upon the nature of their business development; specifically in relation to cohesive versus diverse networks.

Understanding the intricacies of entrepreneurs' networks requires significant study as "the entrepreneur is embedded in a complex set of social networks that either facilitate or inhibit venture development by facilitating or inhibiting effective linkages between the entrepreneur and the required resources and available economic opportunities" (Carsrud, Gaglio, Olm and Churchill, 1987, p.15). Martinez and Aldrich's (2011) findings showed that potential entrepreneurs with strong ties with established entrepreneurs at the opportunity stage increased the possibility of them becoming an entrepreneur hence demonstrating one way that a potential entrepreneurs' social network impacts the start-up process.

Greve and Salaff (2003) described how entrepreneurs can grow their networks to seek out the information or other resources they require from new contacts by positioning themselves strategically to interact with them and building relationships with them whereby they can then gain access to these resources. Cohesive networks of strong ties[6] are instrumental at venture creation for the entrepreneur to source the resources they require to launch the business; however, as the business grows, the development of more diverse networks of weak ties facilitates access to information which successfully fits with the business model (as opposed to just utilising the information

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[6] Granovetter (1973) defined the strength of ties as "a combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterise the tie" (p. 1361).

available via the strong tie network) as well as access to alternative viewpoints which heightens the likelihood of innovation (Martinez and Aldrich, 2011).

Successful entrepreneurs are generally highly skilled at networking. If they were not, it is highly unlikely that they would ever be able to reach their market (Bessant and Tidd, 2007). In order for businesses to be successful, there is a requirement upon them to be innovative and a need for them to engage in open innovation, thereby harnessing the information available outside the company and essentially trading in knowledge as much as in goods and services (Bessant and Tidd, 2007). Gellynck et al. (2007) discussed innovation networks and defined them as "the means of exchange between the firm's internal and external resources in the process of developing innovation processes" (p.212).

Lorentzen (2008) in her work on innovation, questioned the value of regional networks in a world that is now so globalised claiming that businesses that need certain types of knowledge for their innovation can find it on their own. Furthermore, the idea that weak ties over further distances are of more value to firms as they innovate provides more fuel to her argument. Granovetter (1973) put forward that while the value of a close circle of friends (strong ties) is phenomenal, when the number of acquaintances each individual has is considered, then the value of the accumulation of all of their close circles is immeasurable. Weak ties act as bridges between the close circles of individuals meaning that the higher number of weak ties an individual has the wider reach they have to the population.

Weak ties are traditionally used to pass on information that the strong ties lack while the focus of relationships with strong ties is for support and resources for the entrepreneur (Greve and Salaff, 2003). In Jack's (2005) study, she outlined how the entrepreneurs in her research predominantly utilised their strong ties to access resources and information and only in the case that they were unable to assist did they look further to their weak ties through activation by their strong ties. An interesting development to the Granovetter (1973) definition of ties as being either "strong" or "weak" is the use of the term "multiplex" tie which consists of both a business and

friendship element. Jack (2005) established in her study, that a sample of her respondents found these multiplex ties to be the most valuable as the entrepreneurs felt that individuals who they were tied to this way really understood their context and their needs.

This current study focuses on entrepreneurs' motivations to engage specifically with learning networks, therefore the next section reviews literature pertaining to learning networks.

2.3.4 Learning Networks

Learning networks represent just one type of network for entrepreneurs and are characterised by small groups coming together with learning as the key focus to develop their businesses with the help of the network (Alasoini, 2008). Learning networks have been used within organisations also to facilitate staff learning and development. This has arisen as a means to address the necessity for enterprises to be learning-focussed in order to be able to respond to company's needs to remain flexible and respond to the changing needs of their environment (Poell, Chivers, Van der Krogt and Wildemeersch, 2000). Tell and Halila (2001) identified how these groups are a very successful way for SMEs to overcome feelings of SME isolation. Learning networks represent an opportunity to the SME sector in terms of the learning and training they can experience through such initiatives. The focussed nature of the learning with the highly contextual practical approach of learning networks represents an attractive offering to entrepreneurs. Many groups; mainly government funded groups, are seen to provide training for SMEs though many entrepreneurs find these sessions to be irrelevant to their businesses and therefore not worth taking the time out for; learning networks overcome this by their very nature of being driven by the needs of the participants (Kiely and Armistead, 2005).

Bessant and Tsekouras (2001), in their study of inter-organisational networking, went a long way toward defining learning networks; the different forms they take, the purposes they serve and the practical operation required for their success. Learning

networks have come about in recent decades in a bid to solve the age old dilemma that firms need to learn to survive; learning networks represent one such way for firms to adapt to their changing environments to ensure their survival and promote the culture of organisational learning capability and dynamic improvement (Bessant and Tsekouras, 2001). Research on learning networks is in its infancy with researchers calling for more work to be done to understand how learning networks develop and survive successfully (Bessant and Tsekouras, 2001). Jørgenson and Ulhøi (2010) asserted that the manner in which networks develop may have a significant impact on the behaviour of participants in the network and the way in which knowledge is shared and created within the group. Foley, Harrington and Kelliher (2006) put forward the Small Firm Learning Network Model which conceptualised the manner through which small firm owners learn within a network context. They drew on research into Irish entrepreneurs specifically and found that Irish entrepreneurs had a significant need for learning that was tailored to their needs and facilitated the development of a network. Kelliher, Foley and Frampton (2009) adapted this model for the facilitation of learning networks within the tourism sector in Ireland. This is presented in Figure 2.3.
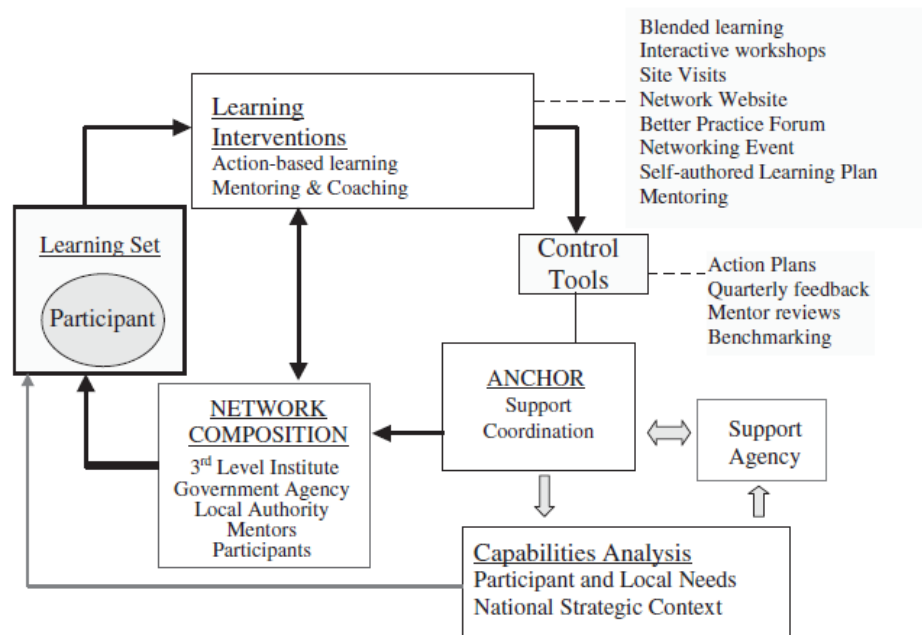
Fig. 2.3: Adapted small firm learning network model (Source: Kelliher et al. 2009, p.83)

Kelliher et al. (2009) utilised the small firm learning network model to analyse the learning network experiences of over 140 entrepreneurs who had participated on a learning network programme. They utilised observations, focus groups and evaluations to gain an insight into the experiences of these entrepreneurs. They found that the anchor organisation was critical to the facilitation of the networks and that communication, web community, local Action Learning Sets[7] and partnership with policy makers combined to make the networks successful. This success was characterised by the development of increased management capability amongst network participants alongside the presence of distinct network advantages like the development of relationships with more established businesses and the presence of support facilities for participants. Kelliher et al.'s study provides positive evidence for the potential of learning networks as a development tool among SMEs.

Learning organisations and the requirement for organisations to become learning focussed for their survival is very apt within the field of network research (O'Driscoll, Carson, and Gilmore, 2000) as learning networks represent a cost-effective means of reaching new knowledge. McGovern (2006) presented the case of Mould-Tech, a company that was part of a learning network in Ireland, FPN, First Polymer Network. Mould-tech attributed their ability to diversify their processes and maintain competitiveness to the knowledge they had gained through participating on a learning network, exemplifying a real-world case of the successful operationalisation of learning networks.

Learning occurs in a cyclical fashion with Kolb's (1976) learning cycle forming the basis of how all people and organisations learn; this cycle follows four concrete stages (stage 1: experience, 2: reflection, 3: concept and 4: experiment). In order for true learning to take place, each stage of the cycle must occur but before this happens the individual must be motivated to enter the cycle (Bessant and Tsekouras, 2001). When individuals enter the cycle, they must learn to learn with the implementation of learning systems and the development of the capability to make explicit tacit knowledge (Bessant and

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[7] An Action Learning Set is characterised by up to 8 individuals coming together each with a specific problem they wish to solve which they address in the Learning Set

Tsekouras, 2001). O'Driscoll, Carson and Gilmore (2000) identified two basic types of learning that individuals or organisations can engage in; adaptive and generative learning. Adaptive learning is very straight forward and in the cases of organisations, focuses on simply developing better practice for activities that the firm is already engaging in. Generative learning, on the other hand is a facilitator of innovation within firms where the firm is willing to change practices traditionally observed within the firm.

In the context of the learning to be achieved within learning networks, there are numerous advantages which entrepreneurs can capitalise on including the opportunity for:

- Challenge and critical reflection;
- New Concepts;
- Reduction of risk in experimentation (shared costs);
- Support;
- Clarification of system principles;
- Sounding board environment

(Adapted from Bessant and Tsekouras, 2001)

Many of these advantages of shared learning have been applauded by the School of Action Learning. Action Learning involves the development of a group of up to eight independent participants who come together in a group known as an Action Learning Set and each individual brings their own unique problem to the group. The key advantages for participants is the opportunity for exposure to an alternative point of view for the challenging questions another individual may propose; as well as the many new concepts to which one can be exposed. Within Action Learning, the Action Learning participant must diagnose the best solution to the difficulty they face in their group to bring back to their organisation (Foy, 1977). Learning networks in operation are very similar to Action Learning Sets and many of the principles are the same.

Clarke and Roome (1999) presented a case study of a Canadian company that utilised a learning action network to develop their business with great success, as it enabled them to acquire new knowledge and enhance their business practices. They defined a

learning-action network as "a set of relationships which lay over and complement formal organisational structures linking individuals together by the flow of knowledge, information and ideas" (p. 297). Learning networks, as defined by Bessant and Tsekouras (2001) are "networks formally set up for the primary purpose of increasing knowledge" (p. 88). This definition implies a number of features imperative to their operationalisation; they are formally established, their primary goal is for learning; there is a structure for their operation, and learning can be fed back to the operation of the network. Learning networks can take many forms. Outlined in Table 2.1 are the various typologies of learning networks one may encounter:

Type	Learning Target	Examples
Professional	Increased professional knowledge and skill = better practice	Professional Institution
Sector-based	Improved competence in some aspect of competitive performance – e.g. technical knowledge	-Trade association -Sector-based research organisation
Topic-based	Improved knowledge of a particular field- e.g. new technology in which many firms are interested	'Best practice' clubs
Region-based	Improved knowledge around themes of regional interest – e.g. SMEs learning together about exporting	'Clusters' and local learning co-operatives
Supplier or value stream-based	Learning to achieve standards of 'best practice' in quality, delivery, cost reduction etc.	Particular firms supplying to a major customer or members of a shared value stream
Government-promoted networks	National or regional initiatives to provide upgrades in capacity- knowledge about exporting, technology, marketing etc	Regional development agencies, extension services etc
Task support networks	Similar to professional networks, aimed at sharing and developing knowledge about how to do a particular - especially novel - task	Practitioner networks

Table 2.1: Outline typology of learning networks (Source: Bessant and Tsekouras, 2001, p. 90)

In the research conducted by Bessant and Tsekouras (2001) each of the above types of learning network was represented; they found that although there are a wide number of different types, they are all based on the principle of shared learning for capacity development.

One of the types of learning network that Bessant and Tsekouras (2001) highlighted was the region-based network. However, the debate on the requirement of physical proximity of network participants for the effective operation of learning networks is still open. Sherer (2003) conducted a study into the critical success factors of manufacturing networks in the US. There were 71 manufacturing networks studied. These networks were formed to increase the collective competitiveness of their members. Geographical proximity was important for the network's success. However, Jørgenson and Ulhøi (2010) found that international links were an integral part of the network in their case study; their research presented an in-depth longitudinal case study of the experience of an entrepreneurial firm within the mobile commerce space. Therefore, due to the technological nature of the business involved, business type may have been a determining factor. It was asserted that limiting the boundary of a network to one area can impede diversity and, with diversity hailed as being an enabler of innovation, this can only be perceived negatively (Patrucco, 2003 in Jørgenson and Ulhøi, 2010).

Bessant and Tsekouras (2001), in their work on inter-organisational networking have designed a generic framework (Figure 2.4) for assessing the effectiveness of networks; this represents a valuable and highly practical guide to researchers and practitioners in the design and ongoing evaluation of networks:
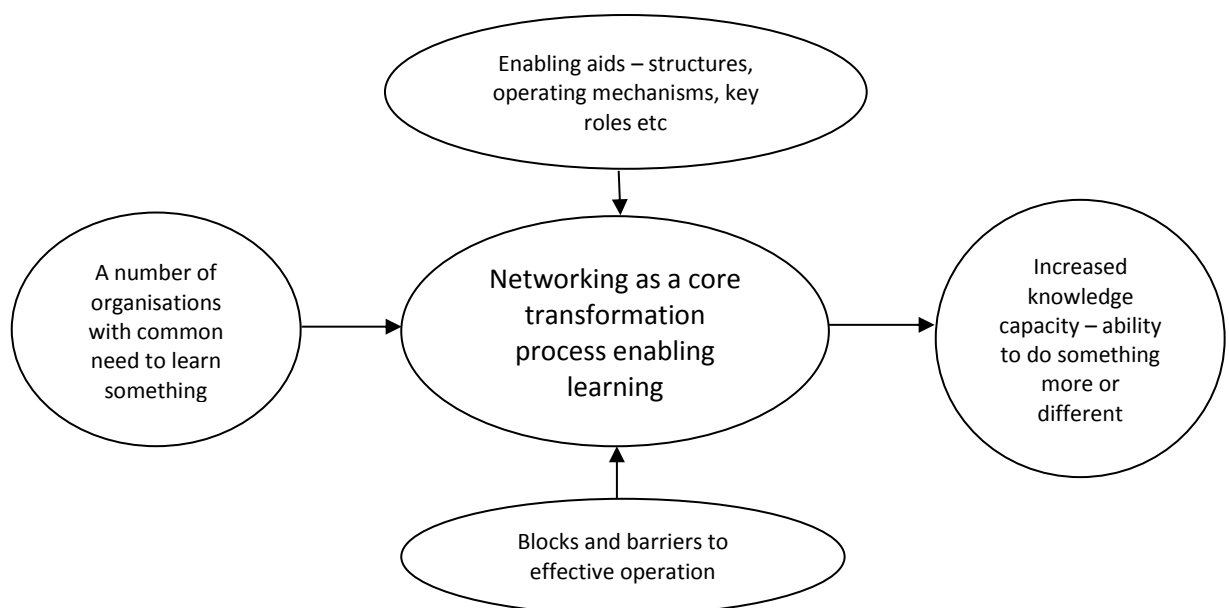
Fig.2.4 :Key Elements in Learning Networks (Source: Bessant and Tsekouras, 2001, p.89)

In their assessment of the effectiveness of the networks they studied, Bessant and Tsekouras (2001) studied the design variables, the operational variables and the learning variables of the networks. From this, they identified eight core processes which they asserted contribute to the success of the network and these are presented in Table 2.2:

Process	Underlying questions
Network creation	How the membership of the network is defined and maintained
Decision making	How (where, when, who etc.) decisions get taken
Conflict resolution	How (and if) conflicts are resolved
Information processing	How information flows and is managed
Knowledge capture	How knowledge is articulated and captured to be available for the whole network
Motivation/commitment	How members are motivated to join/remain in the network – e.g. through active facilitation, shared concerns for development
Risk/benefit sharing	How the risks and benefits are shared
Integration	How relationships are built and maintained between individual representatives in the network

Table 2.2: Eight core processes in inter-organisational networking (Source: Bessant and Tsekouras, 2001, p.91)

Bessant and Tsekouras (2001) conducted in-depth case interviews with eight different learning networks to assess their effectiveness. The most outstanding finding from their research was that for each of the core processes, focus and clarity are imperative to successful network operation. The purpose of the network must be clear; what it's there for, the characteristics of ideal participants, the structure of how it will work, the roles participants will take, the type, content and measurement of learning, the enabling techniques to be employed and mechanisms for addressing barriers to effectiveness. The qualitative methodology allowed for the exploration of the topic and each of the themes that emerged over the course of the research. Morrison, Lynch and Johns (2004) conducted research on networks specifically within the tourism sector and composed 10 case studies of networks which they deemed to be successful to provide a typography of the characteristics feeding into this success. They too highlighted the necessity for the objectives and goals of the network to be clear to all

participants. Foley et al.'s (2006) research also emphasised the requirement for network goals in order to achieve network success. Depending on the type of network, these goals and objectives would differ but the content of the goals was irrelevant, what was more important was the collective commitment to these goals amongst network members. Jørgenson and Ulhøi (2010) also elected to use a qualitative design for their study as they believe snapshot studies of events can often overlook significant influencing factors. Within their work, they addressed the themes of trust, collaboration, and power in network relationships and when and how these relationships formed. What they wanted to identify was the crucial relationships formed in networks impacting the capacity to innovate within the firm and understand the conditions under which this occurred. Learning networks particularly require that relationships develop as individuals who have built strong trusting relationships will be more inclined to engage with one another and share knowledge and experience (Bergh et al. 2011).

Zaheer et al. (2010) in their assessment of network research, identified the different levels at which networks have been examined and under what constructs. The four constructs they identified were resource access, trust, power/control and signalling. The levels of analysis for these constructs were at the dyadic level, the ego level and the whole network level. Their meta-analysis of network research showed the areas where research is lacking within the field and highlighted how network research is beginning to take a more longitudinal approach as this methodology is important for increasing our depth of understanding of network dynamics. Jack et al. in 2008 highlighted the deficit in research surrounding the changing states of networks over time and how and why these changes occur; with Martinez and Aldrich (2011) corroborating with this in their assertion that network research has been predominantly static and that while this type of research is valuable, that it lacks the ability to demonstrate the dynamics of networks. Their study was theoretical in nature and they conducted an analysis of network research in order to examine the effect of network composition on entrepreneurial activities. Hanson and Blake (2009) in their study of networks, outlined how little is known about how networks work and how entrepreneurs actually create and use these networks in their entrepreneurial

activities. This current research addresses these issues through the constructs of study alongside the longitudinal methodology employed and will contribute to and inform the research conducted to date; particularly within the study of network dynamics and gender impact in networks. The next section addresses the development of relationships, trust and commitment within networks.

2.3.5 Network Development – Relationships, Trust and Commitment

From Granovetter's (1973) seminal work on the strength of weak ties, network ties have become a significant area of inquiry in network research. Jørgenson and Ulhøi (2010) highlighted some very interesting findings in their research in relation to this. Under the basic definitions of ties[8], as put forward by Granovetter (1973), characteristics of ties which should represent 'strong' ties are apparent in ties which should technically be considered 'weak' ties and vice versa . This represents a significant difficulty for network researchers evaluating networks on the basis of the strength of ties. For example, In the case put forward by Jørgenson and Ulhøi (2010), contacts that the entrepreneurs believed to be critical in the development of their organisation and who they asserted to have "strong relationships" with, were classified as weak ties due to the level of interaction they engaged in and the lack of historical bond as Granovetter's (1973) definition of a strong tie required high levels and frequency of interaction (social engagement at least twice a week). The weak ties of the entrepreneur facilitated learning and knowledge exchange and innovation activities (Jørgenson and Ulhøi, 2010).

Jack (2005) conducted research into the way that entrepreneurs engage with their network ties and determined that it is the strong network ties of the entrepreneur that impact business development but are also instrumental in the activation of "weak ties" where required. Weak ties are characterised by heterogeneity, this diversity sparks the flow of information within networks (Jack, 2005). Jack (2005) concurred with the

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[8] Granovetter (1973) defined the strength of ties as "a combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterise the tie" (p. 1361).

arguments of Granovetter (1973), Burt (1992) and Johanisson (1986) said that the most successful networks will contain a mixture of weak and strong ties to facilitate the support, motivation and validation of individuals through their strong ties with the extended reach and variety of perspectives and information offered by their weak ties. In fact, Jack's (2005) study is concerned with focussing on the role and value that both strong and weak ties provided within the network context. Her study was an in-depth ethnographic analysis of the networks of 14 entrepreneurs in the Highlands of Scotland (Jack, 2005). Her key findings were that strong ties were highly significant for the entrepreneurs in her study and provided support, knowledge and business as well as providing a link to a broader group of weak ties which provided access to information beyond the reach of their close circles alone. However, it was the process of the activation of the weak ties through the strong ties that was seen as important, as opposed to a level of importance associated with the weak ties themselves.

When discussing the themes of networks and entrepreneurs, Greve and Salaff (2003) put forward that the social network contacts entrepreneurs possess who contribute toward the entrepreneurs' goals can be considered their social capital. While many authors consider social capital to be a thing, Anderson and Jack (2002) asserted that it is, in fact, a process; a process of creating the correct condition for the exchange of information and resources. They go on to describe how this process can be compared to bridge-building and how networks represent series of bridges that connect individuals and how some are stronger than others which can be thought of in terms of strong or weak ties. It is important that these bridges be maintained as the value of relationships to a firm can be immeasurable. When examining the motivations of entrepreneurs for sustained engagement, these ties should be evident in the facilitation of knowledge sharing within the group.

From a social network theory perspective, networks can be considered to be collaborative arrangements which result from interactions between individuals in a social context (Jørgenson and Ulhøi, 2010). This environment is conducive to relationship building which leads to trust and hence to norms of reciprocity. In Jack's (2005) study into the development of strong ties in networks, she found that trust was

built over time within the development of these relationships. Moreover, while trust is important at an interpersonal level, Neergaard and Ulhøi (2006) asserted that it may be even more critical in network relationships formed by SMEs due to research that has shown that with trust comes collaboration and greater openness in knowledge exchange (Jørgenson and Ulhøi, 2010). This finding was also found true in the case of Lefebvre et al.'s (2015) longitudinal examination of network dynamics of a network in France. The network they studied was the Entrepreneurs' Club of the Paris Chamber of Commerce. It was formed in 2005 with 10 members and over the course of the next four years had a total of 121 members. Lefebvre et al. (2015) utilised a mixed method approach with participant observation forming a major part of their study. It was during these observations that they identified the development of relationships among participants and the positive impact this had upon their interactions.

Smith-Ring and Van de Ven (1994) conducted research on the developmental processes of inter-organisational cooperative relationships and found that trust defined as "confidence in the other's goodwill" (pp.488) must exist in order for cooperative exchange to occur. Furthermore, Morgan and Hunt (1994) conceptualised trust as "existing when one party has confidence in an exchange partner's reliability and integrity" (p.23). Their study was conducted in the context of the automobile tyre industry in the US. There was an initial sample of nine retailers who participated in a preliminary study to identify the key components to be considered within the study. A questionnaire was then devised and completed by over 200 respondents to measure the levels of trust, among other things across respondents.

Trust is a necessary condition for knowledge exchange and learning to take place as research conducted by Bergh et al. (2011) has demonstrated. They studied the development of trust within a learning network context by engaging in a longitudinal in-depth analysis with a group of nine Swedish entrepreneurs who participated in a learning network designed to develop their knowledge. Within the peer network context Zhang and Hamilton (2009) found that trust is not present at network formation but that it develops with participation and signifies the most important factor supporting the learning process. Their study was based on a year-long

management programme with 67 participating entrepreneurs. They conducted in-depth interviews and in their paper (Zhang and Hamilton, 2009) presented the cases of six of these entrepreneurs. They outlined the importance of trust and the need to build trust amongst participants in order for the most significant value to be gleaned from the peer network context.

Tsai and Ghoshal (1998) conducted research into the development of social capital and value creation in a network context. Their research examined the intrafirm relationships of 15 autonomous business units (three managers from each unit participated) within one large company. Interaction between these units was voluntary, hence the role of social capital and networks in fostering exchange. The findings of their research was that social capital is a facilitator of value creation, specifically, the elements of social interaction, trustworthiness and vision in promoting resource exchange. This further supports the assertion that trust is a necessary condition for valuable network relationships. Research in the inter-organisational context carried out by Martinez and Aldrich (2011) also revealed that even though inter-organisational relationships are classified as "weak" ties, trust is imperative to the exchange of information and resources and to create reciprocal relationships. Uzzi (1997) asserted there is a need for firms to develop these soft skills (relationship development for the creation of trust between network parties) at the same time as managing the hard skills of commercial activity management in networks. Further, O'Driscoll, Carson and Gilmore (2000) described the skills required for the development of networks as having a strong marketing focus, with the practical management of relationships and trust as an important part of the networking process because the ability to manage networks can be a significant source of competitive advantage for firms with opportunities for collaboration heightened in developed networks. However, trying to capture and put a structure on the stages of formation and development of relationships in networks was found to be impossible because the process is inherently changeable and differs significantly across individuals (Turnbull, Ford and Cunningham, 1996).

Gulati and Gargiulo (1999) put forward that firms enter into networks and develop relationships which are embedded within the network and characterised by trust which in turn facilitates knowledge exchange. The network resources of firms can be thought of as the organisation's social capital, with social capital conceptualised as social harmony leading to mutually beneficial outcomes. Gulati, Nohria and Zaheer (2000) highlighted the importance for understanding the social embeddedness of firms and the impact this has upon their behaviour.

Blankenburg Holm, Eriksson and Johanson (1999) asserted that a firm's commitment to a network relationship is influenced by the commitment they perceive from their network partners. Again, trust is a key ingredient for the development of successful network relationships. Commitment was also found to be integral to network development in the peer networks studied by Zhang and Hamilton (2009) where they discovered that commitment impacted the possibilities for learning within the peer network context. Morgan and Hunt (1994) defined relationship commitment as "an exchange partner believing that an ongoing relationship with another is so important as to warrant maximum efforts at maintaining it; that is, the committed party believes the relationship is worth working on to ensure that it endures indefinitely" (p.23). Those networks which consisted of committed individuals resulted in heightened levels of learning as the relationships deepened over time and the learning achieved as the trust and openness in the network increased was more meaningful (Zhang and Hamilton, 2009). Morgan and Hunt (1994) presented the key mediating variable (KMV) model of relationship marketing (presented in Figure 2.5.) to demonstrate graphically the variables impacting the relationship commitment and trust that individuals perceived.
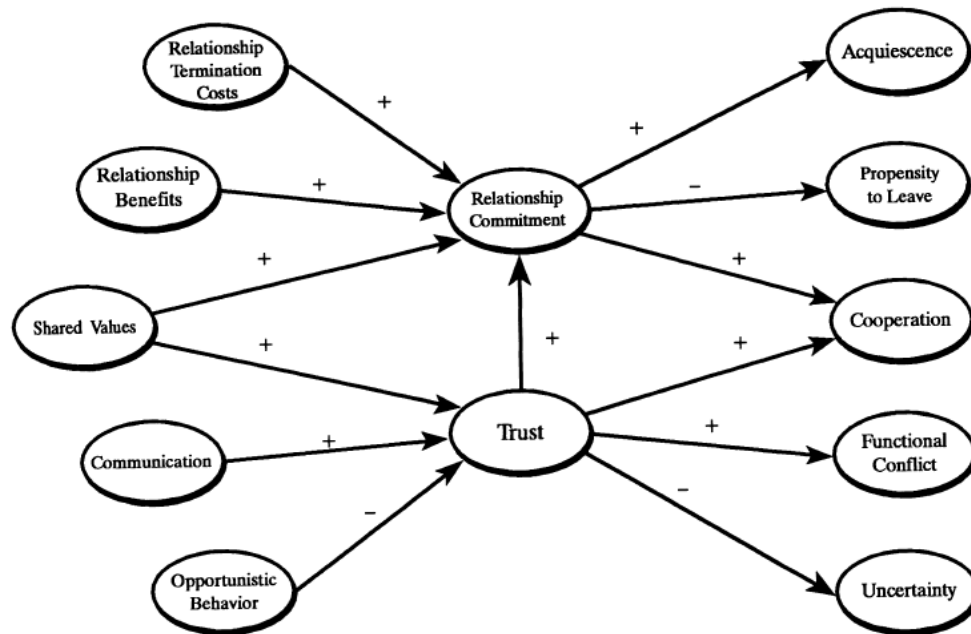
Fig. 2.5: The KMV Model of Relationship Marketing (Source: Morgan and Hunt, 1994 p.22)

The study of Morgan and Hunt (1994) based on the model presented in Figure 2.5 was concerned with the examination of 13 hypotheses. These are presented in Table 2.3 alongside the outcomes realised through this study. They conducted a self-administered questionnaire with a sample of 204 participants from a specific trade association. This research has been widely cited (over 16000 citations according to Google Scholar) and supported in the 20 years since its initial publication. This work is seminal in the examination of relationship commitment and trust. Though this model was developed in the context of relationship marketing, in the opinion of the author of this thesis, these hypotheses are transferrable to the learning network context in which this current research is based.

Hypothesis	Result
H_1 - **There is a positive relationship between relationship termination costs and relationship commitment**	Supported
H_2 - **There is a positive relationship between relationship benefits and relationship commitment**	Supported
H_3 - **There is a positive relationship between shared values and relationship commitment**	Supported
H_4 - **There is a positive relationship between shared values and trust**	Supported
H_5 - **There is a positive relationship between communication and trust**	Supported
H_6 - **There is a negative relationship between opportunistic behaviour and trust**	Supported
H_7 - **There is a positive relationship between relationship commitment and acquiescence**	Supported
H_8 - **There is a negative relationship between relationship commitment and propensity to leave**	Supported
H_9 - **There is a positive relationship between relationship commitment and cooperation**	Supported
H_{10} - **There is a positive relationship between trust and relationship commitment**	Supported
H_{11} - **There is a positive relationship between trust and cooperation**	Supported
H_{12} - **There is a positive relationship between trust and functional conflict**	Supported
H_{13} - **There is a negative relationship between trust and uncertainty**	Supported

Table 2.3: Testing the KMV Model of Relationship Marketing (Source: Morgan and Hunt, 1994, pp. 26-27)

The hypotheses supported by Morgan and Hunt (1994) in their study highlighted the various conditions that impact the trust and commitment in relationships. For instance, relationship benefits, shared values, communication, cooperation, trust and functional conflict all have a positive impact on relationship commitment. Morgan and Hunt (1994) also highlighted how relationship termination costs impacted commitment. Thus, where there is little cost to an individual to leave a relationship, they are more likely to do so. Within the context of this current research, this was particularly apt as network participants perceived little cost in terminating their network relationships. This was particularly true in the early stages of network formation where benefits, communication, cooperation and trust had not yet formed. This thus resulted in a low level of commitment to the network relationships.

In terms of business development, Ritter, Wilkinson and Johnston (2004) highlighted the value that can be derived from network relationships and that an important development for policy surrounds the development of these relationship-based competencies within individuals to ensure that entrepreneurs are able to efficiently develop network relationships to the betterment of their businesses.

In discussion about network dynamics, Gulati et al. (2000) highlighted the various endogenous and exogenous factors that shape the evolution of the network. Exogenous factors include external influencing factors such as the economic environment while endogenous factors refer to factors within the network such as new ties formed within the network which affects not only the individuals engaging with the new tie but also impacts the ties of the tie. Understanding these dynamics enhance understanding of specific network evolution.

Competition raises issues around trust in terms of network composition. Zhang and Hamilton (2010) reported that network participants experienced characteristic based trust as a result of participating in networks where members were in diverse businesses that were not in competition, indicating the importance of network composition to accelerate trust formation.

With regard to the impact of gender on network dynamics, the work of Prytherch, Sinnott, Howells, Fuller-Love and O'Gorman (2012) highlighted the impact of gender on early group formation. Their work examined single gender and mixed gender networks with the resultant observation that bonding occurs sooner in single gender female networks than in mixed gender or male networks. It was observed that trust formed more efficiently between members of the female network and thus, this network performed better, sooner (Prytherch et al., 2012).

Incorporating a contract outlining the role and responsibilities of participants in Action Learning Sets represented a highly positive mechanism for ensuring engagement which in turn, facilitated the development of relationships among participants (Zhang and Hamilton, 2010).

Larson's (1992) research highlighted the important role that trust and reciprocity play in the development of successful exchange relationships within networks. She examined how seven interfirm alliances were built and developed using an exploratory ethnographic study which provided a rich and detailed understanding of the intricacies of these structures (Larson, 1992). Individuals' reputations (and the reputations of their companies) played a role in the initial development of ties and represented a positive starting point for the development of trust within the relationship. She goes on to discuss the philosophy of partnership and the goodwill and support that can be garnered from relationships where friendship, mutuality and commitment exist and are demonstrated by each of the partners in their interactions (Larson, 1992). Larson's (1992) study focussed on relationships which were involved in formal exchanges between businesses and thus, for the development of the exchange relationships, the economic benefits had to be mutually balanced. She described how the development of trust was an incremental process and balanced upon increasing levels of exchange over time. The governance of these relationships was built on social norms of exchange and formal contracts were rarely referenced. Larson identified how firms who are capable of developing relationships like these are more likely to sustain themselves, as they are pooling their resources and leveraging the resources of these close ties. Thus, the network approach represents a positive mechanism for small firm growth.

Wenger, Trayner and deLaat (2011) found the narrative approach the most effective in terms of discerning the value of networks and Communities of Practice to individuals as this approach allows for an appreciation of the depth of the experience for those involved.

However, the area of network development and gender requires examination as authors have identified a deficiency in current understanding of the impact of gender on these processes (Hanson and Blake, 2009; Hampton, Cooper and MacGowan, 2009) Therefore, the next section of this chapter provides a brief review of literature pertaining to networks and gender.

2.3.6 Networks and Gender

Our understanding of entrepreneurial networks and gender is one that remains, as yet, quite unclear. In 2004, Watkins and Reader conducted an analysis of trends in entrepreneurship research and were surprised to discover that networking among female entrepreneurs in particular, had so little coverage. Hanson and Blake (2009) in their examination of the theory around networks and gender found that there are still differences in the networks of men and women in terms of the composition of members and the functioning of the network and therefore asserted that these differences will remain until women have equal access to opportunities as men. When it comes to looking at entrepreneurial networks in particular, it was found that there really is not enough information available about how they work in relation to gender differences and so Hanson and Blake (2009) emphasised how valuable a study on gender and entrepreneurial networks would be. Hampton et al. (2009) carried out a study of female entrepreneurial networking activity in the Information Technology (IT) sector through the use of in-depth interviews with 18 female technology entrepreneurs in Northern Ireland. They found that female entrepreneurs' networks were quite different to the networks of their male counterparts. These female entrepreneurs were found to engage predominantly with all female groups which, during the initial stages of business formation, proved very valuable in overcoming feelings of isolation that the female entrepreneurs experienced. However, as the business grew, these networks became helpless in terms of developing the business past a certain point. Hampton et al. (2009) conducted this study in order to begin to address the research gap within the study of entrepreneurial networks and gender. Studies into the quality and dynamics of female networks are called for in a bid to design networks for female entrepreneurs which will be reminiscent of their male counterparts' networks (Hanson and Blake, 2009; Hampton et al. 2009).

Greve and Salaff (2003) did not find gender differences between the networks of female and male entrepreneurs in their study though they call for further research to examine in more detail the manner in which male and female entrepreneurs develop and maintain their networks.

Within this current research, the impact of gender upon the networking process will be considered from diverse perspectives. Firstly, from the perspective of females and males engaging in single sex networks and secondly from the perspective of female and males who are engaged in mixed gender groups.

2.3.7 Sustaining network engagement over time

Within their paper addressing network management within firms, O'Driscoll et al (2000) addressed the strategic component of network selection within firms and highlighted that best practice in network engagement for a firm as being continuous assessment of the networking activities and their value within the firm on a cost vs benefit basis. In the absence of this, firms run the risk of suffering 'network myopia'; whereby their involvement within a network is no longer of value to the firm and they are failing to see any opportunity outside that network because they have become blinkered. Gulati et al. (2000) described the lock-in and lock-out effects networks may have on firms; in that firms can become locked into unproductive relationships while at the same time being locked out of potentially more fruitful relationships due to the time they're committing to the former.

While networks have been advocated as facilitators of innovation (Bessant and Tidd, 2007), Gellynck and Kühne (2010) found that this is only the case where trust, relevant knowledge, understanding of network benefits and physical resources are present. They asserted that without the practical ability to manage the networks in a manner that fosters trust and assures confidentiality among members, networks cannot facilitate innovation.

As this current research developed, the significance of Community of Practice (CoP) theory became much more apparent. The next section provides an overview of CoP theory and its relevance to this current study.

2.3.8 Communities of Practice

Earlier in this chapter, the concept of Communities of Practice (CoPs) in relation to entrepreneurs and learning was introduced. Community of Practice theory originated as a social theory of learning; hence its place earlier in this thesis in section 2.2.5: Entrepreneurs and Learning. A Community of Practice is defined as "a learning partnership among people who find it useful to learn from and with each other about a particular domain" (Wenger et al. 2011, p. 9). Brown and Duguid (2001) analysed literature pertaining to knowledge creation and networks and asserted that learning is inherently a social process and that individuals do not simply learn things as individuals, that the context in which they learn is highly relevant. Furthermore, they identified a need for a focus not just on the community, but on the practice that that community has created.

Communities of Practice and networks have been considered to be differing types of social structures but Wenger et al. (2011) outlined how the two structures are interlinked with the result that it is nearly impossible to identify a "pure" community or network where characteristics do not overlap. Networks consist of sets of relationships among members with personal reasons to connect. Network structures facilitate learning through joint solution building, information sharing and knowledge creation. A community occurs where members develop collective intention to maintain learning about a particular domain. In a longitudinal study conducted in France by Lefebvre et al. (2015) it was revealed that the network they studied evolved into a community structure over time.

In 1998, Wenger identified three modes of belonging within communities that he identified as: (i) Engagement, (ii) Imagination and (iii) Alignment. In 2010, he continued to use these terms but believed them to be more appropriately known as modes of identification within Communities as it is individuals' participation and hence identification with a community that characterises their experience and so, Wenger has distinguished between these different modes of belonging or identification

(Wenger, 1998; 2010). Outlined below are examples of processes associated with each mode:

Engagement *Formation of Communities*	Imagination *Ability to relate to different perspectives*	Alignment *Alignment to context*
Definition of common enterprise	Sharing stories	Finding common ground
Mutual engagement	Perceiving ourselves in different ways	Definition of identitiy
Relationship building	Using histories in new contexts	Putting procedures in place
Shaping identities	Exploration of alternatives	Convincing, inspiring, uniting
Building history of shared experiences		Investing energy in a focussed manner

Table 2.4: Processes of CoP modes of engagement (Source: Adapted from Wenger 1998; 2010)

In terms of cultivating Communities of Practice, Wenger, McDermott and Snyder (2002) wrote a book to this effect and highlighted seven principles for cultivating communities. These are presented in Table 2.5 along with a brief description of each principle. These principles provide practical operational guidelines to be considered as communities are being created. These are also transferrable to the network context in the author's opinion.

Principle	Description
1. Design for evolution	Designing Communities for evolution involves an appreciation of the dynamic nature of communities. This means that the Community must be open to new participants and new influences.
2. Open a dialogue between inside and outside perspectives	Communities need to be led from the inside out; however, there is great value in maintaining openness to outside perspectives
3. Invite different levels of participation	Three different levels of participation are identified. The first level is the core group that become the leaders of the community. The next level represents the active members who engage regularly but who leave the coordination of events to the core members and the remaining level of participation is by those members at the periphery of the community who do not engage as regularly as the active members but who observe the activities of the group and join in when they can.
4. Develop both public and private community spaces	Public community spaces include the meetings and activities of the community as a whole. Private spaces refer to the one-to-one activities members engage in and foster the development of relationships.
5. Focus on value	In order for Communities to maintain their "aliveness" members of the community must be gaining value from the engagement with the community. There is an abundance of value that occurs in the day-to-day interactions that community members' share, in the insights provided to problems arising.
6. Combine familiarity with excitement	As Communities develop, they naturally find a sense of routine in their activities and this is a very positive thing as the Community space becomes a place where Community members feel comfortable to share information and ideas and reflect on the advice of their peers. However, it is important that the Community engage with divergent thinking to bring some excitement into the group.
7. Create a rhythm for the community	Finding the right rhythm for community engagement is required to sustain people's motivation to engage without overwhelming them or boring them.

Table 2.5: Seven principles for cultivating communities of practice (Source: Adapted from Wenger et al., 2002)

Given the importance placed upon value creation within communities and networks, Wenger, Trayner and deLaat (2011) put forward a framework for assessing value creation within communities and networks. This framework is a highly valuable tool for the analysis of network value in real terms. They consider the various ways in which communities and networks create value for participants and so devise five cycles of value creation within networks; acknowledging the challenge of time and commitment that participants require in order to foster learning within these networks. Expanding

on Donald Kirkpatrick's (1976; 1994) four-level model of cycles of value, the five cycles identified by Wenger et al. (2011) are:

Cycle 1. Immediate value: Activities and interactions	• Fun and inspiring • Collective reflection; opening new perspectives • Solution building
Cycle 2. Potential value: Knowledge capital	• Potential for knowledge capital created to be used later • Knowledge capital can take various forms: human; social; tangible; reputational and learning
Cycle 3. Applied value: Changes in practice	• Adaptation and application of knowledge capital • Identification of how practice has changed
Cycle 4. Realized value: Performance improvement	• Reflection on effect of knowledge application and changed practices
Cycle 5. Reframing value: Redefining success	• Reconsideration of learning and the measures of success of learning • Can occur at individual, collective or institutional levels

Fig. 2.6: Cycles of Value Creation (Source: Adapted from Wenger et al. 2011)

The cycles of value creation outlined in Figure 2.6 represent a valuable means of assessing the value that networks and communities provide to their participants. While individuals are positioned within the cycle, the value of their engagement is going to be heightened.

2.3.9 Summary

This section of the chapter addressed the network construct in detail with specific attention paid to the areas of learning networks and Communities of Practice as these forms are most appropriate to this current study. However, the value of inter-organisational networks, in the various forms they take has been presented. This current research is focussed upon understanding sustained motivation for participation among entrepreneurs in learning networks. Integral to this is the delivery of value through the process to sustain motivation. The formation and development

processes required for these networks is significant and the roles of relationship development throughout the course of network formation has been highlighted as it is specifically relevant to this study.

2.4 Theoretical Framing Summary

This current research required the review and synthesis of literature from the fields of entrepreneurship, motivation, networks and Communities of Practice. This current research is concerned with understanding what motivates entrepreneurs to engage and sustain engagement with learning networks over time. In order to address this research question, VIE theory is the theory of motivation that has formed the underpinnings for the research design. Taking the entrepreneur and their personality and basic motivations as the starting point, bringing Bessant and Tsekouras (2001) core processes for successful networks combined with Wenger's Community of Practice theory constructs alongside the cycles of value creation model in networks and Communities of Practice, a framework for data analysis to address these constructs and examine the proposition of this research (the original conceptual framework did not incorporate CoP theory but its applicability emerged over time) has been devised and is presented in Figure 2.7.

Throughout this chapter, the knowledge deficiencies in network research have been highlighted. There is a significant need for research to be conducted in the network context which captures the dynamic nature of these constructs, examining them in-depth and over time. Thus, the framework in Figure 2.7 is concerned with conceptualising this process. The framework starts in the centre, at network formation, where the participants, combined with the right structures and processes are motivated to engage with a network. Where their initial experience is positive, they will perceive positive valence toward their network activities and thus enter into the cycle of value creation. Over time, and with positive, valuable experiences, the learning network will evolve into a community structure and begin to demonstrate the dimensions of Communities of Practice; namely, joint enterprise, shared repertoire and mutual engagement. Conversely, it is conceptualised in Figure 2.7 that when

participants do not perceive value from their network activities, they will not be motivated to sustain engagement with the networks. This thesis is concerned with examining six learning networks over time to determine what motivates entrepreneurs to engage and sustain their engagement with learning networks.
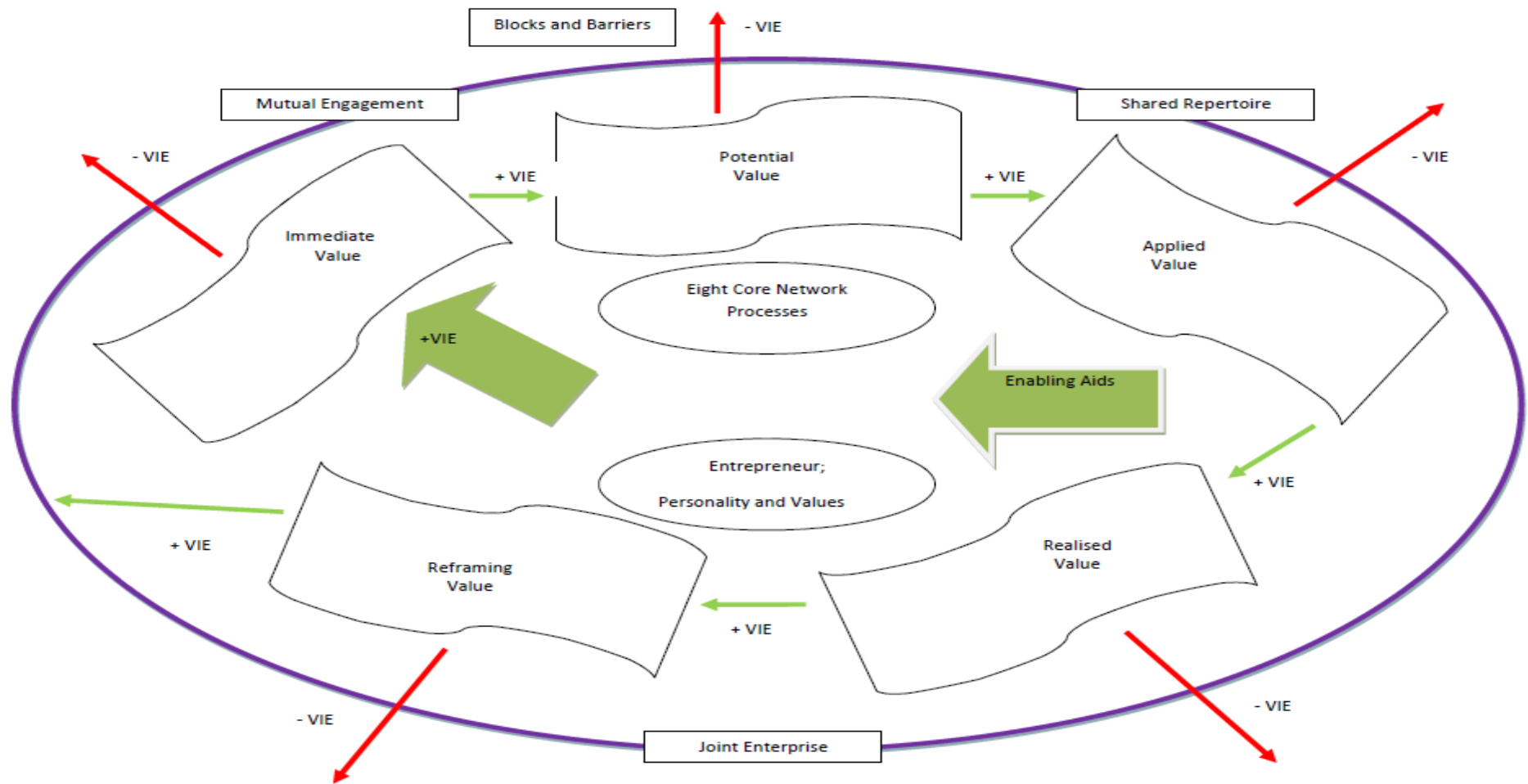
Fig. 2.7: Data Analysis framework (source: current research)

Chapter 3

Approaching Learning

Network Research

3.0. Approaching Learning Network Research

The purpose of this chapter is to firstly present the research questions of this current research as they emerge from the conceptual framework. Section 3.2 addresses the research paradigm of the author in order to provide an appreciation of the position from which this research was approached. Next, the research design is presented and justified followed by a description of the analysis techniques employed. Finally, this chapter concludes with a reflection on the advantages and limitations of the methodology employed.

3.1. Research Questions

This study is concerned with: Understanding what motivates entrepreneurs to engage and sustain engagement with networks and understanding how those motivations change over time.

In order to address this overall research question, the research sub-questions are:

- **RQ1** – What motivates entrepreneurs to engage with learning networks in the first place?
- **RQ2** – What motivates entrepreneurs to sustain engagement with learning networks?
- **RQ3** – What motivates entrepreneurs to disengage with learning networks?
- **RQ4** – Are there differences across gender and culture in the motivations of entrepreneurs to engage and remain engaged with learning networks?

These research questions emerged from the conceptual framework of this research, presented in Figure 3.1. The focal point of this research is understanding entrepreneurs' motivations to engage, and most importantly, to sustain engagement, with learning networks over time. The conceptual framework outlines the key theoretical underpinnings for addressing this research.
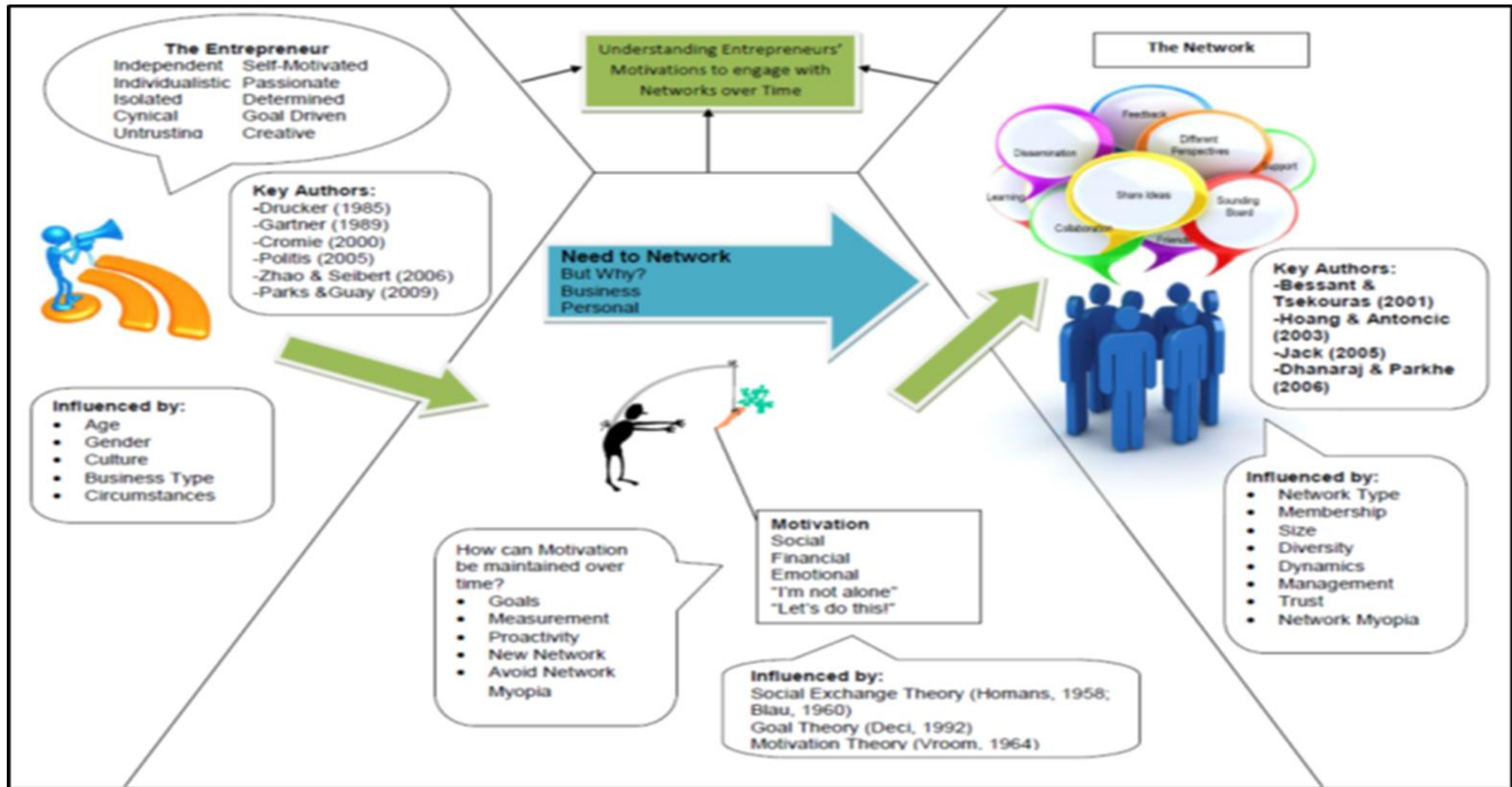
Fig. 3.1: Conceptual Framework (Source: current research)

Section 3.2 outlines the research paradigms which influence the manner through which the author conducted this research. This provides the reader with an appreciation of the position from which this research was approached.

3.2. Research Paradigms

Paradigms form a central role in research methodology and can be conceptualised in a number of ways; paradigms as worldviews, paradigms as epistemological stances, paradigms as shared beliefs in a research field and paradigms as model examples (Morgan, 2007). Morgan (2007) presented these paradigm perspectives as an overview of the Kuhnian (1970, 1974, 2000) writings on the subject which gave paradigms credence as a way for researchers to provide an overview of their beliefs about their task to create knowledge. Kuhn favoured the perspective of paradigms as shared belief systems in a research field; researchers engaged in a specific field of research should be unified in their perception of those questions most necessary to answer within the field and also, what manner is most appropriate to answer them. Given this perspective, Creswell (2009) asserted his frustration with the concept of paradigms as absolute truths and disputed the idea that it is impossible for a researcher's worldview to change or be influenced by more than one paradigm. Even the term paradigm causes difficulty among researchers given that one researcher may understand paradigms as epistemological stances and another as a worldview.

For the purposes of this thesis, paradigms are perceived as: *worldviews and shared belief systems in research fields*. In accordance with Creswell (2009) and Morgan (2007), it is asserted that no single paradigm is completely fixed and researchers can be influenced by other paradigms and worldviews. What is most important when conducting research is the research question and context. The methods employed must reflect the most appropriate approach for answering the elected research question(s). In the case of this current research, the author is influenced by three different paradigms: (i) phenomenology, (ii) critical realism and (iii) pragmatism. Phenomenology influences the qualitative depth sought out in this research. However,

the author is drawn to the practical views offered by the Critical Realist and Pragmatist schools of thought with a focus on conducting research which is of practical value in the "real world". To identify an overarching worldview, it would be that of pragmatism with influence from critical realism and phenomenology.

As asserted above, the author's paradigm is influenced by the interpretivist field of phenomenology. Interpretivism as a paradigm is concerned with understanding social phenomena (Blaxter, Hughes and Tight, 2010). Kvale and Brinkmann (2009) described phenomenology as "an interest in understanding social phenomena from the actors' own perspectives and describing the world as experienced by the subjects, with the assumption that the important reality is what people perceive it to be" (p.26), highlighting the subjective nature of this paradigm. In fact, Denzin and Lincoln (1994) defined interpretivist researchers by their "commitment to the study of the world from the point of view of the interacting individual" (p.100), which in itself embodies the subjectivity of this research paradigm. Phenomenological methods are designed to investigate the meanings of phenomena and communicate them clearly and with compassion for the actor experiencing the phenomena (Berglund, 2007). Understanding entrepreneurs' motivations for sustained engagement in a learning network environment required that a deep understanding of the meanings of the social dynamics be attained and as such the research design incorporates longitudinal phenomenological underpinnings.

Critical realism is focussed on the relationship between knowledge and practical relevance where the validity of the knowledge is verified by the extent to which that knowledge works in practice (Danermark, Ekström, Jakobsen and Karlsson, 2002). Critical realism is primarily focussed on explaining why what happens in social science happens and as such, the key methodological features of critical realism are the world view elements of causation consisting of structures, mechanisms and causal powers and how these interact to generate specific outcomes (Blundel, 2007). The methods employed in critical realism must take into account the research object and research purpose in their design (Danermark et al. 2002) and as such, critical realism lends itself to multi-method approaches where researchers can take advantage of all relevant

techniques appropriate to ascertaining the answer to the research question posed (Johnson and Buberly, 2003). Indeed, Blundel (2007) asserted that research in the social sciences calls for a specific set of methodological tools to address the dynamics and underlying mechanisms of such complicated phenomena.

To gain an understanding of the changing motivations, over time, of entrepreneurs for network involvement, a longitudinal mixed method research design was undertaken incorporating qualitative and quantitative techniques. Creswell (2003) asserted that research practices are most commonly placed on a spectrum between qualitative and quantitative methods as opposed to strictly one or the other. This research heavily employed qualitative techniques in the form of in-depth interviews and direct observations in order to gain a true appreciation of the dynamic nature of entrepeneurs' motivations to engage with learning networks over time. Some may consider that research carried out by people who have a direct involvement in the 'real-life' situation of participants (as the author did) is highly tainted or biased and therefore not of value. However, Robson (2002) suggested that research conducted this way can be thought of as 'collaborative research', which for many has been found to be more usable research. For social scientists, the object of study is the world and in that world, research subjects are active participants in the creation of knowledge through their participation in the social world of which they are a part. A key challenge for social science researchers is the interpretation of the interpretations of research subjects as this is imperative to fully understand the social situation under study (Danermark et al. 2002).

Robson (2002) highlighted the usable nature of real world research; as the input that society has on it makes it that much more practical. Real world research can be thought of as a practical way of solving problems. For the purposes of this current research, the author wanted to gain a thorough understanding of how entrepreneurs' motivations for network engagement evolved over the course of the development of the learning networks they joined and so, a longitudinal mixed method study represented the most appropriate way to achieve this. This understanding will enhance network theory and contribute to future network development for the

creation of sustainable learning networks. Hence, for the purposes of this research study, a collaborative research approach was undertaken, allowing for a full appreciation of the research participants' experiences and insights.

Pragmatism has emerged as the dominant worldview held by mixed method researchers. In Tashakkori and Teddlie's (2003) handbook of research methods they presented the writings of a number of researchers who believe that pragmatism is the principal paradigm underpinning mixed methods research (See for example Datta, 1997; Howe 1988; Patton, 1990; Tashakkori and Teddlie, 1998; Maxcy, 2003; Bazely, 2003; Rallis and Rossman, 2003; Forthofer, 2003; and Rocco, Bliss, Gallagher and Perez-Prado, 2003; presented in Tashakkori and Teddlie, 2003, p. 18). Pragmatism as a paradigm is focussed upon the research problem under investigation and the consequent outcomes of the research and as such represents a highly practical approach to research (Feilzer, 2010). Pragmatism is concerned with being practically useful in reality as opposed to simply describing realities; the research inquiry needs to focus around the questions of what it is for, who it is for and how do the values of the researcher engaging in it effect the research being conducted (Feilzer, 2010, p.8).

Tashakkori and Teddlie (1998) put forward six observations of pragmatism and mixed methods presented in Table 3.1. below:

1.	Pragmatism supports the use of both qualitative and quantitative research methods in the same study and within multistage research programs.
2.	Pragmatist researchers consider the research question to be more important than either the method they use or the paradigm that underlies the method. We refer to this as "dictatorship of the research question".
3.	Pragmatists reject the forced choice between post-positivism and constructivism with regard to logic, epistemology and so on. Pragmatism rejects the either/or of the incompatibility thesis and embraces both points of view.
4.	Specific decisions regarding the use of mixed methods or qualitative methods or quantitative methods depend on the research question as it is currently posed and the stage of the research cycle that is ongoing.
5.	Pragmatism avoids the use of metaphysical concepts (e.g., "truth," "reality") that have caused much endless (and often useless) discussion and debate (e.g., Howe, 1988).
6.	Pragmatism presents a very practical and applied research philosophy.

Table 3.1: Pragmatist perspectives and mixed methods research (Source: Tashakkori and Teddlie, 1998, pp. 22-30)

Pragmatism represents a highly practical contextual research approach which the author appreciates for the flexibility in research design it affords. Critical realism and interpretivist phenomenology offer very interesting and appropriate perspectives which also influenced this research study. In fact, it could be termed a pragmatic approach to research whereby the critical realist perspective qualifies the practical applicability of this research while the phenomenological perspective envelopes the depth of understanding achieved. Section 3.3 presents the research design employed in this current research.

3.3   Research Design

Denzin and Lincoln (1994) comprehensively defined research design as "a flexible set of guidelines that connects theoretical paradigms to strategies of inquiry and methods for collecting empirical material. A research design situates researchers in the empirical world and connects them to specific sites, persons, groups, institutions, and bodies of relevant interpretive material, including documents and archives. A research design also specifies how the investigator will address the two critical issues of representation and legitimation" (p. 14).

In order to select an appropriate research design, there is a research process that researchers in the social sciences will generally undertake in advance in order to ensure the design is appropriate to the research question(s) (Yates, 2004). Yates goes on to describe how depending on whether you are trying to *construct generalised laws* or provide a *detailed description of particular circumstances,* the research design will vary greatly.

Every piece of research begins by conducting a thorough review of the literature in the area of interest (Blaxter, Hughes and Tight, 2010). Next, the researcher must consider the context of the research. This leads the researcher to identify the topic they will examine and the resultant research questions they wish to address. The design is then selected accordingly to answer the research questions. In the case of this current

research, it was highly apparent that network theory required studies into the dynamic nature of networks and authors (such as O'Donnell, Gilmore, Cummins and Carson, 2001; Hoang and Antoncic, 2003; Provan, Fish and Sydow, 2007 and; Jack, Drakopoulou Dodd and Anderson, 2008) highlighted the deficiency in network research of longitudinal studies that captured that depth of understanding. Thus, the selection of a longitudinal mixed method research design was a natural choice.

It is important for researchers to consider their own skills and resources in the design of the research methodology (Blaxter et al., 2010). Furthermore, Somekh and Lewin (2005) argued that social science researchers must select a research design which is appropriate to their area of enquiry and their own perspective of the world. As detailed in section 3.2, the author's research paradigm is pragmatist with influence from the critical realist and phenomenological perspectives. Pragmatism is the dominant paradigm in mixed methods research due to the practical nature of this paradigm whereby the research question is the most important consideration and researchers can utilise both qualitative and quantitative methods as appropriate to address the research question (Tasshakori and Teddlie, 2003).

There were various methods employed within this current research. The author utilised quantitative questionnaires (administered at 6-monthly intervals) which addressed background information regarding the participant's business, how they develop their business, their network experience and motivations for networking. Monthly network meeting evaluations were utilised to identify the areas that the networks were addressing within their sessions, the relevance and value of these to participant businesses, the participants satisfaction with their network and their levels of engagement between meetings with other participants. After 12 months of network activity, it was clear that participants' personalities were significantly impacting group dynamics and network development and thus personality inventories were administered to identify the dominant personality characteristics amongst network participants. The questionnaires, evaluations and personality inventories provided the author with a significant breadth of background information regarding the research participants. However, the use of qualitative tools such as direct participant

observation and in-depth interview afforded the author the opportunity to add significant depth and insight to the study. The in-depth interviews allowed the author to explore the network experience of participants and addressed their previous network experiences and delved into the experience they were having as SLNIW learning network participants. The interview guide facilitated the exploration of the various factors impacting participant motivation for network engagement. The direct participant observations were a particularly valuable component of this research as this allowed the author to become embedded in the network processes of the networks and observe first-hand the developmental dynamics of the networks. Utilising Bales (1950) Interaction Process Analysis inventory allowed the author to quantify different components of participant interaction such as agreement, disagreement, facilitation, compromise etc. The observation report template guided the author in recording long-hand the more detailed interactions and activities of the networks. Another valuable component of the research design was the longitudinal aspect. The author studied the learning networks in this current research for almost three years which facilitated the understanding of the dynamic nature of network development over time.

Other important considerations in the selection of a research design include practical considerations such as, time available, access to the population the researcher wishes to study, as well as the ethical considerations of the research (Blaxter et al., 2010). As a research assistant on the SLNIW project, the author enjoyed heightened access to the research subjects as she was so embedded in the networks' design, formation and development. A significant advantage offered by the research context was that the SLNIW project was a cross border project and this facilitated a cross cultural study. Six networks were formed, three in South East Ireland and three in West Wales. Also hugely beneficial for this current research was that the networks were designed such that there would be one female network, one male network and one mixed network in each country. This provided for rich observations of the gender differences that occur in network formation and development.

As outlined by Denzin and Lincoln (1994) the research design must address the "representation" of the research subjects. Within this current research, the author considered the research to be collaborative and was fully cognisant of the value of the input of the research participants. Denzin and Lincoln also highlighted the need for "legitimation" of the research. The use of a variety of research tools and techniques allows for the legitimation of the research. For example, in the case of this current research, observations made through direct participant observations were verified through the in-depth interviews conducted with participants.

In summary, the research design for this current research was a mixed method longitudinal research design which utilised a variety of tools and techniques, both qualitative and quantitative. The research subjects were participants on six learning networks of entrepreneurs. Three of these networks were in South East Ireland and three were in West Wales which facilitated cultural analysis. In each country there was one female network, one male network and one mixed gender network which facilitated analysis by gender. Section 3.4 details the research approach and all the methods utilised as part of this current research.

3.4. Approach: Research Methods

Specifically in this research study, participants involved in six learning networks were involved in a longitudinal study for 34 months that tracked their motivations from before they began network participation right through the development of the network. These six learning networks were formed across the regions of South East Ireland and West Wales (three networks in each region). The networks were formed such that there was one female, one male and one mixed network in each country. The networks began with 104 participants across the six networks (each network ranged in size from 10 to 19 participants) and after a year of engagement, 59 participants remained (with 35 of the participants that withdrew disengaging very early in the process).

Quantitative surveys were conducted among all network participants. Also a number of participants were approached to take part in qualitative interviews to gain a deeper understanding of their motivations; accounting for gender, culture and industry type. Throughout the course of the study, direct observations of the networks were conducted in both countries, with the author spending an equal amount of time observing the networks in Ireland and in Wales in order to be embedded in the culture and therefore contribute to the real world (and phenomenological) nature of the work. O'Donnell and Cummins (1999) wrote a paper on the use of qualitative methods to research networking in SMEs outlining how previous network research was predominantly quantitative and thus failed to capture the content of network relationships. They provided a number of conditions they felt ought to be met within a research study which considers small firm networks. The research design should:

1. allow the phenomenon to be examined within its social context;
2. allow the phenomenon to be examined in its totality;
3. allow the researcher to get close to the participants;
4. be sensitive to the holistic nature of the phenomenon and;
5. be carried out longitudinally.

(O'Donnell and Cummins, 1999, p.84)

This current research addressed all of these aspects through the comprehensive mixed method design employed. There was a huge amount of time required to collect the data for this current research: almost 350 hours of observations, 37 in-depth interviews, collection of 170 6-monthly questionnaires, collection of monthly participant evaluations from network meetings for 16 months, collection of personality inventories and, co-ordination and completion of over 100 initial interviews with participants.

Figure 3.2 presents the various methods, timescales for employment and analysis tools used at various stages of this research design.

Interviews (104) with entrepreneurs using basic interview guide to ascertain initial motivations to engage; content analysed manually into themes (January – March 2010)

Administration of Goldberg's Big 5 **Personality Inventory** (46) (1992); content analysed using SPSS (February 2011)

6 Monthly questionnaires (170); closed, scaled, ranking and open questions; 3 time-points; SPSS analysis (February 2010 – July 2011)

Network observations (350 hours) using Bales (1950) Interaction Process Analysis (IPA); SPSS analysis and descriptive guide; NVivo analysis (Monthly; February 2010 – June 2012)

Participant evaluations (223) of network meetings; concise question format employing closed and ranking questions; SPSS analysis (Monthly; February 2010 – June 2011)

Participants that disengage from the network (45)

Participants that remain engaged with the network (59)

Exit interviews (19) using interview guide designed around Vroom's Valence Instrumentality Expectancy (VIE) theory for data to be analysed according to this construct; analysis using NVivo (September 2010 – October 2012)

Interviews (32) with sample of remaining participants accounting for gender, culture, industry sector using interview guide structured around Vroom's VIE theory for data to be analysed according to this construct; analysis using NVivo (March/April 2011 – October 2012)

Understanding of entrepreneurs' motivations for engaging with networks and how those motivations change over time

Fig. 3.2: Interventions employed in 34 month longitudinal study including analysis tools (Source: current research)

Longitudinal research design is rare within social science research and particularly within network research, and as such many authors are highlighting this deficit (Jack et al, 2008; Zaheer et al, 2010). O'Donnell and Cummins (1999) highlighted the need for longitudinal work to be conducted within the context of network research in order to capture the dynamic nature of networks.

For practical reasons, longitudinal research is often not feasible for researchers because of the level of commitment required in terms of both finance and time. Longitudinal design calls for a specific set of research subjects to be approached over a number of time points over the course of the research study (Taris, 2000). The amount of time lapsing between time points in a research study can vary significantly and a longitudinal study can last anything from a number of minutes (very rare) to a number of decades (also extremely rare) with any number of time points, depending on the research design; though, in social science research, the average number of time points in a longitudinal study would be between two or three (Taris, 2000). Within this research, for each research method, the number of time points over which the subjects were examined varied.

Sections 3.4.1 to 3.4.4 address each of the methods employed in turn, outlining the benefits and drawbacks associated and justification for employing each one within the study.

3.4.1. Surveys and Questionnaires

Zikmund (1997) defined a survey as "a research technique in which information is gathered from a sample of people by use of a questionnaire; a method of data collection based on communication with a representative sample of individuals" (p.202). Questionnaires are most appropriate when dealing with a large number of people and looking for straightforward information that the respondents will be willing and able to answer (Denscombe, 1998). May (2001) asserted that within social science, the survey method is an efficient means to gather information surrounding individuals characteristics and basic beliefs and can be broken down into: (i) factual, (ii)

attitudinal, (iii) social psychological and, (iv) explanatory. Within this current research, the questionnaires administered incorporated questions which fall within each of these four brackets. There are different types of questions which can be used: (i) classification questions, to gather demographic information, (ii) factual questions, for basic facts, (iii) opinion questions, for people's perceptions of things and (iv) open and closed questions, either allowing for elaboration (open) or specific responses within a provided set (closed) (May, 2001). When designing questions for a questionnaire, attitude scales can also be employed where statements are proposed and respondents can assert their degree of agreement/disagreement with the statement which means that complex attitudes can be broken down into a number of components to facilitate respondents answers (May, 2001). Attitude scales were used extensively in the questionnaire instrument for this current research, particularly in relation to the motivational components being tested as they broke these complex motivational constructs into manageable pieces for respondents.

While questionnaires represent a cost effective and relatively easy to analyse source of data, they certainly have their drawbacks, the main one being the poor response rate many researchers report (Denscombe, 1998). A particular downfall of the questionnaire method within social science research is their inability to explain the process through which people come to behave in a certain way, though their value is apparent in a multi-method context where they are followed by qualitative measures to address these deficits (May, 2001).

The questionnaires in this current research were administered at four different time points, at six month intervals. These questionnaires addressed the motivations for engagement in the networks alongside the business changes occurring for participants over time. Appendix A presents an example of a 6-monthly questionnaire completed by one of the participants. Within this part of the research, the response rate diminished over time from the first to the last time point. See table 3.2 for the response rates of these questionnaires:

Questionnaire	Responses
Baseline	76
Interval 1	48
Interval 2	20
Interval 3	26

Table 3.2: 6-monthly Questionnaire Response Rates (Source: current research)

This response rate difficulty is common within survey research (Denscombe, 1998) and highlights the necessity to utilise other methods alongside questionnaires in order to provide comprehensive results. In the case of this current research design, the mixed method approach meant that there were participant observations, interviews and evaluations to complement the questionnaires and ensure comprehensive results were achieved.

3.4.2. Interviews

A qualitative research interview is a conversation between interviewer and interviewee where the interviewee explores their lived experience with the interviewer who, armed with strong communication and questioning skills, can achieve a deep understanding of the interviewee's perceptions of the themes under examination (Kvale and Brinkmann, 2009). Fontana and Frey (2008) emphasised the co-creation that occurs within the interview setting and highlighted the integral role of the interviewer as part of the process. Within this research, a semi-structured interview design (see Appendix B for example of a complete interview transcript) was employed with a specific list of themes to be explored; this design allowed for a natural flow of conversation about specific subjects; open ended answers were encouraged and the emergence of additional information and themes of experience were facilitated (Denscombe, 1998). Interviews represent an effective means of researching real world phenomena though Fontana and Frey (2008) highlighted how researchers now often use interviews as part of a multi-method approach which provides broader and better results.

Interviews with participants who sustained engagement were conducted at three time points; the first interview was a short interview conducted with all participants who enrolled in the programme; the second interview had significantly more depth and was conducted with a sample of participants (see section 3.5 for detail on sample selected) after 12 months of network engagement; the third time point addressed the changes participants had seen after a further 12 months (for some interviews, this was as much as 18 months due to difficulty in securing interviews) of network engagement. Of all methods employed, the interviews and observations represented the real depth and phenomenology of this research. The interviews were really important and revealed significant findings for this research. They were particularly helpful as a complementary technique to the direct participant observations as the interview setting allowed for the verification of information attained through observations.

Finally, a natural part of participation in any group is that some participants will elect to disengage. Using the interview method for reasons of exploration of the themes of engagement, participants who withdrew from the networks were approached to participate in an exit interview (See Appendix C for Exit interview guide). Not all participants were willing to engage with this process, but the information retrieved from those participants who did, provided insight into their motivations for disengagement. There were 20 participants who never engaged with the networks even though they had enrolled to do so; of these 20, eight participants took part in a brief exit interview over the telephone. There were 15 participants who withdrew in the very early stages of network engagement and six of these were interviewed over the phone. Eight participants elected to leave the networks after more than six months of network engagement and five of these participants engaged in in-depth face-to-face interviews.

3.4.3. Direct Participant Observation

When it came to observation, each of the six networks was observed on a monthly basis for 16 months; after this time, the SLNIW research team entirely ceased observation. After a further six months of independent network operation had passed,

the author approached the networks to request access for three more network observations over a six month period (this was particularly beneficial as the networks were entirely independent at this point and were not expecting any further observation). This was approved by the networks and so, observations of the networks occurred spanning a time period of 26 months (this represented observation of approximately 18 meetings per network – some networks missed meetings due to adverse weather). Direct observation of the networks was a brilliant tool for the development of understanding of the "real" situation of participants; it allowed for the researcher to become embedded into the environment under study which was an invaluable opportunity. Direct observation facilitates more direct understanding of situations than most other techniques due to the integration of the researcher; you are not depending on self-report from subjects on what they say they did, you are directly observing what they are doing (Mays and Pope, 1995). In this research, participant observation was employed which Denscombe (1998) asserted is more appropriate when trying to understand the culture and processes of a group as it provides a means to describe the detail and context of the research setting (Hennink, Hutter and Bailey, 2011). The researcher engaged in passive observation whereby interaction with the group did not occur; the researcher was removed from the group and did not participate in the group's activities (Spradley, 1980). In order to limit researcher perception variation, systematic observation was employed for the observation whereby an observation schedule was designed to provide a framework for the themes to be observed (Denscombe, 1998). The observation schedule employed was that of Bales' (1950) Interaction Process Analysis (IPA) (See Appendix D for example of a completed IPA schedule) whereby the activities of the group were observed and frequencies recorded for acts such as "agrees", "gives opinion", "asks for suggestion", "shows tension" etc. This allowed the researcher to record group activities and character in a formulaic manner. The IPA schedule was supplemented by a detailed freehand report (See Appendix E for example of complete observation report) to give more detail on the group interactions and provide longhand examples of behaviours observed.

3.4.4. Personality Inventory

There were some interesting findings from the observations, so after one year of networking, a personality inventory (Goldberg's Big 5, 1992) incorporating rating scales of satisfaction, trust, loyalty, performance and collaboration was conducted with participants (See Appendix F for example of completed personality inventory). This allowed the researcher to look at how the levels of personality characteristics such as conscientiousness, for example, impacted the engagement and work of the networks and acted as a valuable addition to the research design. The response rate for the personality inventory was very good, with 46 of 59 participants completing it. Personality has been found to remain stable over adulthood and thus given the stability of the construct over time can be a good indicator of individual's inherent characteristics (Conley, 1985). In section 2.2.4 Entrepreneurship and Personality, the personality inventory was presented and its validity and reliability as a tool highlighted (Gow et al., 2005; Goldberg et al., 2006). Thus this instrument was valuable within this research given its proven rigour.

3.4.5 Summary of research methods

The preceding sections have addressed the research approaches employed. Table 3.3 presents each research approach and the value sought in using each tool in the context of this current research with the value, benefits and drawbacks outlined.

Method	Value	Benefit	Drawback
Initial Interviews	Med - High	Opportunity to gauge initial motivation levels	Limited feedback as most participants had not engaged in this style of network
Participant Evaluations	Low	Opportunity to see what participants were enjoying, and not, month-to-month	Initially strong but after a couple of months, participants clearly suffered fatigue and were not completing these fully
6-monthly questionnaire	Low - Med	Opportunity to record the entrepreneurs' impacts from network involvement on a longitudinal basis	The response rate diminished significantly from the first to fourth questionnaires and so the value of this instrument diminished over time
Participant Observation	High	Opportunity to gain a thorough understanding of the environment under study	Time consuming and behaviour of the groups was potentially modified for observation
In-Depth Interviews	High	This allowed the researcher to explore the experience of participants on the networks	Time consuming and subject to sampling as limited in resources – would have been great to meet all participants
Personality Inventory	Med - High	Opportunity to observe the impact of personality on group dynamics	This method was not in the initial data analysis plan and thus was only implemented after 12 months of engagement; would have been much stronger had it been conducted initially with all participants – were certain personality characteristics indicators of withdrawal??

Table 3.3: Research Approaches, Value, Benefits and Drawbacks (Source: current research)

Table 3.3 presents the various research approaches employed within this study. As outlined, earlier in this chapter, the interviews and participant observations generated incredibly valuable data to answer the research questions. While the monthly evaluations and 6-monthly questionnaires represented the least valuable tools within this current research, they had a significant role in providing the data to "set the scene".

Section 3.5 outlines the population of this current research and the sampling techniques utilised in this study.

3.5   Research Population and Sampling

The population of study for this piece of research was participants in six learning networks created by the Sustainable Learning Networks in Ireland and Wales (SLNIW) research project. There were a number of eligibility criteria for potential participants of the SLNIW project. Firstly, they were required to have been in business for at least three years; secondly, they must employ someone other than themselves in the business and thirdly, they must demonstrate a clear desire to grow their business. There were 104 participants initially recruited for the project. This number was reduced to 59 after one year of network engagement due to participant withdrawal at various stages (though primarily in the early forming stage; some 20 participants never engaged in any network activity).

Figure 3.2 outlined all the research interventions employed in this current research. The questionnaires, personality inventories, participant evaluations and observations naturally included all network participants. All participants who withdrew from the networks were approached for interview, but not all would engage. When it came to the in-depth interviews, it was necessary that a sample of participants be selected as Palys (1997) highlighted the impracticality of assessing every single unit of interest. Palys continued that when it comes to sampling, researchers can use probabilistic (to generate formally representative samples) or non-probabilistic (to generate strategically chosen samples) sampling techniques. In the case of this current research, the author wished to achieve a formally representative sample which accounted for network type (facilitating gender and cultural representativeness) and industry sector of participant. As such, a stratified random sampling technique was employed based on industry sector and network type. For example, in order to select one participant from the services sector from the female network in Ireland, those six (see Table 3.5. for numbers of participants from each sector in each network) names were printed and one was selected at random by the author's colleague. The participant businesses were divided into three broad industry sectors as detailed in Table 3.4.

Technology	Services	Manufacturing
Renewable Energy	Education / Training	Manufacturing
IT/ICT/Software Development	Consultancy	Engineering
R & D/Science	Professional Services	Craft
Chemistry/Laboratories	Marketing	Food Production
Food technology	Market Research	
	Interior Design	
	Garden Design	
	Printing/packaging	
	Archaeology	
	Not for Profit	
	Retail	

Table 3.4: Overview of categories of businesses placed under each sector (Source: current research)

Table 3.5 outlines the number of participants per network, region and industry sector. The numbers in Table 3.5 are representative of the active participants after one year of network engagement as this was when the first in-depth interview took place.

	Technology	Services	Manufacturing
Mixed Ireland	5	3	4
Mixed Wales	2	3	3
Male Ireland	6	2	4
Male Wales	3	2	2
Female Ireland	0	6	3
Female Wales	1	7	3
Total	**17**	**23**	**19**

Table 3.5: Numbers of SLNIW Participants by network and sector (Source: current research)

Of the total participants for each sector, one participant was chosen at random for interview. There was no female Irish participant in the technology sector and though there was one female Welsh participant whose business was in the technology sector, she declined to be interviewed and so there were no interviews to represent the technology sector in either female network. The participant from the mixed Welsh network in the manufacturing sector who was selected for interview was considering withdrawing from the network and so a second participant from this sector was selected resulting in interviews being conducted with both participants. Table 3.6 below outlines the interviewees by network and sector.

	Technology	Services	Manufacturing
Mixed Ireland	1	1	1
Mixed Wales	1	1	2
Male Ireland	1	1	1
Male Wales	1	1	1
Female Ireland	0	1	1
Female Wales	0	1	1
Total	4	6	7

Table 3.6: Participants interviewed by network and sector (Source: current research)

Participants involved in this research study were advised of their confidentiality and anonymity. Similarly, research participants were assured that they could elect to cease engagement with the research at any time. In order to ensure participant anonymity, the author assigned identifier codes to each participant. These were based on network type (Female = F; Male = M; Mixed = Mx), country (Ireland = I; Wales =W) and sector (Manufacturing = Manuf; Services = Serv; Technology = Tech). For example, the participants on the female network in Ireland are presented in Table 3.7:

Network Participant Codes – Female Network Ireland
1. FIManuf1
2. FIManuf2
3. FIManuf3
4. FIManuf4
5. FIServ1
6. FIServ2
7. FIServ3
8. FIServ4
9. FIServ5
10. FIServ6
11. FIServ7
12. FIServ8
13. FITech1

Table 3.7: Network Participant Identifier Codes (Source: current research)

Designator codes were applied for all participants. For example, participant 1 in Table 3.7 was in the female (F) network in Ireland (I). Her business was in the manufacturing sector (Manuf) and she was the first (1) of four female participants in the manufacturing sector. Thus, her assigned code for use throughout the analysis of the data was: FIManuf1. Utilising these codes protected the identity of participants.

Section 3.6 outlines the data analysis techniques utilised in this current research.

3.6. Data Analysis

The analysis of the data represented an enormous undertaking. For the purposes of this research, there was a significant amount of data collected:

- 350 hours of direct participant observation data;
- 104 initial interviews with participants;
- 19 exit interviews (14 phone interviews with those participants who had limited engagement with the networks and 5 in-depth interviews with participants who elected to withdraw after a significant period of engagement)
- 32 in-depth interviews with participants at two time points (to capture the dynamic nature of motivation for engagement);
- 46 personality inventories completed by participants;
- 170 questionnaires collected at 6-monthly intervals;
- 223 monthly evaluation forms completed by participants.

The data collection alone represented a huge amount of time, before analysis even began. The initial temptation with the data was to analyse it, method by method, and present the findings separately. This would mean presenting the findings first from the interviews, then the observations, then the questionnaires and so on. While this may have been an easier approach, it would not have made a significant contribution to theory. Instead, it was more important to take the time to draw out the relevant information thematically to present each finding coherently and ensure its value. This required utilising all the relevant data for each finding and presenting it holistically to provide the reader with a synthesised analysis of the data. However, before this synthesis could take place, each method needed to be analysed separately. After this initial analysis process, the author utilised mind map techniques to map out the presentation of the findings. See Figure 3.3 which highlights the original mindmap used to devise the data analysis framework. For the purposes of that exercise, the author used post-it notes to record all the factors feeding into the research and all the data collected to identify the emerging themes to be analysed and conceptualise how it should be presented.

Fig. 3.3. Developing the Data Analysis Framework (Source: current research)

The framework that emerged and which was used to guide the analysis process is presented here again in Figure 3.4. It encompasses the entrepreneur as he/she is motivated to engage and sustain engagement with the learning network. This is characterised by the valence they associate with network activities which will determine whether/what value they are experiencing. With continued value, comes sustained motivation and over time, the network evolves into a community.
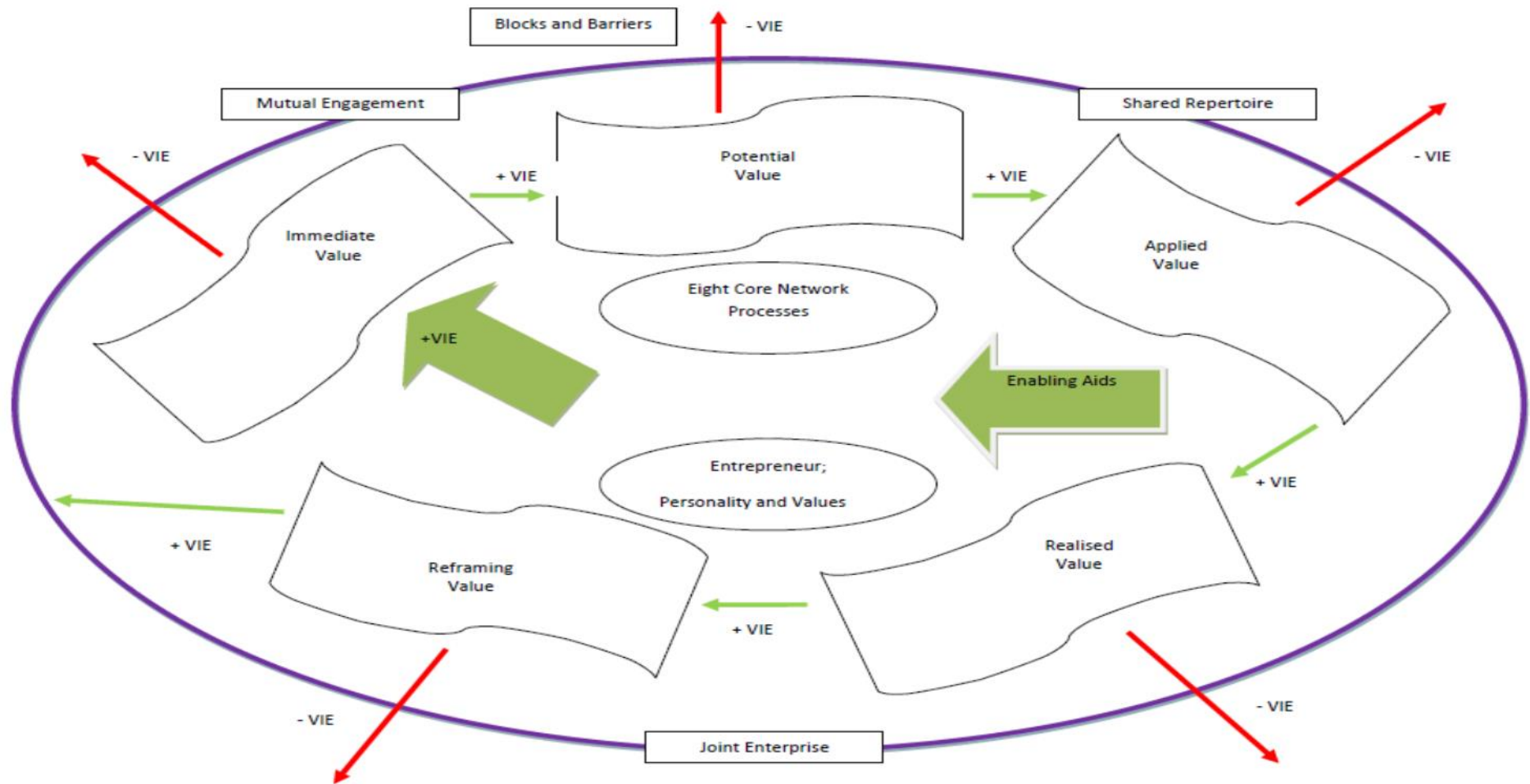
Fig. 3.4. Data Analysis Framework (Source: Current research)

After devising the overall framework for data analysis (Figure 3.4), mindmap techniques were utilised again to map out each of the findings and identify the data which would need to be presented. See Figure 3.5 for the mindmap for the first finding. In this figure, the different components of the finding are presented and critically, the sources of data identified to demonstrate the evidence.

Fig. 3.5. Example of mindmapping Finding One (Source: Current research)

This process was repeated for each of the findings. Though this represented a lengthy and challenging activity, the resulting findings chapters have a level of richness and

depth that would not have been evident in the presentation of each of the findings separately by method.

The data analysis required the use of various tools and techniques depending on the method begin analysed. For instance, the questionnaires, evaluations and personality inventories were analysed using SPSS, a quantitative data analysis software programme, which proved highly beneficial for analysing the data under various cross-tabulations which was required particularly in examination of the data by network type/gender/culture for instance. The interviews and observations were analysed using NVivo, which is a software programme specialising in qualitative data analysis. In a bid to present the qualitative data analysis in the most interesting way, the author attended a qualitative writing workshop in Leeds University with leading qualitative researchers. An interesting piece of advice provided at that workshop was that although NVivo represents a valuable tool in terms of management of data, ideally, analysis should be done manually (ie that data should not be manipulated within the NVivo software). Thus, the NVivo software was used to store and code the data, but then the nodes associated with each theme were analysed manually. The qualitative data analysis was ferociously time consuming with over 200 codes generated from the data which were then sorted into broad categories for analysis as follows:

- Benefits of engagement codes;
- Group dynamics codes;
- Ideal network codes;
- Logistics codes;
- Meeting value codes;
- Motivation to engage codes;
- Network expectations codes;
- Network reality codes;
- Network value codes;
- Participant characteristics codes;
- Real problems codes and;
- Reasons for engagement codes.

3.7. Research Reliability and Validity

Within research design, it is important for the researcher to ensure the validity and reliability of their data. Reliability refers to the "consistency and trustworthiness of research findings" while validity refers to "the truth, correctness and strength of a statement" (Kvale and Brinkmann, 2009, pp. 245-246). While reliability and validity are subtly different concepts, in good research, they are inextricably linked as high quality research must be both reliable and valid (Robson, 2002).

Golafshani (2003) highlighted the subtle difference in reliability from the quantitative and qualitative traditions. She asserted that reliability in quantitative studies serves the purpose of "explaining" whereas a "reliable" qualitative study generates "understanding", highlighting the depth and complexity presented in qualitative studies.

The concept of validity, as defined by the "truth" of the research, raises difficulties in qualitative research (Robson, 2002). Robson continued that it is almost impossible in qualitative research to be certain of this absolute "truth" of the research but highlights a number of ways to increase the likelihood of validity in research, such as:

- Rigourous collection of data using multiple methods;
- Utilising detailed methods, data collection, data analysis and reporting; and
- Writing up the research clearly to present the realities of the subjects' lives.

To ensure the reliability of the data collected in this current research, it was necessary to first of all conduct pilot studies with each of the research interventions to ensure appropriateness of the tool and understanding of the questions. Robson (2002) highlighted the value of pilot studies and advocated their use to ensure that the instrument is sound. Palys (1997) asserted that a pilot study should *always* be conducted before the researcher applies all their resources to the research. The use of pilot studies means that if there are any problems with the instrument, they can be rectified before too much work has been carried out. Ensuring the reliability of the research instrument through pilot studies also increases the validity of the data

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generated. In the case of this current research, for the evaluation forms and questionnaires, the first 10 of each were completed by the author face-to-face with research participants to ensure the understanding of the questions and rating scales. Confident from this sample (10% of the research population) of the clarity of the instruments, the remainder were completed independently by the research participants.

The personality inventories used in this study were developed by Goldberg and their scientific rigour proven (Gow et al., 2005; Goldberg et al., 2006) meaning that this instrument was guaranteed to generate reliable and valid data. Similarly the use of Bales IPA system for analysing interaction in the networks has also been proven effective (Poole and Folger, 1981) in group observations. Utilising previously validated instruments increases the validity and reliability of this research.

In the case of the interview guides for this research, the author engaged the advice and guidance of the SLNIW research team in testing the interview guides which were devised by the author based on the themes identified from the literature. Given the semi-structured design of the interview, the interviewee was able to add anything they felt appropriate. Similarly, this design allowed for the author to probe the interviewee on anything that required further attention. The subjectivity of the research design was highlighted earlier in this chapter and the influence of the research participant was valued. Thus, the author entered into the research process aware that reflexive objectivity would only be achieved through the acknowledgement of the research bias that existed. Yates (2004) highlighted the requirement for data to be verified, particularly when using qualitative techniques. The collaborative co-constructive nature of the data collected in this current research made verification particularly apt. The individuals who participated in the in-depth interviews verified their interviews after the author had transcribed the interview to ensure the data was captured and interpreted correctly, thus ensuring the validity of the data.

The research design employed in this current research was a longitudinal mixed method design. Patton (2002) asserted that utilising mixed methods facilitates

triangulation of results which increases the validity and reliability of the study. Greene (2005) defined triangulation as "the use of multiple methods – each representing a different perspective or lens – to assess a given phenomenon in order to enhance confidence in the validity of the findings" (p.274). In the case of this research, the variety of tools and the repeated nature through which they were administered and tested enhanced the reliability and validity of this study. The author is confident that the research tools utilised are sound and that the results that have been generated are generalisable in the network context.

In feedback received from an expert panel in the early phases of data analysis, it was highlighted that the real value of this current research was in taking the various data and analysing them holistically under the themes of investigation of this research. Thus, this was the approach adopted in the analysis. While each piece of research was analysed separately initially, the value of the longitudinal mixed method design was in the integration and triangulation of all data to form a single comprehensive analysis under each of the key findings of the research and this is presented in Chapters 4 to 8.

Section 3.8 – Reflections on the research design - provides the author's reflections on the research design employed in this current research.

3.8. Reflections on the research design

The research design employed for this study was highly successful in accomplishing significant understanding of network dynamics with the researcher becoming highly embedded in the environment and as such developing a sense of understanding of the context and meaning of the lived experience of the participants that an outsider simply could not. The networks were divided by gender in each country so that there was one female network, one male network and one mixed network in both cultures. This meant that for every piece of research conducted, analysis at individual network level taking gender and culture into consideration was facilitated.

The longitudinal aspect of this research is very important and allows this research to begin to "plug a gap" in network research. Network research is typically saturated with cross-sectional studies which are, of course, important, but with the significant limitation that they simply provide a snapshot of a single point in time. Using a longitudinal methodology facilitated understanding of the various factors which impact network dynamics over a period of time. Qualitative research data are imperative to the understanding of real world phenomena and provide the opportunity to capture the dynamics of social situations as the data is collected in close proximity to the phenomena under study (Miles and Huberman, 1994). Particularly in this current research, direct observations of the networks facilitated embeddedness and contextual understanding of the network environment which, verified through the interview setting meant that the direct observations were the most powerful tool employed within this study. However, analysis of observations and interviews was highly time-consuming and represented the biggest drawback of these techniques.

The questionnaires, participant evaluations and personality inventories were valuable tools for "setting the scene" of the research and providing a backdrop for the participants' contexts throughout the course of network engagement. The significant advantage of these tools is the relative ease of data analysis. Once the instruments have been well designed, the data can be almost instantly analysed using software. While the information generated from these methods may be considered quite superficial given the lack of flexibility in response for participants, when supplemented with qualitative interviews and observations, this argument becomes null.

Within mixed methods research, the analysis of data is a very important consideration. While the prevalence of mixed methods research is increasing, analysis still tends to take each method separately which does not facilitate an integrated understanding of the research questions; which is one of the key motivations for engaging in mixed methods research in the first place. Within this research study, a framework for data analysis was devised, integrating the key theoretical constructs behind the research questions upon which to analyse the data in a truly integrated manner to put forward a cohesive piece of research which addressed all the research questions holistically.

Reporting and analysing the findings of the amount of data generated in this study was a huge challenge.

Though this research design represented a highly integrated and comprehensive means of analysing and understanding the dynamics of networks, the time commitment required to undertake this level of research makes it prohibitive for many researchers. The time spent in observation alone represented almost 350 hours; this was before reports were completed or analysed and did not include travel time which in a cross cultural study was highly significant. A thorough analysis of resources must be undertaken before a research study of this size can be considered.

3.9. Summary

This chapter presented the methodology and approach of this current research. The perspective that this research was approached from was a pragmatist worldview, influenced by critical realist and phenomenological perspectives. This research was concerned primarily with understanding the "real world" experiences of entrepreneurs as they engaged with learning networks over time. Thus, a variety of methods were employed on a longitudinal basis to feed into the understanding of these individuals' motivations for engagement over time. This was a highly successful research design, however, the time and resources required to complete the research were significant and thus replicating a study such as this would represent a significant undertaking. However, ideally, the learning achieved from this current research should feed into the network design of a new set of networks and these should be studied to ascertain their success over time to determine the validity of the factors identified as feeding in to network success.

The next five chapters present the key findings of this current research as uncovered through the research methodology employed.

Chapter 4

Motivations to engage

with Learning Networks

4.0. Motivations to Engage with Learning Networks

The purpose of this research was to explore the motivations of entrepreneurs for engaging and sustaining engagement with learning networks over time. As outlined in Chapter 3- Methodology, a significant amount of data collection was undertaken to inform this research; almost 350 hours of direct observation of the networks, 150 interviews, 46 personality inventories and 170 questionnaires. This research took place over almost three years (Between January 2010 and November 2012). There were five key findings emerging from this research which will form the basis for the findings chapters of this thesis.

Within Chapter 4 – Motivations to Engage with Learning Networks, the demographics of the population of study are presented alongside the first research finding which surrounds what initially motivates entrepreneurs to engage with networks.

Chapter 5 – Network Purpose, Structures and Processes for Sustaining Participant Motivation, addresses the next two emerging findings; firstly, the role that clarity of network purpose has upon network engagement and secondly, the impact of defined network structures and processes on network engagement. When entrepreneurs understand the purpose of networks and are committed to working toward that purpose, their experience will be heightened and their motivation to sustain engagement with the network will be enhanced. When networks operate on a routine basis with defined structures and processes, the network is more likely to provide value to participants and thus sustain their motivation to engage.

Chapter 6 – Personality Characteristics and Participant Motivation, addresses the role that network participants' personality characteristics have upon their propensity to sustain engagement with networks.

Chapter 7 – Building a Positive Network Environment, presents the impact of the network environment on successful network operations. Where there is an environment of peer-to-peer engagement, openness, honesty, support and trust,

entrepreneurs are more likely to perceive a sense of community from their networks and this serves to sustain their motivation to remain engaged with the network.

Chapter 8 – Summary of Research Findings – Bringing it all Together, presents a summary of the five key findings of this research and provides an analysis of the manner through which the different themes which are emerging throughout are linked.

Participant details are presented next before the initial motivations of entrepreneurs to engage with networks are addressed.

4.1. Participant Details

This section presents the details of the population of study for this thesis. There were six learning networks studied, three in South East Ireland and three in West Wales. In each country, there was one male network, one female network and one mixed network. This facilitated analysis from a gender and culture perspective. The networks under examination were the Sustainable Learning Networks in Ireland and Wales (SLNIW[9]) networks. The details of participant numbers recruited to each network, attendance rates of each network, withdrawal and non-attendance rates for each network and basic participant information such as business sector, employee numbers and number of years in business are all presented in this section.

4.1.1. Participant Numbers

Table 4.1 presents the numbers of participants recruited to each network in Ireland and Wales.

Female Network Ireland	Male Network Ireland	Mixed Network Ireland	Female Network Wales	Male Network Wales	Mixed Network Wales	Total
13	18	19	16	18	20	104

Table 4.1: Recruited participants (Source: current research)

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[9] The SLNIW project was part-funded by the European Regional Development Fund (ERDF) through the INTERREG IVA Ireland Wales Programme 2007-2013. The project was undertaken by the Centre for Enterprise Development and Regional Economy, School of Business, Waterford Institute of Technology, Ireland in partnership with the School of Management and Business, Aberystwyth University, Wales.

This means that, in total, 104 participants were recruited to the SLNIW learning networks. However, a number of participants that were recruited never attended any events and as such, were never truly a part of the networks. As a result, although interviews were sought with those recruited participants who never engaged, they did not form a significant part of the population of study for this research considering the longitudinal nature through which the remaining participants were studied. These figures are presented in Table 4.2.

Female Network Ireland	Male Network Ireland	Mixed Network Ireland	Female Network Wales	Male Network Wales	Mixed Network Wales	Total
0	2	3	2	8	5	20

Table 4.2: Recruited participants who never engaged (Source: current research)

Given the amount of recruited participants who never attended any network events, it is important that the network participant numbers be adjusted to represent the "true" numbers for each network. These are presented in Table 4.3.

Female Network Ireland	Male Network Ireland	Mixed Network Ireland	Female Network Wales	Male Network Wales	Mixed Network Wales	Total
13	16	16	14	10	15	84

Table 4.3: Network sizes minus those recruited participants who never engaged with the networks (Source: current research)

Within any group structure, participant withdrawal is inevitable and presented in Table 4.4 are the numbers of participants who withdrew from the network programme after initial engagement.

Female Network Ireland	Male Network Ireland	Mixed Network Ireland	Female Network Wales	Male Network Wales	Mixed Network Wales	Total
4	2	5	0	0	1	12

Table 4.4: Participant withdrawal figures (Source: current research)

Though, on official record, only one participant withdrew from the Mixed Network in Wales and none from either of the other networks, the attendance rates of members

tell a different story as outlined in Table 4.5 where we see that for many meetings, there were as few as four participants in attendance at many network meetings.

Direct observations were undertaken of all of the networks on a monthly basis and as such, for the purposes of this part of the research, all participants represented the population of study. After a year of engagement, the number of participants across all six networks was approximately 50 in total. For the in-depth interviews, the time required to interview all participants was too great and so a stratified random sample of participants was selected to represent each network and type of business resulting in 17 participants being interviewed after one year of engagement and 15 after two years of engagement. Details of the interviewees were presented in Chapter 3 – Approaching Learning Network Research, Section 3.5: Research Population and Sampling.

| Network Sessions | | | | | | | | | | | | | | | | |
Session	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Irish Female	12	11	9	10	9	9	8	11	6	5	6	8	7	7	6	5
Irish Male	13	9	13	11	9	7	10	10	9	12	8	6	7	6	6	8
Irish Mixed	12	9	15	12	11	9	13	10	10		10	9	11	7	8	7
Welsh Female	9	10	11	9	6	6	7	5	8	7	5	7	8	7	10	6
Welsh Male	8	6	6	6	4	4	4	4	4	3	3	7	7	5	5	4
Welsh Mixed	13		8	9	8	9	4	5	7	6	6	5	7	8	7	8

Table 4.5: SLNIW Attendance Rates by Network for each Observed Session (Source: current research)

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Table 4.6 shows the types of businesses that were included under the three broad sectors of "technology", "services" and "manufacturing". With such a wide variety of businesses represented by the participants, it was important to allocate them into these three sectors to facilitate research analysis from an industry perspective. The sampling process for the in-depth interviews considered "sector" to ensure a sample which accounted for gender, culture and industry type.

Technology	Services	Manufacturing
Renewable Energy	Education / Training	Manufacturing
IT/ICT/Software Development	Consultancy	Engineering
R & D/Science	Professional Services	Craft
Chemistry/Laboratories	Marketing	Food Production
Food technology	Market Research	
	Interior Design	
	Garden Design	
	Printing/packaging	
	Archaeology	
	Not for Profit	
	Retail	

Table 4.6: Overview of categories of businesses placed under each sector (Source: current research)

4.1.2. Network Participant Characteristics by Network

This section presents tables outlining the active participants in each network, the sector of their business, the amount of time in business and the number of employees in the business. The number of sessions that each participant attended during the induction period of network formation is also presented. This encompasses the first five sessions which were facilitated by the SLNIW research team as well as the first two self-facilitating sessions of the networks as this was the key time for network formation.

4.1.2.1. Female Network Ireland

Code for Study	Sector	Employees	Years in Business	Induction Period Attendance
1. **FIManuf1**	Manufacturing	1	10	6 /7
2. **FIServ1**	Services	4	6	5 /7
3. **FIServ2**	Services	2	6	7 /7
4. **FIServ3**	Services	4	14	7 /7
5. **FITech1**	Technology	2	1	2 /7
6. **FIServ4**	Services	6	12	6 /7
7. **FIManuf2**	Manufacturing	8	45	4 /7
8. **FIServ5**	Services	3	10	6 /7
9. **FIServ6**	Services	4	7	2 /7
10. **FIServ7**	Services	2	15	7 /7
11. **FIManuf3**	Manufacturing	2	12	7 /7
12. **FIManuf4**	Manufacturing	6	8	5 /7
13. **FIServ8**	Services	12	11	4 /7

Table 4.7: Female Network Ireland Recruited Participants (Source: current research)

Table 4.7 presents the participants of the SLNIW female network in Ireland. Of the six networks recruited, this network was the only network where there were no participants recruited who failed to attend SLNIW events. This means that, starting out, there were 13 participants. The services sector dominated with eight businesses in the services sector, four in manufacturing and just one in technology. The average number of employees was four and the average number of years in business was 12.

4.1.2.2. Male Network Ireland

Code for Study	Sector	Employees	Years in Business	Induction Period Attendance
1. **MITech1**	Technology	8	11	6/7
2. **MITech2**	Technology	5	4	4/7
3. **MITech3**	Technology	2	10	7/7
4. **MITech4**	Technology	2	5	6/7
5. **MIManuf1**	Manufacturing	3	3	6/7
6. **MIManuf2**	Manufacturing	3	6	5/7
7. **MITech5**	Technology	6	3	4/7
8. **MIManuf4**	Manufacturing	22	33	6/7
9. **MIServ3**	Services	2	5	6/7
10. **MIServ4**	Services	7	6	6/7
11. **MIManuf5**	Manufacturing	35	9	4/7
12. **MIServ6**	Services	4	5	4/7
13. **MIManuf6**	Manufacturing	17	17	3/7
14. **MIManuf7**	Manufacturing	60	30+	5/7

Table 4.8: Male Network Ireland Active Participants (Source: current research)

Table 4.8 presents the details of the active participants of the Male Network in Ireland. There were 14 active participants in this network (though 16 were listed in Table 4.3, there were two participants who engaged for just one induction session and so were not technically "active"). There was good diversity in business sectors within this network with six manufacturing, five technology and three services businesses. The average employee numbers was 13 and the average years in business was 11.

4.1.2.3. Mixed Network Ireland

Code for Study	Sector	Employees	Years in Business	Induction Period Attendance
1. **MxITech1**	Technology	19	10	3/7
2. **MxIManuf1**	Manufacturing	30	16	3/7
3. **MxITech6**	Technology	5	8	5/7
4. **MxIManuf3**	Manufacturing	40	31	6/7
5. **MxITech2**	Technology	6	9	6/7
6. **MxIManuf4**	Manufacturing	2	5	5/7
7. **MxIServ1**	Services	1	9	5/7
8. **MxIServ2**	Services	7	7	6/7
9. **MxIServ3**	Services	17	10	4/7
10. **MxIServ4**	Services	6	4	6/7
11. **MxIManuf5**	Manufacturing	14	11	7/7
12. **MxIManuf6**	Manufacturing	160	33	5/7
13. **MxIManuf8**	Manufacturing	90	77	5/7
14. **MxITech3**	Technology	6	3	5/7
15. **MxIManuf9**	Manufacturing	28	17	5/7
16. **MxITech4**	Technology	8	5	5/7

Table 4.9: Mixed Network Ireland Active Participants (Source: current research)

Table 4.9 presents the SLNIW Mixed Network participants in Ireland. There were 16 active participants in this network. There was good diversity in business sector among active participants in this network with manufacturing, technology and services having seven, five and four representatives respectively. The average number of employees was 27 (this number is quite high and was influenced considerably by two significant employers within this network; MxIManuf6 with 160 employees and MxIManuf8 with 90 employees) and the average number of years in business was 16.

4.1.2.4 Female Network Wales

Code for Study	Sector	Employees	Years in Business	Induction Period Attendance
1. **FWServ1**	Services	3	6	4/7
2. **FWServ2**	Services	19	16	5/7
3. **FWServ3**	Services	3	3	5/7
4. **FWManuf1**	Manufacturing	13	30	6/7
5. **FWServ5**	Services	2	13	3/7
6. **FWServ6**	Services	8	4	4/7
7. **FWServ7**	Services	1	2	6/7
8. **FWManuf2**	Manufacturing	1	6	3/7
9. **FWServ8**	Services	4	16	4/7
10. **FWTech1**	Technology	4	4	2/7
11. **FWServ10**	Services	5	1	3/7
12. **FWServ13**	Services	2	8	3/7

Table 4.10: Female Network Wales Active Participants (Source: current research)

Table 4.10 presents the SLNIW Female Network participants in Wales. There were 12 active participants in this network (though 14 were listed in Table 4.3, there were two participants who engaged for just one induction session and so were not technically "active"); nine in the services sector, two in manufacturing and one in technology. The average number of employees for this network was five and the average number of years in business was nine.

4.1.2.5. Male Network Wales

Code for Study	Sector	Employees	Years in Business	Induction Period Attendance
1. **MWTech1**	Technology	5	15	4/7
2. **MWTech2**	Technology	43	31	4/7
3. **MWManuf1**	Manufacturing	6	5	6/7
4. **MWTech3**	Technology	5	5	6/7
5. **MWManuf3**	Manufacturing	14	27	7/7
6. **MWServ5**	Services	7	6	6/7

Table 4.11: Male Network Wales Active Participants (Source: current research)

Table 4.11 presents the Male Network participants recruited in Wales. There were 18 participants initially recruited (See Table 4.1) but there were 12 participants removed due to limited or no engagement with SLNIW events. This network saw the strongest differences between those participants recruited and those who were actually active. This network shrunk to just six members once inactive members were removed. There

were three technology, two manufacturing and one services business represented in this network. The average number of employees for the network was 13 but this figure is heavily impacted by the large number employed by participant MWTech2 (43 employees). The average number of years in business was 15.

4.1.2.6. Mixed Network Wales

Code for Study	Sector	Employees	Years in Business	Induction Period Attendance
1. **MxWTech1**	Technology	3	9	5/5
2. **MxWTech2**	Technology	4	12	2/5
3. **MxWTech3**	Technology	1	4	4/5
4. **MxWServ4**	Services	2	16	5/5
5. **MxWServ5**	Services	3	1	5/5
6. **MxWManuf3**	Manufacturing	1	3	5/5
7. **MxWServ6**	Services	2	11	3/5
8. **MxWManuf4**	Manufacturing	1	6	4/5
9. **MxWServ7**	Services	12	5	2/5
10. **MxWServ8**	Services	2	6	2/5
11. **MxWManuf6**	Manufacturing	1	7	4/5

Table 4.12: Mixed Network Wales Active Participants (Source: current research)

Table 4.12 presents the active participants of the Mixed Network in Wales. There were 11 active participants in this network (though 15 were listed in Table 4.3, there were four participants who only engaged for one network session and thus were not technically "active"). There were five participants from the services sector, three from manufacturing and three from technology. The average number of employees was three and the average number of years in business was seven.

Table 4.13 outlines an overview of all the profiles of the six networks recruited to the SLNIW project. The Irish and Welsh Female Networks and the Mixed Welsh Network were, on average, composed of smaller businesses. Through observation and network participant reporting, this seems to have positively influenced participant motivation for engagement, potentially as the owners of smaller businesses may have less support within their business structures. These networks reported the strongest levels of productivity and value from their engagement; potentially they had more to learn than some of the more established participants in the other groups. These three networks were dominated by services businesses and potentially this is an indicator that service-

based businesses stand to benefit more significantly from network engagement and collaboration and certainly, within each of these networks, there were explicit examples of collaboration on business projects amongst members from services based businesses (not the purpose of learning networks but represents a positive outcome for participants). The Mixed Network in Ireland consisted of the biggest employers and most established businesses and it was this network that had the highest rate of withdrawal (5) among members who did initially engage but who subsequently decided to withdraw their engagement. This raises a question about the learning that more established entrepreneurs can gain from structures such as these. Potentially, larger businesses benefit from more access to support within their own businesses than those individuals who are running smaller operations and as such, those entrepreneurs with smaller businesses may benefit more from the support that learning network structures provide; although the expertise of more experienced entrepreneurs is highly valuable, therefore experienced participants are required for network success.

Network	Recruited	Active	Average Employees[10]	Average Years in Business[11]	Sector Split[12]
Irish Female	13	13	4	12	8 Services 4 Manufacturing 1 Technology
Irish Male	18	14	13	11	6 Manufacturing 5 Technology 3 Services
Irish Mixed	19	16	27	16	7 Manufacturing 5 Technology 4 Services
Welsh Female	16	12	5	9	9 Services 2 Manufacturing 1 Technology
Welsh Male	18	6	13	15	3 Technology 2 Manufacturing 1 Services
Welsh Mixed	20	11	3	7	5 Services 3 Manufacturing 3 Technology

Table 4.13: Overview of SLNIW Network Details (Source: current research)

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[10] These figures relate to active participants on the networks
[11] These figures relate to active participants on the networks
[12] These figures relate to active participants on the networks

The next section of this chapter explores the first finding of this research which addresses the initial motivations of entrepreneurs to engage with networks.

4.2. Finding 1: Entrepreneurs will be motivated to engage with networks where they are provided the opportunity to engage with like-minded people for information sharing, learning and problem solving

Before participants embarked upon network engagement, they participated in a brief face-to-face structured interview where their motivations for engaging with the networks were examined. From the literature review, a number of motivations for engagement were identified. These motivations were presented to the entrepreneurs and they were asked to choose the ones which were most relevant to them. Figures 4.1 to 4.4 present these motivations as outlined by male and female participants in both Ireland and Wales, presented separately to facilitate comparative analysis.
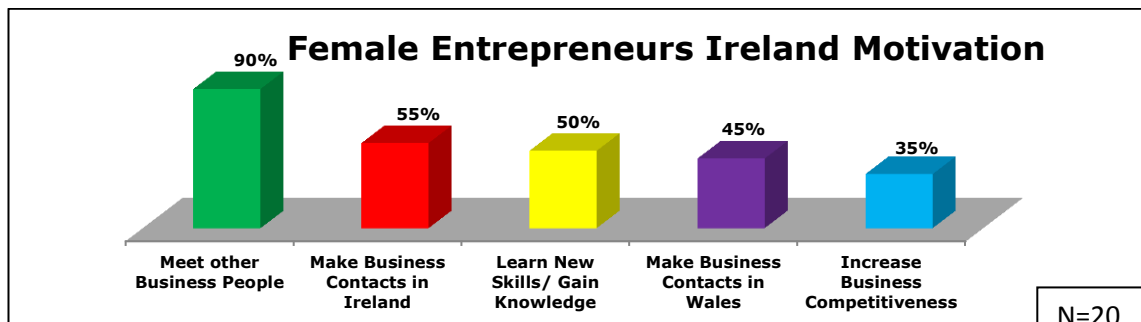
Fig. 4.1: Initial Motivation to engage (Female participants Ireland) (Source: current research)
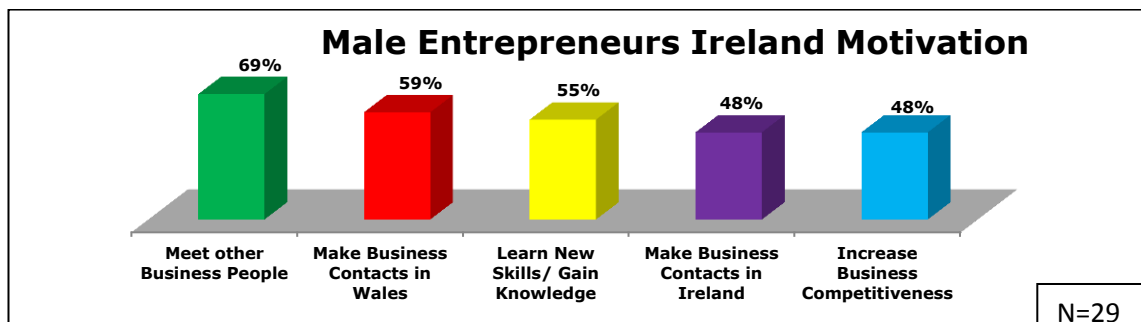
Fig. 4.2: Initial Motivations to engage (Male participants Ireland) (Source: current research)

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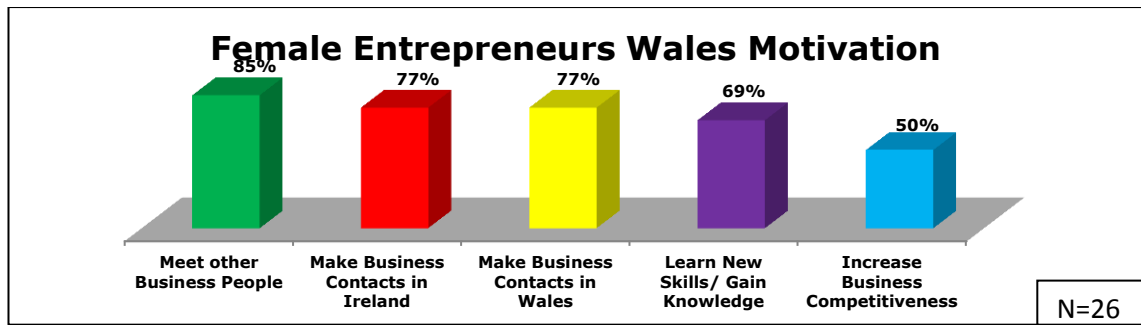
Fig. 4.3: Initial Motivation to engage (Female participants Wales) (Source: current research)
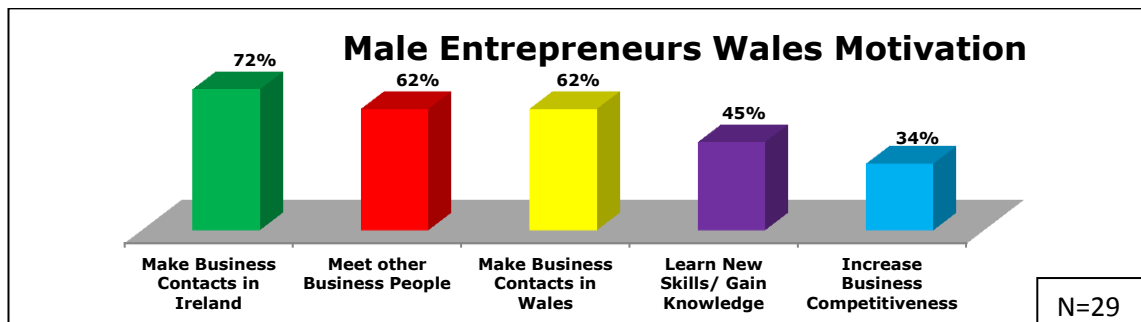
Fig. 4.4: Initial Motivations to engage (Male participants Wales) (Source: current research)

For the Irish male participants and the Irish and Welsh female participants, the most significant motivation to engage was to meet other business people. This was particularly important for the female participants where 85% of the female Welsh participants and 90% of the female Irish participants cited "meeting other business people" as a motivation for them to engage. "Meeting other business people" was less important for male participants with 69% of Irish participants and 62% of Welsh participants citing this as a motivation to engage. This difference is not unexpected with research into female entrepreneurship uncovering that female entrepreneurs need support in the development of their enterprises and networks represent a positive source of this support. Women are more naturally inclined toward developing relationships with others (Foss, 2010) and in the research conducted by Malewicki and Leitch (2011) which examined the outcomes of network engagement for female and male entrepreneurs, female entrepreneurs were found to glean more economic and affective value from their network interactions than their male counterparts.

The opportunity for international contacts was significant for male participants with Irish male participants citing "making business contacts in Wales" as their second most

important motivation to engage at 59% and for the Welsh male participants "making business contacts in Ireland" was their most cited motivation to engage at 72%. The opportunity for international contacts was only the fourth motivation for Irish female participants to engage (45%). However, female participants in Wales were much more enthusiastic about this aspect with 77% motivated to engage to make contacts in Ireland.

Learning new skills/gaining knowledge took third and fourth place across participants with between 45% and 69% of participants citing "learning new skills/gaining knowledge" as a motivation to engage. It would have been expected that this would have been higher but potentially, with these networks being designed as learning networks, the opportunity for learning was assumed by participants.

Increasing business competitiveness was the least cited motivation to engage amongst participants. This was expected given the fact that participants had not yet met with their network colleagues when these interviews took place and thus, potentially had no expectation for how engagement with the networks could increase their business competitiveness.

After the induction session where participants came together for the first time, participants filled out the first of their six-monthly questionnaires which included a section on their motivations to engage with the networks. There were numerous possible responses which are presented in Figure 4.5 but participants were asked to elect up to five that were relevant to them. Figures 4.5 to 4.11 represent these responses.

Collaboration	Personal Contacts	Enabling Innovation	Information Sharing	Overcome Isolation
Socialising	Improving effectiveness	New Ideas	Economies of Scale	Advice/Problem Solving
Learning	Problem Solving	Technology	International Business	Sharing Skills
	Positive Effect on the Local Economy	Influence People's Opinion	Sharing Resources	

Fig. 4.5: Possible Motivations for Engagement from 6-monthly Questionnaire (Source: current research)

Figure 4.6 presents the overall Top 8 response rates for participants' motivations to engage with the networks.
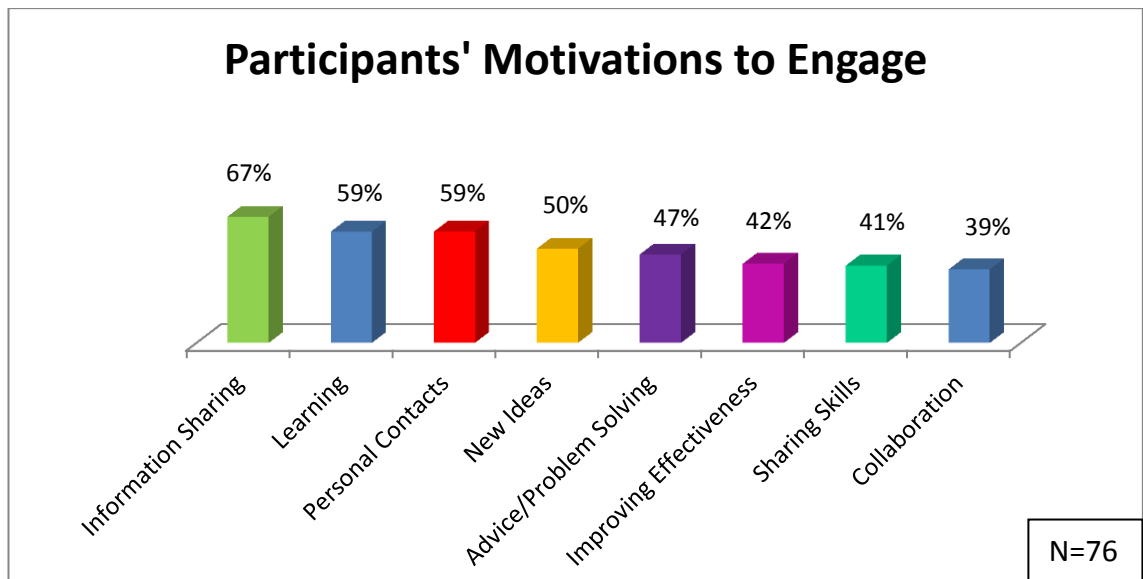
Fig. 4.6: Participants Initial Motivations to Engage with the Networks (Source: current research)

"Information sharing" represented a motivation to engage for over two-thirds of participants with both "learning" and "personal contacts" cited by 59% of participants followed by "new ideas" and "advice/problem solving" by 50% and 47% respectively. These top five responses are presented in Figures 4.7 to 4.11, where they are broken down by country and gender to allow for comparisons to be drawn.
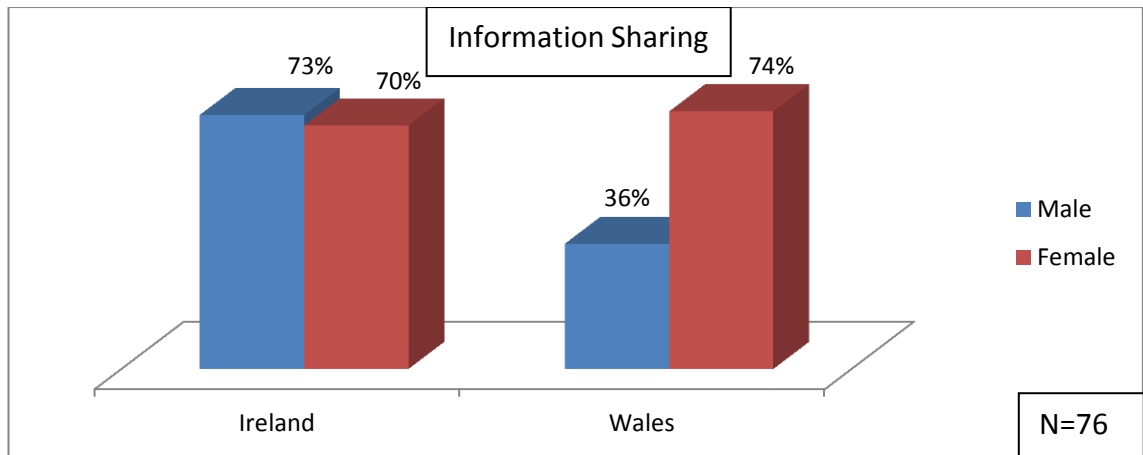
Fig. 4.7: Motivation of "information sharing" by country and gender (Source: current research)

The most significant observation to be drawn from Figure 4.7 is the relatively low proportion of male participants in Wales who are motivated to engage for information sharing. Within observations of the male networks in both Ireland and Wales, there was a reluctance to share information observed among male participants so this could go some way to explain the significantly different response rate from the male participants in Wales. It is interesting though that the same difference is not observed among Irish male participants.
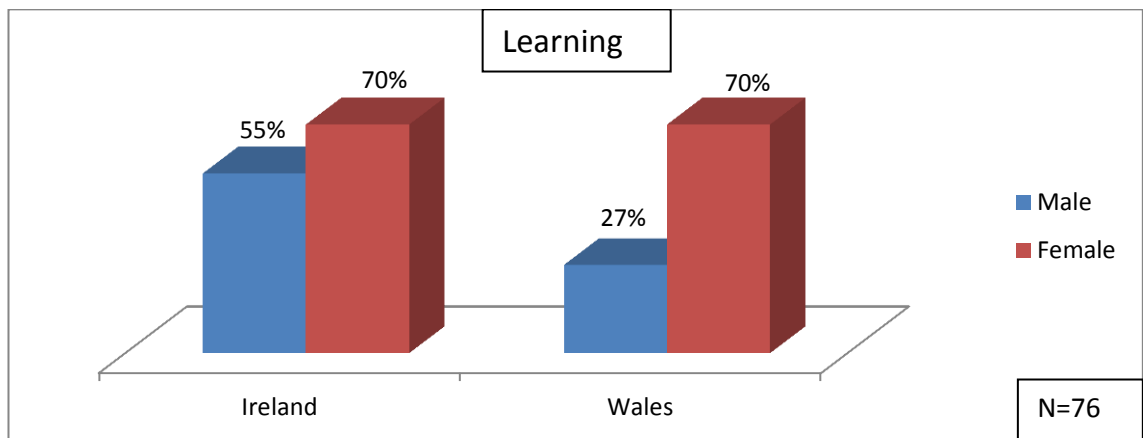
Fig. 4.8: Motivation of "learning" broken down by country and gender (Source: current research)

From Figure 4.8, the female participants were more motivated by learning than the male participants in either country, again with a marked difference in the level of enthusiasm of the Welsh male participants for learning.
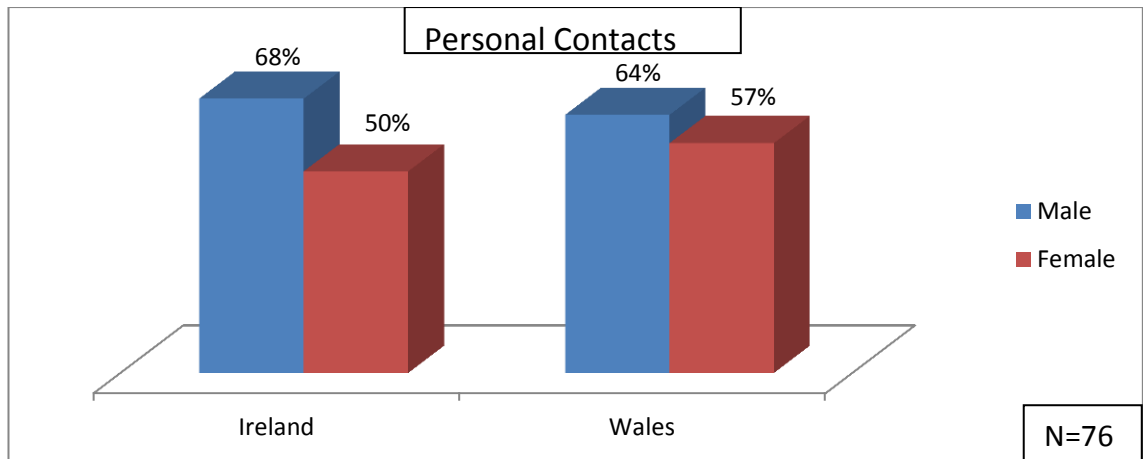
Fig. 4.9: Motivation of "personal contacts" broken down by country and gender (Source: current research)

Figure 4.9 reveals the importance of building personal contacts for the male participants in both Ireland and Wales with approximately two-thirds of male participants motivated to engage for this reason. However, the figures for the female participants are also quite strong with over 50% of female participants motivated for personal contacts.
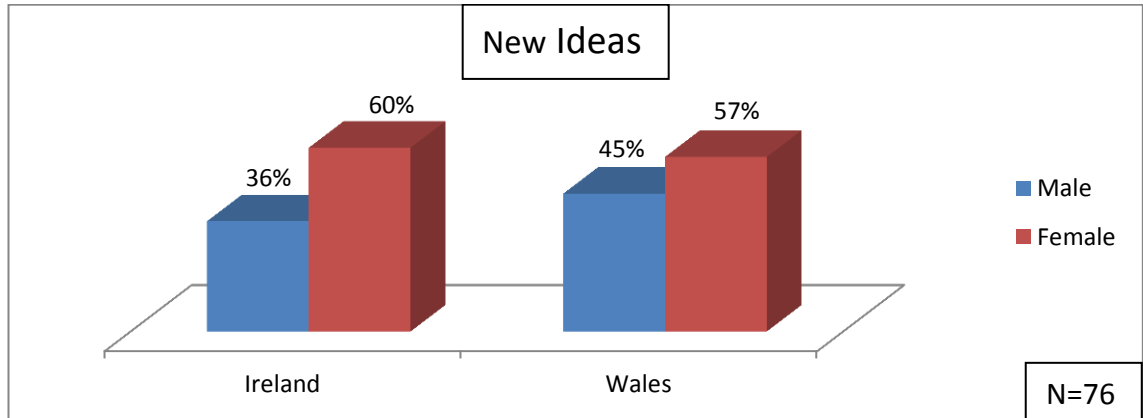
Fig. 4.10: Motivation of "new ideas" broken down by country and gender (Source: current research)

Figure 4.10 reveals that female participants are more motivated to engage with networks for access to "new ideas" than their male counterparts. This level of openness is more expected from female participants. Through the observation phase of data gathering, it was seen that female participants engaged more openly and with more trust and enthusiasm from the early stages of network formation. Male participants required more time for their networks to form. This meant that the female

network participants appreciated the value of the learning networks sooner than their male counterparts, increasing their enthusiasm for engagement.
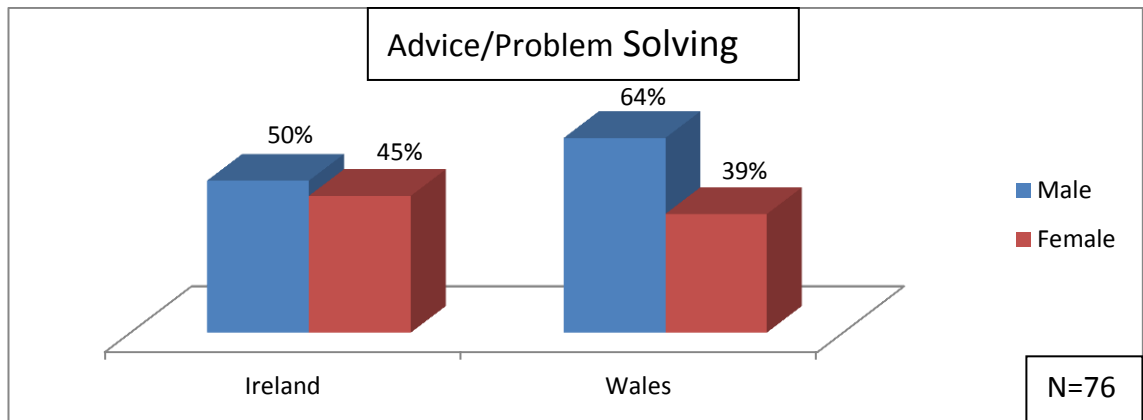
Fig. 4.11: Motivation of "advice/problem solving" broken down by country and gender (Source: current research)

Figure 4.11 demonstrates a male preference for "advice/problem solving" as a motivation for engagement. For the male participants in Wales, this represented a much more significant motivator than for their female counterparts (with 64% and 39% respectively). However, the male and female Irish participants showed similar results with just a five percent difference between the male and female responses.

4.3. Summary

This chapter addressed:

RQ1: What motivates entrepreneurs to engage with learning networks;

and

RQ4: Are there differences across gender and culture in the motivations of entrepreneurs to engage and remain engaged with networks over time?

The initial motivations of the entrepreneurs in this study for network engagement involved connecting with like-minded individuals where they would be provided with the opportunity for sharing information, learning and accessing advice. Within the context of these networks, these factors were encompassed in the essence of the network purpose and thus, participants' motivation to engage should have been

sustained. However, there were some differences to note in the motivations of male and female participants with the female participants reporting more enthusiasm for sharing information, learning and new ideas than their male counterparts. The cross culture differences in the initial motivations of participants across Ireland and Wales were minimal with the only small difference recorded being a higher interest amongst Welsh participants to engage with Irish participants. Understanding what motivates entrepreneurs to engage with networks in the first place is necessary to design activities which address those motivations to ensure participants are gleaning value from their engagement which thus sustains their motivation for engagement. Chapter 5 - Network Purpose, Structures and Processes for Sustaining Participant Motivation, presents other factors which impact engagement, namely, the impact that clarity of purpose has on network development and the role that defined network structures and processes have upon securing sustained engagement.

Chapter 5

Network Purpose, Structures and Processes for Sustaining Participant Motivation to Engage

5.0 – Network Purpose, Structures and Processes for Sustaining Participant Motivation

The purpose of this chapter is to present the next two findings of this research. Firstly, the role of clarity of network purpose on sustained network engagement is explored. Where participants fully understand what the purpose of the network is and are committed to working to that purpose, sustained motivation for engagement is achieved. The second part of this chapter addresses the impact that defined network structures and processes have upon entrepreneurs' motivations to remain engaged with a network. Networks with defined structures and processes tend to produce more value for network participants and as such, participants in networks operating this way are more likely to be motivated to sustain engagement with their network as they perceive strong positive valence toward those activities.

5.1. Finding 2: Clarity of Network Purpose among network participants increases participants' motivation to engage and sustain engagement with learning networks

An understanding of the purpose of the learning network is imperative to ensuring participants' motivation to engage with and commitment to sustained engagement with a learning network. Essentially, participants must understand the goals (see: Foley, Harrington and Kelliher, 2006) and objectives (Morrison, Lynch and Johns, 2004) that the network seeks to achieve in order to buy into the network process and gain maximum value from their network engagement leading to successful network engagement (Morrison et al. 2004).

The purpose of this section is to outline the role that clarity of network purpose has in developing and sustaining individual's motivation to engage with networks. Where participants were unsure of the network purpose, their commitment was not secure and as a result, the level of engagement with the networks was lower than expected with approximately one third of participants who enrolled either not engaging at all or only engaging on a very limited basis. The findings in relation to the negative impact of lack of clarity of network purpose on network engagement are presented first with the

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results reported from those participants who did engage as well as from those who withdrew. The second part of this piece will focus on the positive effect of network purpose on sustaining participants' motivation to engage and the success of networks that worked together toward a purpose is presented. The impact of "network champions" in the promotion of the network purpose which led to sustainable network structures is also examined.

5.1.1. Lack of Understanding of Network Purpose among Participants

There was a significant amount of information provided to potential network participants about the purpose of the SLNIW networks prior to the launch of the networks in an attempt to communicate what was hoped the networks would achieve. This included brochures, newspaper advertisements (appeared in two national and 12 regional papers in Ireland and five regional papers in West Wales), radio advertisements (on two stations in Ireland and one in Wales), radio interviews (three radio interviews about the project in Ireland), a website, 10 information sessions in Ireland where members of the SLNIW research team presented at conferences and enterprise support events that were being conducted across the South East of Ireland and three events in West Wales, direct e-mailing to potential participants distributed through enterprise support agencies and, one-to-one meetings with all potential network participants. However, despite all the information provided through these various avenues, through direct observations of the network meetings, it became apparent that the purpose of the network was causing participants great difficulty and they were unsure as to what the networks were trying to achieve.

After a year of network engagement, a sample of participants (17) was interviewed in order to explore their experience over the previous year. The question was posed "Before agreeing to take part in the SLNIW network, what did you think the networks were about"? Of all participants interviewed, only one participant provided an assured response which was:

> "I knew it was a learning network and I knew it was a support network and I
> knew that my, like everybody's, experience in business would be drawn upon

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to the benefit of somebody that might be having a difficulty – you might tell them how you overcame that same difficulty. People sharing their experiences like that means that if you had a problem you could consider all the opinions of your group to reach a conclusion that would be good for you and your business" (FIManuf1).

The remaining 16 responses varied from complete ignorance, for example: "I didn't have a clue" (MWServ5), to slightly more considered responses such as:

"I guessed we'd get together over a cup of tea and just chat and see how business is going and whether there are any opportunities for our businesses. The first thing that hit me was that there was no structure at all, it was entirely up to us how we ran the network" (MWTech2).

This indicates a significant lack of understanding of the network purpose. However, all 17 participants had met with a member of the SLNIW research team to discuss the project before engaging with the networks; thus, this lack of understanding was not expected.

Misunderstanding of the purpose of the networks was apparent in the number of participants who elected to withdraw from the networks either without engaging at all or simply engaging for a small number of meetings. There were 104 participants recruited to the SLNIW networks, 20 of these never engaged at all. A further 12 participants withdrew following a period of initial engagement. This means that almost a third of those recruited withdrew from the process before the induction period had even been completed.

5.1.2. Insights from Participants who withdrew from the networks

Telephone interviews were sought with all of the 20 recruits who had withdrawn without engaging at all but only eight interviews were conducted. Those participants who withdrew after attending between one and three of the induction period meetings were also interviewed by telephone; six of these interviews were conducted. Participants who withdrew after engagement with the self-facilitated sessions were approached for face-to-face interviews and five of these participants agreed to be

interviewed. The induction period of the networks lasted for five months where participants engaged in a number of skill building sessions designed to prepare the networks to become self-facilitating. These induction meetings were not focussed on specific business topics; they centred around the skills that the participants would need to become self-facilitating and included such things as: innovative and creative thinking, team building, communication, conflict management, change management, and sustainable development. Table 5.1 presents the participant withdrawal information including the stages at which participants withdrew, the quantity that agreed to be interviewed (all withdrawing participants were approached for interview), and the type of interview conducted:

Stage of Withdrawal	Quantity	Quantity Interviewed	Interview Type
Never Engaged	20	8	Telephone
Withdrew during Induction	12	6	Telephone
Withdrew after Networks became Self-facilitating	7	5	Face-to-Face

Table 5.1.: Participant Withdrawal (Source: current research)

From the 14 telephone interviews conducted, three participants cited the relevance (or lack of) of the networks to their business needs as the motivating factor to leave and the remainder cited "time". Vroom's (1964) VIE (Valence Instrumentality Expectancy) theory was explored within the literature review as the underpinning theory of motivation for this research. In order for individuals to be motivated to engage in certain behaviour, that behaviour must hold positive valence (association) for them and they must expect that it will be instrumental in achieving a certain outcome. In this case, engaging with the networks was not an activity which held enough positive valence for these participants to engage. Though so many participants cited "lack of time" as their motivation to withdraw from the networks, if they had perceived the network activity positively they would have engaged and as such, the relevance of these networks to these participants' needs must not have been satisfactory. One participant who withdrew, on discovering that the second network meeting was going to be focussed on team building activities for the group in an outdoor activity centre, asked:

"what am I going to do for my business in a canoe" (MxITech5)?

With the level of confusion apparent even among those participants who sustained engagement, it can be deduced that these participants entered into the learning network process without a clear understanding of what it was, how it would work and the time commitment required for the networks to be effective. Without this clarity of purpose, the entrepreneurs were never going to be able to commit to the network. For these individuals, the initial skill building sessions seemed irrelevant.

Three of the six participants who were interviewed after engaging in the induction stage questioned the relevance of the sessions to their businesses with one participant highlighting that he felt it was like:

"a training programme and development of people using trainers as opposed to business people sharing knowledge" (MWServ8).

The purpose of the initial skill building sessions was to equip participants with the skills they would need to facilitate their own networks to create the environment for "business people sharing knowledge" highlighting again the lack of clarity of network purpose resulting in the withdrawal of participants.

There were five participants interviewed face-to-face after engaging in the self-facilitated sessions. All five of these participants cited frustration at the lack of structure of the networks but they were not proactive in taking a role within the network meetings to increase the relevance of the network meetings to them and their businesses.

From the mixed network in Ireland, MxIServ3 said:

"I didn't realise it was going to be self-structured and chaotic…I thought I had signed up for a structured management development programme"

and subsequently withdrew from the group because it was

"not a valuable use of my time" (MxIServ3).

This relates again to Vroom's (1964) VIE theory as for this participant, network activities did not hold positive valence for him/her and as such the cycle of value creation was broken and thus, this participant withdrew. This participant was not clear

on the purpose of the learning network nor committed to the development of the group and his/her role as a member of the learning network to be part of the effort to direct it.

Another member of the same network who withdrew, MxIServ1, was equally frustrated with the way that the network was working. This person approached the SLNIW team to make his/her views known to the team, after the networks had become self-facilitating (ie after SLNIW, as part of the study, ceased facilitation and were solely engaged with network observation; the operation of the network was to be dictated by the members themselves). MxIServ1 was advised by the SLNIW team to approach his/her network peers with his/her issue within the network meetings, which he/she never did. During his/her exit interview he/she communicated his/her frustration that the SLNIW team did not intervene on his/her behalf to alter network operations, so again, the issue of network purpose and the goal of the networks to be self-facilitating, self-directed learning networks was not clear to this participant.

The third interviewee, MxIManuf9, cited time as his/her motivation to withdraw but when the author sought elaboration on what he/she meant by "time", it was apparent that this participant was really uncomfortable with the idea of self-facilitation and the fact that this would mean that he/she would have to take a turn to facilitate a meeting. The intimidation he/she felt at this prospect was unexpected; again, the reality of the purpose of the networks to be self-facilitating learning networks was not clear for this participant.

Only one participant who withdrew from the Irish female network, FIServ8, agreed to be interviewed. The difficulties she experienced were very similar to those experienced by other participants. Though she had gleaned great value from some network meetings, she felt that the networks had lost their momentum and value and were being dominated by two members of the network. In the exit interview she was asked what she could have done to solve this issue. She said that she should have approached the issue in the meetings with all the participants; that she should have put the question to the group "was today's session valuable". As she spoke, it was

clear that this had never occurred to her at the time she was in the network meeting. She could have been proactive in the direction of the network. Again, this highlights the lack of clarity of purpose to this member and lack of understanding of her role within the network purpose as a network participant.

The last in-depth exit interview conducted was with a member of the mixed network in Wales, MxWServ5. He/she understood that he/she was entering into a self-facilitating learning network and being quite an organised business person, believed this would be easy. He/she found the reality of self-facilitation quite different and was somewhat surprised by the fact that his/her network peers did not share his/her passion for organisation and seemed content to simply float from meeting to meeting with no set routine, structure or discipline.

Nearly all of the participants who withdrew were unclear as to the purpose of their networks. This had a direct correlation to the valence associated with network activities as without understanding the purpose of the networks it was unlikely that these participants would perceive the network activities positively; and where participants do not associate positive valence with their activities they are not motivated to sustain the behaviour (Vroom, 1964).

5.1.3. Commitment to Network Purpose – Example from LEAD Wales

When participants were unclear of the purpose of the networks, commitment was impossible to achieve. At a conference pertaining to the theme of networks and learning for SMEs, the author became acquainted with some researchers who were working with similar goals in the development of Action Learning Sets within the LEAD Wales programme[13]. After hearing about the programme, the author was very interested in the LEAD Wales model and arranged a visit to Swansea University to observe the programme and engage with the participants and facilitators. Throughout

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[13] The purpose of the LEAD Wales programme was to develop the leadership capabilities of entrepreneurs and address the challenges they face in a dynamic and effective way utilising action learning sets of peers. These groups comprised of up to eight individuals who all brought a business problem to the set to be addressed over the course of the programme.

the course of the observation, the level of commitment participants had to the programme was apparent, and considering the levels of withdrawal the SLNIW networks suffered, the author was curious as to how this was achieved.

The LEAD Wales programme was on their sixth cohort of participants when the author observed their meetings. Each cohort consisted of 28 participants and as such, there were over 160 entrepreneurs who had engaged with the process to that point. Only one of these 160 participants disengaged with the process. This level of engagement and commitment was very impressive. When asked about the level of commitment achieved, the programme director asserted that the "contracts of engagement" that participants had to sign to enrol on the programme were highly effective in achieving commitment.

The "contract of engagement" outlined the purpose of the programme, the itinerary of activities of the programme and put a monetary value on the level of development the participants would achieve on the programme (£11,378). Participants had to sign the contract to signify that they understood the commitment involved and understood that they could potentially be liable for this fee should they forfeit their place on the programme. As the director outlined, in reality, they could not have pursued anyone for the money if they did not engage but the gravity of signing their name to this amount of money ensured that those participants who did sign up were fully committed to the programme and spent the time required to understand the purpose of the programme before signing up. When the entrepreneurs on the LEAD Wales programme came together, they always found great benefit in discussing their challenges with their peers within an action learning set. Similarly, once the SLNIW participants came together with the ethos of openness, honesty and confidentiality and started bringing real problems to their networks they got great benefit from the process and from their engagement. Potentially, implementing a "contract of engagement" like the one used by LEAD Wales could have ensured more commitment from those participants signing up to engage with the learning networks in Ireland and Wales.

5.1.4. Levels of Participant Engagement Achieved

Table 5.2 presents the attendance rates in each of the networks. The numbers in attendance at the meetings are quite low considering that there were up to 20 participants recruited per network. An additional difficulty for participants in relation to the impact of participant non-engagement was that they had been given profiles for all the participants in the groups. Therefore, it was highly apparent when there were a lot of participants missing. This created a

> "sense of loss" (MITech4),

among participants and made them question their own engagement with the networks

> "why have they left? Should I be here" (MxIServ4).

However, had the participants not seen these lists and simply engaged with the participants that were present at network meetings, the absence of participants may have been less stark as learning networks are just as (and potentially more) effective with smaller numbers; but having participant profiles meant that people felt a loss and then continued questioning the purpose of the groups and why those participants had not engaged.

Session	Initial Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Irish Female	13	12	11	9	10	9	9	8	11	6	5	6	8	7	7	6	5
Irish Male	18	13	9	13	11	9	7	10	10	9	12	8	6	7	6	6	8
Irish Mixed	19	12	9	15	12	11	9	13	10	10	X	10	9	11	7	8	7
Welsh Female	16	9	10	11	9	6	6	7	5	8	7	5	7	8	7	10	6
Welsh Male	18	8	6	6	6	4	4	4	4	4	3	3	7	7	5	5	4
Welsh Mixed	20	13	N	8	9	8	9	4	5	7	6	6	5	7	8	7	8

Table 5.2: Network Meeting Attendance Rates (Source: current research)

From Table 5.2 it can be seen that the attendance rates fluctuated greatly in the majority of the networks from month to month. After one year of network

engagement, there were only two instances of meetings that had more than 10 participants in attendance; in the mixed network in Ireland and in the female network in Wales. When the average attendance rates are calculated for each of the networks, the figures are significantly different than the figures of recruited participants. The comparison is presented in Table 5.2.1. The average attendance rates are significantly different than the numbers that were initially recruited for these networks.

Network	Initial Numbers	Average Attendance Rate	%
Irish Female	13	8	62%
Irish Male	18	9	50%
Irish Mixed	19	10	53%
Welsh Female	16	8	50%
Welsh Male	18	5	28%
Welsh Mixed	20	7	35%

Table 5.2.1.: Average attendance rates across the networks (Source: current research)

The discrepancy between the number of participants recruited and the number that were active represented a significant challenge for the male networks in Ireland and Wales in particular. Interestingly, the network with the lowest number of initial recruits (the female network in Ireland) had the highest percentage of the initial numbers in attendance at the meetings with the average attendance rate representing 62% of those recruited. This is particularly significant when compared to the male network in Wales with 28% of the initial numbers recruited representing the average amount of participants in attendance each month. This could indicate that smaller initial numbers facilitate the creation of a sense of commitment among individuals and encourage engagement.

5.1.5. Addressing Network Purpose within Network Meetings

Even those participants who sustained engagement with the networks struggled with the concept of network purpose. For example, during the observation phase of the networks, the discussion of network purpose arose on numerous occasions even after a significant period of engagement had elapsed (see Table 5.3).

Female Network Ireland	Male Network Ireland	Mixed Network Ireland	Female Network Wales	Male Network Wales	Mixed Network Wales
7, 10, 14	11, 12	3, 5, 13	4, 8	8, 10, 11, 12, 13	4, 8, 11

Table 5.3: Sessions in which Network Purpose was discussed (out of 16 sessions observed) (Source: current research)

This was after network participants had been briefed on the purpose of the networks before the networks were launched and the first Induction session was focussed on developing understanding of the learning network concept with the subsequent Induction meetings addressing further development of the network goals. Table 5.3 displays the sessions in which the theme of network purpose was discussed by the network participants. From as early as the third network meeting (sessions 3 and 4 were still within the Induction period) to as late as the 14th session in the cases of the Irish mixed and female networks, "network purpose" was discussed. The regular re-visitation of the discussion of network purpose indicates the difficulty participants experienced with the highly novel approach of self-facilitating learning networks. The significance of this is that participants spent a lot of time exploring the purpose of the networks and talking about why they were there instead of engaging in valuable network activities and discussion related to their business issues. As such, the value that participants were achieving in these meetings was minimised which was frustrating for some participants; for example, one participant summed it up by saying:

"I just wanted to get on with it and have real, useful discussions" (MxIServ4).

However, it must be noted that while the network purpose did require re-visitation, there were always network champions who understood and bought fully into the ethos and who endeavoured to communicate this to their network colleagues in discussions of network purpose. During observations of the male networks in both Ireland and Wales, it was apparent that the struggle with network purpose was a key issue in the lack of development of these networks and the lack of momentum the networks suffered. The male network meetings in Ireland became quite stagnant and the number of participants engaging reduced significantly over time (from 13 in the

beginning down to six for a number of the final meetings). For example, one participant asserted that:

> "there wasn't leadership in our network so you can see why people withdrew because there was no focus in what we wanted to achieve" (MIServ4).

Therefore, it is not surprising that the male network in Ireland was most interested in the amalgamation of the networks in Ireland and this participant (MIServ4) in particular advocated the amalgamation as he felt the male network had lost their direction altogether. Amalgamating with the other networks in Ireland afforded the male network the opportunity to find purpose and focus for what they wanted to achieve in the network with the assistance of the other participants.

5.1.6. Network Purpose for Network Expansion

Purpose plays a huge role in attracting new members to the network. In order for the network to be sustainable therefore, it is imperative that a system for the integration of new participants be in place. Where the network purpose is not clear, it becomes very difficult to communicate to potential participants what the benefit is of their becoming involved. In eight of the 17 in-depth interviews conducted with participants who sustained engagement with the networks, participants made reference to the need for a clear purpose in order to attract new members who will engage in the proper context and not become involved thinking it is solely a business network. This is important because for many participants, their motivation to sustain engagement included the introduction of new members to the network. There was great benefit perceived in the new ideas and skills that new participants could bring to the group. However, understanding the purpose of the network was imperative to potential new participants engaging with the networks in the right context.

During direct participant observations of the female network meetings in Ireland, there was great discussion around the purpose of the network and the context within which new people would have to engage:

> "The objective of the network is for learning from each other and though we need more members, we need to ensure any potential new members are

> willing to engage in that context and thus, there should be a policy for the selection of new members" (S14[14], Female Network Ireland Observation report)

This level of concern for the importance of a:

> "constitution stating the network purpose to be drawn up and process put in place for the recruitment of new members" (Extension Period[15] Observation Report, Female Network Wales)

was echoed by the female network in Wales who were strongly committed to the ethos of the networks being for learning and support and did not want to lose this when new participants would join. Thus; drafting a constitution of engagement for new members where the purpose of the network would be clearly outlined represented a very positive mechanism for this network to expand. Potentially, if the networks had drafted such a constitution at the beginning of the network there may have been more committed engagement from members.

5.1.7. Role of Network Champions in reinforcing Network Purpose

While the first part of this section focussed on the negative impacts of misunderstanding or miscommunication of network purpose, it is important to address the many benefits of network engagement that occur where participants understand, buy-in to and commit to a network purpose and the power of what can be achieved when people join together in pursuit of a common goal.

The purpose of the networks is important in maintaining the motivation of participants to work toward a common goal. Instrumental in the maintenance of participants' motivation are network champions who are advocates of the network purpose and lead their network peers in the pursuance of this goal. Network champions were directly observed within the network meetings themselves and were often referenced

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[14] S14 refers to "Session 14" of the observed network meetings
[15] The SLNIW project was granted an extension to re-visit the networks and observation was authorised for three network meetings that occurred over a six-month period

by the participants being interviewed. For example, MxIServ4 referred to how MxIManuf3 was:

"leading the group, organising the meetings and making sure we all go".

This sentiment was echoed by MxIManuf5 who also identified MxIServ4 as the driver of the mixed network in Ireland.

From the Male network in Wales, MWServ5 and MWManuf3 identified how MWTech2 and MWTech3 were:

"the ones driving the group, organising meetings, taking minutes and sending them around; network meetings would not happen without them".

FWServ6 in Wales identified the leaders in her network and the role that they have in keeping the meetings going, she stated that:

"there are some members who have really taken hold of the reigns and are really driving it forward".

FWManuf 1 reiterated this by identifying that MWServ1 was:

"really keen for the network to continue and committed to driving it forward".

Three of the 17 participants sustaining engagement with the networks, who participated in the in-depth interviews, were network champions themselves but did not make reference to it.

There was a number of characteristics which defined network champions in the context of this research. In some cases, they were highly involved in the leadership and coordination of the networks (this was very much the case in the mixed and female networks in Ireland and the male and female networks in Wales). However, there were other participants who were perceived to be network champions in the manner through which they encouraged their peers to share and regularly asserted positively the value being gained from engaging with the network. While the motivation achieved from the encouragement of the latter form of champion is fantastic, networks without the former (organisational) type of network champion struggled to manage the logistics of making the meetings happen. Interestingly, even though the male network in Wales had two champions who took co-ordination roles, they failed to

be sustainable. The male network in Wales struggled with membership and though they had champions who were committed to organise meetings, one participant, on reflection of the demise of the network, asserted that:

> "as the university's involvement became less, there was no proper common goal and purpose for the network to continue" (MWManuf3).

As such, in network composition, in order for participants to be motivated to engage and sustain engagement with the network, the purpose must be clearly defined, the participants must be committed to that purpose and ideally, there will be network champions that address both the organisational logistics as well as the ongoing motivation of participants to work to network purpose as in the case of the male network in Wales; even though the champions were there in terms of organisational capacity, encouragement was lacking. Figure 5.1 presents the profiles of network champions in each network, outlining the number of participants who took an organisational role (these participants must have believed in the network ethos to take the time to co-ordinate network events) and those who took the inspirational role in terms of maintaining enthusiasm toward the network purpose and the value being sought from engagement.
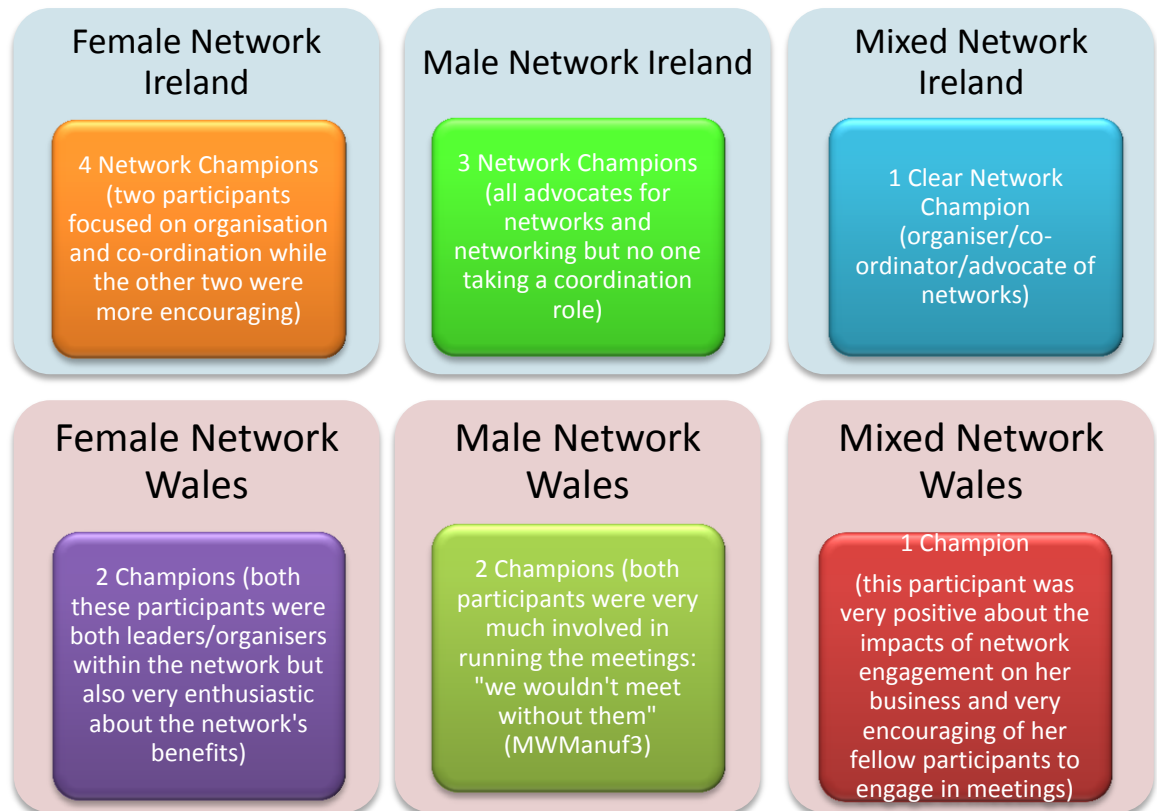
Fig. 5.1: Network Champion Profiles by Network (Source: current research)

There are many benefits to the presence of network champions that contribute to network success and while they certainly serve to enhance the quality of engagement through seeking maximum engagement from their peers, having network champions does not necessarily signify network sustainability. There needs to be a significant core group of members who are committed to the purpose in order for the network to be sustainable.

5.1.8. Value sought in working to Network Purpose

The purpose of these networks was for participants to come together and learn from each other to overcome the challenges they faced within their businesses. As such, the content of their network meetings was dictated by participants to address the difficulties they were experiencing in their businesses thus making the learning occurring highly contextual and valuable to them. Relating this back to Vroom's (1964) theory of motivation, where participants associate positively with an activity they are going to be motivated to sustain engagement with that activity. In this case, where

value is being sought from engagement, the cycle of value creation is reinforced (Wenger et al, 2011) and this serves to motivate sustained engagement. The networks visibly "came alive" (recorded through direct participant observation) when participants brought real problems that they were experiencing to the network meetings. The diversity of the groups meant that there was great variety in the questioning participants offered based on their own contexts which meant that in many cases, it helped participants to look at their problems from a different perspective. Figure 5.2 presents the numbers of meetings observed where participants drew on their own problems to form the basis for discussion within the network meetings.

Female Network Ireland	•Discussed real problems facing their businesses in 9 out of 15 network meetings observed
Male Network Ireland	•Discussed real problems facing their businesses in 9 out of 15 network meetings observed
Mixed Network Ireland	•Discussed real problems facing their businesses in 9 out of 15 network meetings observed
Female Network Wales	•Discussed real problems facing their businesses in 7 out of 14 network sessions observed
Male Network Wales	•Discussed real problems facing their businesses in 11 out of 14 network sessions observed
Mixed Network Wales	•Discussed real problems facing their businesses in 7 of 13 network sessions observed

Fig. 5.2: Use of Real Problems in Network Meetings by Network (Source: current research)

The more that participants opened up with one another, the more effective the network meeting was in terms of seeking valuable actionable outcomes. FIServ8 highlighted this by saying that:

> "At the start we were quite slow to open up but it just took one person to open up and tell us about something awful going on in their business and that was it; our guards went down and we were all then very open about the problems we were experiencing in our businesses".

This was where the real value in network purpose was present. FIManuf1 emphasised this by asserting that:

> "the way that the network has formed, there is a great bond and great support and it's such a benefit to be able to share your problems with other business people who understand and have potentially experienced the same difficulty".

Naturally, those participants who embraced the ethos of openness and honesty with their network peers were more comfortable sharing their business challenges. By sharing these challenges, they were able to get feedback from the network. Human nature dictates that when people open up about problems, the people around them will do their best to find a solution for that difficulty. This was evident in the meetings with the variety of solutions which were offered by the participants. This represented a significant benefit and support for members and their businesses which increased the value they associated with network activity which reinforced their motivation to engage, and remain engaged with their respective networks.

From Figure 5.2 it is clear that the female network in Wales discussed real problems less than any of the other networks. Again, this links back to the theme of clarity of purpose in that the female network in Wales was somewhat unclear as to how to operate their network and certainly in the beginning, viewed it more as a training network than a learning network. Four of the Female network meetings in Wales were dedicated completely to training without any time being allowed for network participant updates. However, over time and particularly during the SLNIW project extension period which occurred almost two years after the original initiation of the network, the female network in Wales solidified the purpose of their network. Their network purpose was for learning and support and as such, it was later in the process that this network embraced this ethos and increased their commitment to focussing their network this way.

An interesting addition to the female network in Ireland's agenda was that of "accountability" which was where the participants who had presented challenges to the network in the previous session provided feedback to their network on the options they had tried to resolve the problem and the outcomes achieved. Accountability for

the learning that was occurring within this network was key. FIServ 7 demonstrated this when she stated that:

> "One thing that we did from the beginning was to "action" everything. All our discussion was worth nothing unless the changes were implemented in the business".

This act served to reinforce the purpose of the networks as being for learning and solution building for the development of participant businesses. It encouraged participants to take responsibility for applying their learning to problems they were facing in real time. With time, and with less formality, the other networks integrated the theme of accountability into their network meetings also.

Figure 5.2 presented the number of meetings where participants addressed real problems they were facing within their meetings. Ironically, the male network in Wales displayed the highest percentage of meetings where real problems were discussed. This is ironic because this network was the first to cease operation which would be unexpected when network participants were engaging on such a highly contextual basis using real problems from their businesses. However, if we refer back to Table 5.1, the male network from the fifth session of network engagement most regularly had four or less participants in attendance

> "We were running out of things to discuss and there was a limit on what ideas were coming out if there were only four or five people in the network and sometimes only three would turn up" (MWTech2);

thus, this participant felt that the numbers were so small that the group had exhausted the potential content of their meetings. However, this network struggled with the organisation of their meetings and never identified topics for discussion ahead of the meetings. Had they had more structure around the planning of their meetings, they could have derived great value from focussed discussion even within a small group.

The types of problems discussed focussed around key themes with which all businesses struggle. Examples of the problems discussed are presented in Figure 5.3.

Difficulties with Staff	Issues in Product Development	Issues in Service Development	Development Opportunities	Diversification	Issues around Pricing
Business Generation	Cash Flow	Tendering	Recession	New Markets	Branding
Competitive Issues	Outsourcing	Partnerships	Time Management	Focus	Strategic Partnerships
Work Volume and Value	Online Business	Finanace	Recruitment	Marketing	Business Strategy

Fig. 5.3: Examples of the Real Problems entrepreneurs brought to the meetings (Source: current research)

The diversity of problems discussed within the network environments shows how important it is that entrepreneurs have a forum where they can discuss their business issues with people who can relate to those issues and who have potentially experienced those issues before. This serves to further reinforce the importance of maintaining focus around the network purpose during engagement. When participants are achieving valuable feedback to problems they are experiencing and as a result, making positive changes in their businesses, their motivation for engagement is heightened and their commitment to sustaining engagement increases. In short, they are gaining value from their engagement and as the cycle of value is reinforced, participants' motivation for engagement with the network is sustained; this is in line with the VIE theory of motivation put forward by Vroom (1964) which dictates that where individuals perceive value from an activity, they experience positive valence toward it and thus are motivated to behave in a certain way.

5.1.9. Summary

The purpose of this section of this chapter was to present the findings of this research in relation to the role of clarity of network purpose in the motivation of participants to engage and sustain engagement with learning networks. Where potential participants

are unclear of the purpose of the network, it is difficult to secure their commitment to the networks (evident in the number of participants (20) who signed up to engage and then never attended any sessions). Some participants will attend network meetings even though they are unsure of the network purpose but when they do not gain clarity and seek value from their engagement, they too will withdraw from the networks as the activity holds no positive valence for them and as such they will not be motivated to continue to engage with this behaviour. The role of network champions in motivating participants to buy-in to the network purpose was presented. When participants bought-in to the network purpose and worked toward that purpose, the variety of problems raised in network meetings highlighted all the areas where participants experienced valuable engagement, thus, motivating them to sustain engagement. The next section of this chapter presents the role of defined network structures and processes on participants' motivation to sustain engagement with networks.

5.2. Finding 3: Defined Network Structures and Processes enhance Commitment to Networks and Sustained Engagement

The purpose of this section is to demonstrate how defined network structures and processes impact the success of the network in terms of the value it provides to participants which therefore motivates participants to sustain engagement with their networks. Within the context of this research, the networks in question were intended to be self-facilitating, self-directed learning networks of entrepreneurs. The networks went through an initial period of facilitation to equip them with the necessary skills to direct their own networks after this facilitated phase. Therefore, it was then the responsibility of the individual networks to design the structures and processes to be implemented for network engagement.

5.2.1. Network Processes and Operations of each Sustainable Learning Network

Within the period of observation, there were various types of meetings observed; the descriptors of these are presented in Figure 5.4.

Network Meeting	•Network members came together for a meeting •No external expertise or specific training included
Combined training and network meeting	• Network meeting •Training focus for part of this meeting
Training	• Meeting focussed completely on training •No network meeting
Informal Meeting	•Group came together without discussing their businesses or engaging in training
Field Trips	•Male, female and mixed networks in each country came together for a joint event with a business speaker
Cross-Border Meetings	•Where network participants from both countries came together; all 6 networks represented

Fig. 5.4: Descriptors of different types of network meetings (Source: current research)

Each type of network meeting holds its own value. However, the networks where training occurred in one part of the meeting and in the same meeting network participants provided updates, presented issues and sought advice from their peers, were observed to be most effective as participants were achieving a focussed learning from the training but also benefitting from the peer-to-peer engagement within the same meeting. Organising these combined meetings required strong planning and processes. Table 5.4 presents all the meetings which occurred over the period of network observation. The number of meetings which occurred in each network is shown and for each month's meeting, the type of meeting is identified and the total number of each type of meeting in each network is presented. There is some overlap in the meetings, for instance, under "induction skill building" and "network meeting" for all three of the Irish networks, there were network meeting activities conducted as part of sessions 3, 4 and 5. Thus these are duplicated in Table 5.4.

Network	No of Meetings	Induction Skill Building	Informal Meeting	Network Meeting	Field Trip	Cross Border Meeting	Training	Combined Training/ Network Meeting
Irish Female		Months 1, 2, 3, 4, 5		Months 3, 4, 5, 11, 15, 16	5, 12	Months 8, 10, 14, 16	Months 10, 13	Months 6, 7, 8, 9, 12, 14
Total:	**22**	5		6	2	4	2	6
Irish Male		Months 1, 2, 3, 4, 5		Months 3, 4, 5, 7, 8, 9, 11, 12, 13, 15	5, 12	Months 8, 10, 14, 16	Months 10, 16	Months 6, 14
Total:	**22**	5		10	2	4	2	2
Irish Mixed		Months 1, 2, 3, 4, 5		Months 3, 4, 5, 14	5, 12	Months 8, 10, 14, 16		Months 6, 7, 8, 9, 11, 12, 13, 15, 16
Total:	**21**	5		4	2	4		9
Welsh Female		Months 1, 2, 3, 4, 5	Month 8	Months 5, 6, 10, 12, 15	9	Months 8, 10, 14, 16	Months 7, 14, 16, 17	
Total	**20**	5	1	5	1	4	4	
Welsh Male		Months 1, 2, 3, 4, 5		Months 12, 13, 14, 15, 16, 17	9	Months 8, 10, 14, 16		Months 6, 7, 8
Total	**19**	5		6	1	4		3
Welsh Mixed		Months 1, 3, 4, 5	Month 8	Months 7, 14	9	Months 8, 10, 14, 16	Month 9	Months 13, 15
Total	**15**	4	1	2	1	4	1	2

Table 5.4: Months when different meetings and events took place (Source: current research)

The mixed network in Ireland were most effective at structuring their meetings to combine training and network engagement (nine meetings were conducted this way) followed by the female network in Ireland (six meetings conducted this way). The impact of this is that for these networks, the value they were gleaning from their engagement was increased as a result of the processes of engagement they had implemented. Observation of the mixed network in Ireland in their 10th session showed a:

> "Network committed to sustainability; in this session the group were actively identifying topics to be addressed in future meetings and planning out the agendas for the next six months. This meeting focussed on insurance needs for businesses presented by an external guest and the group engaged in roundtable discussions of their businesses; some participants provided brief

> overviews while others presented issues they were facing which prompted very
> enthusiastic responses from participants as they sought solutions to these
> problems" (S10, Mixed Network Ireland Observation Report).

This was indicative of the meetings held by the mixed network in Ireland and with this level of organisation present, participants were having their needs addressed within the meetings. Linking this back to the motivation theory underpinning this research (Vroom, 1964), this then impacted the positive valence the participants perceived in network engagement which served to motivate these participants to sustain engagement with their network activities. The female network experienced similar positivity for organised engagement as characterised by this observation recorded from their 11th meeting:

> "This was a great meeting and I think everyone left it with really practical
> information that they will all be using in their businesses. This group are very
> organised and focussed on addressing formal learning within their session.
> Though they tend to go over time quite often, I think the group are happy to do
> this as they are going over time with highly business focused discussion and as
> a result, from the energy in the group, I feel that the majority of participants
> are experiencing real benefits from the network" (S11, Female Network Ireland
> Observation Report).

One of the Irish female network participants (FIManuf1) asserted that:

> "I'm benefitting hugely from the network. We are getting more organised for
> our meetings, planning the agendas and topics for our meetings. We have set
> out to gain as much as we can from each meeting and we are achieving that".

Table 5.4 quantified the level of engagement across the networks while Table 5.5 provides an overview of the dominant network engagement styles favoured by each network type.

Irish Female	Irish Male	Irish Mixed	Welsh Female	Welsh Male	Welsh Mixed
Equal split between network meetings & combined network meetings and training	Network Meetings	Training & Network meetings	Almost equal network meetings & meetings focussed on training	Network Meetings	Very limited independent network meeting engagement (only 5 independent meetings)

Table 5.5: Dominant network engagement style by network (Source: current research)

When it came to levels of network engagement, the Irish networks engaged with their networks more than their Welsh counterparts. The Irish networks implemented a structured routine for their engagement from the beginning and as such the Irish networks each had a set day, time and venue each month for network meetings. This meant that network meetings did happen each month in Ireland apart from one month where severe weather conditions caused a mixed network meeting to be cancelled.

In Wales on the other hand, the sense of routine was slower to develop which meant that in a number of months no network meetings happened or if there was another event on (such as a cross border trip) they may not have had a network meeting that month (for example in months 10 and 16 the mixed network in Wales held no separate network meeting to the cross border event) and attended the event instead (as opposed to treating it as an extra activity). The Welsh networks commonly held shorter network meetings than their Irish counterparts with two hour meetings being most common among them (in comparison to three hours being the standard length of meeting time in Ireland). While these factors may appear to be relatively insignificant, the extra time the network members spent together promoted the development of relationships and increased participants' commitment to each other and their network and as such increased their motivation to engage. For example, in month 10 during the cross border visit to Ireland, the male networks from Ireland and Wales had a meeting together where they discussed their network experience; the Welsh network participants observed that they were still in the "formation" stage of network development and commented on the depth of the bond that they observed among their Irish counterparts.

The mixed network in Ireland favoured combining training and network meetings and ensured that every time they engaged with their network group, that there was time allocated to have round-table updates of all participant businesses. This was highlighted in observations of the 12th meeting of this group where:

> "the facilitator was excellent, started the meeting well, explained the agenda, introduced the guest speaker, conducted the round table effectively, keeping time for each participant. He/she also raised and noted issues to be discussed at the next meeting" (S12, Mixed Network Ireland Observation Report).

This organisation in the meetings and the balance achieved between training and peer-to-peer updates and engagement was observed to be very successful for this network. The level of training that this network engaged with (nine external facilitators were invited into their meetings) is testament to the organisation of their network meetings and the structures and processes around which they engaged with the networks.

The mixed network in Wales had the lowest levels of engagement of all the networks. They did not engage in their team building day in the beginning which would have been their second activity together. This certainly appeared to have an impact on their network engagement in terms of network membership. There were 20 participants recruited into this network, 13 participants in attendance for the first session but from the third session on, the maximum attendance was only nine. This network had a core of six members and after the induction stages of the network, there were rarely more than six members in attendance at the meetings. What was interesting to observe with this network was that even though they had low levels of engagement and a small group size, the members' enthusiasm and openness in engagement overcame these apparent obstacles and a couple of members of this group made significant changes to their businesses that they described as "pivotal" to the future of business as a result of discussions they had had in their network meetings. One of these participants noted that

> "five or six dedicated people who are motivated to help each other is sufficient for the network to be successful when those people are able to be honest and raw and undiluted with their problems. There is great quality in that exchange. Because you are laying your business out for scrutiny and you have to scrutinise

other people's businesses, you have got to build up that relationship" (MxWManuf6).

This serves to contradict the finding that defined network structures and processes increase participants' propensity to engage. Because even though this network lacked structure, it was still successful for the core group of participants who were happy to engage within those parameters; they were motivated to sustain engagement this way. However, it can be hypothesized that the network would have been successful for more people (this group originally had 20 members) had the structures and processes been in place to encourage network engagement; one of the participants who withdrew from this network, MxWServ5, was interviewed and asserted that:

"it just was not happening, there was no structure, routine or discipline; I would have loved to stay involved had we set a routine, because they are a good group of people".

Another participant observed that the network could have been enhanced with more focus and organisation around their meetings. He/she stated that:

"I would have more speakers and more practical things going on in the meetings. For me, just having meetings for the sake of meetings does not inspire people to come. But if there is a meeting where there is something going on, a visitor or somebody who can share something, a workshop or something we can do, that will bring people together" (MxWManuf4).

Structure and routine could have enhanced the sustainability of this network if they had the habit of engaging together regularly. This network no longer meet since the SLNIW project ended.

Through network observations it was apparent that where organisation and routine were not present, it was very challenging to maintain participants' motivation to engage with the networks. For example, MxWManuf6 was a very enthusiastic member of this network and in his/her last in-depth interview he/she put forward that

"I love meeting with the network but we are not very organised. So with the greatest of intentions, we will not meet unless someone organises it and I don't think we will be very good at doing that" (MxWManuf6).

This proved true by the cessation of meetings of this group.

The male networks in both Ireland and Wales were very slow to identify training topics and instead favoured regular network meetings with just peer-to-peer focus. One participant from the male network in Wales noted that:

> "The male network has not invested much in doing training because they did not feel they needed any...but they do not know what they do not know" (MWTech2; after one year engagement).

Potentially without the focus of a specific topic (that can be provided by external expertise) they struggled to maintain momentum in the groups. The male network in Wales was the first network to officially end.

> "There was a lack of will and motivation to take it further. The participants just about made the effort to attend the meetings and then would disappear back to their day-to-day routine. There were no actions to work toward; there was no list of actions to take to the next meeting so there was nothing to carry forward. There was no drive there. There was some sharing of ideas. It needed to be slightly more formal to get that drive. That bit of formality would carry forward so the ideas form and solidify" (MWTech2; after two years engagement).

Without set agendas for this network that included following up on topics previously discussed, they simply could not maintain the interest in the group to keep going.

The male network in Ireland initiated the discussions surrounding the amalgamation of the Irish networks as they did not believe their network would be able to continue if it did not join with the other networks. For example, one participant said:

> "When there was no leadership in the network, you can see why people withdrew from it, because there was no focus in what we wanted to achieve as a network. There was inevitability about the amalgamation of the groups because otherwise, the all-male network just was not viable" (MIServ4).

This is testament to the necessity for structures and processes being required to ensure network engagement and success. The role of clarity of purpose was discussed earlier in this chapter and is particularly apt here as the structures and processes of the Irish male network should have been focussed around what the network participants

wanted to achieve through engagement but as cited by MIServ4, there was "no focus" in the network.

With regard to the female networks, both the Irish and Welsh female networks engaged in training; though interestingly, the Welsh female network only ever had full training or full network sessions with no combination of the two. This meant that in many months, the network members provided no formal update on their business issues which was the main purpose of the networks and as such, the network struggled to develop. So when supports were withdrawn, the network ceased to function. It was only when the SLNIW project was extended and there were formal events re-introduced that the female network in Wales really bought into the idea of their network being sustainable

> "I think they have been very important (the formal events) at this particular stage. I do not think any of the networks would have stayed together if it had not been for those events. But now, I am quite hopeful" (FWManuf1).

Another participant reiterated that:

> "the female network (in Wales) has continued to evolve with the intervention of the University driving it" (FWServ6),

acknowledging again the need for the University to take a leadership role in sustaining network engagement.

The Irish female network structured their meetings with the network purpose of "participant business development" at the centre of their engagement. All but two of the network meetings of the Irish female network focussed upon the network members themselves (two sessions were pure training sessions). One of the key processes they implemented into the structure of their network meetings was to integrate a section on accountability which meant that participants were taking actions to implement the learning coming from their meetings thus increasing the value of network meetings and increasing participants motivation to engage and remain engaged in the network. As one participant said:

> "We decided that the network would not work if, at the end of every meeting, we did not feel that we gained something and learned something from that

meeting. That has been very effective at maintaining the focus on action. That was the key to keeping me there" (FIManuf1).

This focus on action was very effective for FIManuf1 and was echoed by the participants of this network in their meetings; the focus on action and on implementing change and reporting those changes back to the group was a highly valuable action. Linking this back to Vroom's (1964) theory of motivation, these participants were perceiving positive valence from their engagement with the network due to this focus on action. As a result, the cycle of value creation (Wenger et al., 2011) was reinforced which motivated sustained engagement with the network.

5.2.2. Network Processes Examination in each SLNIW Network

For people to engage with a network there has to be a number of structures and processes driving it and dictating how it operates. This relates to how the network is managed, what the network's purpose is, and logistical considerations such as: where participants meet, how often they meet, what time they meet, and how long they meet for. These factors appear quite straightforward but when there is no set plan or routine for network engagement, it simply will not happen; as was observed with the mixed network in Wales earlier in this chapter. In the literature review, the eight processes required for successful network operation were outlined (Bessant and Tsekouras, 2001). These are presented in Table 5.6; thus, this section of the chapter presents how each of the networks addressed each of these eight network processes and the impact they had upon the success of each network.

Process	Underlying questions
1. Network creation	How the membership of the network is defined and maintained
2. Decision making	How (where, when, who etc.) decisions get taken
3. Conflict resolution	How (and if) conflicts are resolved
4. Information processing	How information flows and is managed
5. Knowledge capture	How knowledge is articulated and captured to be available for the whole network
6. Motivation/commitment	How members are motivated to join/remain in the network – e.g. through active facilitation, shared concerns for development
7. Risk/benefit sharing	How the risks and benefits are shared
8. Integration	How relationships are built and maintained between individual representatives in the network

Table 5.6: Core processes in inter-organisational networking (Source: Bessant and Tsekouras, 2001, p.91)

When networks are successful, they are more likely to create value for the participants involved. As such, participants' motivation to engage is more likely to be sustained in a network where the processes are undertaken successfully. This also relates to Vroom's (1964) motivation theory which asserts that where individuals perceive activities positively and can associate them with being instrumental in an outcome they expect can occur, they will be motivated to engage and sustain engagement in that behaviour. In turn, successful networks that create value for participants are more likely to be sustainable.

5.2.2.1. Network Creation and the Networks

Network creation is the first process identified by Bessant and Tsekouras (2001) as important for the successful development of networks. When it came to the creation of the networks under study, these networks were designed to be self-facilitating networks and as such the idea was that the network members themselves would direct their own learning and network development. In the initial stages, the networks were facilitated to equip the members with the skills that they would require as they embarked upon the journey of their networking experience.

These networks were brought together by a team of researchers and as such, control over network composition was held by the team. Efforts were made to ensure diversity in the networks and where possible, to avoid putting direct competitors in the same networks. Issues with regard to competition were observed most significantly in the male network in Wales and within the mixed networks in both Ireland and Wales. For example, in observation of meetings of the mixed network in Ireland:

> "there were edgy comments exchanged between two members of the network with similar business interests" (S3, Mixed Network Ireland Observation Report).

Within the mixed network in Wales, there was a new participant introduced after the network had become self-facilitating, that a number of participants were disgruntled about, as they did not feel it was appropriate. In observations of the 11th network meeting of the mixed network in Wales, the following was noted:

"Two members expressed that they may have a conflict with MxWNM1 as they have similar businesses. They expressed that they may not disclose fully in his/her presence. The network members identified a need for a strategy for eviction from the network. It was suggested that only one individual per industry sector should be allowed membership of the network. Others mentioned that they did not dislike MxWNM1 but were happy to go with the strong feeling of others but on the other hand some members expressed feelings of discomfort at the idea of evicting MxWNM1" (S11, Mixed Network Wales Observation Report).

Naturally, the issue of competitors becoming members of the network represented a significant difficulty for these two participants and diminished the value they felt could be gleaned from their engagement when a competitor was present; this also had negative repercussions on other members of the group who were torn between their loyalty to the original members and their "feelings of discomfort" for evicting someone from the network. However, the issue of competition was most stark in the male network in Wales as that group had a core of just six participants; three of whom were in IT businesses.

"MWTech1 and MWTech3 are in more direct competition with each other than with me (MWTech2). They have clashed in the meetings. MWManuf3 still refers back to one particular meeting and its levels of hostility" (MWTech2).

The conflict observed represented a distraction in network meetings where it occurred and diminished the value that could be perceived by participants for their involvement. For this reason, networks which were composed of diverse businesses were more successful than those where competitive businesses were present.

As the networks evolved it became apparent that membership was dominated by individuals with service-led businesses

"there is a core of business service orientated companies that would benefit from staying together for the longer term" (MIManuf7).

All the service led businesses engaging with the networks were micro-businesses with less than four employees and benefitted from the perspectives of their network peers as they made business decisions. Another factor in the motivation of service-led

businesses to engage in the networks was that they were gaining business from their network colleagues. This represented an added benefit of network engagement, motivating them to sustain engagement. There were also business collaborations observed whereby in the Irish female network, an interior designer and a landscape designer started working together to offer customers integrated packages. This access to extra business represented a significant benefit for these service-led businesses. In Wales, MWTech2 highlighted in his interview that:

> "I have done a lot of work with MWTech3 and he has put work forward to me and I have passed work over to him as well"

So there have been significant direct business benefits for these businesses in their engagement with the networks.

Diversity of network members increased the number of perspectives offered towards the business problems presented and facilitated the majority of participants to speak openly about their business challenges which represents a key benefit of learning networks. Across all six networks, there were positive relationships built between members. This was observed to have made the process most successful. In fact, participants across all networks except the male network in Wales expressed reservations at the impact that new participants would have on the bond that was created. For example, during network observations, the network members in the mixed network in Wales:

> "Discussed the effect that new members would have on trust in the network and other detrimental effects of increasing numbers" (S11, Mixed Network Wales Observation Report).

Challenges of new participants were also discussed in the female network meetings in Ireland in relation to the impact that new participants would have upon the group dynamics that had formed:

> "FIManuf1 expressed concerns about the effect that amalgamating the three networks in Ireland would have on the cohesion of the female network" (author's reflection during the interview conducted with FIManuf1 after one year of network engagement).

The consideration of how new members should be integrated into the networks was discussed as participants were unsure about how they would go about this. For example, MITech4 expressed that while he was open to the idea of new members joining the network, he asked:

> "how do you bring a new person into a network that is established, that is open, where all the members know each other well and are very comfortable with one another? How do you bring a new person in and hold onto them long enough that they become fully integrated into the network? There is probably some psychological answer to that and you would probably have to go through the network formation cycle again but I do not want to go through that again. We have experienced that already and spent a significant amount of time developing the network. But if you bring one or two or three new people into the network, I do not know how you bond them into the network".

In observations of the female network in Ireland, the theme of integration of new members was also discussed:

> "The network was in agreement that ground rules needed to be established for the introduction of new people, this is especially prevalent if the networks merge as (the participants feel) it is more likely to find a competitor in a larger group. Some feel this will affect trust and confidentiality" (S14, Female Network Ireland Observation Report).

One participant from this network had made reference to the idea of new members in her interview shortly before this network session and her sentiments echoed those of MITech4 in the sense of the difficulty in bringing new members into the network, she said:

> "Having new members is going to be very strange. I think we need to put a process in place to deal with new members. For example, what are the criteria for selecting new members? Do we have a process for inducting them and getting to know them and building that trust? There has to be a way to speed up the trust building process" (FIServ7).

The composition of the networks, in terms of the members recruited, is important to the successful development of the network. Using criteria for recruitment represented a positive mechanism for network design in the cases of four of the six networks studied. The original criteria were that participant entrepreneurs: were established in business for at least three years; employ at least one person other than the owner and that they demonstrate a clear desire to grow their businesses. Diversity was sought in the composition of the networks; however in two of the networks, there were competitive businesses in the network. Issues of competition represented the biggest challenges for network development in the male and mixed networks in Wales.

5.2.2.2. Decision Making and the Networks

Decision making and the manner through which the networks make decisions is the second process identified by Bessant and Tsekouras (2001) to indicate the success of networks. In relation to decision making what was observed in the development of the networks was that all networks in Ireland chose to rotate the chairing of the network among all participants. This system was somewhat followed by the Welsh networks though on a much less formal basis (Irish networks devised schedules for chairing alphabetically whereas the welsh networks decided who would facilitate the next meeting at their network meeting). The result of conducting the meetings with a different facilitator each month meant that leadership roles within the networks were very slow to develop. As it was a different individual's responsibility to conduct the meeting each month, no one felt the responsibility to drive it. In the cases of the female networks in Ireland and in Wales and the mixed network in Ireland, natural leaders did emerge as time went on which proved to facilitate engagement. In the case of the mixed network in Ireland, both MxIManuf5 and MxIServ4 highlighted how after a year of engagement that:

"MxIManuf3 is leading the group and organising everything".

In the case of the female network in Wales, FWManuf1 asserted in her second interview, after one year of engagement that the network would be sustainable as long as there were

"fairly forceful proactive members there. Then everybody else will join in out of loyalty"

In her third interview, after another year of engagement with the network, FWManuf1 highlighted that:

"As you saw (the author/interviewer had observed a network meeting the same day that the interview was conducted), we have two members here today who are very keen and very committed to it so hopefully if other members agree to let them run it then it will continue; that's my perspective anyway".

In the fifth observed meeting of the mixed network in Ireland, the network members decided that they should have a steering group consisting of three members of the network to oversee the development of the network which was a good indicator of the level of organisation and concern around the development of the network:

"the network members agreed to set up a Steering Group, consisting of three network members, to oversee the running and development of the network. The purpose of this steering group is to direct the network and identify topical areas of interest to be investigated by the network to meet the overall network goal" (S5, Mixed Network Ireland Observation Report).

Those networks which were organised in the structures they put around network operations provided more value to participants than those which did not. The mixed network in Ireland and female network in Ireland represent examples of networks which were organised in terms of planning network meetings and discussing the topics they would address. They also made schedules for at least six months at a time. The result of this was that these networks were very focussed and participants were addressing the topics which were significant to them, which was valuable. This was discussed in Section 5.2.1 - Network Processes and Operations of each Sustainable Learning Network, earlier in this chapter. Where participants perceived positive valence toward an activity, they sustained engagement with it.

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5.2.2.3. Conflict Resolution and the Networks

The third process required for network success (as identified by Bessant and Tsekouras, 2001) is that of conflict resolution. There was limited conflict observed within the network meetings. In the initial facilitation of the networks, there was a session focussed on the sustainable development of the networks; and within this session, each network worked on a set of ground rules for their networks. It can be assumed that having these ground rules in place minimised the amount of conflict that was likely to take place. For example, respect for the opinions of participants was one ground rule that all networks implemented into their set of ground rules.

The most direct conflict observed in the networks was within the male network in Wales. One participant was very direct and aggressive with his behaviour toward another network member who was a competitor of his:

> "MWTech1 and MWTech3 are in direct competition with each other. They have clashed in the meetings. MWManuf3 still refers back to one particular meeting and the levels of hostility between them" (MWTech2)

On this occasion, though the male network in Wales had no formal conflict resolution policy, the facilitator of the meeting was very competent and addressed the behaviour after it had become aggressive. As such, facilitation skills were observed to be instrumental in addressing conflict in the network environment.

As the female network in Ireland formed there were some instances of participants being in a power play with each other but the team building day represented a fantastic opportunity for the participants to address the conflict that occurred; through observation:

> "the women recognised the conflict and even identified the causes as they saw them which, moving on, will help them progress with their work. Two participants in particular were very open in discussing their difficulties working in a team which I feel were very well received by the group" (S2, Female Network Ireland Observation Report).

This highlights the value of the team building day for opening the channels for open and honest communication to ensure that participants were maximising their time on the network. This ensured that network engagement was relaxed and friendly as participants were comfortable to talk about any difficulty they were having.

The female network in Wales had a participant who was very emotional and persistently caused difficulty throughout the meetings. The female participants were very patient and sympathetic with this participant and also ignored her behaviour at times. These were necessary coping mechanisms for her behaviour which was very challenging. This highlighted the skills required for network operation in instances of conflict. Though there were no formalised "conflict resolution" procedures, the female network in Wales intuitively had the ability to address conflict within their network which enhanced engagement for participants.

Within the mixed network in Wales, the introduction of a new member by the SLNIW team represented a significant source of conflict within the group. The following excerpt from the observation report highlights the feelings of the participants involved:

> "Two members expressed that they may have a conflict with MxWNM1 as they have similar businesses. They expressed that they may not disclose fully in his/her presence. The network members identified a need for a strategy for eviction from the network. It was suggested that only one individual per industry sector should be allowed membership of the network. Others mentioned that they did not dislike MxWNM1 but were happy to go with the strong feeling of others but some members expressed feelings of discomfort at the idea of evicting MxWNM1" (S11, Mixed Network Wales Observation Report).

This theme was observed in discussions that occurred in the following network meeting but the participants never addressed the eviction of this member from the network. Without conflict resolution procedures in place, this network spent a lot of time discussing a conflict that was occurring without ever addressing it; thus, wasting some of their time together and minimising the value of engagement.

An area where conflict was observed in small amounts was within discussions on the future of the networks. There were seven references made to conflict during the observations of discussions of the future of the networks. In most cases, the network participants allowed everyone to express their opinions and then the network looked for the general consensus from the entire network but in one case, the discussion was forcefully closed by one network participant and the rest of the group allowed this to happen. Ideally, dictatorial behaviour such as this would not exist in networks as this does not represent an ideal manner for networks to address conflict (for one network participant to have the "power" to close the conversation without the approval of the rest of the group).

While instances of conflict were minimal within the development of the networks, it was apparent that there were no particular strategies for addressing conflict within the meetings. This was observed particularly starkly in the mixed network in Wales where the group were committed to evicting a member from the network but in the end, they did not evict him/her. While evicting someone from a network would be a difficult thing to do, the time spent discussing this issue was wasted especially where no action was taken.

Dependent on the network (and more importantly, the personalities of the participants) the necessity for conflict management processes is increased or decreased. As outlined above, the female network in Ireland responded very positively to the team-building forum for addressing conflict and this early intervention created an open environment where conflict was not observed subsequently. The mixed network in Wales did not attend their team building day and thus, missed out on this opportunity to explore conflict in abstract terms. The team building activities served to create superficial scenarios of conflict through the medium of team building games which was a very positive mechanism to discuss the theme of conflict and personality without it being in relation to pertinent business issues.

The development of strong ground rules during network formation represents a very positive manner of conflict avoidance. The most important ground rules across all six

networks surrounded the theme of open communication and absolute confidentiality which all interviewees (17) referenced in their interviews about what made the networks work. Learning environments with no conflict or limited conflict represent more successful networks than those where there is a lot of conflict. This increases the value that participants perceive and as such sustains their motivation to engage and remain engaged with the network.

5.2.2.4. Information Processing and the Networks

Information processing is the fourth process identified by Bessant and Tsekouras (2001). In the case of these networks, they predominantly engaged in face-to-face information exchange. While this is a highly effective manner for individuals to learn, the resulting information is difficult to manage. Some networks managed the information emerging from network sessions in the form of meeting minutes but this only provided a brief overview of what had occurred as opposed to providing an in-depth understanding of what had been discussed. However, this was a good way to provide re-caps to network members and should the need arise, the participants would know where to go to seek that information again.

There was complete respect for confidentiality within the meetings which impacted the manner through which people communicated, for example one participant stated:

> "Confidentiality is hugely important and I know that within our network, it is very well respected" (FIManuf1).

This respect for confidentiality meant that participants were very open in the information, knowledge and experiences that they shared with their peers and as such, the value of the information exchange was very high.

With regard to managing information online, there was a basic website with a network members' area provided by the SLNIW project for the networks, but instead participants favoured using existing platforms such as LinkedIn and Facebook for their online communications with each other. While there was significant support for the development of online platforms that could be used for discussion of various topics

relating to business issues, there was very limited engagement with these platforms (the mixed network in Ireland created a LinkedIn group and put less than ten posts up over a two month period after the group was set up and then never used it again). The networks reverted to focussing on face-to-face communication and emailing their network if they had a question or piece of information to share between meetings. As such, for this style of network, it does not appear that online forums are necessary for their successful operation.

5.2.2.4.1. Importance of Facilitation

With the operating mechanism of rotating facilitation within the networks, all individuals in each network had to facilitate network meetings, regardless of their facilitation skills. Facilitation requires a certain set of skills as the facilitator needs to engage the members, ensure everyone is participating and manage the time to ensure that every item on the agenda is dealt with within the timelines set for the network meeting. MIServ4 made reference to some of the difficulties of rotating the facilitator role by saying:

> "If you have someone that is the motivator or leader whether you like them or not, at least there is a reaction. But just showing up and asking "who is the chairperson this time"…it is a bit too casual. Whatever you are involved in needs to have some sort of structure. Now that I think about it, that's the big thing that it lacks. I do not think the rotating chair works".

In the 10th meeting of the male network in Ireland, the facilitator struggled to perform the role as outlined in the observation below:

> "The facilitator allowed the meeting to get side-tracked and go on tangents but another member of the network stepped in at times to keep the meeting moving; the official facilitator appeared unfazed The facilitator did try to facilitate, but appeared cautious and apologetic about facilitating, he appeared a little uncomfortable but aware that it was a role that the meeting required" (S10, Male Network Ireland Observation Report).

If the routine of rotating facilitation had not been in place in this network, it is unlikely this individual would have undertaken this role.

As outlined in Section 5.2.2.3. - Conflict Resolution and the Networks, a skilled facilitator can serve to resolve conflicts that arise in network meetings. A number of meetings were observed where the facilitator was not able for the task and as a result the meeting was disastrous in terms of time-keeping, maintaining relevance and ensuring that all agenda items were addressed. This meant that how information was processed within the meetings differed depending upon the facilitator of that particular month's meeting. Meetings such as this were frustrating for many participants (as indicated by their body language which showed impatience – scribbling, looking around the room, fidgeting in their chairs, eyes to heaven or other non-verbal signals) and also served to discourage engagement as participants would leave feeling that their time had not been well spent.

The mixed network in Wales, struggled to formalise their facilitation procedures which is characterised by the following observation from their sixth network meeting:

> "There was no structure to this meeting and there did not appear to be a facilitator or an agenda. One participant appeared to be taking notes. The meeting at times jumped from one topic to another and back again, occasionally straying from the business at hand. There was particular difficulty when trying to decide on next meeting time, date, where to hold it etc. They did not come to an agreement in the end, so the meeting finished without arrangements for the next meeting in place" (S6, Mixed Network Wales Observation Report).

This demonstrates how easy it is for meetings not to occur for a network where there is no set structure or process as to how they do things and it is almost impossible for a network being run this way to process information in an effective way.

On the other hand, excellent facilitators brought real energy and action to meetings and proved quite motivational for participants to see what can be achieved in the networks (this relates to the theme of potential value whereby participants who witnessed the assistance that the group provided to other participants perceived the potential value for their business should they encounter a problem they wished to bring to the network). The most effective facilitators were those who fully engaged the

group and sought the input of all members while maintaining relevance and keeping the meeting moving in an efficient manner without being abrupt. Observations from the 10th network meeting of the female network in Ireland highlight the impact that strong facilitators have upon network performance

> "The network member facilitating today is quite organised, proactive and makes everything fun. The facilitator actively encouraged all network members to provide an overview of the issues facing them in their businesses at the moment. This encouraged participation from all network members who offered valuable solutions and suggestions to the problems outlined. All network members seemed to receive valuable information and suggestions. Network members spoke freely and comfortably with each other. The meeting agenda that was set was not adhered to. However, the facilitator made very good decisions to change the agenda which resulted in a good use of participants' time. In general, the facilitator was very effective keeping the meeting pace upbeat and including all network members" (S10, Female Network Ireland Observation Report).

As such, the facilitator in this case impacted the manner through which the participants engaged and ensured all participants got valuable feedback.

The way that information was processed within the network meetings differed depending upon the facilitator of that month's session. Some facilitators were skilled at bringing information out of the participants while others were not. Referencing this back to the valence that participants associate with activities, where information processing was more effective, participants sought more value from their engagement and were, thus, motivated to continue to engage in the behaviour of network engagement.

5.2.2.5. Knowledge Capture and the Networks

The fifth process required for network success as outlined by Bessant and Tsekouras (2001) was that of knowledge capture. From the beginning of self-facilitation, the three Irish networks were focussed on planning out their network meetings and ensuring that agendas were drafted allowing for a certain level of knowledge capture for participants to see what was being addressed in each meeting. This was quite positive as it kept some level of focus in the meetings, though in some cases of poor facilitation, even having an agenda set out did not maintain focus in the meeting. An example of this occurred in the Irish networks after they had amalgamated and the impact of poor facilitation is highlighted by this observation:

> "Though there was an agenda set for the meeting, it was not very well followed resulting in some frustration for participants. One network participant who was supposed to present in the meeting was unable to attend and so, it seems, the facilitator allowed the roundtable discussions extend and at times, go off topic. As a result, the meeting was about to end without the second participant presentation and at that point, one participant asserted that it was only for that presentation that she had come to the meeting so she did not want the meeting to end without it being addressed" (BUA[16] (amalgamated Irish networks) observations; six months after amalgamation had occurred).

The Welsh networks did not engage with such a structured approach but after visiting the networks in Ireland, they decided to adopt the same practices (all the while referencing that they still were not as formal as the Irish networks and would not want to be).

As positive a tool as the agendas were, certainly in the male network in Ireland, participants over-used it in terms of maintaining the same structure which meant that the network meetings became rather stale after a while and could have benefitted

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[16] Bua is an Irish word which means victory/success. In the first session of the amalgamated Irish networks, the network decided they wanted to give their network their own name and identity: BUA was the name they agreed on.

from more variety. One participant particularly highlighted the impact that the repetitive nature of the meetings had upon the dynamic of the male network, saying:

> "I think if I was doing it myself and structuring it, I would not have run it the way we did. It became too predictable. Then the novelty and the variety went out of it. To some extent, when you are dragging it out over a year and in a sense, filling time, I think that it lost focus. I think that comes from having no structure" (MIServ4).

Knowledge capture, in the sense it was intended by Bessant and Tsekouras (2001), was not evident in the networks as they lacked any central comprehensive repository of information. Through agendas and meeting minutes, a superficial level of knowledge was captured; providing direction to participants with questions regarding certain topics.

5.2.2.6. Motivation/Commitment and the Networks

The sixth process for network success listed by Bessant and Tsekouras (2001) was that of motivation or commitment to the network; this related to the manner through which members are motivated to join/remain in the networks. The first part of this chapter, Section 5.1.- Finding 2: Clarity of Network Purpose among network participants increases participants' motivation to engage with learning networks, was concerned with exploring the impact that the clarity of network purpose has upon network engagement and it is particularly apt within the context of motivation/commitment to sustain engagement. In the seventh meeting of the female network in Ireland, the following observation was made:

> "The network members seem very passionate about ensuring the long-term success of the network. The group worked together very inclusively to define a goal for the network, a bigger vision and an identity. This was a very interactive forum" (S7, Female Network Ireland Observation Report).

This passion around working to network purpose and designing their goals and vision for the network drove the success of the female network in Ireland and their

enthusiasm to work together toward the goals they had designated was a very positive mechanism.

Network champions were also seen to be encouraging of other participants and dedicated to sustaining other participants' motivation, helping them to see the value of their engagement with the network. The following observation was made in the sixth meeting of the mixed network in Wales:

> "MxWManuf6 was very enthusiastic in trying to get the other participants talking about their businesses and highlighted for them that even having one person to bounce their ideas off was beneficial" (S6, Mixed Network Wales Observation Report).

Networks require participants like MxWManuf6 who are motivated and enthusiastic about network engagement to share these sentiments with other members; thus, encouraging their engagement also.

5.2.2.7. Risk/benefit Sharing and the Networks

The seventh process for network success identified by Bessant and Tsekouras (2001) was that of how the network shares the risks/benefits of network engagement. The Welsh networks took a relaxed approach to network processes in the beginning and decided meeting-to-meeting when and where their next network meeting would take place because the travel logistics in Wales were very difficult:

> "distance is a challenge; particularly in self-facilitating networks; if people have a long way to go, it makes it harder and harder to meet" (MWManuf3).

This meant that for all Welsh networks, there were months when they did not have a formal network meeting. The observed impact of this was that the momentum of the network was somewhat lost when too much time lapsed between meetings. This approach addressed the idea of risk/benefit sharing in terms of sharing the travel burden and while this system facilitated the networks to meet informally in different places, at different times, and at different stages of the month, it meant that a lot of time was spent consulting diaries and negotiating dates whereas, by contrast, one of the Irish participants asserted that:

> "the first Tuesday morning of every month, I am in Arclabs (where network meetings were conducted) and that is that, the diary is blocked out" (FIManuf1).

So in many ways, the process was made much easier when routine was present and as such, attendance was maximised.

5.2.2.8. Integration and the Networks

The final process identified by Bessant and Tsekouras (2001) for successful network operation was that of member integration and the manner through which relationships are built and maintained among network participants. Network expansion was a theme that was discussed at length by all the networks and from quite early on in the process. This could have been as a result of the numbers of participants that were listed as enrolled in each network (between 13 and 20 in each) where the reality of active attendees was much different. The higher numbers that participants were initially exposed to potentially gave them the perception that these numbers were the numbers of participants that they should be aiming to have in each network. In reality, these networks function very well with as few as six members once those members are fully committed and enthusiastic about network engagement; in fact, the most effective meeting observed was the tenth meeting of the female network in Ireland and though there were only six present, they fully engaged and worked at discussing (and in most cases, resolving) the issues that participants' businesses were facing including direct business referrals, recommendations for business diversification, and opportunities for collaborations across participants' businesses which all came to fruition. However, as positive as this meeting was, the desire still remained for network participants to expand their networks to the larger sizes. There was significant motivation/commitment among participants for the networks to sustain, even in an alternative form.

The difficulty for the networks in expansion was that they had to design the processes around which new participants would be recruited. This was not a straightforward process. Many participants highlighted the various difficulties surrounding new

members including that in the recruitment of new participants that there could be competitors joining the networks and that this would not be a positive scenario. This issue was discussed in Section 5.2.2.1. - Network Creation and the Networks.

Within the networks, positive bonds and relationships had formed that participants were apprehensive would be damaged by the integration of a new participant who may not share the network ethos of learning, problem solving and support. This issue was explored in detail in Section 5.1.6. - Network Purpose for Network Expansion.

Though discussion on new members was observed often, in Ireland, only the mixed network was proactive on this front in the first 18 months of network engagement. They designed a process for new member integration that included that potential participants had to be invited by a member to attend a meeting where they would deliver a presentation on what they would bring to the network. Afterward, the network members would confer on whether an invitation to become a permanent member should be extended to the candidate or not. While in discussion this seemed to be a favourable way to introduce new members, in reality, the discussion that occurred was not private and therefore, it would have been impossible for any member to disapprove of any potential new participants without seeming rude. Out of this recruitment process, two new participants (out of three) became regular attendees of the network meetings. One of these integrated seamlessly into the network whereas the other disrupted the flow of the network and served as a distraction in network meetings, changing the subject and focussing on topics of discussion irrelevant to the network. The impact of this on the established network was evident with participants visibly showing their irritation once this new participant would make a contribution.

The female and male Irish networks did not recruit new participants before the amalgamation of the three groups. In Wales, the male network had a core group of six members and from the beginning, the Welsh male network members were not content with this low number of participants. They requested that the SLNIW team recruit new participants and though there were five new potential participants

brought into the network this way, only one became a regular attender and as such, the issue of size remained a significant one for this network. There was no set structure to the manner through which the Welsh male network integrated new participants other than to have them arrive, someone would give a brief introduction as to what the networks were all about and then the meeting would proceed as normal whereby:

> "if they liked the laid back relaxed way the network works, then they would adjust to the culture if the style of networking was valuable to them" (MWServ5).

This "take it or leave it" approach did not inspire confidence in the potential participants and the ethos of the networks was not accepted by some new members. For example, it was observed in the 13th meeting of this network that a new participant refused to give another participant advice on an issue he was experiencing because he said that:

> "that level of feedback/input would be information he would charge for"

This statement was contrary to the ethos of the network. Learning networks require reciprocity from participants to ensure that individuals both give and gain valuable insights from their engagement.

The female network in Wales did not introduce any new participants until a significant amount of time had passed (over a year). The first new participant to be introduced was brought by another member and invited to join the network. Though there was no objection, in interview, one participant confided that the new member had had a significant impact on group dynamics;

> "The new participant that was brought into the network, I have got to be honest, it caused a little bit of imbalance. I did not think it would, but it did cause some imbalance. I think once something has started, you've got to be very careful who you then bring into that network. A very strong personality can upset a few people and I've got to be honest, it did happen within our network and it did throw me off a little bit. I just thought this person has a lot to say about nothing and that's how it felt" (FWServ6).

Two participants were introduced this way before an objection was made by an original member about the manner through which new participants were recruited. She particularly wanted selection criteria to be set to ensure that new members met the same conditions that were initially set out in the SLNIW guidelines (that participants be the owner of the business, that they have been in business at least three years, and that they employ at least one person other than themselves in the business). She wanted to ensure that new participants coming onto the network had as much to offer as to gain. This was accepted by the other network participants, even by those new participants who had been recruited without meeting those criteria.

The examples outlined above demonstrate the necessity for a network expansion process to be designed for the introduction of new members to the learning networks. When the networks struggled to set out formal processes and structures for expansion, they suffered as a result. The Irish networks engaged with more formal processes than the Welsh networks which ensured their longevity. In the initial stages of the amalgamation of the networks in Ireland, two new participants were introduced to the network, but only one of these became a regular attender. Since then, no new members have been introduced and it appears that this type of network is very difficult for new people to join. However, as stated previously, these networks are very effective forums for problem solving with as few as six participants and as such, the focus on membership needs to surround enthusiasm and commitment to the purpose as opposed to simple quantity of members.

5.3. Summary

This chapter has addressed all four of the research questions of this study. It has outlined that The SLNIW networks predominantly worked within the parameters of defined network structures and processes. However, where these processes became lax, the productivity of the networks diminished and participants were not getting value from their engagement with the networks and thus the cycle of value creation was not reinforced and therefore engagement levels dropped. Table 5.7 provides an overview of the processes and structures in place in each of the networks and the

outcomes achieved. The Irish networks engaged in more organised processes for network engagement than their Welsh counterparts. Therefore, the value they gleaned from their engagement, as a result, was such that the networks in Ireland continue to meet five years after initial formation. These participants were motivated to sustain engagement.

From Table 5.7, it is evident that the female network in Ireland was the most successful network and that their strong planning and organisation of their meetings, encouraged sustained valuable engagement from these network participants. This network was followed closely, in terms of success, by the mixed network in Ireland. The strong focus of the Irish female network participants was brought to the amalgamated network in Ireland and together with the network champions of the Irish mixed network, a highly successful and sustainable network formed when the three Irish networks joined together to become "Bua", an Irish word which means "victory". The Irish male network participants were not confident about the sustainability of their network, given the less structured way they had approached network operations. However, there was a core group of participants who were committed to the network purpose and were highly eager to engage under the leadership of the Bua network.

While there were many motivated participants across the three networks in Wales, none of the networks formed with sufficient ownership or organisation to ensure the sustained success of these networks.

Within this chapter, the theme of network purpose and network structures and processes were explored in detail. The networks in Ireland required frequent re-visitation of the theme of purpose but their success was in this constant commitment to purpose and focussing on what they wanted to achieve together. This focus on network purpose, coupled with strong routine and planning, influenced the successful sustainability of these networks. Conversely, it was the lack of purpose, structures and processes which impacted the cessation of the Welsh networks.

	Routine	Ethos	Structures & Processes	Outcomes	Status
Female Ireland	Same day, date, venue	Learning, Action and Support	Organised and structured with strong planning	Network participants gleaned great value from the network and after significant discussion and organisation of facilitator to handle the process, agreed to amalgamate with the other Irish networks	Still meeting as amalgamated group engaging in the same routine from network formation (January 2015)
Male Ireland	Same day, date, venue	Learning	Loosely structured with moderate planning	After 18 months, the network decided that the group could only be sustainable if amalgamated with the other two Irish networks	Still meeting as amalgamated group engaging in the same routine from network formation (January 2015)
Mixed Ireland	Same day, date, venue	Learning	Organised and Structured with strong Planning	Committed network with two new members integrated successfully; open to the amalgamation of the groups as put forward by the Irish male network	Still meeting as amalgamated group engaging in the same routine from network formation (January 2015)
Female Wales	Varied; routine from 11th month	Support and Learning	Initially lacking structure; more formal with time; required SLNIW extension to motivate sustained engagement	There were a strong core of nine participants in this network who were primarily motivated to engage to support one another. After initial SLNIW withdrawal, meetings were sporadic but the extension period motivated the group to continue for a time	No longer meeting (August 2012)
Male Wales	Varied; routine from 11th month	Learning	Initially lacking structure; more formal with time; issues with membership numbers	There were a core of six members in this group who engaged well together but they lacked structure and focus and the group naturally fell away with no official cessation	Ceased meeting as a network before SLNIW extension; though three participants attended training provided by SLNIW during the extension period
Mixed Wales	Varied	Learning and Support	Lacking structure and focus	Network core reduced to six from very early in the process. There were two significant business developments within this network which occurred following feedback from their network peers	No longer meeting after SLNIW support was withdrawn (May 2012)

Table 5.7: Overview of Impact of Structures and Processes on Sustained Engagement (Source: current research)

Chapter 6

Personality Characteristics and Participant Motivation

6.0: Personality Characteristics and Participant Motivation

The purpose of this chapter is to present the fourth finding of this research which is outlined in section 6.1.

6.1. Finding 4: Participants' personality characteristics play a role in the attraction they feel toward a network and their motivation to engage and sustain engagement with the network

Within this section, the roles of personality, attraction and motivation in determining an individual's propensity to engage in learning networks are considered. The research instruments drawn upon to inform these insights are personality inventories; rating scales of loyalty and attraction and information garnered through direct observations and in-depth interviews. An individual's personality make-up influences their attraction toward and motivation to engage with networks. The most significant finding reported here being the levels of agreeableness present in the participants. This is not a surprising finding given that some of the difficulties observed and reported in interviews surrounded dominant and difficult individuals, who presumably would not have high levels of agreeableness in their personalities. More importantly, what was more regular in meetings were examples of participants getting along very well with one another, conflict in these networks was relatively small.

6.1.1. Respondent Profiles

46 participants from Ireland and Wales participated in these personality inventories. The breakdown was as follows (Figure 6.1):
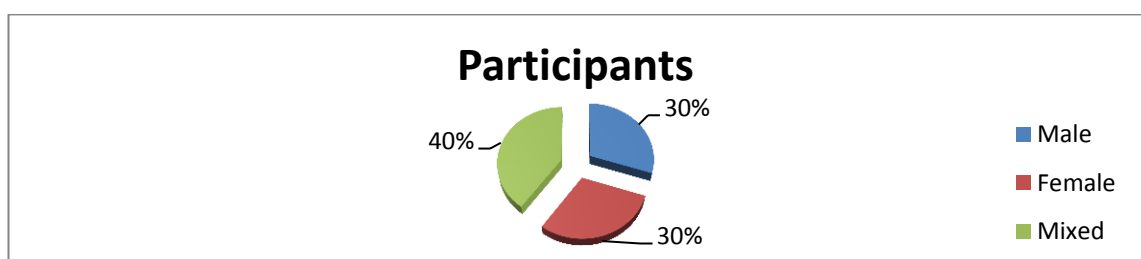
Fig. 6.1: Breakdown of respondents by network type (Source: current research)
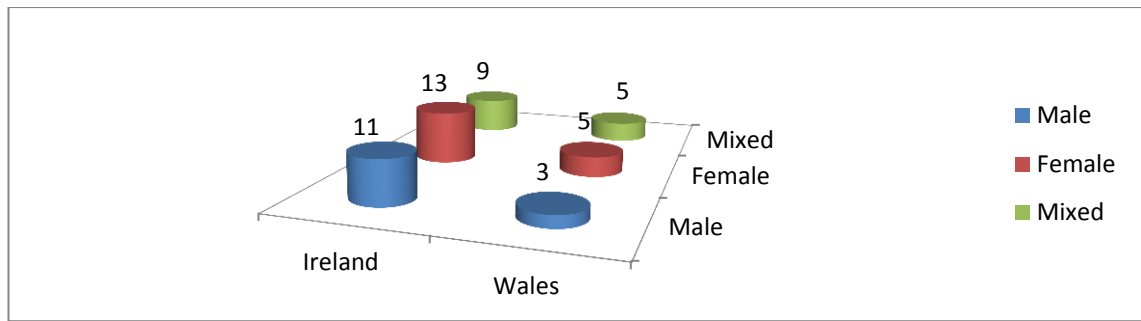
Fig. 6.2: Participant breakdown by network and region (Source: current research)

Figure 6.2 outlines the six networks and the numbers of respondents from each network (these are not percentages). There was a nearly even split across mixed, female and male respondents with a small dominance by the mixed network respondents (40% vs 30%) while there was a significant difference between the numbers of respondents from Ireland and Wales (72% of respondents were from Ireland; 28% from Wales). The personality inventories were conducted 12 months into network engagement and at that stage the response rates reflected typical attendance rates across the networks; in Wales attendance rates were significantly lower than in Ireland.

6.1.2 Goldberg's Big Five Personality Characteristics and the Networks

Goldberg's (1992) Big Five personality inventory examines the five personality traits of extraversion, agreeableness, conscientiousness, emotional stability and intellect/imagination. Presented in the following pages are the results from each trait. For each trait there were a series of statements put forward to determine the level of accuracy of that trait to the individual undertaking the inventory. For example, within the examination of the theme of Extraversion, "I am the life of the party" and "I start conversations" are examples of the kinds of statements that participants have to rate the accuracy of in relation to their own personalities (See Appendix F for details of the Personality Inventory questions).

6.1.2.1. Extraversion
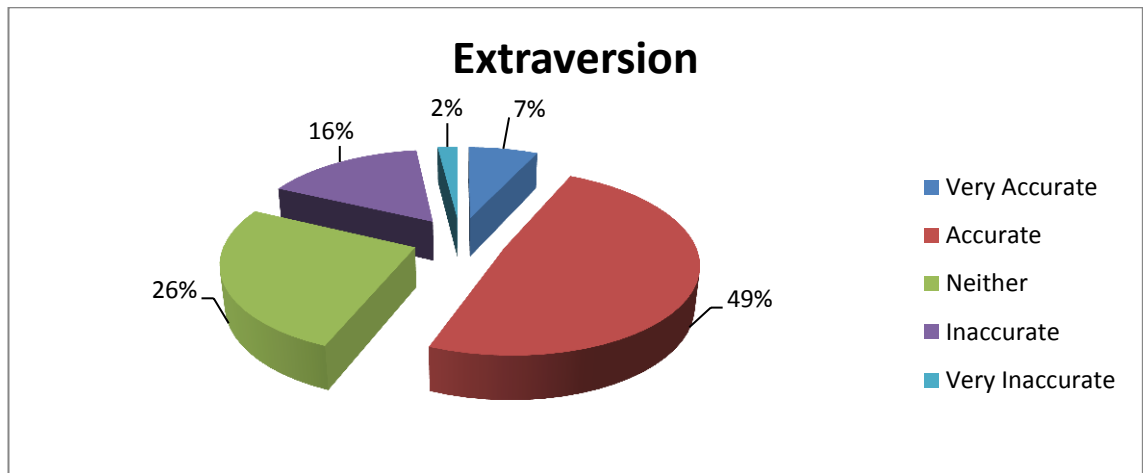
Fig. 6.3: Personality measure for "extraversion" (Source: current research)

Figure 6.3 presents the responses in relation to "extraversion". When the response rates for "accurate" and "very accurate" are combined, there is a 56% accuracy rate for extraversion among the network participants. When this is broken down according to network, in Figure 6.3.1, it is apparent that the mixed network participants were the most extravert (62% rated these characteristics as accurate or very accurate for them) though the differences across networks are not particularly notable (57% combined accuracy rate for respondents from the female networks and 47% for those from the male networks). From the mixed and female network respondents, 16% were more introvert and from the male networks, 22% were more introvert. The remainder were neither extravert nor introvert with significant numbers of respondents neutral to these characteristics (22% of mixed, 27% of female, and 31% of male respondents).
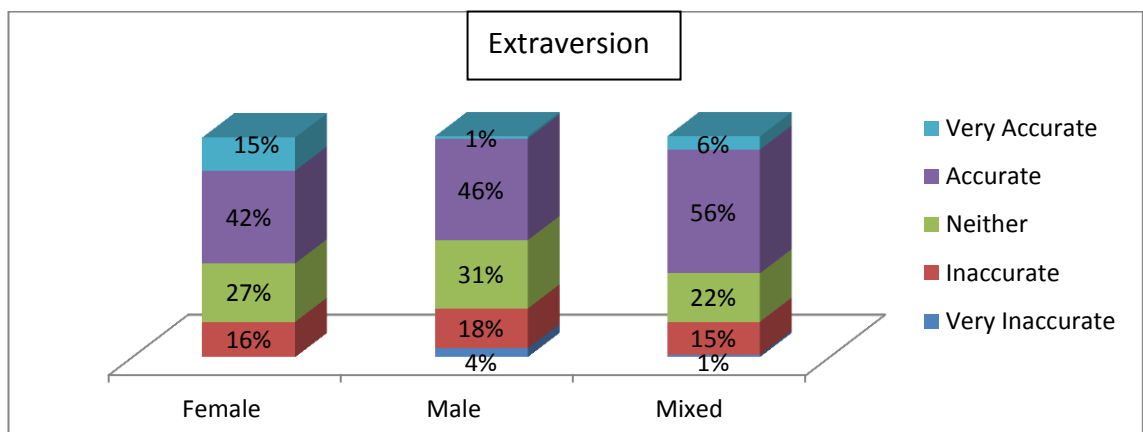
Fig. 6.3.1: Personality measure of "extraversion" broken down by network (Source: current research)

6.1.2.2. Agreeableness
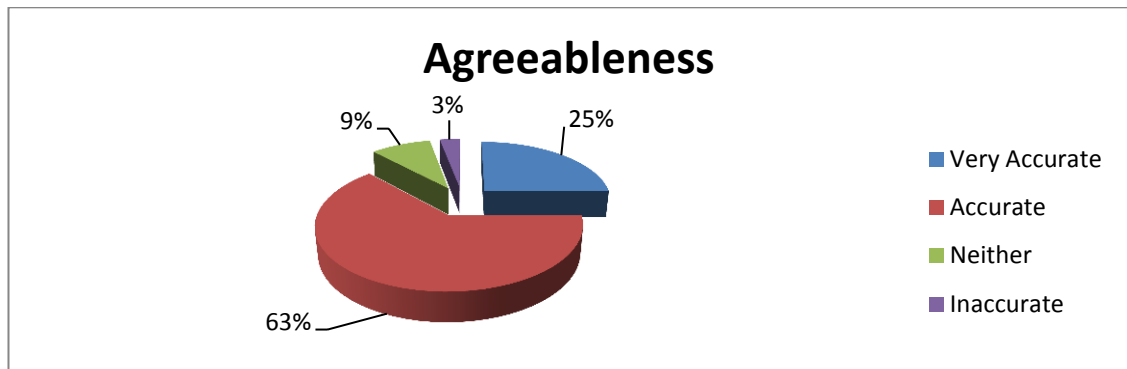
Fig. 6.4: Personality measure for "agreeableness" (Source: current research)

The next of Goldberg's big 5 personality traits is that of agreeableness, presented in Figure 6.4. This trait shows the most significant associations with the network participants, with 88% reporting accuracy. When considered by network in Figure 6.4.1, the mixed and female networks represented the highest levels of accuracy in agreeableness (91% each reporting these characteristics as accurate or very accurate). The slightly lower levels of agreeableness in the male participants are unexpected as through observation, these networks operated in a highly polite and diplomatic manner. For example, the male network in Ireland, on their team building day opted to draw at the end of the day instead of conducting a tie breaker to determine the winner. There was still a significant level of accuracy recorded among male participants with 80% reporting that these characteristics were either accurate or very accurate for them.
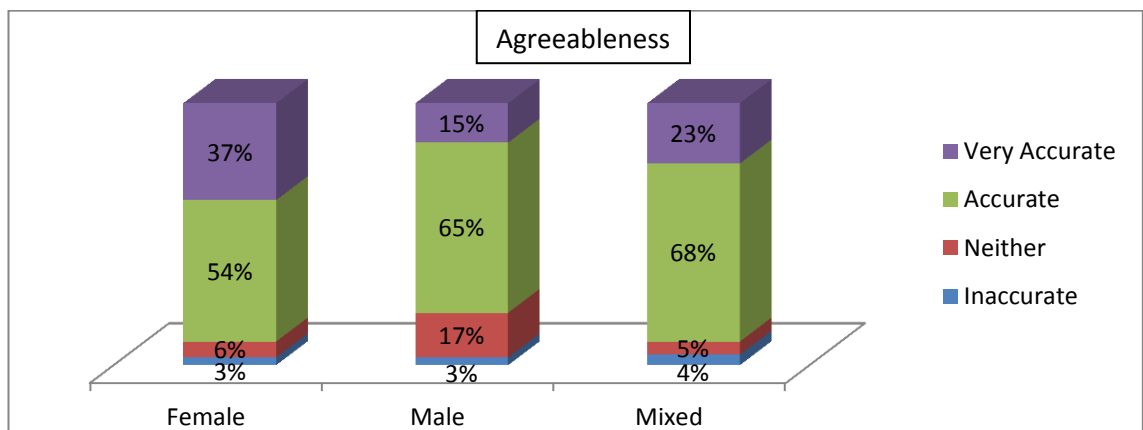
Fig. 6.4.1: Personality measure for "agreeableness" broken down by network (Source: current research)

6.1.2.3. Conscientiousness
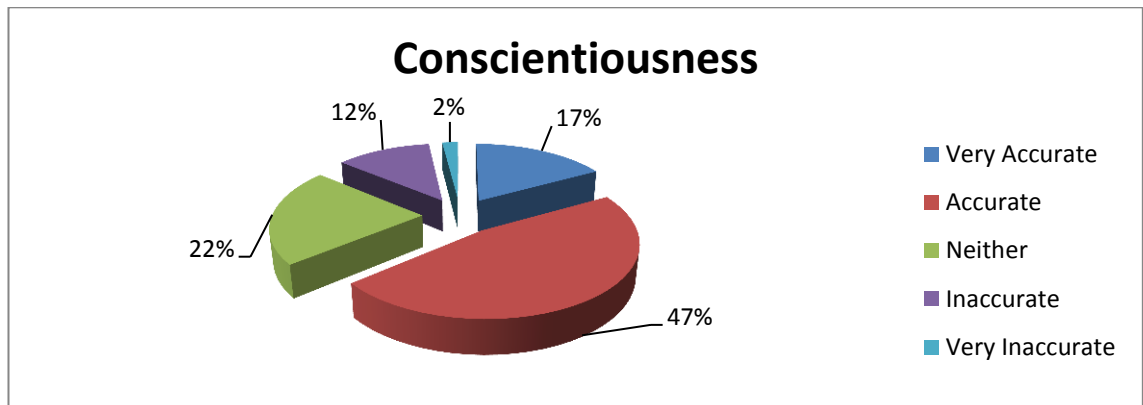
Fig. 6.5: Personality measure for "conscientiousness" (Source: current research)

From Figure 6.5 we can see that there is a rate of 64% accuracy for the trait of conscientiousness among network participants. This does not represent a surprising finding given that conscientiousness refers to an individual's ability to set and stick to goals. These inventories were conducted after 12 months of network engagement and so the likelihood was that a strong level of conscientiousness would be found. The slightly more pronounced emphasis among the female respondents for conscientiousness, presented in Figure 6.5.1, is not surprising given the high levels of engagement, organisation and action observed in these networks.
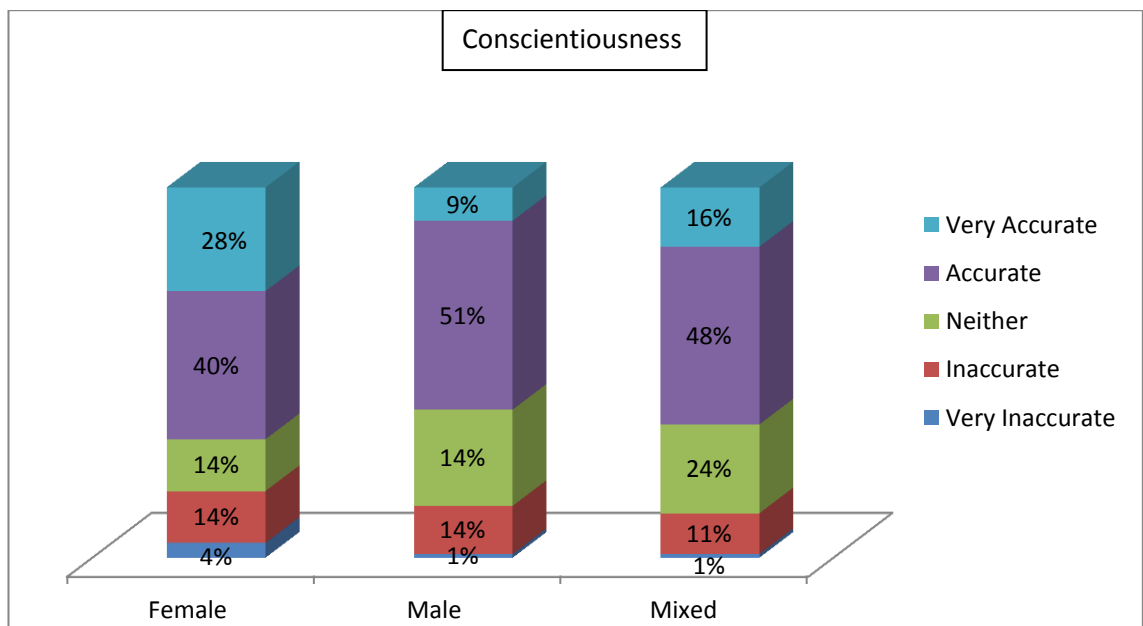
Fig. 6.5.1: Personality measure for "conscientiousness" broken down by network (Source: current research)

6.1.2.4. Emotional Stability
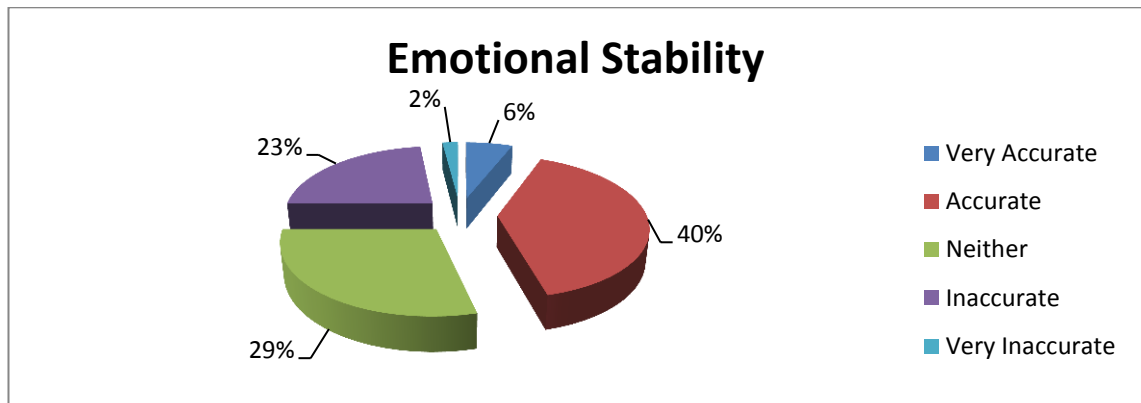
Fig. 6.6: Personality measure for "emotional stability" (Source: current research)

Emotional stability is a trait considered common among entrepreneurs and refers to their levels of self-efficacy and resilience and impacts their motivations for future action. However, from Figure 6.6, less than half the respondents in this study reported accuracy with this personality trait. Almost a third of participants were neither accurate nor inaccurate. Still, this leaves a quarter of respondents for whom the trait of emotional stability is inaccurate. Differences across the networks were small with 43% of mixed respondents, 49% of male respondents and 50% of female respondents reporting the accuracy of emotional stability as part of their personalities.
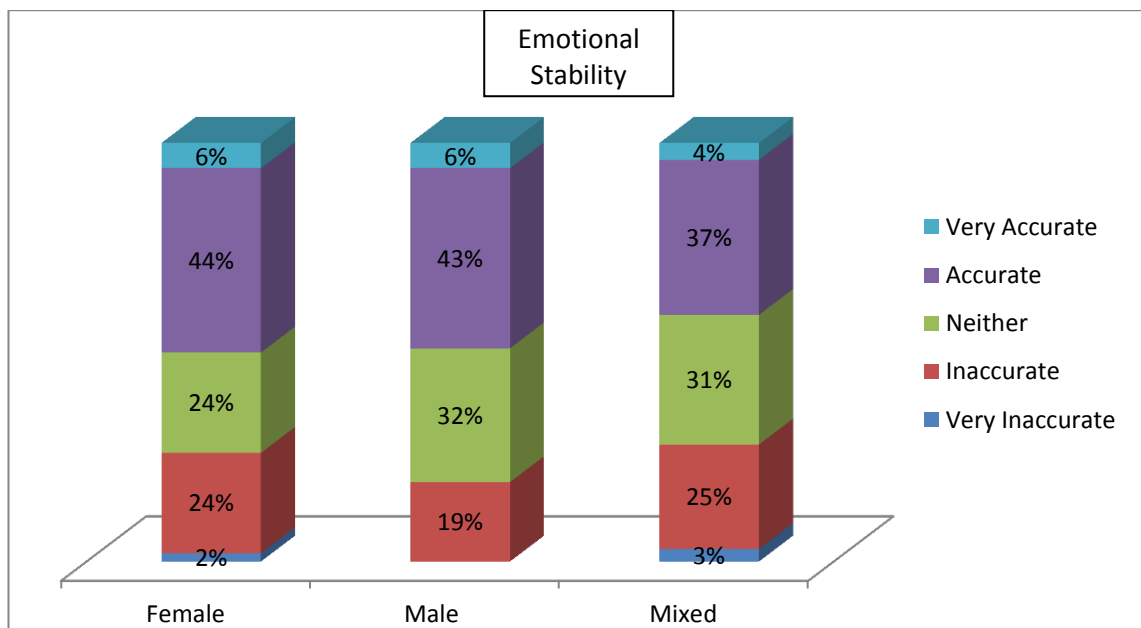
Fig. 6.6.1: Personality measure for "emotional stability" broken down by network (Source: current research)

6.1.2.5. Intellect/Imagination
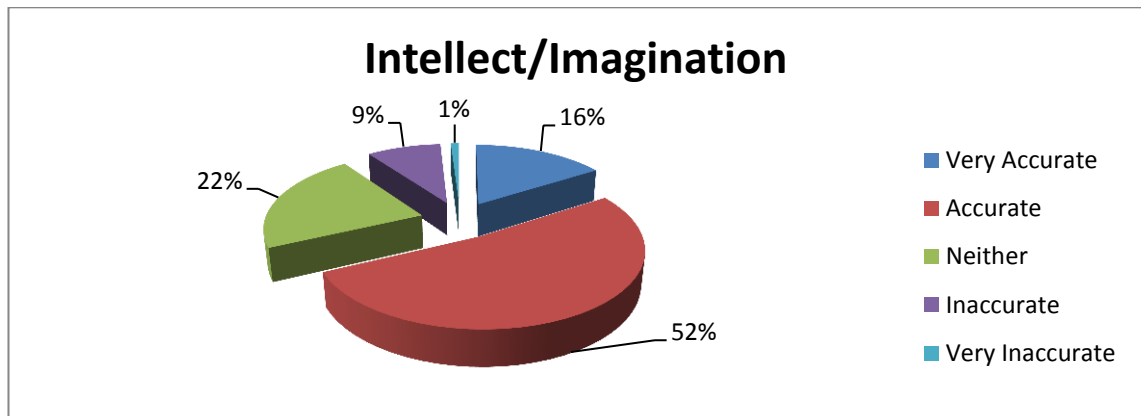
Fig. 6.7: Personality measure for "intellect/imagination" (Source: current research)

Goldberg's Big 5 measure for intellect/imagination refers to the extent to which individuals are open to experience. Those individuals for whom the traits of intellect/imagination are inaccurate tend to prefer routine and familiarity. Entrepreneurs by their stereotype would not fit this profile and it would be expected that they would be quite open to experience. As can be observed from Figure 6.7, in the case of the entrepreneurs in this study, over two-thirds of respondents reported accuracy with this trait. The respondents from the female and mixed networks report higher accuracy with regard to their openness to experience. Through observations, the male networks were very repetitive in their operations so the finding in Figure 6.7.1 that the male participants were less open to experience is not unexpected.
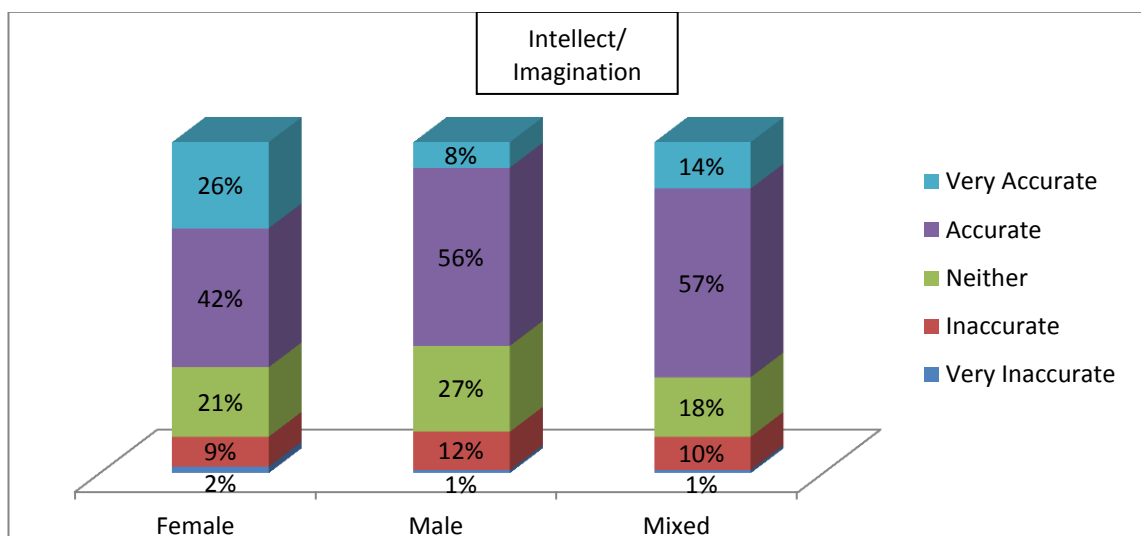
Fig. 6.7.1: Personality measure for "intellect/imagination" broken down by network (Source: current research)

6.1.3. Summary

The female network participants showed the highest levels of agreeableness, conscientiousness and emotional stability. Given the role of the female network participants in the sustainable success of the amalgamated Irish network and the success of the Welsh female network, for as long as they were active, this is not surprising. In Chapter 4, the initial motivations of participants to engage with learning networks were explored and the female network participants were highly motivated for engaging with other business people, information sharing, learning and accessing new ideas. From the beginning, they were naturally disposed toward network engagement and their personality compositions were favourable toward succeeding in these motivations. What was particularly influential in the success of the female network in Ireland was the fact that within this network, there were four Network Champions (see Figure 4.1, Chapter 4) which was the highest number of Champions across any of the networks. These four individuals were very well balanced in terms of their organisational vs motivational capabilities. In Chapter 5, the structures and processes around which the networks operated were explored. The female network participants' personality characteristics, particularly, the high levels of conscientiousness and agreeableness were apparent in the way the meetings were organised (refer back to table 5.7 for overview of network routine, ethos and structures) and conducted; with minimal conflict. From this, it can be concluded that when there are motivated individuals whose personality characteristics are favourable toward engagement and there is sufficient commitment among the network to structure the network meetings and ensure a routine, networks will provide value to participants which means their motivation to engage with the network will be sustained (Vroom, 1964) and they will remain within the Cycle of Value Creation (Wenger et al, 2011).

6.2. Factors Impacting Participants' Attraction and Loyalty to the Networks

Upon completion of the personality inventories, participants were then asked a series of questions in relation to factors which impact their attraction and loyalty to the

networks. Firstly, they were asked to rate their levels of collaboration within the networks with their network colleagues and include collaborations that were occurring outside network meetings with their network colleagues (for instance, within the female network in Ireland, two participants with complementary businesses began working together on collaborative business projects). A significant proportion reported collaboration within their groups as outlined in Figure 6.8; no participants reported that they "do not collaborate" indicating that for all respondents, there was at least a small amount of collaboration occurring.
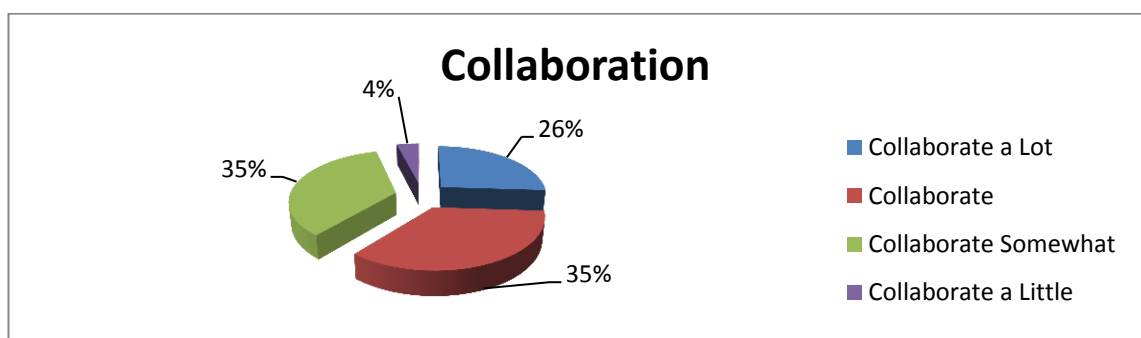
Fig. 6.8: Levels of collaboration in the networks (Source: current research)

There is a significant level of collaboration reported with 61% indicating that they "collaborate" or "collaborate a lot". All participants experienced some level of collaboration, thus, demonstrating an indicator of the role of collaboration in sustained engagement with network members. Figure 6.8.1 presents the levels of collaboration reported broken down by region.
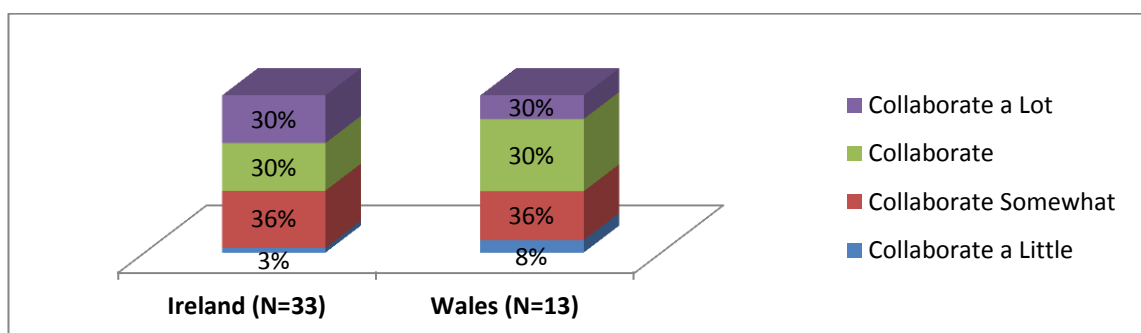
Fig. 6.8.1: Levels of collaboration broken down by region (Source: current research)

In Figure 6.8.2 the breakdown of these results are presented by network type. Overall, the male respondents did not respond very positively while the mixed and female

networks reported relatively similar statistics with extra emphasis on the level of collaboration amongst the female participants. These results are not unexpected given the level of engagement, openness and collaboration observed in the female network from the very early stages of network development compared to their male counterparts. The male networks were much more reserved and for many months of observation were seen to be holding back information from their colleagues and experiencing blatant issues with trust which naturally impacted the level of collaboration they perceived/experienced.
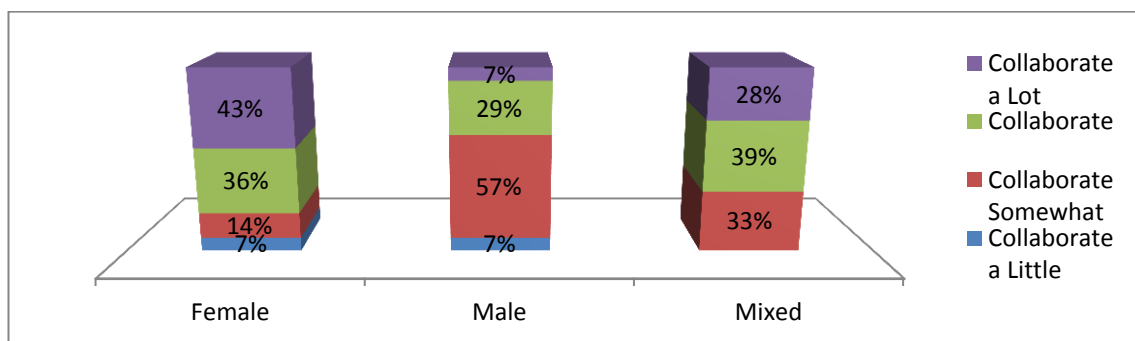
Fig. 6.8.2: Levels of collaboration broken down by network type (Source: current research)

Figure 6.8.3 presents the levels of collaboration reported by each individual network. The female network in Ireland reported the highest levels of collaboration with two thirds of these participants "collaborating a lot" with their network peers. Not surprisingly, the male networks in both Ireland and Wales reported the lowest levels of collaboration.
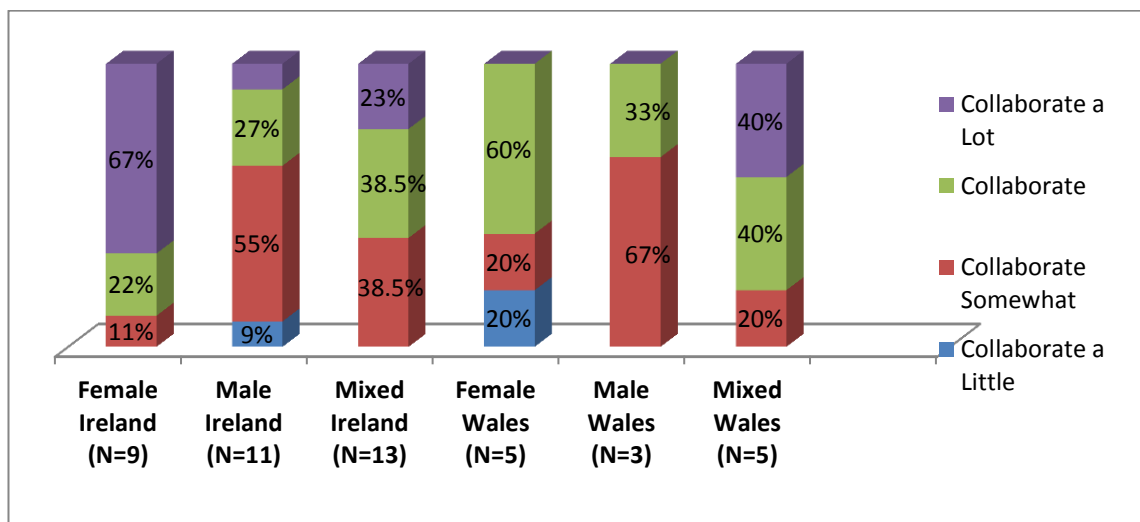
Fig. 6.8.3: Levels of collaboration broken down by each network (Source: current research)

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Participants were then asked how likely they were to remain involved with the network. Figure 6.9 presents the responses.
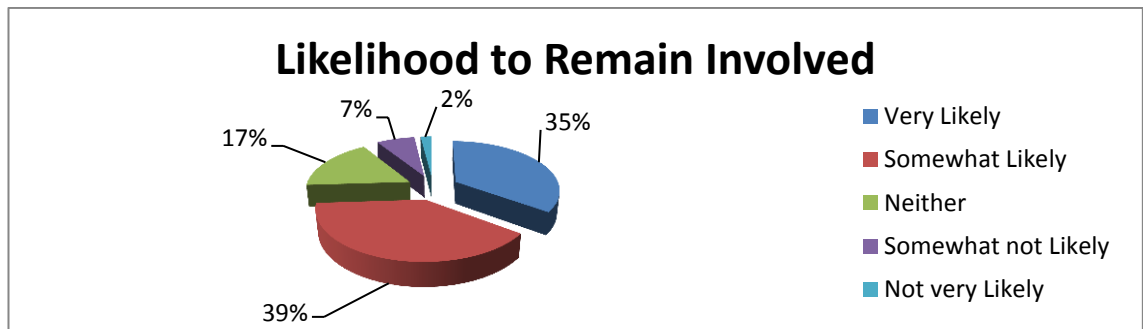
Fig. 6.9: Likelihood to remain involved with the network (Source: current research)

Almost three quarters (74%) of respondents reported that they were somewhat or very likely to remain involved with the networks. This is very positive; particularly when just 9% of respondents were feeling that they may not remain engaged. Broken down in Figure 6.9.1 are the responses from each region.
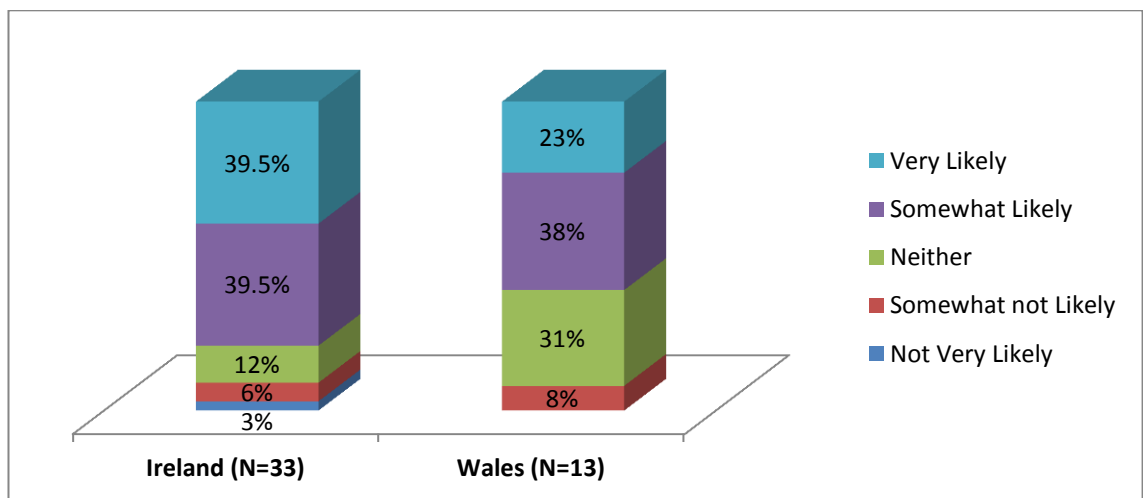
Fig. 6.9.1: Likelihood to remain involved with the network broken down by region (Source: current research)

The Irish network participants were more positive about the likelihood of remaining engaged with the networks; 79% of Irish participants compared with 61% of Welsh participants were either very or somewhat likely to remain engaged with the networks. Irish participants were more inclined toward being "very likely" to remain involved with almost 40% indicating this response in comparison with 23% of Welsh participants. Figure 6.9.2 presents the results broken down by network type.
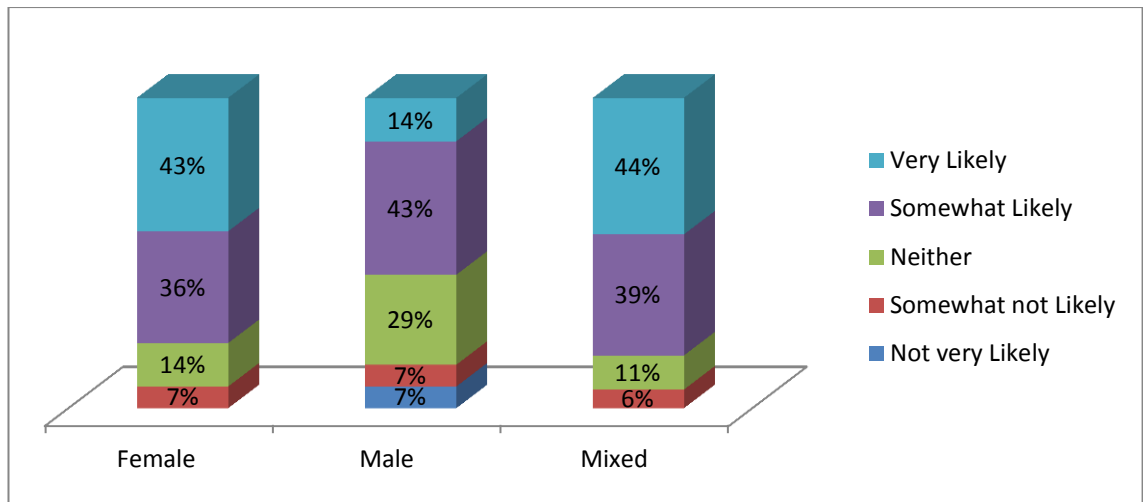
Fig. 6.9.2: Likelihood to remain involved with the network by network type (Source: current research)

The mixed network participants represent the most positive network participants in terms of staying involved; though only slightly more positive than their female counterparts (73% vs. 69%). The male networks represented the lowest proportion of respondents likely to remain involved. The male networks really struggled to maintain momentum within their networks in both Ireland and Wales with the small numbers of active participants being a huge problem in Wales from the beginning. Figure 6.9.3 breaks down the results further by each individual network.
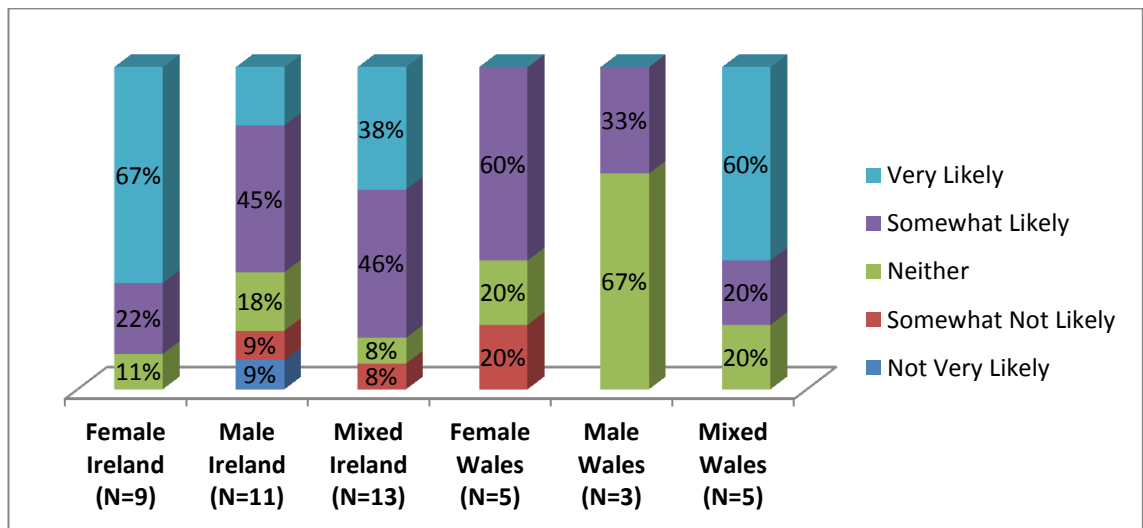
Fig. 6.9.3: Likelihood to remain involved with the network by each network (Source: current research)

The female network participants in Ireland were most likely to remain engaged (89%) followed closely by the mixed network participants in Ireland (84%) and the mixed network participants in Wales (80%). The male network participants in Wales were

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reserved in their likelihood to remain involved with the majority expressing neutrality to the idea of remaining engaged. The findings reported here show the increased positivity that existed within the Irish networks and particularly within the female network in Ireland (they reported the highest number of participants "very likely" to remain involved). It was unexpected that so many participants from the mixed network in Wales (60%) asserted that they were "very likely" to remain engaged as this network really struggled to maintain momentum with their meetings so while there was a core group of participants who were committed to the network and motivated by the purpose, this network lacked the capacity to sustain their meetings and engagement and once the project ended, they were not successful in self-facilitating their network.

Participants were asked to rate the levels of performance they perceived in the network and these are presented in Figure 6.10.
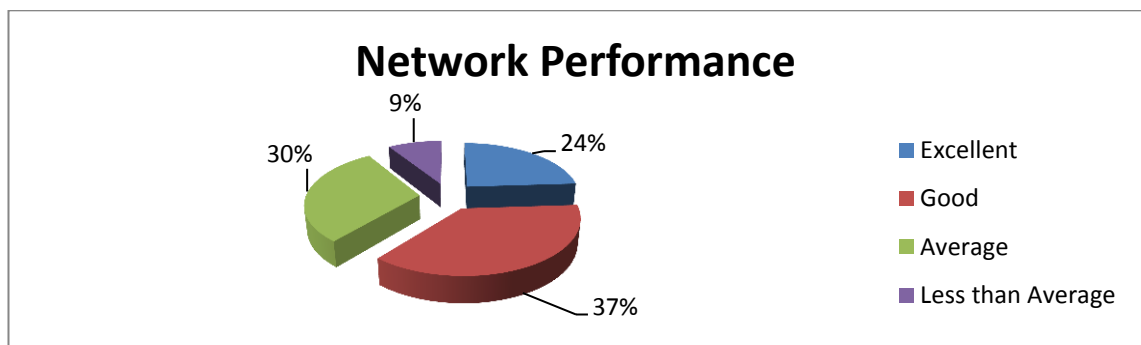
Fig. 6.10: Perceived network performance (Source: current research)

The performance levels reported across the networks was quite positive with a significant majority reporting good/excellent performance rates (61%). Perceived network performance rates are important indicators for the likelihood for sustained engagement. While participants believe the networks are performing well, engagement is perceived positively by them. In this case, the act of engagement has positive valence (Vroom, 1964) and while this behaviour provides value to participants, they remained in the Cycle of Value Creation (Wenger et al, 2011). Figure 6.10.1 presents the breakdown of results by country.
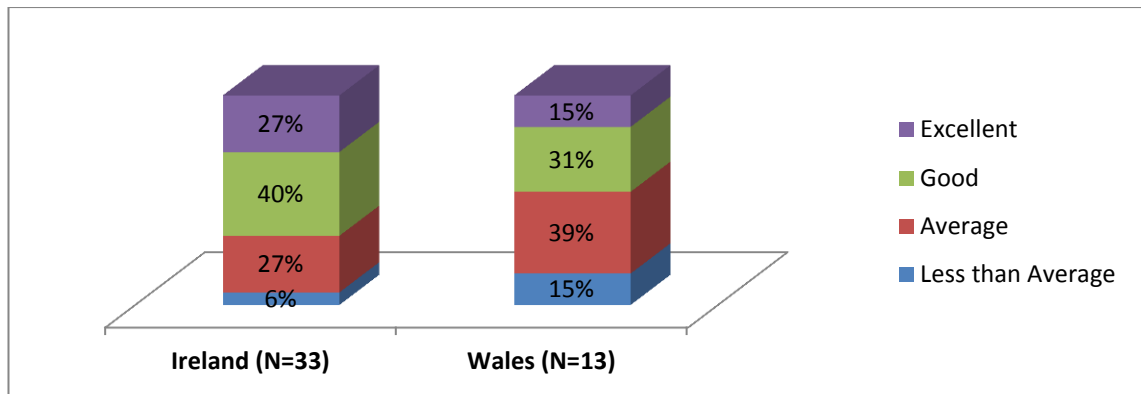
Fig. 6.10.1: Perceived network performance by region (Source: current research)

Irish network participants were more positive than their Welsh counterparts about the performance of their networks with two thirds of Irish participants rating network performance as good or excellent in comparison with 46% of Welsh participants rating their networks this way. Figure 6.10.2 presents the breakdown of these results by network type.
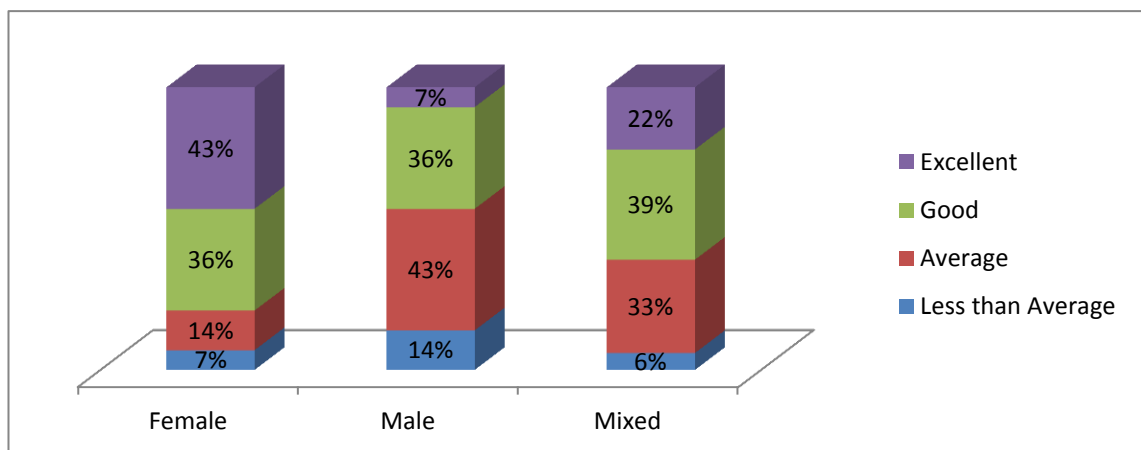
Fig. 6.10.2: Perceived network performance by network type (Source: current research)

The female network respondents were the most positive with regard to the performance of their networks and the male respondents were the most negative. This further supports the observations that the female networks were more successful than their male counterparts. The perceptions of the mixed group were pretty evenly represented across all levels of network performance. This is quite interesting as it shows how participants who are engaging in the same activity can attain such diverse results and individual factors play such an important role in determining the value each

person derives from the one activity. Figure 6.10.3 breaks down the results further by presenting the responses from each individual network.
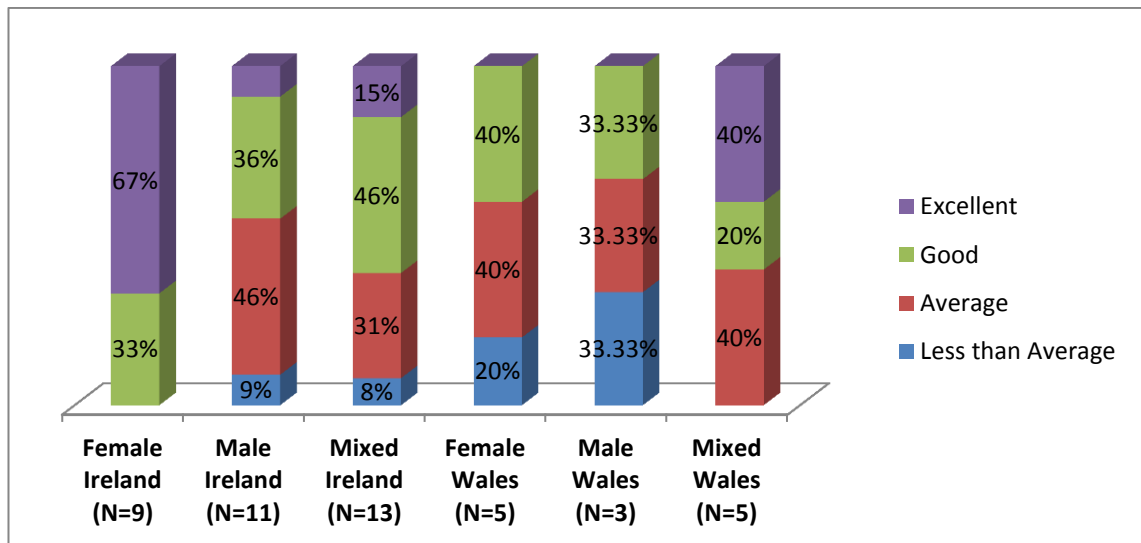
Fig.6.10.3 Perceived network performance by each network (Source: current research)

The female network participants in Ireland were the most positive about the performance of their network with 100% of respondents reporting good or excellent performance. In fact, the female network in Ireland and mixed network in Wales were the only two networks that no participants reported "less than average" performance. The male and female networks in Wales reported the highest levels of "less than average" performance across the remaining networks. These results serve to further reinforce the positive manner through which the Irish female network developed. As reported earlier, the combination of participants who were high in conscientiousness and agreeableness and the presence of four network champions in this network meant that this network was highly action and learning focussed. This focus meant that participants in this network particularly were achieving real value from their engagement, and as such, perceived their network performance incredibly positively, which in turn maintained their motivation for continued engagement in the process.

Participants were next asked to rate their overall satisfaction with the networks and Figure 6.11 presents these results.
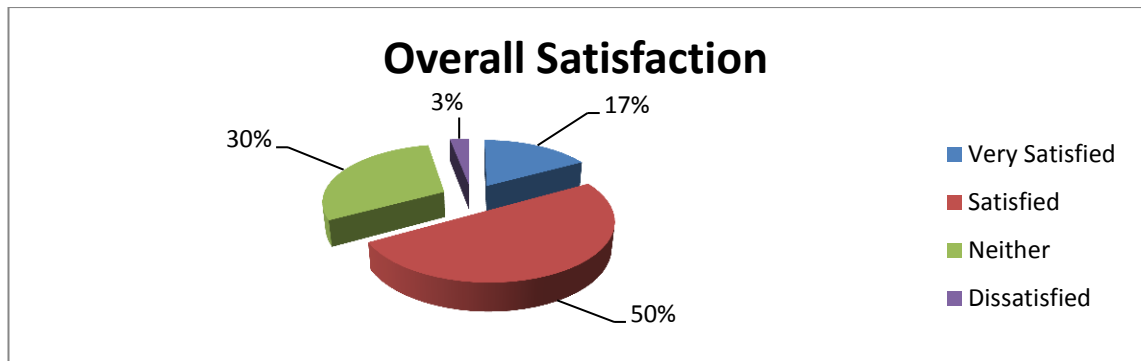
Figure 6.11: Overall network satisfaction (Source: current research)

Two thirds of respondents reported that overall, they were either satisfied or very satisfied by their network experience. Almost a third were neither satisfied nor dissatisfied with just a small fraction of two percent reporting dissatisfaction. Since these inventories were conducted after 12 months of network engagement, perhaps those that were dissatisfied had already disengaged from the networks. Fig 6.11.1 presents the results broken down by region.
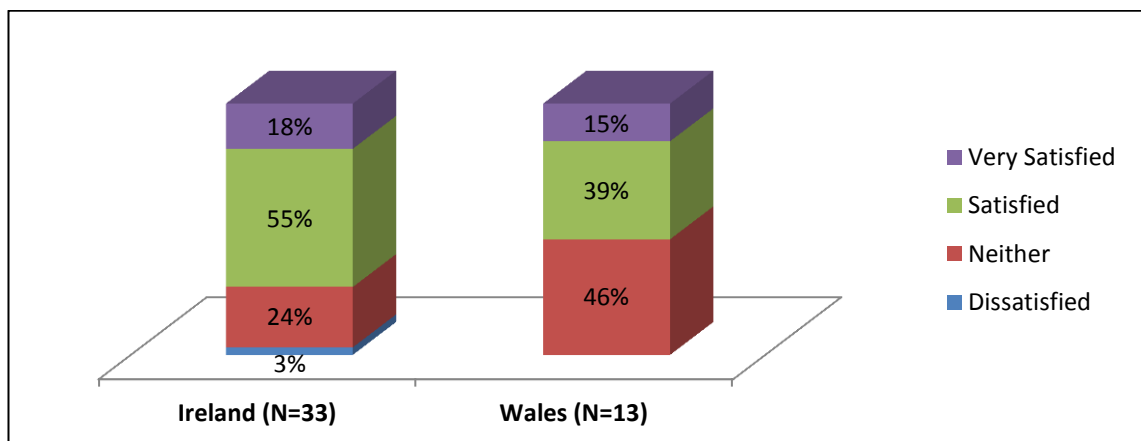
Fig. 6.11.1: Overall network satisfaction by region (Source: current research)

Almost three quarters of Irish respondents (73%) reported that they were either satisfied or very satisfied with their networks in comparison with 54% of Welsh respondents satisfied or very satisfied. Referring back to Table 5.7 in Chapter 5, where the structures, processes, ethos and outcomes were presented for each of the networks. The Irish networks benefitted from more routine and structure around their meetings which potentially feeds into the higher levels of satisfaction they experienced from network engagement. Figure 6.11.2 breaks down the results by network type.

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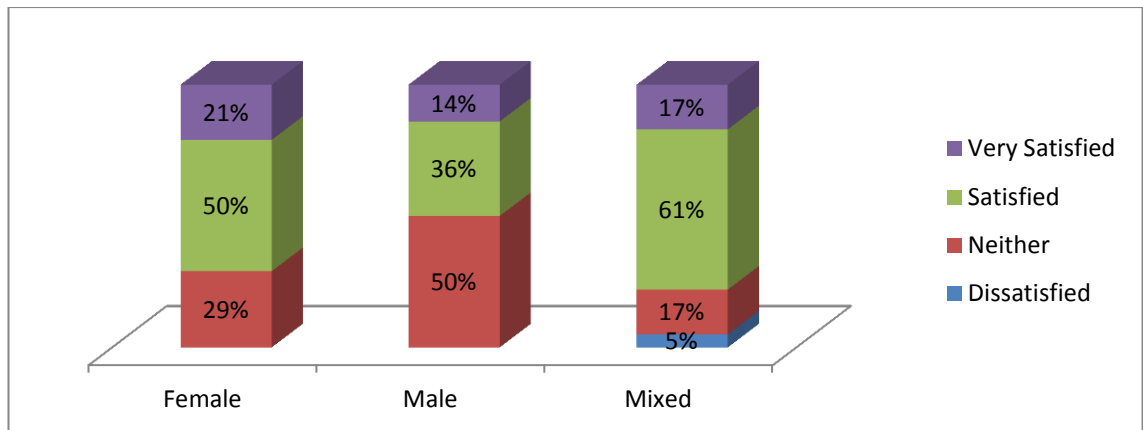
Fig. 6.11.2: Overall network satisfaction by network type (Source: current research)

The mixed network respondents reported the highest satisfaction levels (78%), followed closely be female respondents with 71% satisfaction reported. The male network respondents reported the lowest levels of satisfaction across all network types. The male networks in both Ireland and Wales struggled to maintain momentum within their network meetings and thus these findings are not surprising. Figure 6.11.3 shows the responses from each individual network.
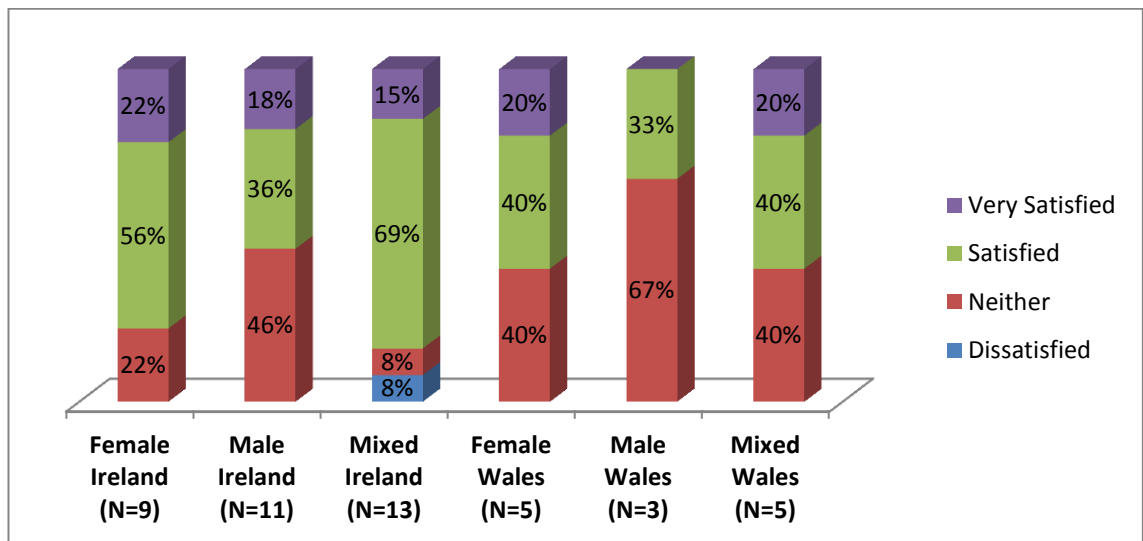
Fig. 6.11.3: Overall network satisfaction by each network (Source: current research)

The only network to have no respondents reporting that they were "very satisfied" was the male network in Wales. The mixed network respondents from Ireland were the most satisfied with their network experience with 84% either satisfied or very satisfied, followed closely by the female network in Ireland with 78% either satisfied or very satisfied. From the results thus far, it would have been expected that the female

network participants in Ireland would have reported the highest levels of satisfaction given the positivity expressed in terms of the clarity of network purpose that these participants achieved and the value that they gleaned from the positive performance of their network.

Participants were then asked whether they would recommend the network to a friend. The results are reported in Figure 6.12.
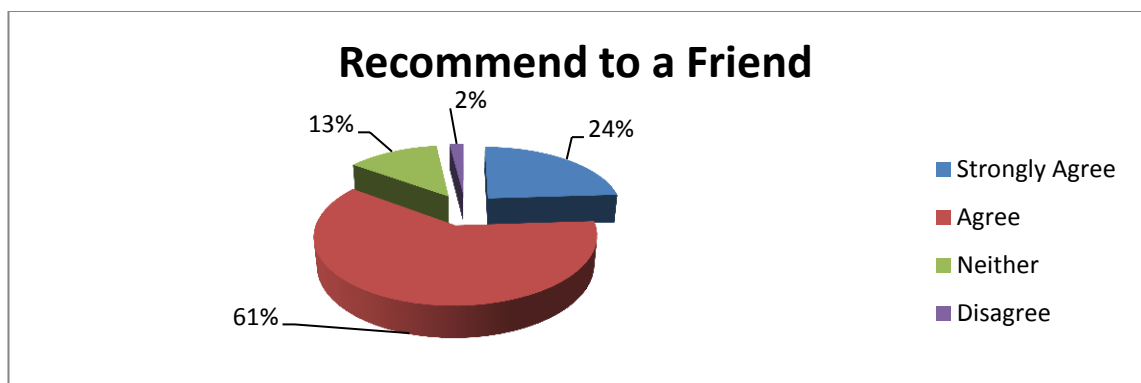
Fig. 6.12: Likelihood to recommend the network to a friend (Source: current research)

In determining how people have really felt about something, researchers often ask respondents whether or not they would recommend the product/service to a friend. This is a highly effective technique for gleaning understanding of their genuine feelings. In this case, 86% agreed or strongly agreed that they would recommend the network to a friend which signifies that they really felt their engagement was worthwhile. This is a surprising finding given that the overall satisfaction levels reported in Figure 6.11 were almost 20% lower (67%) than the percentage of participants who would recommend the network to a friend. This suggests higher levels of satisfaction than reported from the direct question posed to participants. Figure 6.12.1 presents the results broken down by region.
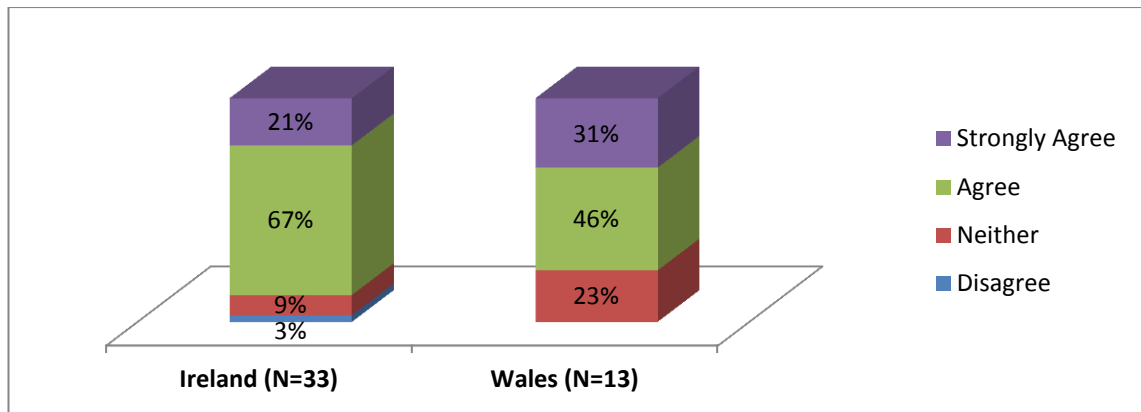
Fig. 6.12.1: Likelihood to recommend the network to a friend by region (Source: current research)

When broken down by region, Irish participants were more likely to recommend their network to a friend; however, the difference is quite small (88% vs 78%). Figure 6.12.2 demonstrates the results by each type of network.
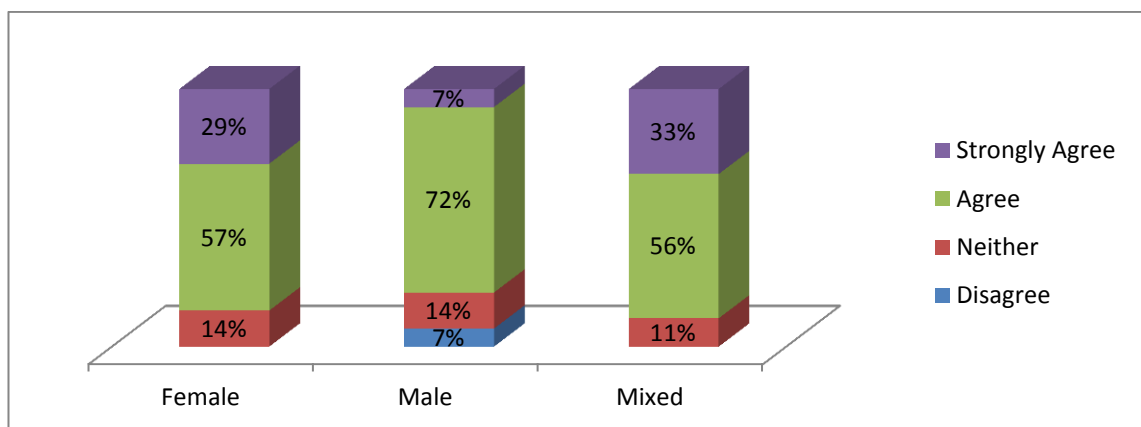
Fig. 6.12.2: Likelihood to recommend the network to a friend by network type (Source: current research)

The differences between networks were also quite small with the mixed network participants only slightly more likely to recommend their networks than their female or male counterparts. This would suggest a relatively high level of satisfaction overall. However, again, it is unexpected that the female participants would not have reported the highest levels of likelihood to recommend to a friend, particularly when they perceived the performance of the network so positively. Within section 5.2.2 in Chapter 5, the network processes were discussed and interestingly, the theme of new members arose there. The female network participants in Ireland, while open to new members, expressed reservations about the impact that new members would have and this potentially had a knock-on effect on how they would feel about

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recommending new members for the network. Figure 6.12.3 presents the results from each individual network.
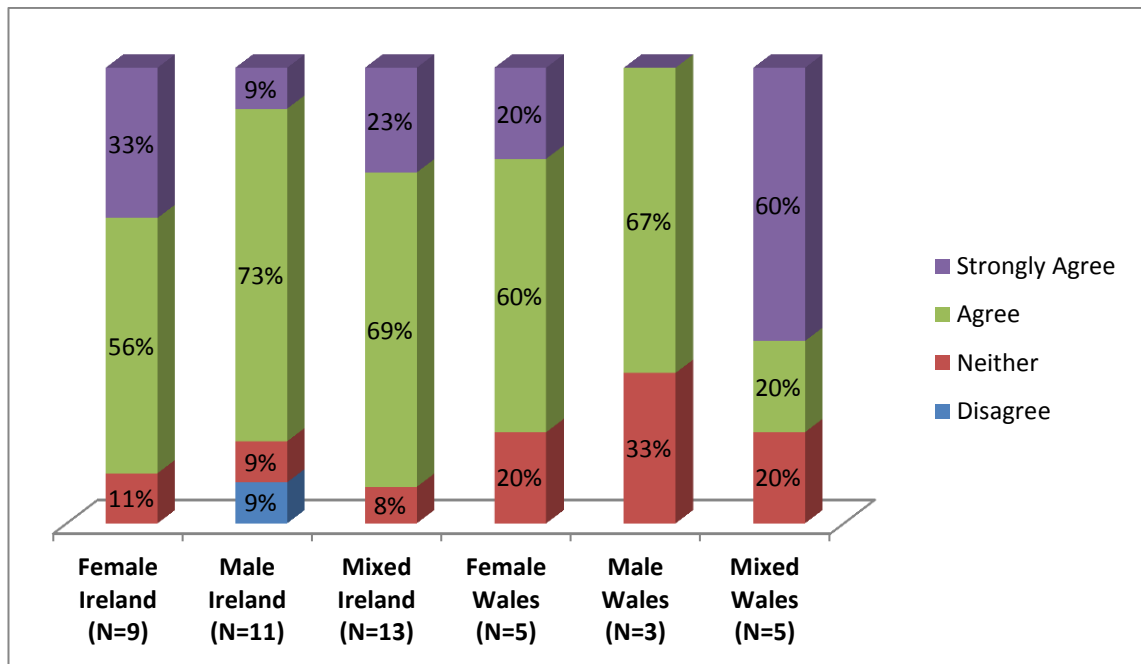
Fig. 6.12.3: Likelihood to recommend the network to a friend by each network (Source: current research)

When the figures are broken down by each network the high levels of agreement that participants would recommend their network to a friend are apparent. The only thing worth noting is that the male network participants in Ireland were the only ones to disagree that they would recommend the network to a friend, however just 11% felt this way. Another interesting observation from the male network in Ireland is the disparity between the results reported here (that 82% either agree or strongly agree that they would be likely to recommend the network to a friend) compared with the satisfaction levels these network participants reported with just 54% either satisfied or very satisfied with their network in Figure 6.11.3 (a difference of almost 30 percentage points).

Participants were next asked whether they were pleased to be associated with their network. The results are presented in Figure 6.13.
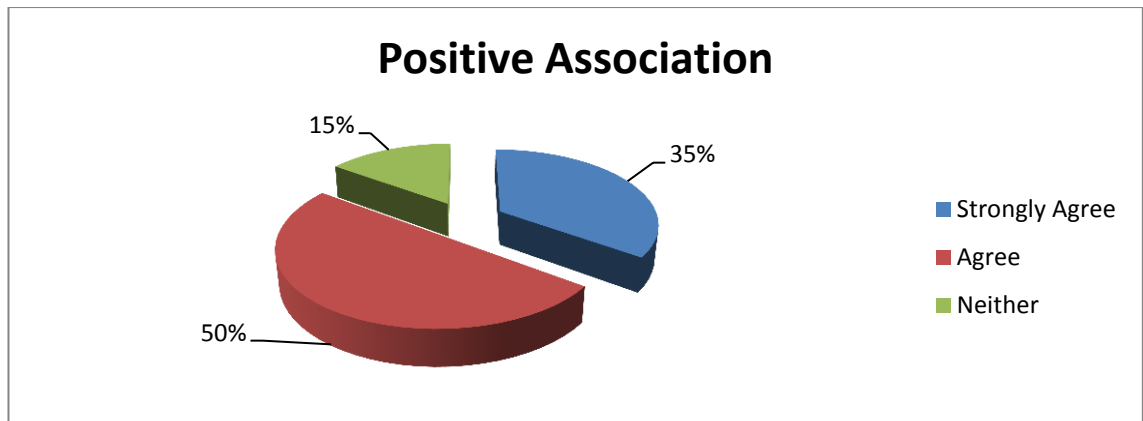
Fig. 6.13: Positive association with the networks (Source: current research)

When asked whether they were pleased to be associated with the networks, 85% agreed or strongly agreed that they were. This represents a very positive result as human nature dictates that individuals do not want to be associated with things they are not proud of. In Figure 6.13.1, the results are broken down by region.
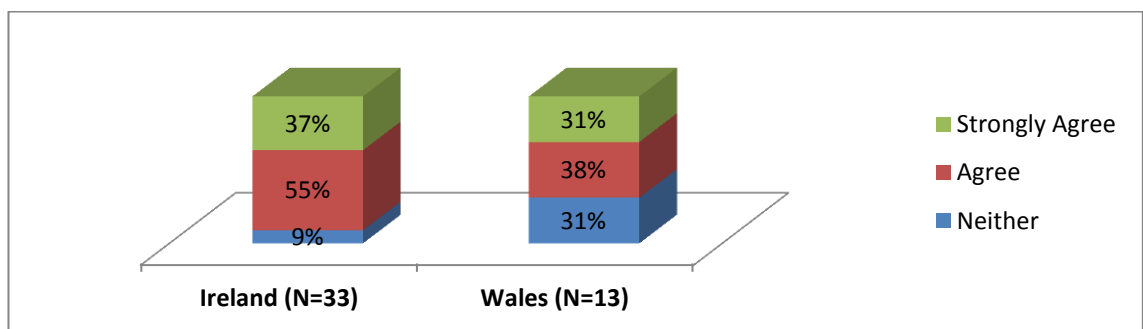
Fig. 6.13.1: Positive association with the networks by region (Source: current research)

When broken down by region, there is higher agreement amongst Irish participants with regard to the positive associations they hold with their networks. Almost a third of the participants in Wales were neither in agreement or disagreement that they are pleased to be associated with their network. This is representative of the lack of sustainability within these networks as it indicates less commitment among the Welsh network participants than among the Irish network participants. In Figure 6.13.2, the results are broken down by network type.
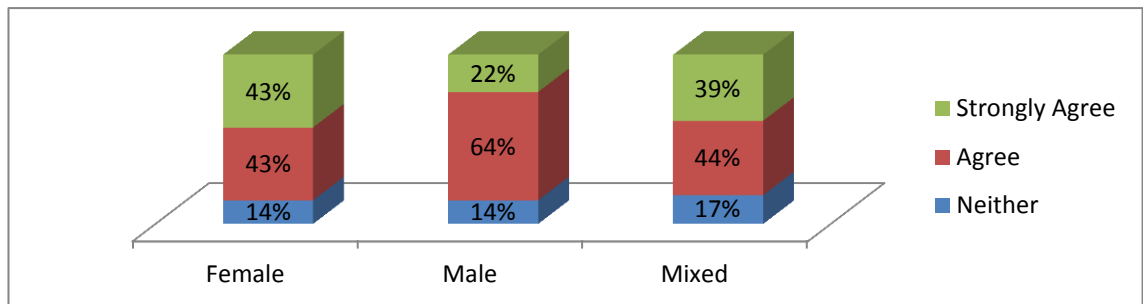
Fig. 6.13.2: Positive association with the networks by network type (Source: current research)

When broken down by network type in Figure 6.13.2, the mixed and female network participants represent very similar percentages across all segments while the male network participants show the smallest percentage in the category of "strongly agree" which is not unexpected with the observed reserve and slow steady pace with which they conducted their meetings. In Figure 6.13.3, the results are presented for each individual network.
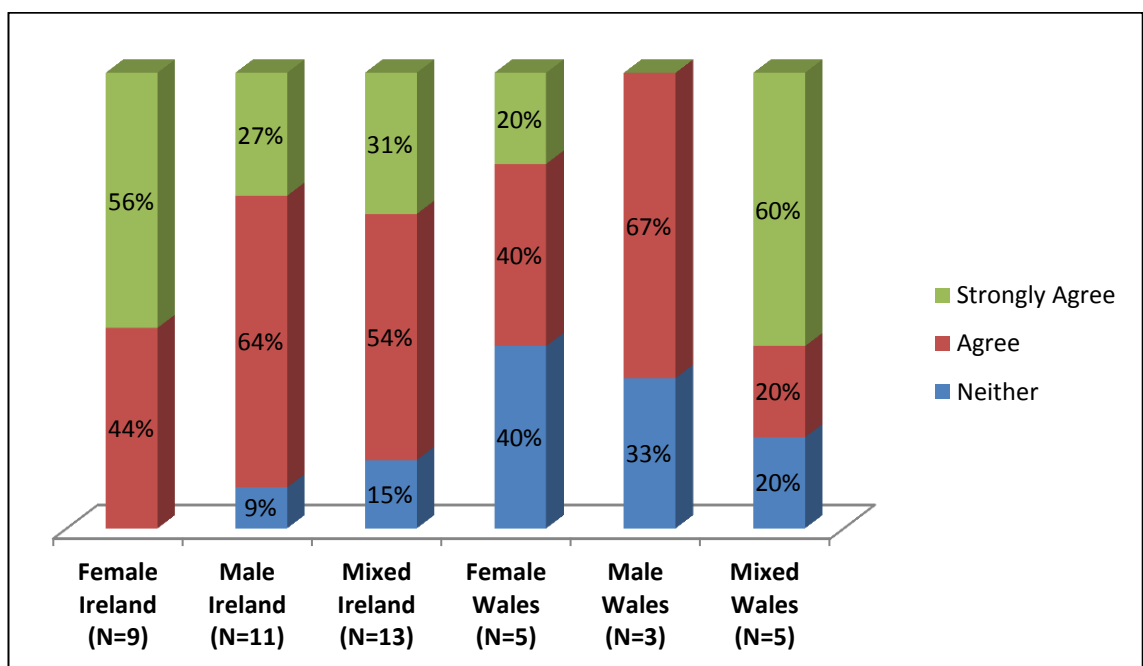
Fig. 6.13.3: Positive Association with the networks by each network (Source: current research)

All the participants from the female network in Ireland agreed or strongly agreed that they were pleased to be associated with their network. The findings reported throughout this chapter have consistently indicated strong positivity amongst the Irish female network participants. The factors impacting this positivity encompass the commitment to purpose that these participants felt, the commitment, trust and

relationships they had with each other, the focus on action that they pursued and the structures and processes around which they organised their meetings. This culminated in participants gleaning great value from their engagement and thus feeling very positive about their network.

Participants were also asked their level of agreement with the statement "this is a great network" and these results are presented in Figure 6.14.
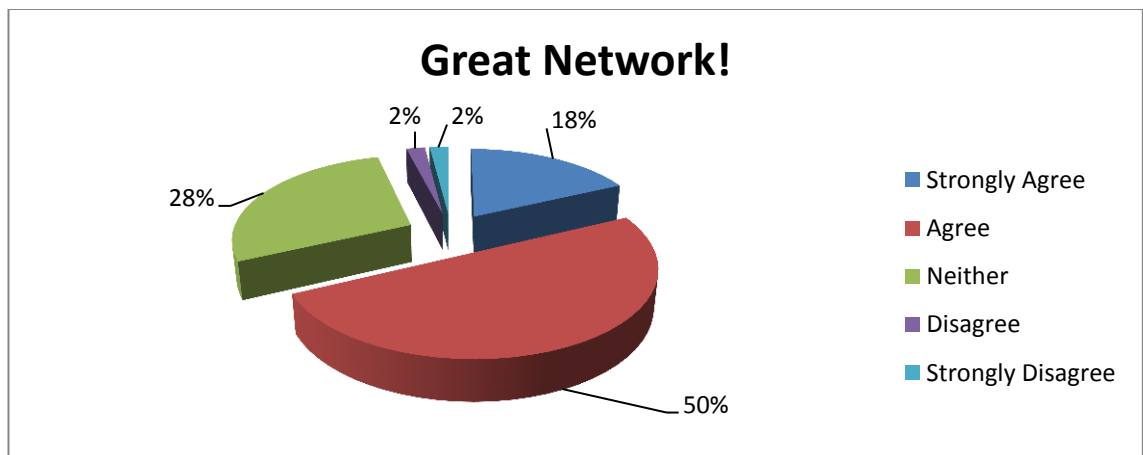
Fig. 6.14: "Great Network" (Source: current research)

Two thirds of respondents agreed or strongly agreed that "this is a great network" while almost a third of respondents were neutral with regard to this statement. In Figure 6.14.1, these results are presented by region.
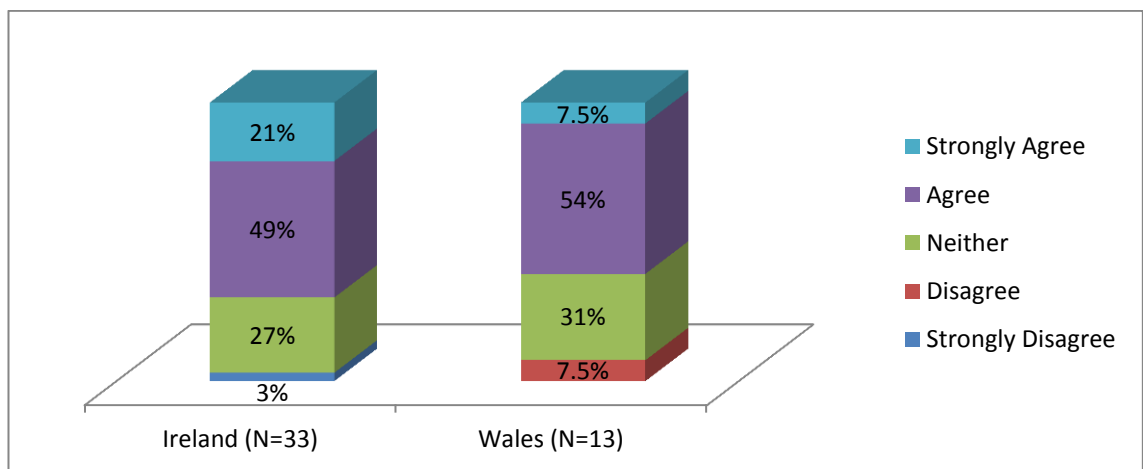
Fig. 6.14.1: "Great Network" by region (Source: current research)

The Irish participants were much more enthusiastic about their networks than their Welsh counterparts, evidenced by 21% of these participants strongly agreeing that their network is "great" in comparison to just 7.5% of their Welsh counterparts. This trend has been apparent throughout the research findings, indicating that the lack of structure and focus around the networks in Wales presented a difficulty in the development of the networks in Wales. In Figure 6.14.2 the results are broken down by network type.
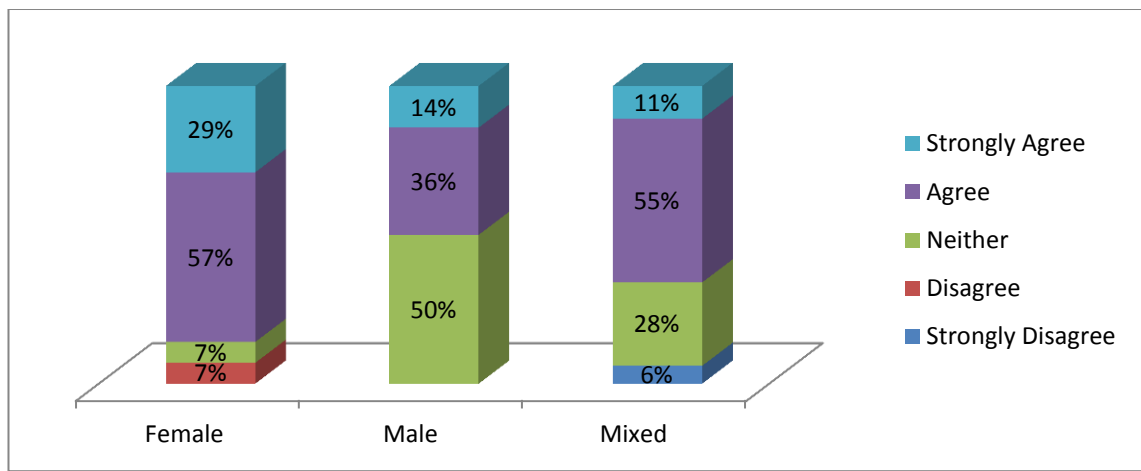
Fig. 6.14.2: "Great Network" by Network Type (Source: current research)

Male network participants expressed the least agreement with the statement "This is a great network" which is in keeping with the findings of this research that the satisfaction that these participants perceived was limited. The female network participants were most enthusiastic about their networks. Figure 6.14.3 presents the results broken down for each network.
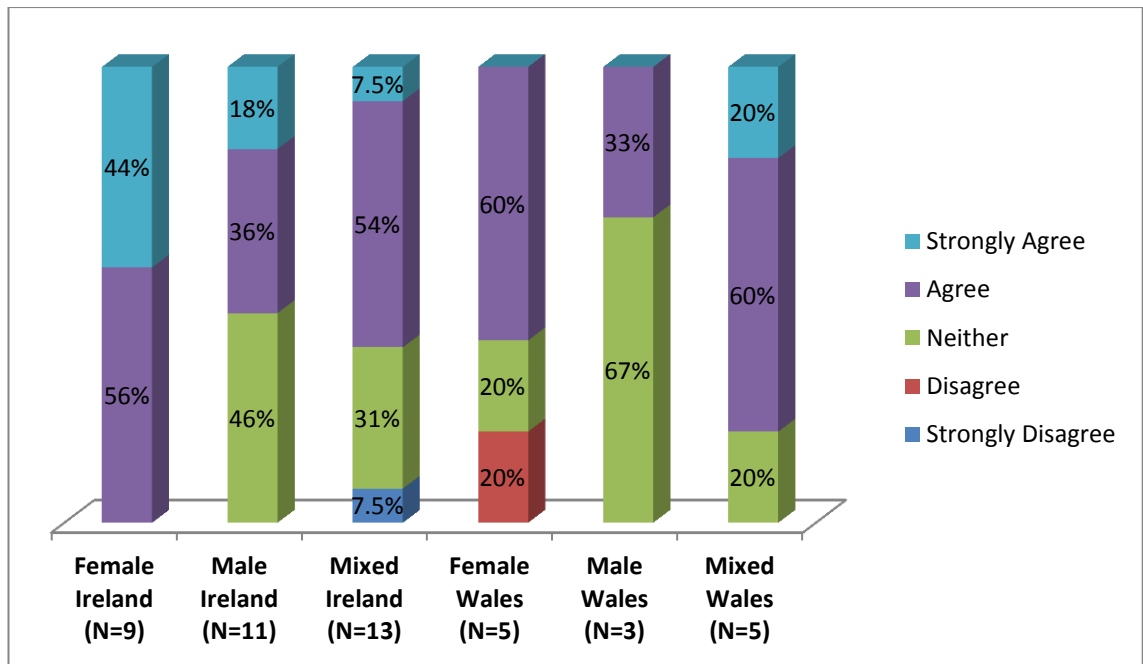
Fig. 6.14.3: "Great Network" by each network (Source: current research)

Again, the female network participants in Ireland were the most positive about their network with 100% of them agreeing or strongly agreeing that their network "is a great network". This further supports the conclusion that this network performed most effectively of all the networks developed, thus keeping these participants on the cycle of value creation which meant that they perceived network activities with positive valence (Vroom, 1964).

Participants were also asked to report their agreement with the statement "This network is here to stay" and the results are presented in Figure 6.15.
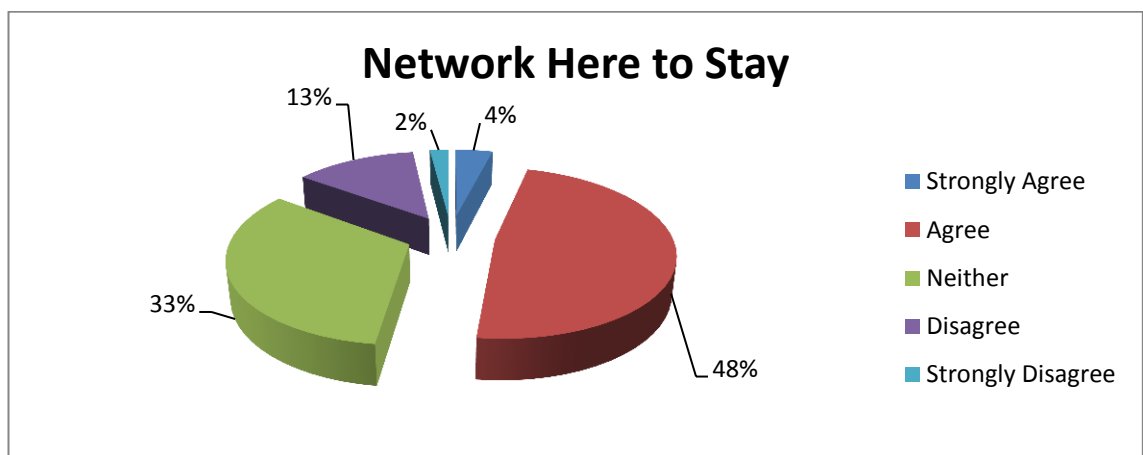
Fig. 6.15: "Network here to stay" (Source: current research)

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Just over half the respondents were in agreement that the networks were going to continue. However, a third of participants were unsure. This reveals that 12 months into network engagement, not all participants were convinced of the longevity of the networks. Figure 6.15.1 presents the results broken down by region.
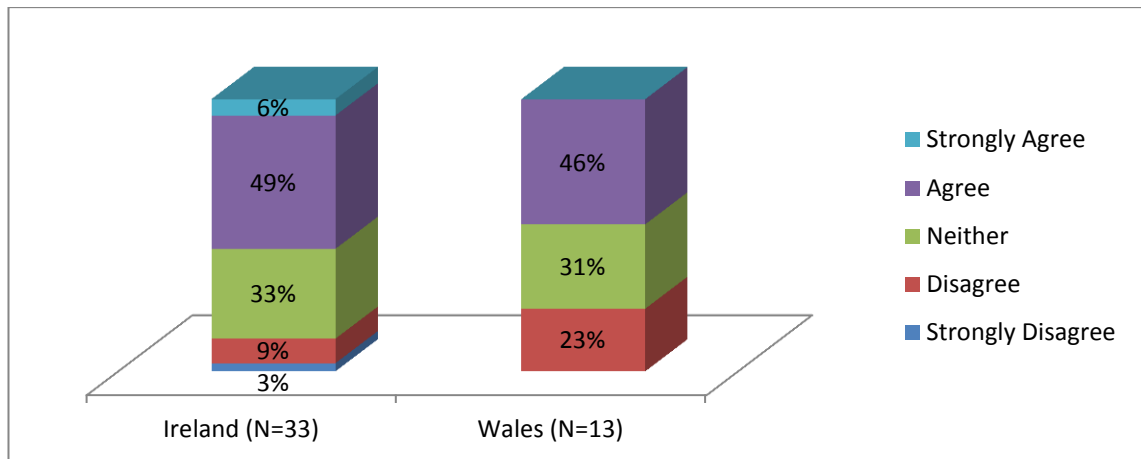
Fig. 6.15.1: "Network here to stay" by country (Source: current research)

Almost a quarter of participants in Wales did not agree that the networks would sustain, this is almost double the amount of Irish participants who felt this way. Figure 6.15.2 presents the responses as broken down by network type.
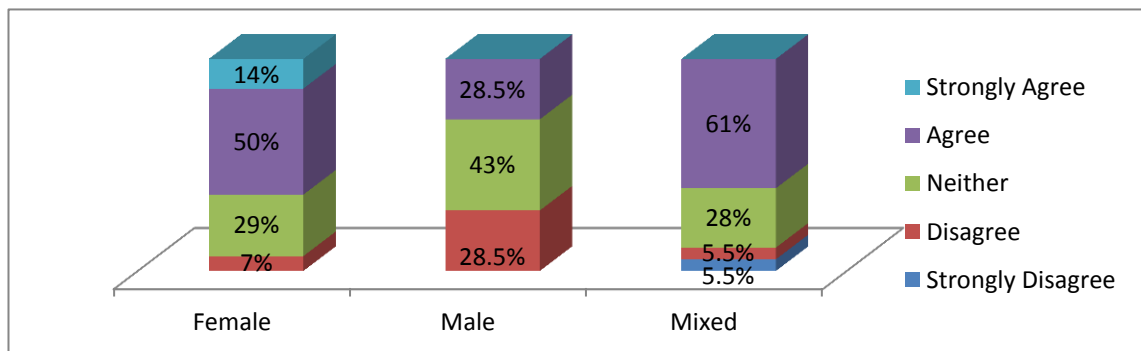
Fig. 6.15.2: "Network here to stay" by network type (Source: current research)

The male network participants were very unsure of the sustainability of the networks with almost three quarters of them either unsure about the future of the networks or disagreeing that they would continue. Sustainability within the male groups was questionable with the highest percentages of the male respondents querying the longevity of the networks. The female and mixed network participants display similar

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responses to each other. Figure 6.15.3 presents the responses from each individual network in the study.
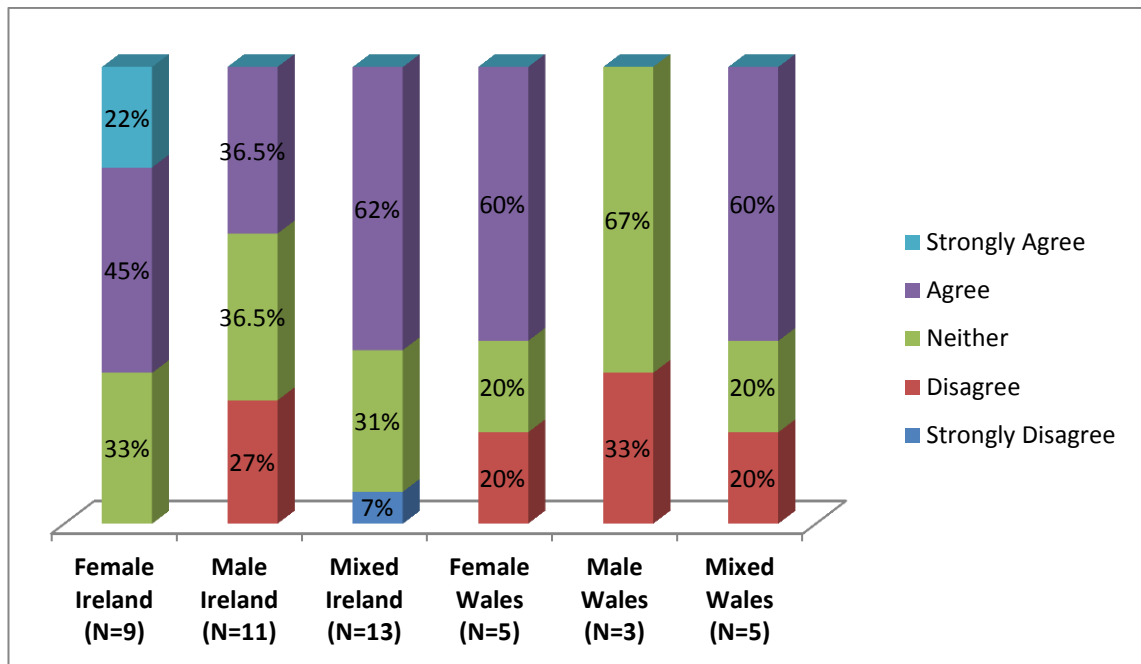
Fig. 6.15.3: "Network Here to Stay" by each network (Source: current research)

The male network participants in both Ireland and Wales were not confident of the longevity of their network with the network in Wales even more resigned to the imminent cessation of their network activities. The only network where any participants were in strong agreement that their network would survive were the female network in Ireland. In all the measures for attraction, loyalty and satisfaction conducted as part of the personality inventory, these participants were very enthusiastic so this response is expected. The conditions for the development of the female network in Ireland were perfectly balanced to ensure the sustainable development of this network. Between the presence of four strong Network Champions in this network and strong structures and routines around which the network operated, this network was highly successful in maintaining the focus on action that provided valuable engagement for network participants. This productivity was observed by the male participants in Ireland and motivated them to initiate discussions of an amalgamation for the Irish networks. This proved hugely successful with this new combined network continuing to meet almost five years after the networks were initially formed.

Participants were next asked to rate their agreement with the statement "This network fills a real need for me". The responses are presented in Figure 6.16.
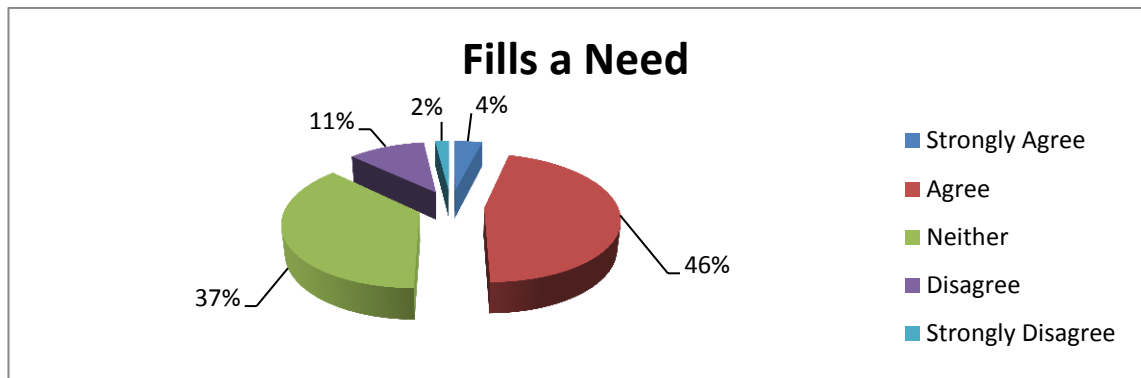
Fig. 6.16: "Network fills a need" (Source: current research)

Half the respondents felt the networks filled their needs. Quite notably, 37% of respondents were unsure whether they did with the remaining 13% asserting that the networks do not fill a need for them. This is a difficult finding as it perhaps indicates why the level of uncertainty exists around whether the networks can remain in operation as where they are not fulfilling participants' needs; it is conceivable that they may not continue. Figure 6.16.1 presents the responses by region.
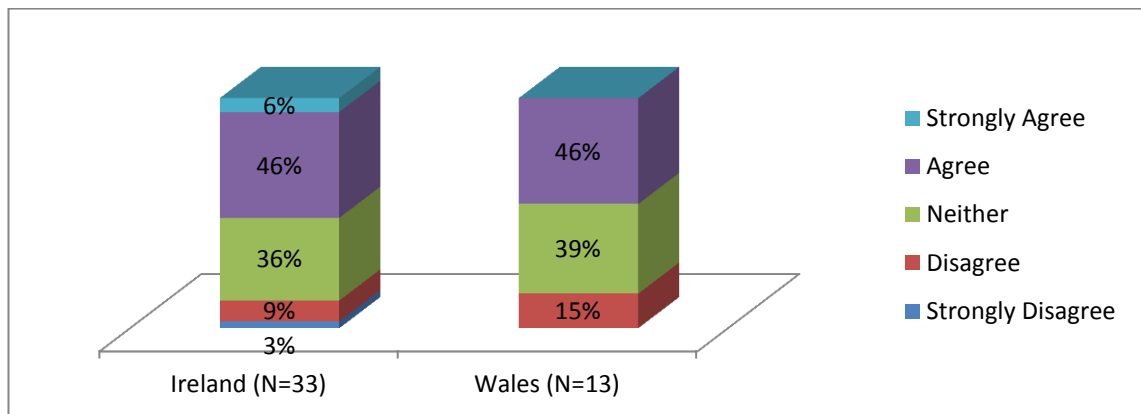
Fig 6.16.1: "Network fills a need" by region (Source: current research)

There are no notable differences between regions on this variable. Figure 6.16.2 presents the results broken down by network type.
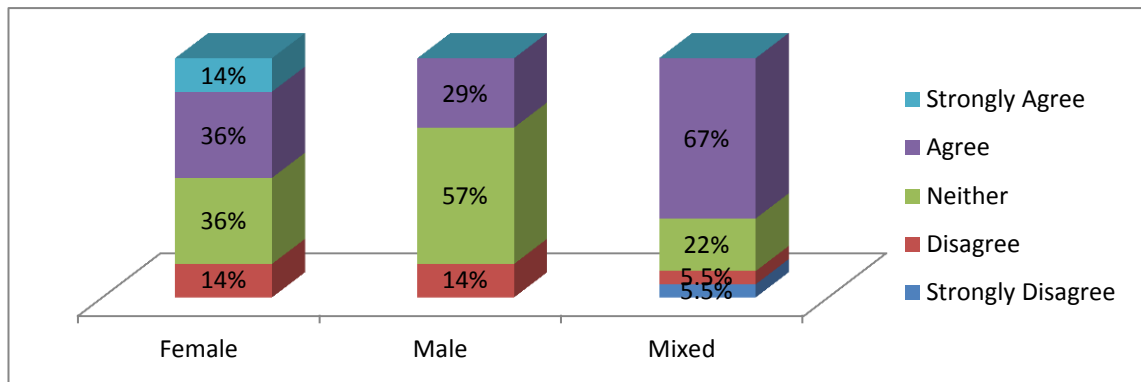
Fig. 6.16.2: "Network fills a need" by network type (Source: current research)

The mixed network participants represent the highest percentage of those participants in agreement that the network fills a need for them; reinforcing again the value in the mixed network model. Surprisingly, given the positive responses thus far, it is unexpected that half of the female participants either disagree or are undecided on whether their network fills a need for them. Male network participants appear undecided as to the usefulness or relevance of the networks to them. Figure 6.16.3 breaks the results down further by each individual network.
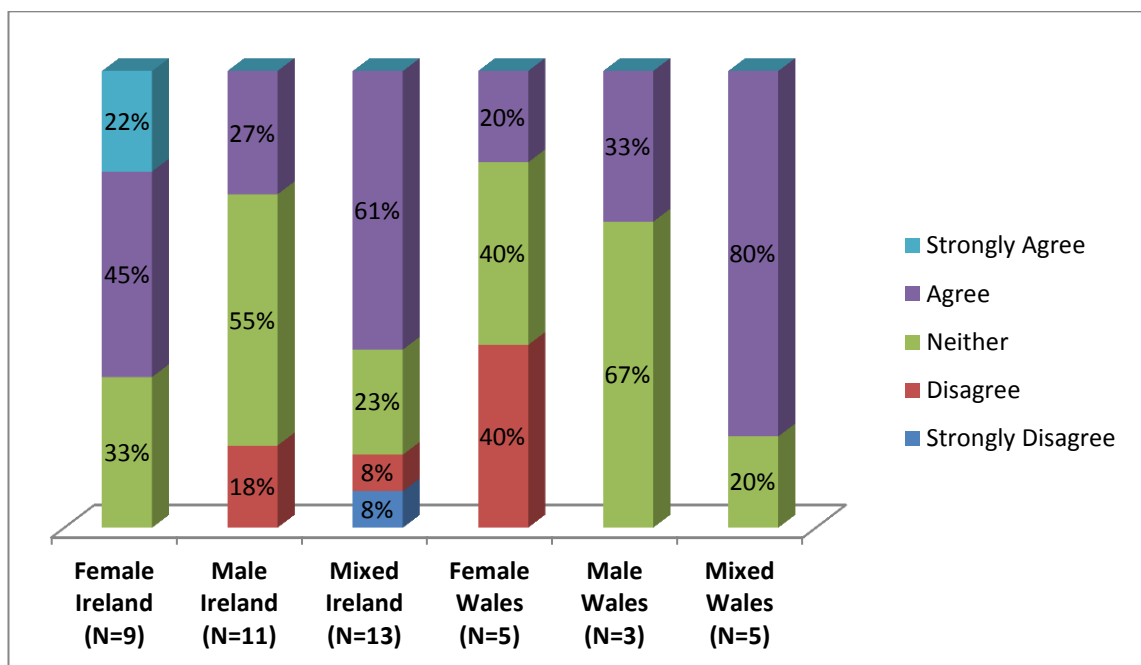
Fig. 6.16.3: "Network fills a need" by each network (Source: current research)

When broken down by individual network, it can be seen that 40% of the female network participants in Wales were the ones who felt their network was not filling their needs, heavily influencing the negative results for female participants in the

previous graph. The female network in Ireland was the only network to have participants "strongly agree" that their network filled a need for them. It is interesting to note that in this case, the male network participants in Ireland were more negative than their Welsh counterparts with 18% of Irish participants disagreeing that their network filled a need for them. Similarly in the mixed networks, it was also the Irish participants who indicated disagreement with the idea that their network filled a need for them. This is unexpected given the generally higher level of positivity amongst Irish participants displayed thus far. The ethos of these networks was that they would be self-facilitating and self-directed. As such, the idea was that these networks would design their own learning and therefore, that learning would be highly contextual and fulfil participant needs. This could indicate that more time needs to be spent in the development of networks such as these. Clarity of purpose was explored in Section 5.1 of Chapter 5 and the importance of ensuring understanding and commitment to network purpose is imperative to the development of sustainable learning networks. This should provide valuable engagement for network participants which will sustain their motivation for engagement.

Participants were then asked whether the network was an improvement over other networks that were available to them and Figure 6.17 presents the results.

This network is a big improvement over other existing networks

- Strongly Agree
- Agree
- Neither
- Disagree
- Strongly Disagree

9%, 2%, 9%, 26%, 54%
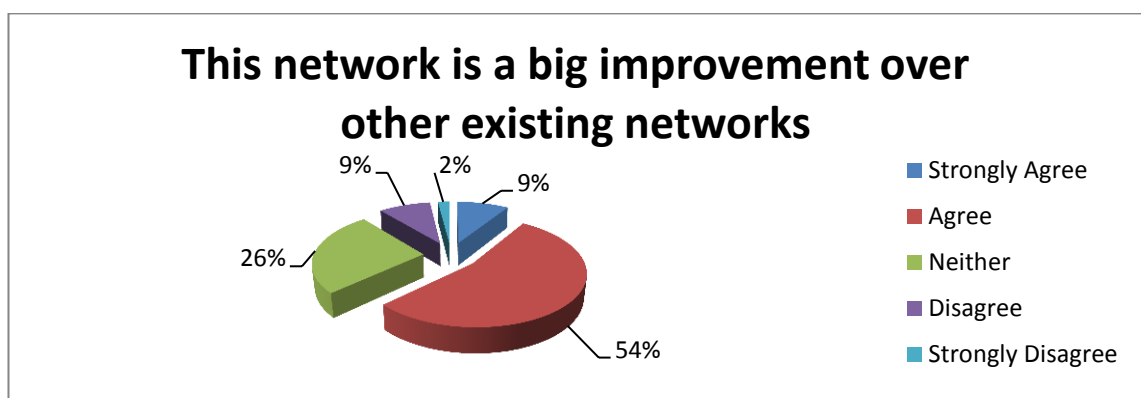
Fig. 6.17: Network compared to other networks (Source: current research)

Sixty three percent of respondents agreed or strongly agreed that the network was an improvement over other available networks highlighting the positive experience that had been sought from engagement with the learning network.
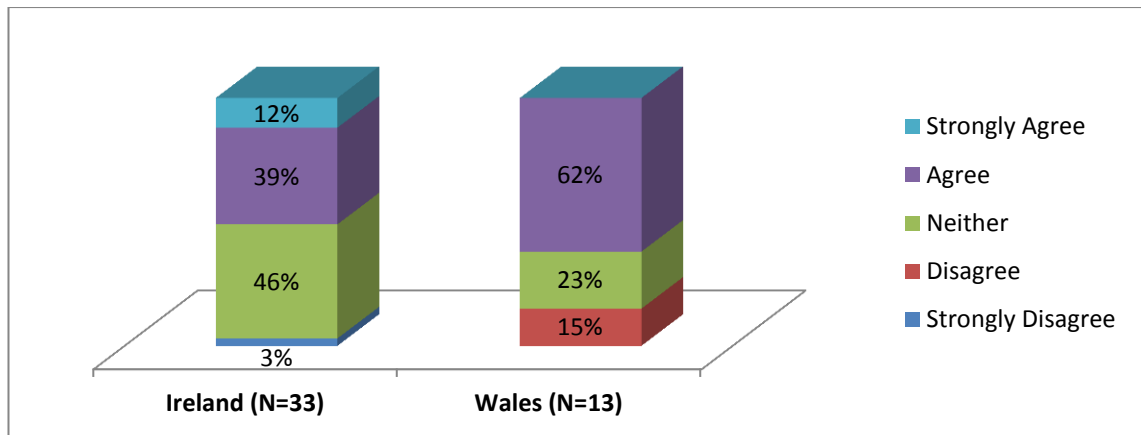
Fig. 6.17.1: Network compared to other networks by region (Source: current research)

When the results are broken down by region, just over half the Irish participants agreed or strongly agreed that the networks are a big improvement over other networks. Almost two thirds of Welsh participants agreed that the networks were a big improvement over other available networks. Figure 6.17.2 presents the results broken down by network type.
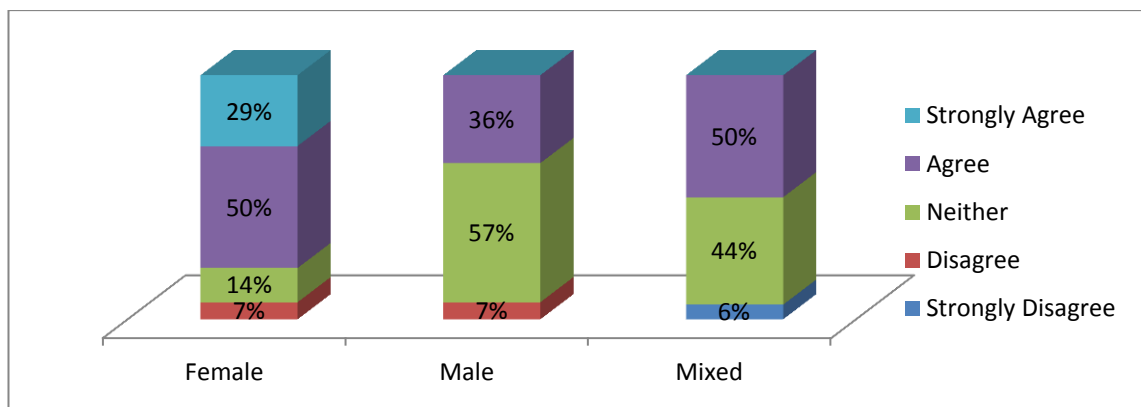
Fig. 6.17.2: Network compared to other networks by network type (Source: current research)

The female network participants perceived the SLNIW networks very positively relative to other available networks with 79% agreeing or strongly agreeing that they were an improvement. The male network participants perceived the least positivity relative to other networks of all participants with only just over one third of male participants agreeing that these networks were an improvement. Figure 6.17.3 breaks these results down even further by each individual network.
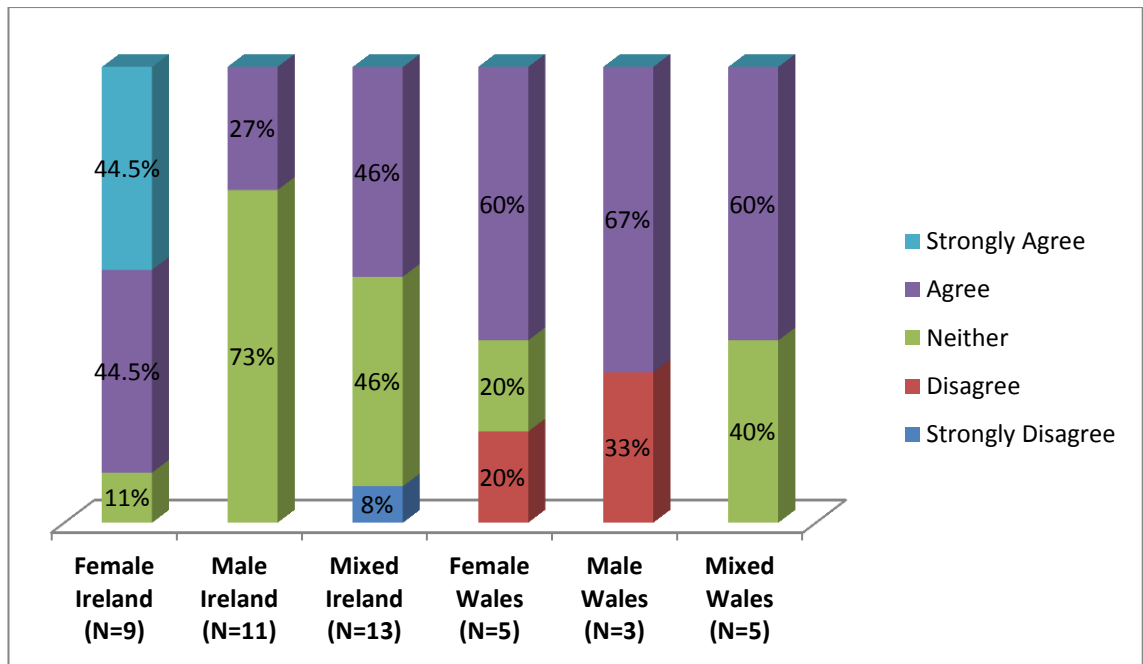
*Fig. 6.17.3: Network compared to other networks by each network (Source: current research)*

The female participants in Ireland were the most positive about this type of network. As outlined throughout this chapter, the female network in Ireland derived great value from their engagement and therefore this level of positivity around this style of networking is expected.

Participants were asked to rate the value that they had perceived from their engagement with the networks; the results are presented in Figure 6.18.
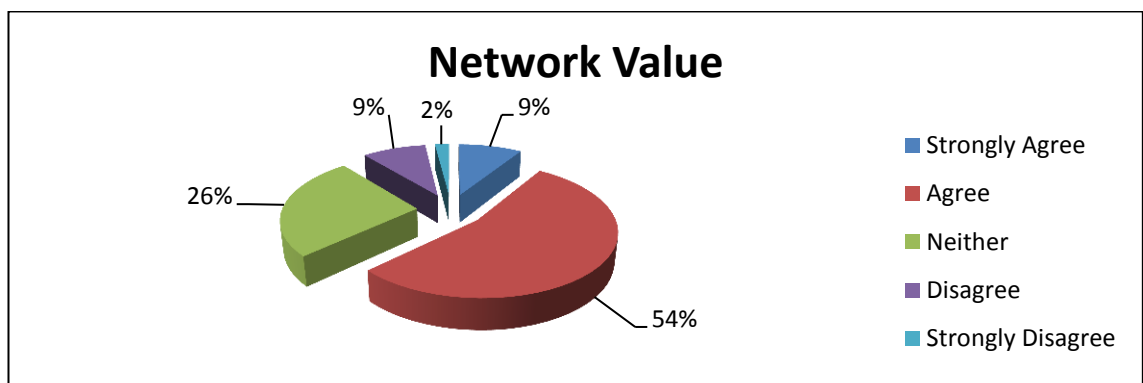
Fig. 6.18: Perceived network value (Source: current research)

Sixty three percent of respondents agreed or strongly agreed that the network provides them with value. These responses were further broken down in Figure 6.18.1 to show the differences across regions.

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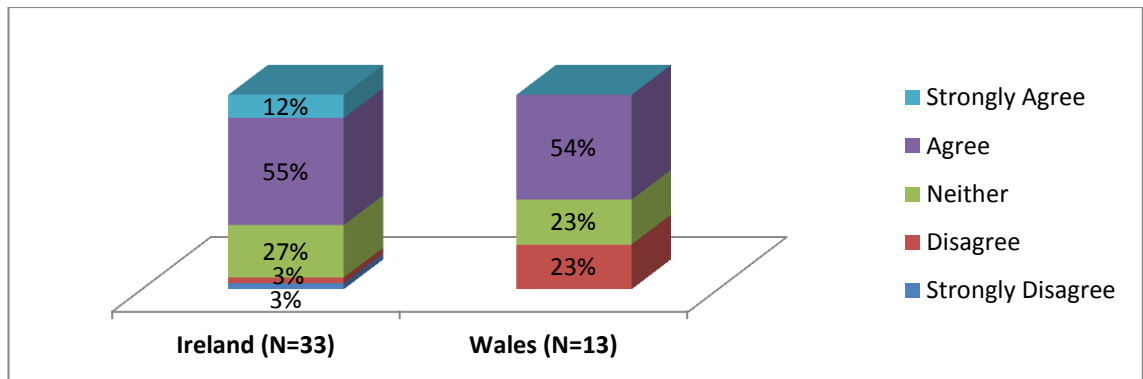
Fig 6.18.1: Perceived network value by region (Source: current research)

Irish network participants perceived higher value from their network engagement than their Welsh counterparts (67% vs 54%). Almost a quarter (23%) of Welsh participants disagreed that they had gleaned value from their engagement with the networks. The value that participants perceived from their engagement is highly important in sustaining their motivation to engage and as such is an indicator of the sustainability of participants' motivation to engage. Figure 6.18.2 presents the results broken down by network type.
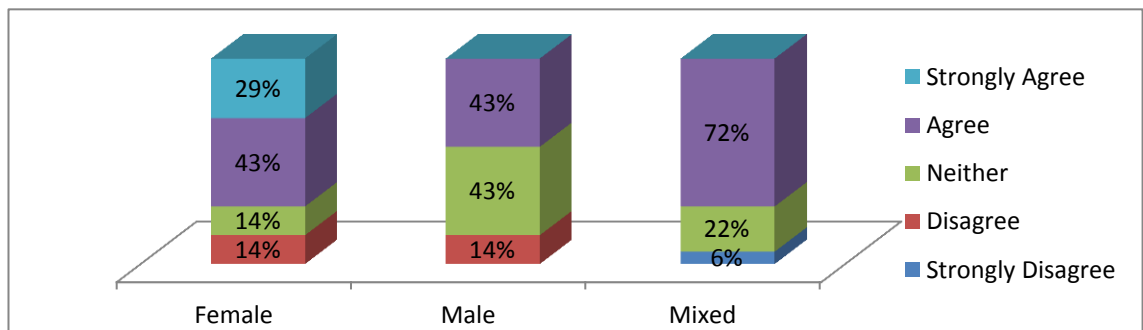
Fig. 6.18.2: Perceived network value by network type (Source: current research)

The mixed and female network participants perceived the greatest value from their engagement with 72% each of these respondents either agreeing or strongly agreeing that the network had provided value. However, the female participants were the most enthusiastic as almost a third of these participants strongly agreed with the value they had gleaned. These results are broken down further by each individual network in Figure 6.18.3.

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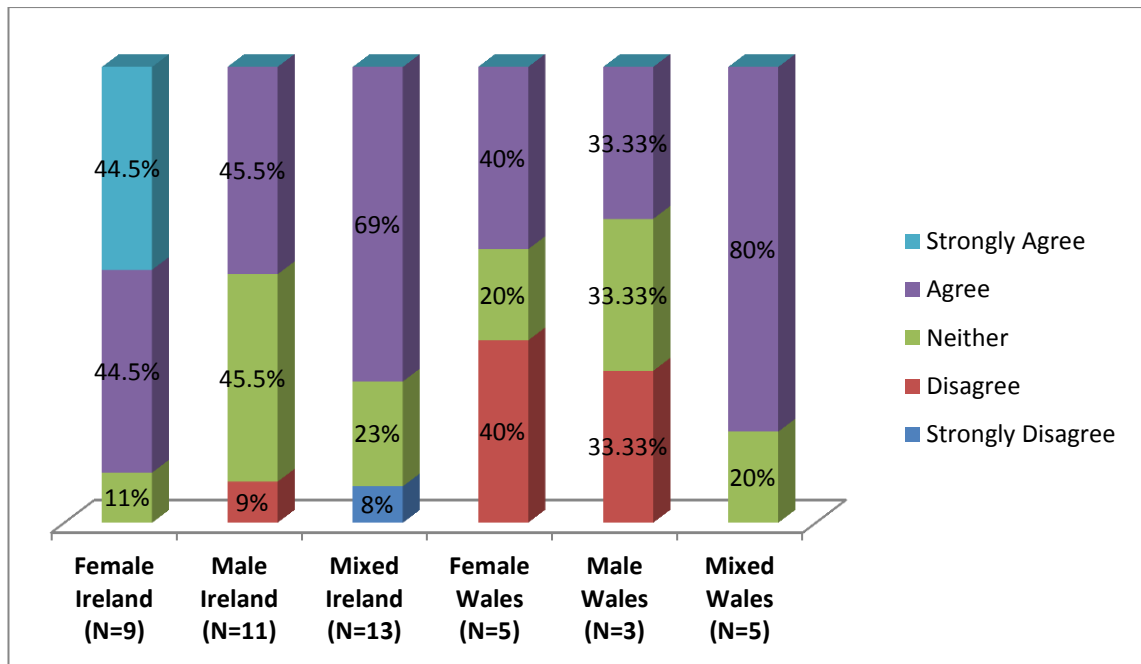
Fig 6.18.3: Perceived network value by each network (Source: current research)

It is revealed in this graph that it was the female network participants in Ireland who had gleaned the greatest value from their network engagement with all the "strongly agree" responses coming from them. This further reinforces the positive outcomes of this network and builds on the findings reported in this chapter. Some male participants in both Ireland and Wales and female participants in Wales disagreed that the network provided value. As such, longevity of these networks was bound to be limited.

Finally, participants were asked to rate their level of agreement with the statement: "This network lets me be part of a shared community of like-minded individuals". Figure 6.19 presents the overall responses.

"This network lets me be part of a shared community of like-minded individuals"
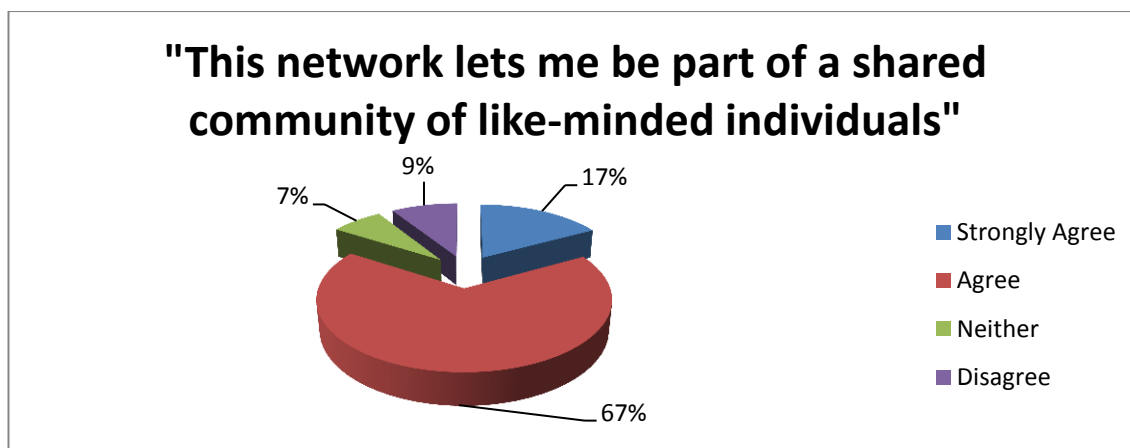
Fig. 6.19: Level of community perceived in the networks (Source: current research)

A significant majority of participants (84%) agreed or strongly agreed that being part of these networks allowed them to be part of a community. Once relationships have developed to a point that individuals feel part of a community, the likelihood for longevity of participant engagement is increased. The figures are broken down in Fig. 6.19.1 by region.
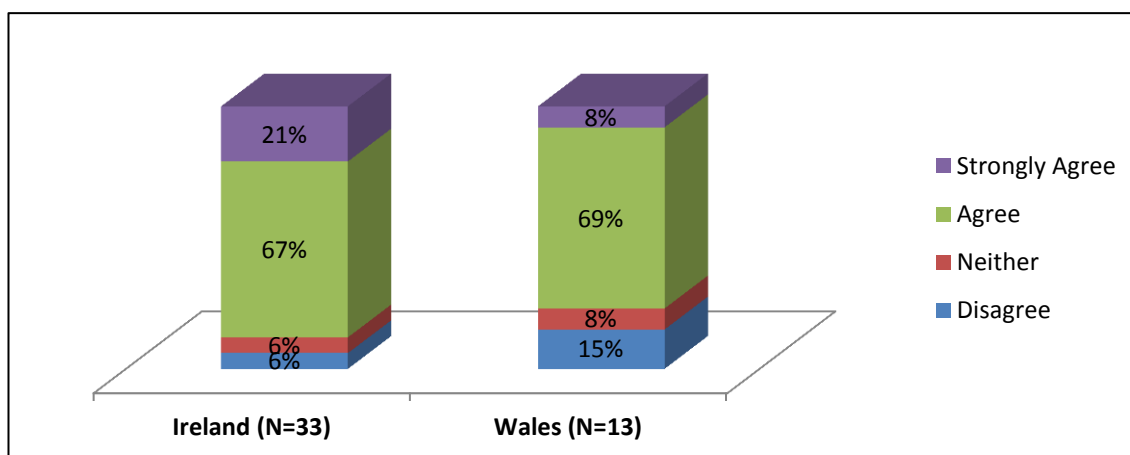
Fig 6.19.1: Level of community perceived in the networks by region (Source: current research)

Irish network participants show much more agreement with the sense of community they perceive from their networks. Over one fifth of Irish participants strongly agreed with the statement and two thirds agreed with the statement. There are generally high levels of agreement with this statement among Welsh participants too with over two thirds agreeing that the network allows them to be part of a community. Figure 6.19.2 breaks down the results by network type.
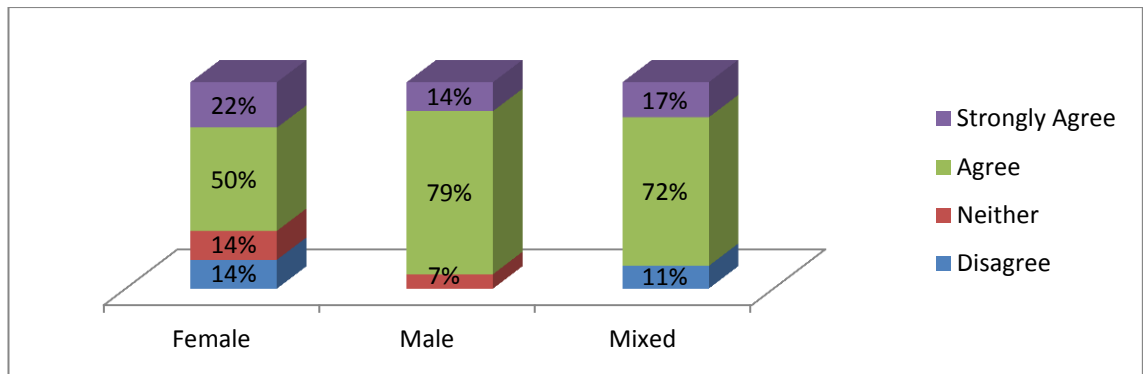
Fig. 6.19.2: Level of community perceived in the networks by network type (Source: current research)

Quite unexpectedly, the female participants show the lowest levels of agreement with the sense of community they feel from their networks. This is unexpected because the results of the other variables within this study showed very high levels of positivity amongst female participants. Figure 6.19.3 breaks these results down further by each individual network.

Fig 6.19.3: Level of community perceived in the networks by each network (Source: current research)

Interestingly the female network in Wales were the least positive about the sense of community they felt on their network. This network was quite slow to develop and focussed hugely on training with minimal peer-to-peer engagement in the beginning. This part of the research was completed after 12 months of engagement with the networks and at that point, the female network in Wales were heavily focussed on training as opposed to the development of their peers and thus could not have

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perceived the same level of "community" from their group as network participants in the other networks.

Figure 6.20 presents an overview of all the variables assessed within the personality inventories to assess participants' attraction and loyalty to their networks. The level of agreement reported by participants (combining the results of "agree" and "strongly agree") are displayed in Figure 6.20.
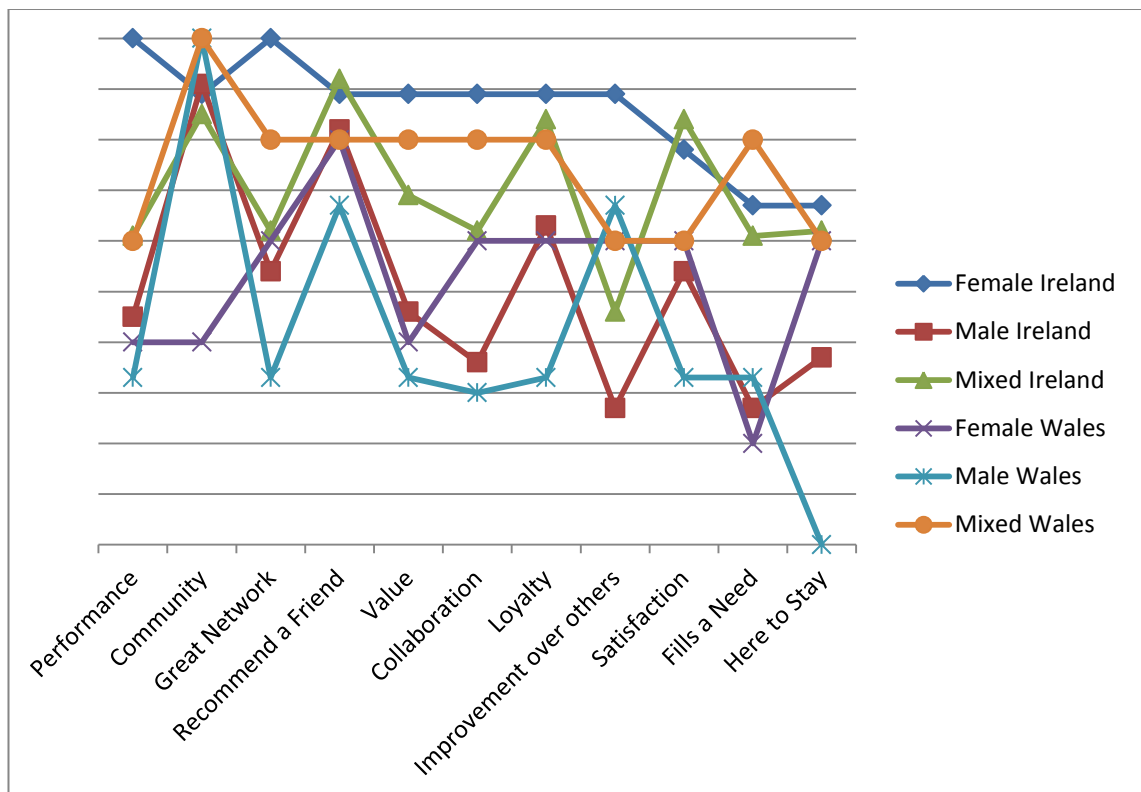
Fig. 6.20: Overview of Attraction and Loyalty measures for each network (Source: current research)

The female network in Ireland ranked the highest agreement on all but four variables; indicating the success of this network in terms of the value participants gleaned from their engagement and how this therefore sustained their motivation to engage with the network. The female network in Ireland consistently performed better than the other networks. Throughout this chapter and the previous chapter the research findings have demonstrated this. They had the highest, most consistent levels of engagement and attendance, particularly during induction where the relationships formed and developed. The Irish female network participants were highly proactive in ensuring the success of their network through directing their learning toward valuable

action, ensuring that participants remained on the Cycle of Value Creation (Wenger et al, 2011). In essence, from the early stages of network development, this network had already adopted the principles of "Communities of Practice" which was integral to their success. The mixed network in Ireland showed varying levels of response to these indicators of success and the male network in Ireland represented the weakest of the three. This was characterised by their lack of commitment to purpose and the way in which they conducted their meetings with limited planning and focus around topics to be discussed. However, the enthusiasm of the Irish female and Irish mixed network participants to drive learning networks resulted in a highly successful amalgamation of the three networks into one which continue to meet five years after initial formation. The male network in Wales consistently underscored their counterparts on eight of the variables examined as part of this research which served as an indicator of the longevity they were likely to achieve on their network. Similar to the male network in Ireland, they struggled with focus for their meetings and as such, failed to achieve valuable action within their time together. The mixed network in Wales reported very positively on the performance of their network but they lacked structure and this was, ultimately, the factor that dictated the cessation of network activities. Finally the female network in Wales had very varied responses to the loyalty and collaboration indicators. This network was quite slow to form and develop and needed support along the way to organise meetings. There was a lack of momentum in this group and this seems to represent the driving force to their network dissolution.

6.3. Observing Personality throughout Network Development

Personality plays a huge role in how networks form and develop. Within all six networks, dominant personalities were observed and the impact this had on the networks differed. For example, within the female network in Ireland there were two individuals vying for the leadership role, but ultimately they ended up working very well together and both took leadership roles in a complementary manner. For the most part, the networks managed diversity in personality quite well and incidences of real conflict were very rare.

However, frustration with personality caused a number of participants to withdraw from the networks. Surprisingly, this occurred in isolated incidences and though three individuals cited personality difficulties in their decision to withdraw, they were all from different networks and the issues they had were all very different. Firstly, a participant from the Irish female network found that two of the women in her group were in a power struggle and as a result a lot of time was wasted.

> "When I was in there, the experience I had when the dominant people took over was that I was completely wasting my time because I felt the two dominant people were just trying to outshine each other" (FIServ8)

With hindsight though she believes she should have spoken up and that with the assistance of the other members of the network, they could have overcome the issue.

> "The only thing I could have done personally was to stand up and say 'listen, we are going the wrong way here because we have wasted the morning on a topic we did not even resolve and I have only heard the same two voices on this'. There were other passive people in the group too who weren't saying much. Maybe if I had expressed my feelings, they would have agreed with me. (FIServ8)

Another woman from the mixed network in Ireland cited difficulties with personality as a factor in her decision to leave. She purposefully joined the mixed network because her past experience was that men tend to dominate work situations and as such, she wanted to improve her confidence to participate with business men but she found her experience within this network only reinforced her experience. She believed gender played a significant role in group development as, from her experience, she felt that male participants dominated the group:

> "One of the reasons I went for the mixed network was that I felt that men tend to dominate meetings. That played out to be true in this network also". (MxIManuf9)

The third participant who withdrew did not find any of his/her colleagues on the network dominating but perhaps this was the problem as he/she found everything exceptionally disorganised and felt the group lacked leadership and as such, were not forming in the way he/she would have liked.

> "unless you have someone who is taking control and saying 'we are meeting at this time, in this place, put it in your diaries', the meetings will not happen...not a dictator, but somebody to lead the network; there were too many different personalities in our group. For me, that is what made it quite difficult". (MxWServ5)

Disruptive personalities played a role in slowing down the progress of the networks. This was not evident to the same extent in all groups but certainly the female network in Wales struggled with a very disruptive participant. This had the effect that meetings were dominated by her difficulties and issues, and frustration was observed in the network when their efforts to help this participant were seemingly ignored. Within observations, this was noted:

> "FWManuf2 dominated at times: Discussion got a bit heated and there was some friction at times when the meeting was dominated – not because FWManuf2 was asking questions/raising issues but because FWManuf2 was not listening to replies". (S10, Female Network Wales Observation Report)

The participant in question was a highly emotional individual which made things awkward for the network. However, the female network in Wales benefitted from strong leadership which was apparent in a couple of participants and it seems that they learned quite quickly how to manage the disruptive participant. It was reported by one woman (FWServ6) within this network that it is the "task-oriented" individuals who keep the network on track and organised.

6.3.1. Impact of Competitive Personality Traits in Network Development

Competitive personalities can have positive and negative effects on network dynamics. Sometimes, competitive traits in individuals can cause power struggles for the leadership position of the group and this was certainly evident in the female network in Ireland and heavily influenced FIServ8's decision to withdraw. However, one of the Welsh participants, MxWServ5, asserted that healthy competition in groups is a positive thing and can promote action. Contrary to competitive personality traits, a trait that proved to impede the development of the male network in Ireland in particular was that of reservedness which meant that these network participants were

almost too polite and diplomatic in their actions leading to a longer formation period than was observed in any of the other networks. For example, in the second network meeting the following observation was made:

"I found this group very quiet and accommodating and diplomatic. I think this is great in terms of minimising conflict. My concern with this would be that they will not get the most out of the network sessions" (S2, Male Network Ireland Observation Report).

As time passed, reluctance to engage was observed amongst these participants:

"There was reluctance among members to present at the next session. It is difficult to assess if this is due to having to speak publicly or a reticence to openly discuss their business issues in such an in-depth manner" (S6, Male Network Ireland Observation Report).

This reluctance to engage took place as many as nine months into network engagement:

"Some members exchanged personal experiences during the training session. However, others appeared reluctant. The trainer often had difficulties extracting information from members" (S9, Male Network Ireland Observation Report).

Given the ethos of the learning networks to be for sharing knowledge and experiences for the development of participant businesses, this reluctance to engage represented a significant barrier to successful network development.

6.3.2. Personality Characteristics impacting Facilitation in Network Development

Positive personality characteristics observed within the networks were those of leadership and facilitation (without being dictatorial), positivity, organisation and inclusion. The impact of strong facilitation skills was observed on many occasions with meetings run more effectively and efficiently where strong facilitators were leading. For example, the following illustrates the positive impact of strong facilitation:

"The facilitator actively encouraged all network members to provide an overview of the issues facing them in their businesses at the moment. This encouraged participation from all network members who offered valuable

solutions and suggestions to the problems outlined. All network members seemed to receive valuable information and suggestions" (S10, Female Network Ireland Observation Report).

However, in the spirit of sharing the workload, the role of facilitator was rotated amongst all members of the networks resulting in a number of meetings which lacked strong leadership and the negative effect was highly apparent; the agendas were not observed and participants who needed to be reigned in, dominated the meeting with the result being that for the majority of participants, these network meetings represented little value. The following shows the impact of poor facilitation on a network meeting conducted almost two years after network formation:

"Though there was an agenda set for the meeting, it was not very well followed resulting in some frustration for participants. One network participant who was supposed to present in the meeting was unable to attend and so, it seems, the facilitator allowed the roundtable discussions extend and at times, go off topic. As a result, the meeting was about to end without the second participant presentation and at that point, one participant asserted that it was only for that presentation that she had come to the meeting so she did not want the meeting to end without it being addressed. While this meeting lacked focus, this had a positive impact on the group as it forced them to assess the meeting at the end and design mechanisms for future meetings that would ensure that time spent in the network would have value" (January 2012, Bua Network Ireland Observation Report).

The suitability of participants for the role of facilitator is an important consideration for the successful development of the networks.

6.3.3. Positivity and Inclusion Characteristics for Network Development

Positivity and inclusion were observed in the majority of participants which is not unexpected for individuals who seek out networks such as these to be involved in. As is evident in the results of the personality inventories, almost 90% of participants displayed agreeableness in their personalities. This trait is naturally going to promote harmony within the networks' relations with each other. Many participants made

reference to the positive relationships they formed within their networks and how this, in turn, created a bond and a sense of positivity which enhanced the learning capability of the networks.

> "Every time you go in there and you talk to people, at some stage, the issue they are facing is either something you are going through or something you have faced. So it is a safety net...Sharing the same issues forms a bond" (MITech4).

As these relationships formed, commitment was observed and genuine interest in the updates from other participants. As observed by one of the women from the Welsh female network:

> "I think they (the SLNIW networks) may be more long-lasting because the networks have formed a kind of friendship and loyalty, and you feel an obligation (to your fellow participants) more" (FWManuf1).

This sense of reciprocity and loyalty is a positive factor for network sustainability. However, even where there is loyalty and reciprocity, without strong routines and processes in place, the network will cease to meet. This was the case for the female network in Wales.

6.4 Summary

This chapter has focussed on the role of personality in the attraction and motivation participants feel toward network engagement. As this was conducted one year after engagement, it most effectively addresses RQ2 (what motivates entrepreneurs to sustain engagement) as those who withdrew were not part of this part of the study. RQ4 was also addressed as the results were analysed by gender and culture. Individuals' personality characteristics influence their decision to engage, or not, with a given behaviour. In this study the trait of agreeableness served to be the greatest indicator of sustained motivation with almost 90% of the participants associating with this trait. This finding was expected as working in networks such as those in learning networks requires individuals who are agreeable in nature. Throughout this chapter the effectiveness of the female network in Ireland was highlighted time and again. In Figure 6.20, there was an overview of all the attraction and loyalty measures tested among participants and it was revealed that for the majority of them, the female

network in Ireland displayed the strongest results. This coupled with the strong routines and structures around which their network operated (as outlined in Chapter 5) proved to be highly effective in the development of this network into a sustainable structure which provided ongoing value to participants and thus, supported their sustained motivation for engagement.

Chapter 7

Building a Positive

Network Environment

7.0 – Building a Positive Network Environment

The purpose of this chapter is to present the impact that the network environment has upon network engagement and operations and the subsequent impact this has upon participants' motivation to engage and sustain engagement with the network. The learning network ethos naturally lent itself toward an environment which promoted peer-to-peer engagement, accountability, support, sharing and trust. When these elements are fostered, the outcomes of engagement are significant.

7.1. Finding 5: A network environment where there is a high degree of accountability, peer-to-peer engagement, support, sharing and trust increases the likelihood of entrepreneurs remaining engaged in the network

Through various means of data collection and analysis, the author found that the network characteristics of accountability, peer-to-peer engagement, support, sharing and trust were significant in the creation of a positive network environment. Table 7.1 presents these network environment characteristics and provides an overview of the levels of each that were observed in all six networks studied. The only network of the six to achieve high levels of all the characteristics, which contribute to a positive network environment, was the female network in Ireland.

The female network in Ireland was highly successful and participants gleaned great value from their engagement within this network environment. Figure 6.20 presented in Chapter 6 provided an overview of 11 measures for network engagement outcomes which included for example, network performance, network sustainability, collaboration occurring within the network and value gleaned from engagement. It was seen that the female network in Ireland had the highest scores for seven out of these 11 measures. Table 7.1 reinforces these positive results from the female network in Ireland, showing its success on the six measures for positive network environment creation.

Network	Accountability	Peer-to-Peer Engagement	Learning	Support	Sharing	Trust
Female Ireland	High	High	High	High	High	High
Male Ireland	Moderate	High	Moderate	Moderate	High- for some participants	Moderate
Mixed Ireland	Moderate	High	High	Moderate	High	High
Female Wales	None Observed	High	High	High	High	High
Male Wales	Low	High	Moderate	Low	Moderate	Moderate
Mixed Wales	Low	Moderate	Moderate	Moderate	High – for some participants	Moderate

Table 7.1: Characteristics of Network Environment in Each Network (Source: current research)

The rest of this section addresses each of these characteristics and the impact they had upon creating a positive environment for network engagement that sustained participants' motivation to remain engaged with the network.

7.1.1. Accountability; Impact of Accountability on Network Environment

By bringing entrepreneurs together in relatively small groups with the shared goal of developing their own businesses and the will to develop the businesses of their peers, a special kind of network environment is likely to be created. Participants are entering into the network environment with the expectation of reciprocity with the result that they are more forthcoming with advice and problems with the expectation that the more they give, the more they will get.

Accountability refers to the follow-up observed within network meetings whereby participants were expected to give an update on their business issues which were discussed in the previous session and inform the group what actions had been taken as a result of the advice of the group and what outcomes were achieved subsequently. Table 7.2 presents the sessions where accountability was explicitly observed.

Network:	Total Meetings Observed	Months of Meetings where Accountability was Observed	Total
Mixed Ireland	15	3, 5, 8, 10, 11, 12	6
Male Ireland	16	5, 6, 7, 8, 10, 14	6
Female Ireland	16	3, 4, 5, 6, 7, 8, 9, 12, 13	9
Mixed Wales	15	12	1
Male Wales	16	10	1
Female Wales	16	0	0

Table 7.2: Meetings where Accountability was observed (Source: current research)

When accountability was present, real valuable action was achieved from the network meetings. In the "accountability" section of the female network in Ireland's meetings, where participants were being questioned about their actions during the previous month, they were more inclined to take action in order to be able to update their network peers. This meant that participants left each meeting satisfied that they had achieved something the previous month and with a plan for what they would achieve that month. Accountability meant that participants were more inclined to achieve valuable action from their engagement which naturally reinforced the positive valence associated with network engagement as it represented a mechanism for taking the advice and feedback of the group and applying it to the problem at hand. The female network in Ireland was particularly committed to the idea of accountability as they identified very early on:

> "that the network would not work if, at the end of every meeting, we did not feel that we gained something and learned something from that meeting. That has been very effective at maintaining the focus on action. That was the key to keeping me there" (FIManuf1).

This sentiment was echoed by another member of the female network in Ireland as she outlined the success of the female network, identifying what made it valuable:

> "One thing that we had from the beginning was to action everything because all our discussion was not worth anything unless changes were implemented in the business" (FIServ7).

Within the third network meeting of the female network in Ireland, they had implemented accountability as an agenda item thereby formalising the process to ensure they kept the focus in the meetings on positive action. Taking a sense of

accountability for learning and implementing changes in their businesses as opposed to simply talking without resolve made the Irish female network a highly effective network. In nine meetings (of 16 observed) the female network explicitly addressed accountability.

The mixed and male networks in Ireland displayed good levels of accountability too and participants were observed following up with each other on issues that had been addressed in previous sessions (six cases of accountability were observed in each network). This level of accountability meant that participants were achieving positive valuable action from their network engagement which meant that they perceived network activities with positive valence as they were instrumental to achieving positive action in their businesses and thus, they were motivated to sustain engagement with the network.

Within the Welsh networks, accountability was only observed on a very limited basis. For example, each network meeting tended to be focussed on a specific topic with little regard for what had occurred in the previous meeting. As such, while valuable information was being shared and exchanged within the meetings, the associated action (if any) was not addressed in the network thereby minimising the tangible benefits participants could perceive from engagement. The value of accountability was highlighted in one of the interviews conducted with a member of the mixed network in Wales, observing that:

> "it would be good if we set each other goals from meeting to meeting. That way we will have committed to engage in a certain activity which can be discussed in the next meeting" (MxWManuf6).

Within the interviews conducted with sustaining network participants, the theme of accountability was referenced by nine of the 17 interviewees as important for their sustained engagement. For example, a participant from the male network in Ireland, highlighted the way in which accountability grew as the relationships developed within the group:

> "the more you get to know the members of the network and hear about their businesses, business ideas and plans, you feel a responsibility to make an effort to stay" (MIManuf7)

For some participants, the ethos of the networks created a real sense of reciprocity toward their peers and a sense of obligation to attend and participate as a result of the relationships that had been built in the networks and the loyalty that was created amongst participants. Seven of the interviewees made reference to the sense of reciprocity created in the network; that all participants were there to help each other in any way they could. The ethos of sharing and reciprocity was presented to potential participants before they began network engagement. For example, during her interview, FIServ7 observed that:

> "that was brilliant because I knew I was going into the network to share my experiences and my knowledge and that the other participants were there to do the same with me. So I went into it really open as opposed to sitting back and waiting for information to be fed to me".

Achieving an environment of reciprocity facilitates knowledge and experience sharing. This peer-to-peer learning was highly valued by the entrepreneurs in this study. Therefore, where entrepreneurs are learning from their peers' experiences, valuable engagement has been achieved which reinforces the cycle of engagement to encourage sustained motivation for engagement. The next section addresses the theme of peer-to-peer engagement and learning within the networks.

7.1.2. Peer-to-Peer Engagement and Learning; Impact of Peer-to-Peer Engagement and Learning on Network Environment

The most effective learning that occurred amongst network participants was through peer-to-peer engagement and through the sharing of ideas, issues and concerns in this context. As such, the elements of peer-to-peer engagement and learning are inherently intertwined and to avoid repetition, they are presented together in this section. Entrepreneurs find other entrepreneurs the most credible source of advice and information and are therefore most inclined to take on board the advice of their peers and turn it into a tangible action within their own business.

Peer-to-peer engagement in the context of this research refers to the manner through which network participants engaged with each other within their network meetings. Peer-to-peer engagement encompasses the learning that participants achieved from each other and with each other, the feedback they received from their network peers and the support that they perceived from engagement with their network peers. Table 7.3 outlines the different months that different types of meetings took place for each network. Where "network meeting" appears, this refers to "peer-to-peer" engagement which is where network participants were working together either sharing information, sharing experiences, sharing problems, offering solutions and/or, offering support. There is some overlap in the Table 7.3. For example, in the Irish networks, in months 3, 4 and 5, there were network meetings held as part of the induction sessions, therefore, those months are recorded both as "induction" and "network meeting".

Network	No of Meetings	Induction Skill Building	Informal Meeting	Network Meeting	Field Trip	Cross Border Meeting	Training	Combined Training and Network Meeting
Irish Female		1, 2, 3, 4, 5		3, 4, 5, 11, 15, 16	5, 12	8, 10, 14, 16	10, 13	6, 7, 8, 9, 12, 14
Total:	22	5		6	2	4	2	6
Irish Male		1, 2, 3, 4, 5		3, 4, 5, 7, 8, 9, 11, 12, 13, 15	5, 12	8, 10, 14, 16	10, 16	6, 14
Total:	22	5		10	2	4	2	2
Irish Mixed		1, 2, 3, 4, 5		3, 4, 5, 14	5, 12	8, 10, 14, 16		6, 7, 8, 9, 11, 12, 13, 15, 16
Total:	21	5		4	2	4		9
Welsh Female		1, 2, 3, 4, 5	8	5, 6, 10, 12, 15	9	8, 10, 14, 16	7, 14, 16, 17	
Total	20	5	1	5	1	4	4	
Welsh Male		1, 2, 3, 4, 5		12, 13, 14, 15, 16, 17	9	8, 10, 14, 16		6, 7, 8
Total	19	5		6	1	4		3
Welsh Mixed		1, 3, 4, 5	8	7, 14	9	8, 10, 14, 16	9	13, 15
Total	15	4	1	2	1	4	1	2

Table 7.3: Months when different meetings and events took place

Table 7.3.1 provides definitions of the various types of network meetings as outlined in Table 7.3.

Meeting Type	Definition
Induction Skill Building	These were the first five skill-building sessions that the networks participated on. They were facilitated by the SLNIW team.
Informal Meeting	This is where network participants met but no specific topics were discussed in relation to their businesses.
Network Meeting	This is where participants were working together, sharing information, experiences, problems, solutions and, support.
Field Trip	There were two field trips in Ireland where all members of the Irish networks were invited to participate to network with the wider group. There was one field trip conducted in Wales.
Cross Border Meeting	There were four cross border meetings hosted by the SLNIW project. The Irish networks visited Wales twice and the Welsh network visited Ireland twice. This was an opportunity for all six networks to come together.
Training	This was where participants elected to engage with external expertise to provide training to them and used all of their time in training with no network meeting occurring.
Combined Training and Network Meeting	This was where networks did some training together but then also allocated time to ensure they spent time together as a network, providing updates and seeking general advice for their businesses.

Table 7.3.1: Types of network meetings (Source: current research)

The focus of this section is on the importance of peer-to-peer engagement and learning. Thus, table 7.4 summarises the number of references made throughout the observation and interview data collected in relation to peer-to-peer activities of the networks:

Problem & Solution Sharing	Information Exchange	Experience Sharing	Support
235	227	190	123

Table 7.4: Number of References from Observation and Interview Data (Source: current research)

FIServ7 highlighted how she never approached other networks as openly as she did this one

> "normally, in a lot of networks, I probably would not be so open about sharing information about our business, but in this one I decided I would because it was the best way to go forward" (FIServ7).

MxWTech1 asserted that the way in which SLNIW was formed meant that

> "it was networking on an individual level and it is more an opportunity to share ideas and problems and become more collective that way. You have got to get a group that is able to work together and say OK we are in this together, what

are we going to deal with, which member are we going to try and help out

today" (MxWTech1).

In relation to the value garnered from the networks, one participant from the male

network in Ireland made the following observation:

"I think when you're in business you can tend to get lost in the woods so it is

always useful to mix with people who have different points of view and I have

enjoyed that. I am a curious person and I like meeting people and seeing where

they are coming from and what their approach is. You are always going to learn

something" (MIServ4).

Participants placed great value on the information and experiences of their peers and

the learning that they achieved in this context was the most actionable learning for

their businesses. For example, when discussing his network experience, one

participant highlighted the value of the opinions of his network colleagues:

""They certainly give different angles on a situation. In some cases, you have

had some ideas and then you bring it to the group and they ask 'have you

thought about doing it this way?'; something from a completely different

perspective which had not occurred to you. They come up with new ideas"

(MWTech2).

With the value placed on these activities, peer-to-peer engagement served to be a

valuable force in maintaining participants' motivation to remain engaged with the

networks.

After the initial period of facilitation, the six networks had the autonomy to dictate

their network engagement. This meant that each network decided when they met,

where they met, how long they met for and what would be addressed within their

network meetings. This resulted in each network having its own Modus Operandi. The

SLNIW project provided funding for external trainers should the network decide that

that was what they should address in a given month. Table 7.3 outlined the various

meetings which occurred over the course of network observations. This presented the

preferences of the groups; whether they favoured training or peer-to-peer network

meetings or a combination of the two. The male networks in Ireland and in Wales

favoured meeting on a peer-to-peer basis. The female and mixed networks in Ireland most often combined training with a peer-to-peer meeting.

The male networks in both Ireland and Wales elected to engage predominantly on a peer-to-peer basis; Table 7.3 outlined that the Welsh and Irish male networks were most inclined to engage with their networks in this way (Irish male network had seven meetings which were peer-to-peer network meetings; the Welsh male network had six such meetings). While the purpose of these networks was for participants to share their knowledge and learn within their network, there was also funding arranged for external expertise to be brought in as necessary. While the male network meetings were effective in sharing the knowledge of the members, the meetings became rather predictable and boring after being conducted the same way from the beginning with no real variety. MIServ4 observed that:

> "the meetings became stale. We needed to engage with new inputs and ideas if we were to keep meeting...there was a need to amalgamate if the network was going to survive because our group had gone too small and was not viable".

Not surprisingly, it was the male network who initiated the discussion of amalgamating the three Irish networks. In their 13th meeting, it was observed that they decided to approach the other networks to discuss amalgamation which amounted to a formal meeting of the three networks facilitated by a Change Management expert on how they could negotiate the joining together of the three networks.

The Irish mixed network were most proactive in pursuing training and over the course of network observation, engaged with nine trainers to discuss various topics of interest to the group. While participants were very positive about the training they received, the observation was made by MxIManuf5 that the trainer brought focus to the session but that it was the experiences of the network members in the particular context under examination that was most beneficial. The mixed network in Ireland was very effective in this regard as they always combined their training with network meetings (Table 7.3 outlined how no meeting for the mixed network in Ireland was completely focussed on training so they always benefitted from the peer-to-peer engagement). Also important to note is that effective trainers of entrepreneurial groups will elicit the

experiences of the group within their delivery and so, peer-to-peer sharing can potentially still occur within sessions that are dedicated to training. Peer-to-peer engagement was identified as

"the most valuable part of the network" (FIServ7),

and thus reinforced the positive valence participants associated with network engagement, sustaining their motivation to engage.

7.1.2.1. Peer-to-Peer findings from Six Monthly Questionnaires

Throughout the course of network formation, the network participants were requested to complete questionnaires at six monthly intervals which covered a range of factors concerned with business operations, growth, challenges, and network motivation and experience. Table 7.5 presents only the factors which were examined within these questionnaires which related to peer-to-peer engagement at four different time points. The factors highlighted in green show only those factors that became increasingly significant over time (the numbers always increased or stayed the same between questionnaire intervals of 6 months).

The first element presented in the table is the definition of "learning network". Participants were presented with a number of different choices and elected the one they deemed most appropriate. The majority of respondents understood the learning network as an "Environment where participants learn from each other" (81% in the very beginning; 95% by the fourth time point).

Element	Baseline Jan 2010 N = 76	Interval 1 July 2010 N = 48	Interval 2 Jan 2011 N=22	Interval 3 June 2011 N=22
Section 1: Learning Network Definition				
"Environment where participants learn from each other"	81%	91%	91%	95%
Section 2: Peer-to-peer motivations to engage				
Motivated by: "Collaboration"	39%	37%	55%	55%
Motivated by: "Personal Contacts"	59%	63%	59%	65%
Motivated by: "Information Sharing"	67%	77%	77%	75%
Motivated by: "Overcoming Isolation"	22%	25%	45%	45%
Motivated by: "Advice/Problem Solving"	47%	69%	82%	65%
Motivated by: "Socialising"	12%	29%	14%	40%
Motivated by: "Problem Solving"	26%	33%	50%	45%
Motivated by: "Sharing Skills"	41%	48%	68%	40%
Section 3: Statements related to peer-to-peer factors				
"I was able to talk to a number of people in the network"[17]	94%	94%	95%	95%
"I was able to bounce some ideas off the other network members"	59%	87%	86%	90%
"The other members gave me some good advice"	55%	71%	82%	75%
"The other members are happy to share information"	67%	94%	100%	90%
"I get on well with the other members of the network"	88%	94%	95%	95%
"The other network members are very supportive"	67%	94%	91%	84%
"The other network members helped me with my business problems"	44%	52%	64%	65%
Section 4: Advantages identified relating to peer-to-peer engagement				
Advantage: "Enable the sharing of ideas/resources/skills"	80%	83%	95%	80%
Advantage: "Facilitate the generation of ideas/innovation"	63%	55%	73%	50%

Table 7.5: Elements from 6 Monthly questionnaires addressing peer-to-peer engagement (Source:

current research)

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[17] For these questions, the results from agree and strongly agree are combined to present the figure

The next section of Table 7.5 focusses on various peer-to-peer engagement factors which motivated participants to engage. This was a multiple choice question and participants could elect up to five responses from a possible 18 (the responses are only provided here which related to peer-to-peer engagement).

The next section of this table addresses a series of statements which were presented to participants for them to rank on a scale of five whether they agreed or disagreed. Finally, participants were asked what the main advantages of network engagement were. The results presented here are just those which relate to peer-to-peer engagement.

Within Table 7.5 it is possible to see that with time, participants were more comfortable sharing ideas with other network participants for feedback within the networks (at Baseline 59% agreed or strongly agreed that they could share ideas while by Interval 3, 90% of respondents were positive about idea sharing). The theme of idea sharing featured again under the advantages of belonging to the network where 80% of respondents at Baseline and 95% at Interval 2, cited that being involved with the network "enabled the sharing of ideas/resources/skills".

When participants were asked what motivated them to network, at Baseline, only 22% asserted the importance of "overcoming isolation"; however, by Interval 3, 45% of respondents were motivated to engage with the network to overcome isolation. Research by Kutzhanova et al., in 2009 showed how peer-to-peer engagement was effective for minimising the sense of isolation felt by entrepreneurs within their businesses. It is interesting that such small numbers of participants referenced this but potentially it is a subconscious need that is being met as the theme of "knowing you're not alone" which was highlighted throughout the in-depth interviews conducted with participants.

Information sharing was a peer-to-peer activity which motivated participants to engage (67% at Baseline to 75% at Interval 3). Participants also observed that their network colleagues were happy to share information with them within the meetings

(from 67% at Baseline to 100% at Interval 2). Access to advice from like-minded individuals represents another advantage of peer-to-peer engagement with up to 82% of participants (at Interval 2) motivated to engage for advice and problem solving and acknowledging that they were receiving good advice from the other members.

The validity of the engagement that occurs within the peer-to-peer environment is significant for the entrepreneurs in this study as it represents not only a source of support but also the perceived relevance of the information being exchanged is heightened as the advice is coming from people who are at the coal face of entrepreneurship and the experiences they share are the experiences they have had in the growth and development of their businesses which makes it more credible. When talking about his network peers, MWManuf3 asserted that:

> "They are people who run small businesses and who, more or less, face the same issues I face in business. They are in all different phases of business and sometimes I can help them with things and sometimes they can help me with things. That level playing field is good. When you are running a business, it is lonely at the top and it is good to share your problems"

These activities hold positive valence for participants and as such represent a positive force for sustaining their motivation for engagement with the networks. Table 7.5 outlined many components which were important for participants to engage with the network but most interesting to observe are the factors which increased in significance for participants over time. For example, being able to bounce ideas off other participants increased significantly over the course of engagement from 59% at baseline to 90% by Interval 3; as participants engaged over time and used the networks to share ideas, the importance of this factor was increased. The factors presented in Table 7.5 all relate to peer-to-peer engagement and where peer-to-peer engagement is embraced, the value of the environment of learning for entrepreneurs is increased and their motivation to engage is sustained due to the positive valence they associate with network engagement.

7.1.2.2. Peer-to-Peer findings from monthly evaluations

Figures 7.1 to 7.5 present the factors examined within the monthly evaluation forms that participants completed after each network meeting[18] that related to peer-to-peer engagement. The findings of the evaluation forms are presented here from session 6 on as these represent the sessions where the networks were self-facilitating and responsibility for network operations belonged to the network participants.

Participants were asked within their monthly evaluation forms whether they had been in contact with other members of their network between meetings. Naturally, engagement with their peers outside network meetings serves to further develop the relationships being formed within the networks. Figure 7.1 displays the "contact between meetings" reported by each network type. The female networks had the highest level of engagement with each other between meetings which represents further evidence of the strength of the bond within this group. The mixed network had the next highest level of contact between meetings but it must be highlighted that the male network did also engage with each other outside meetings, just not at the same level.
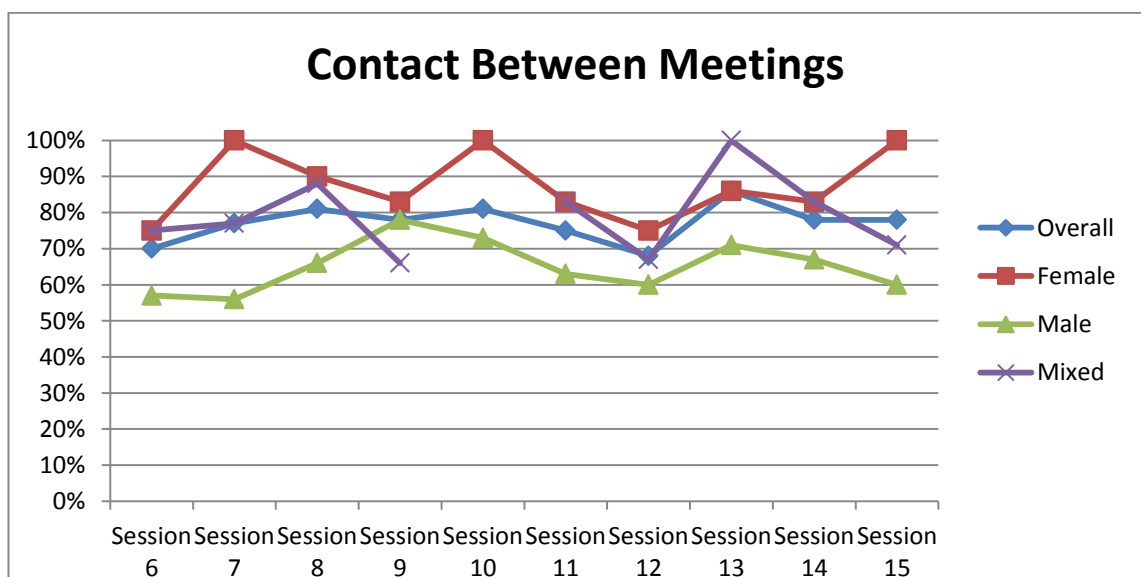
Fig. 7.1: "Contact Between Meetings" from monthly evaluations (Source: current research)

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[18] The mixed network had no network meeting for Session 10, hence the break in responses for this meeting

The evaluation forms that participants filled out also requested them to confirm what specific activities they had engaged with in their networking session. "Networking", "Problem Solving", "New Ideas" and "Information Exchange" were all peer-to-peer engagement activities. The mixed network members reported the highest levels of "networking" (See Figure 7.2) within their meetings. Male network participants were particularly slow to cite "networking" had been addressed in their meetings with one meeting (month 15) having no responses at all for "networking" and responses as low as 17% in session 14 and reaching a height of 60% in one meeting (month 12).
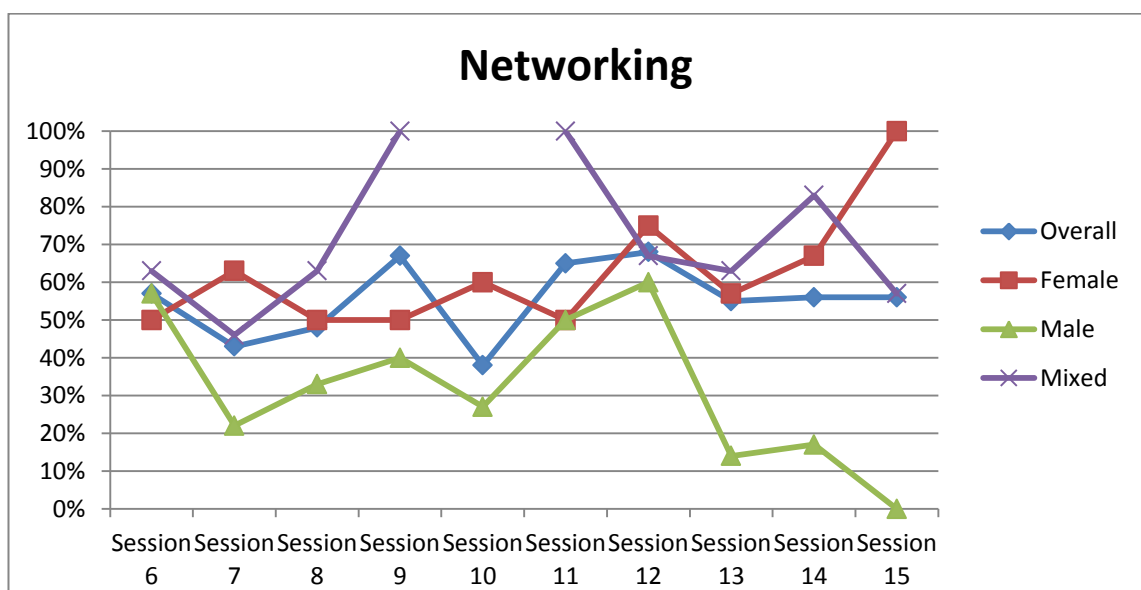
Fig. 7.2: "Networking" from monthly evaluations (Source: current research)

The levels of "problem solving" (See Figure 7.3) occurring in the networks were highest in the male and female networks (highest levels recorded in four meetings each) however, figures fluctuated significantly between meetings. The male network responses varied from no "problem solving" in one session (month 15) to a height of 67% in session 7. The lowest response for "problem solving" among the female responses was 29% (month 13) but "problem solving" within this group was perceived up to 100% (month 15) which shows a significant level of "problem solving" achieved among participants in this group. The mixed network levels of "problem solving" varied from 15% (month 7) right up to 83% (month 14).
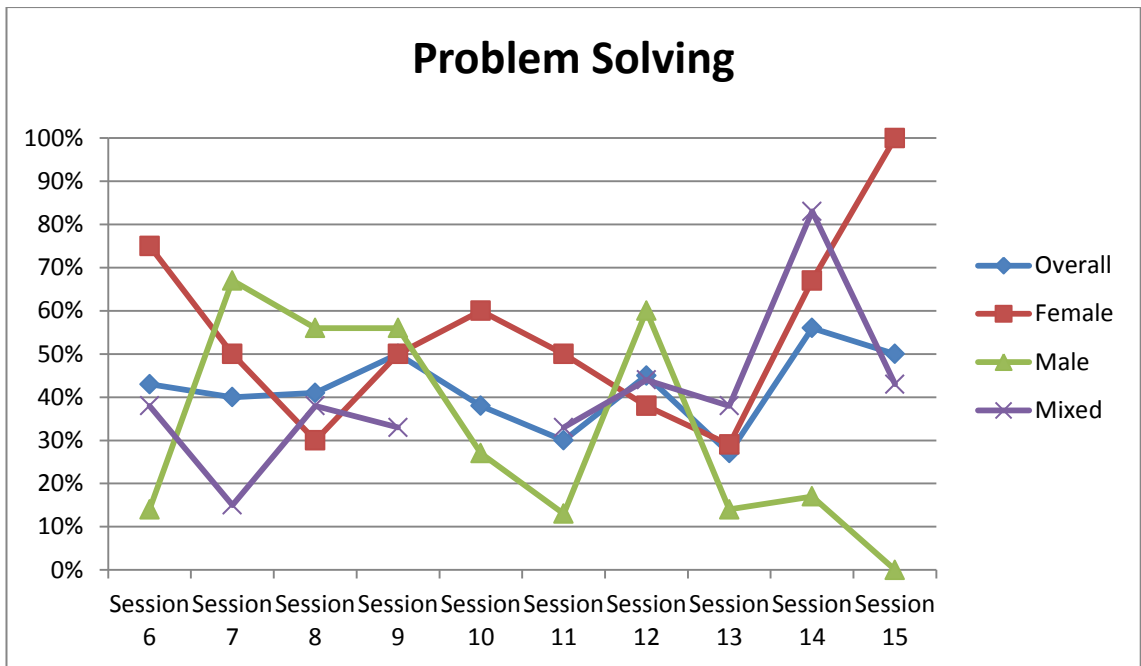
Fig. 7.3: "Problem Solving" from monthly evaluations (Source: current research)

When it came to assessing the levels of "new ideas" (See Figure 7.4) and "information exchange" (See Figure 7.5) occurring in the networks, it is clear that the female networks again experienced the highest levels over time of these peer-to-peer activities, reinforcing the strength of the peer-to-peer environment that the female participants created in their networks and thus maintaining value in their interactions.
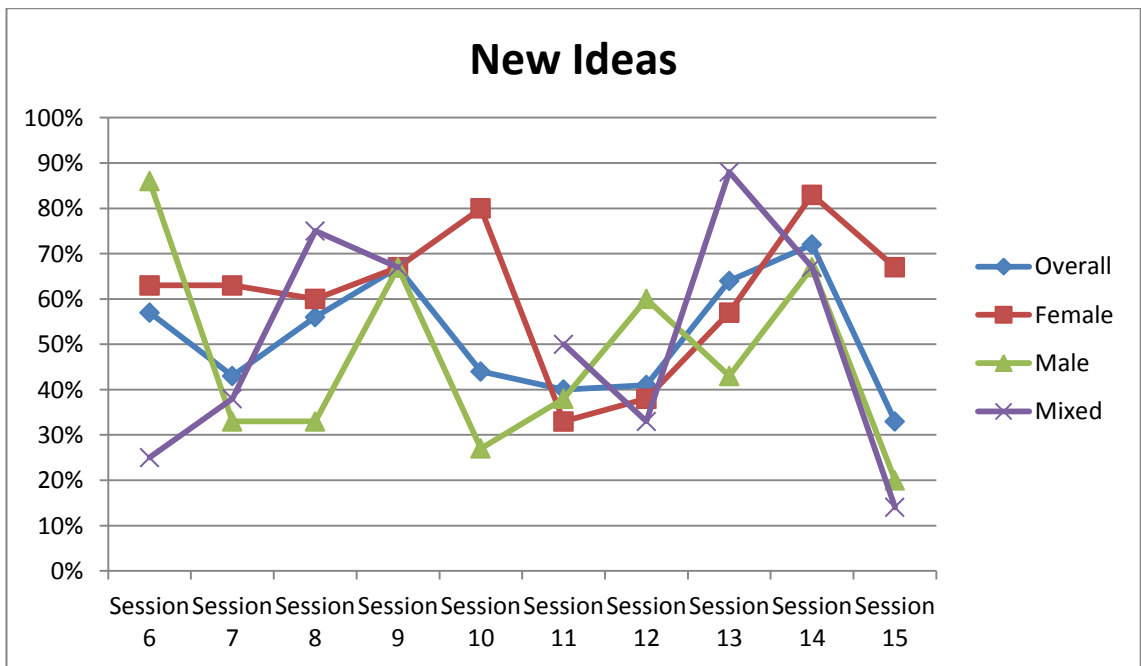
Fig. 7.4: "New Ideas" from monthly evaluations (Source: current research)

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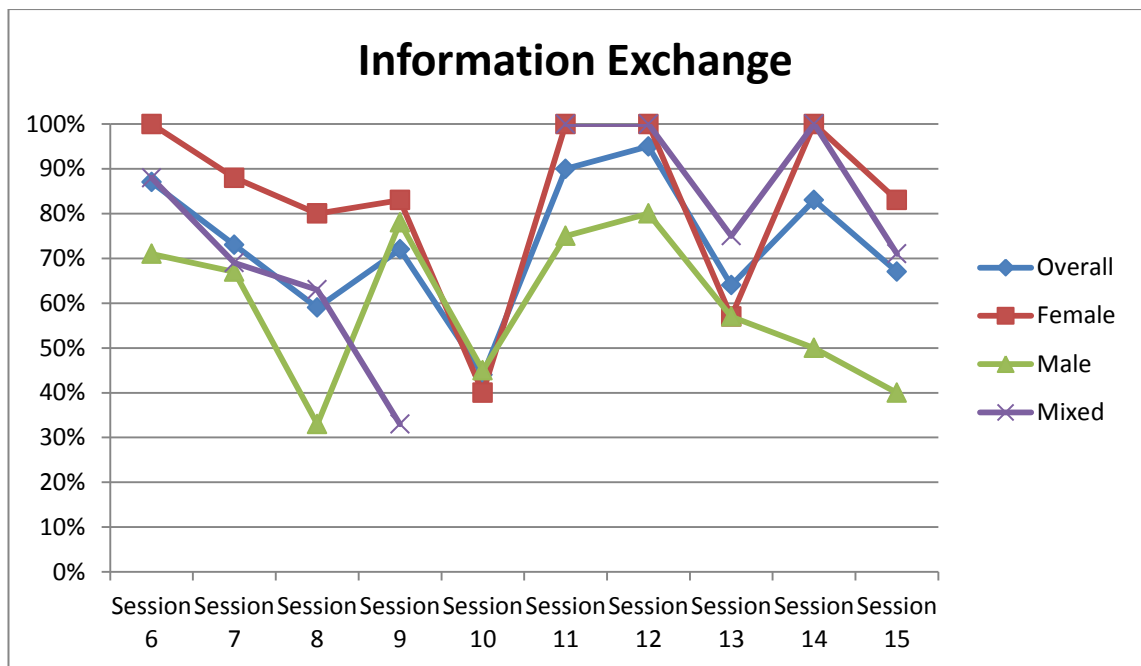
Fig. 7.5: "Information Exchange" from monthly evaluations (Source: current research)

Following the trends presented thus far in terms of the success of the female networks, these statistics reinforce the positive outcomes experienced by the participants of the female networks.

The next section presents the interview data related to peer-to-peer engagement.

7.1.2.3. Peer-to-Peer findings from interview data

Peer-to-peer engagement was addressed by all participants who were interviewed as indicative of a highly valuable aspect of the networks. The value of peer-to-peer engagement was also referenced in four exit interviews as a benefit but for these participants it did not represent a significant enough benefit for them to sustain engagement with the networks. Every participant who was interviewed identified the value of engaging with like-minded people within the networks and the value of the learning that they got from:

> "sitting learning how to overcome the challenges you face with a group of peers and applying those solutions is the most beneficial part of the network" (MxWManuf6).

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MxWTech1 observed how being in the network was like having an extended set of work colleagues to discuss business development with. MWManuf3 asserted that:

> "when you are in business, it is lonely at the top and most of the challenges you face you cannot discuss with your employees. But being involved with a group like this network allows you to share those problems with a group of like-minded people who will help provide solutions in an unbiased way".

The value of peer-to-peer interaction was observed over a significant period of time and throughout the development of the network. For example, on reflection of the engagement of the networks after the three networks in Ireland had amalgamated (18 months after they had initially formed), FIServ7 observed that:

> "the network is definitely still peer-to-peer focussed; I have actively steered it that way because I feel that is the most valuable part (the peer-to-peer engagement) of it (the network)".

The value of peer-to-peer interaction has been outlined in the various forms it took within the networks, be it the contact participants had between meetings or in the knowledge or information exchanged. It is clear with the examination of peer-to-peer factors across all data sources that this element of network engagement represented a highly valuable part of the networks that contributed significantly to the sustained motivation of participants to remain engaged with the networks over time.

7.1.3. Support; Impact of Support for Learning Network Environment

Support is a significant benefit of this type of network and increased over time as relationships developed among participants. SME isolation is reported within the literature as a significant challenge for entrepreneurs in SMEs (See for example Kutzhanova et al., 2009). However, these learning networks were observed to be of benefit for personal support within the business context.

The support (emotional, social and business) that participants gleaned from network engagement was referenced by network participants as one of the most significant benefits of engagement with the networks. Engaging with like-minded people in this

supportive environment represented an activity of significantly positive valence, fuelling the motivation for sustained engagement with the network. When participants were having experiences with their networks which they deemed valuable, the cycle of value creation was reinforced and their commitment to the networks solidified.

For example, 15 of the 17 participants interviewed referenced the impact of the supportive environment and how positive this was for their network engagement. The support was most apparent when participants brought real significant business issues they were having to the network meetings. Through direct network observations, the:

> "participants came alive when coming up with solutions to address the problem
>
> their peer was facing" (S12, Male Network Ireland Observation Report) .

The mixed network in Ireland had an instance of a participant who was in such difficulty that she felt she would have to close her business. But due to the support of the network members and the various solutions they offered to her (which was only made possible by the environment created in the network), this participant (MxIManuf4) is still in business (March 2015) and continues to engage with her network peers.

Support was observed regularly throughout the course of network engagement. Table 7.6 presents the months of meetings where support was observed most obviously in network meetings and outlines examples of the observations which occurred. Support was observed across all networks in both Ireland and Wales with a slightly stronger emphasis on support in the female networks in both countries. It was the male network in Wales that had the least examples of support within their meetings. These trends are in keeping with the pattern being observed throughout the research with the female participants displaying heightened engagement and commitment to the networks, compared to their male counterparts.

Network	Sessions where support was evident	References to support
Female Ireland	Months 6, 7, 10, 13	"Fantastic to observe was the level of interaction, support, encourage-ment and ideas generated in this meeting" – month 13
Male Ireland	Months 8, 9, 12	"The male participants identified significant value in the learning and support that they share in their group" - month 12
Mixed Ireland	Months 13, 15	"The network is a learning environment with the added benefit of support from like-minded people – it's like the AA[19] for entrepreneurs" – month 15
Female Wales	Months 3, 10, 11, 12	"In this session, participants were very supportive of a member facing significant difficulty" – month 12
Male Wales	Month 14	"Supportive atmosphere in the meeting – participants positive about the benefits of the network" – month 14
Mixed Wales	Months 11, 12, 13	"Support Identified as a very important benefit of engagement" – month 11

Table 7.6: Sessions where "support" was observed and demonstrative quote per network (Source: current research)

Participants were very enthusiastic in their references to support as a benefit of engagement. There was reference made to support, for example, MxWManuf6 said support was there whether:

"for congratulations or consolations"

whereby network meetings were observed where participants were reporting good or bad news to their network peers and whichever was the case, they were always met with the support of the group. FWServ6 corroborated this by explaining that:

"the supportive environment of the network means that participants are very encouraging when you are doing well and when you are not and that is really helpful".

This represented a fundamental source of value for participants, impacting positively on their motivation for sustained engagement with their networks.

Sharing business problems and gaining understanding that they were not alone in the business problems they faced was very supportive for the participants involved:

"there is comfort in knowing that the other members face similar issues to you. It creates a bond and a feeling of safety to openly discuss issues and encourages all members to support one another" (MITech4).

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[19] This was a humorous reference to how entrepreneurs need support in the same way that alcoholics require support in Alcoholics Anonymous meetings

This sentiment was echoed by a number of participants with MWManuf3 asserting that:

> "running a business is lonely and it is great to be able to talk to like-minded people about your business problems in a non-consequential way".

This example was further elaborated upon by participant MWManuf3 as he outlined the difficulties of discussing issues with staff and the natural panic which ensues. Therefore, the opportunity to talk to his peers about his challenges represented a source of great support and motivated him to maintain engagement in the network.

In describing the most positive things from his network experience, MITech4 stressed that:

> "the important things about this network are the support, the self-learning, the social side and the emotional side. I loved that it was such an inherently supportive structure".

These words highlight the importance of support for this participant and his enthusiastic use of the word "love" demonstrates the pivotal role that support plays in creating a positive network environment and motivating MITech4 to sustain engagement with the network group.

The support that participants experienced was at times more evident to those around them than to the participants themselves. During one interview, the wife of the interviewee (who was also his business partner) was present and described the boost that the network meetings provided him. She observed that:

> "he always comes back bolstered and motivated"

and after consideration of this, MxWTech1 asserted that it actually is like:

> "the AA for small businesses".

Interestingly, this same term was used by the Mixed Network in Ireland in their 15th session (see Table 7.6) where they were exploring the value of their network as they negotiated the sustainability and future direction of the network. The support they received in the network was very important and participants considered it an essential component in the future operations of the network.

Figure 7.6 presents a variety of examples of the role of support which was offered by respondents. Interestingly, participants were never asked directly about the support that they perceived in their networks. Support was a theme which was so significant for participants that it naturally arose as they were discussing their network experiences and the benefits they had encountered over the course of network engagement.

"You feel you're part of something and you're happy to support people and have them support you aswell" - MxWServ6

"What keeps me motivated to engage with the network are the friendships I've made and the support I get from those friends" - FWManuf1

"It's a great network to be involved in; all the members are very nice, very supportive and encouraging, and very honest" - FIServ7

"the network is a support and nurturing mechanism for me" - FWServ6

"I like the feeling of belonging to the network and the bond we've created with the interest and enthusiasm of the members" -MWServ5

"In business you often become isolated and so the opportunity to gain support and advice from like-minded people is great" - MIServ4

"In a supportive learning environment you always make friends – helping each other through difficulties develops relationships" - FIManuf1

"The supportive environment means as an entrepreneur you don't feel so alone" - MxIServ4

Figure 7.6: References to support by interviewees (Source: current research)

Fostering support within the learning network environment is an inherent part of network development. This section has explored the role of support in encouraging participants to overcome challenges they face and the positive impact that the support of the network has on the motivation of participants to run their businesses. The support of the networks is perceived very positively by participants and therefore plays a fundamental role in reinforcing the motivation of participants to remain engaged with their networks.

7.1.4. Sharing; Impact of Sharing on Creating a Positive Network Environment

The theme of sharing is inherently linked to peer-to-peer engagement as discussed earlier in this chapter. The sharing of knowledge and experiences among peers represents a significant source of learning and positive action for entrepreneurs. These outcomes are only possible when participants are completely open and honest in the challenges that they face in their businesses and in offering advice based on the experiences they have had in the past in overcoming challenges they have faced. As discussed in relation to support, participants took great support and comfort in discovering that they were not alone in the challenges they faced and again, this was only revealed when participants shared their experiences. Trust development within the networks was imperative as participants needed to trust one another in order to be able to be open and honest in the sharing of their experiences with their peers which in turn created the conditions for positive relationship development and a strong network environment to motivate sustained engagement with the networks.

In Table 7.5 there were numerous measures for sharing, such as "information sharing", "sharing skills", "I was able to bounce some ideas off the other network members" reported through the six-monthly questionnaires that participants completed. Between 67% and 77% (the reported levels varied between these two figures across the four time points examined using the six monthly questionnaire) of participants were motivated to engage with the networks for "information sharing". This would imply that over two thirds of participants were positively disposed toward sharing as they engaged with the networks. When asked whether other members of the network were happy to share information, the results were very positive with 100% of respondents by the third time point reporting that their network colleagues were sharing information (See Table 7.5).

As the networks developed, more participants felt they could "bounce ideas off the other network members" with 59% happy to share ideas from the start and by the fourth time point, 90% of participants were happy to share their ideas (See Table 7.5).

These results indicate that network participants become more comfortable with sharing information as the networks develop. As FIServ8 observed in interview:

"all it took was for one person to share their challenges and it put the whole network at ease to open up and share their own challenges".

When participants shared real problems they were facing in their businesses in the network, the environment of peer-to-peer engagement, trust and sharing was developed which resulted in participants gleaning valuable solutions from trusted sources which motivated them to sustain engagement.

Figures 7.1 to 7.5 presented information gleaned from monthly evaluations that participants completed after each network meeting. The levels of "information exchange" reported varied significantly from meeting to meeting and across the various networks. In general the female network experienced the highest levels of information exchange within their network but even they experienced one meeting where only one third of participants felt that information exchange had occurred in the meeting. The topic under discussion and the general enthusiasm of participants has a role to play in maintaining strong levels of information sharing. Participants' motivation to engage is heightened where they are accessing "nuggets of information" (MWServ5), in their network meetings.

In order for sharing to occur, relationships have to develop among the participants. Reluctance to share was observed in all networks for the first six meetings and as far as the ninth meeting of the male network in Ireland. As the male network in Wales expanded, it was observed that new participants were reluctant to offer advice with one new member asserting that he would "have to charge for that information". This participant did not continue to engage with the network after this session. This implies the importance of communicating the ethos of sharing completely with potential participants to ensure that everyone who engages with the network will share information openly in order to maintain the environment that has been created in the early stages of network development.

7.1.5. Trust; Important Role of Trust in the Network Environment

Within a learning network environment, participants must have trust in one another in order to facilitate open, honest communication between members (for example see Neergaard and Ulhoi, 2006). As the networks formed and participants developed relationships with one another, trust between members increased. Trust is an essential component for the success of networks as participants will only bring their challenges into a group of people who they trust. As such, where trust does not exist, participants will be reluctant to share their issues and indeed, their experiences; thus, inhibiting their ability to gain real value from network engagement. Where network engagement does not hold positive valence for participants, they will withdraw from the network.

Crucial to the development of trust within the networks were the induction sessions which participants attended for the first five months of network engagement. For example, FIManuf1 stated:

> "The Induction sessions helped hugely with developing trust among participants".

The second induction session was focussed around team-building activities and proved very successful for the development of trust and the promotion of open and honest communication within the networks. Almost all of the participants who attended this team building day (97%) felt the team building day helped them to start networking with their peers. When participants were asked what they enjoyed most about the session, there was a very positive response to the day with an overwhelming majority (almost 80%) highlighting that the activities they had completed represented a fun and relaxing means of getting to know the other network members and develop trust with them.

This meant that going forward with network activities, the participants who had attended the team building day had created a foundation for the bond they would share with their networks. Table 7.7 presents the numbers of participants who attended the team building days and the number of those participants who subsequently withdrew from the networks. Also presented are the numbers of

participants who sustained engagement who had not attended the team building day showing the higher levels of sustained engagement from attendees of the team building day versus non-attendees. There was one anomaly in the data in the case of the female network in Wales who had a higher percentage of withdrawal amongst attendees of the team building day.

Network	Network Size	Team Building Attendees	Team Building Attendees who withdrew	% of team building participants who sustained	Non-Attendees of Team Building Who Withdrew	% of non-attendees who sustained engagement
Female Ireland	13	10	3	70%	1	67%
Male Ireland	18	9	1	89%	3	67%
Mixed Ireland	19	9	2	78%	6	40%
Female Wales	17	7	2	71%	2	80%
Male Wales	18	5	0	100%	8	56%
Mixed Wales	19	NA[20]	NA	NA	NA	NA

Table 7.7: Team building attendance vs participant withdrawal (Source: current research)

Table 7.7 shows that the majority of participants who engaged with the team building day went on to sustain engagement with their networks. In the case of the male network in Wales, the participants who attended the team building day went on to be the core of that network. Of the participants of the male network in Ireland, only one participant who had attended the team building day subsequently withdrew from the network. The trust building associated with team building activities appears to have more positive effects on male participants than on their female counterparts (as there was higher withdrawal among female participants that attended their team building day). This could be related to the fact that male participants experience greater difficulty building trust and therefore, experience a greater benefit from activities designed to facilitate trust development than their female counterparts.

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[20] The Mixed Network in Wales did not have a team building day (the group were uninterested and would not agree on a date to do it and therefore it never happened)

Within both the male networks in Ireland and in Wales, it was only participants who had not engaged with the team building day who demonstrated reluctance to engage as long as nine months into network operations, refusing to discuss business issues or share information with their peers. This shows how important it is for all participants to commit to engage with team building during network formation processes to ensure the highest possible levels of trust. Had these participants attended their team building day, perhaps they would have been more forthcoming in their meetings. The trust developed throughout the activities of the team building days accelerated the relationship building among the network participants. From the following meetings, it was apparent in observation the shift that had taken place in terms of the bonds which had begun to form among participants.

Trust among network participants was a crucial mechanism for the facilitation of information and experience sharing among participants. Across all networks, some participants showed reluctance to engage openly within the network environment. Four participants interviewed identified that trust only solidified within the networks after the first participant opened up about a serious issue he/she was having. One participant stated

> "I was happy to open up once I saw that others were being open with me…you will progress faster by being open with the network" (MxWManuf6).

After just three months, the female networks were displaying strong levels of trust. After six months, participants across the mixed networks were engaging very openly. However, within the male network, trust was significantly slower to develop and reluctance to engage was observed up to nine months after network formation (and even longer in the male network in Wales when new members were introduced). The impact of this lack of trust within the male networks was that the network structure took longer to become a safe environment for participants to share their business issues; this is one of the most valuable characteristics of the learning network process so without this willingness to share business issues, participants were limited in the value they could attain from engagement leading to more superficial engagement within the male networks with the result that the male networks did not become

sustainable structures to participants. However, though trust was slow to form, after a year of engagement, bonds had been formed and the following observation was made by a member of the Irish male network:

> "Everyone is very open about whether they are doing well or not and what issues they are having. The more people open up to you, the more you will open up to them. That is all down to trust" (MITech4).

One of the participants from the mixed network in Ireland observed that:

> "This style of network could not function if the members did not trust each other" (MxIManuf5)

reinforcing the importance of trust for effective and valuable network operations which in turn leads to sustained motivation for participants to remain engaged in their networks.

The levels of trust which are created within a network environment are directly linked to the level of sharing which can occur. The opportunity to share real business problems with like-minded individuals represents one of the most valuable benefits of learning network engagement. As such, where trust was slow to form, sharing was inhibited and the value of engagement was limited, causing a negative impact on participant motivation for sustained engagement. Trust and the relationships which form where trust has developed are integral to network success.

7.2. Summary

The environment created within the learning network structure is indicative of the level of engagement that can occur. Where peer-to-peer engagement, sharing, support, trust and accountability among members was present, a highly valuable environment for learning was created. When this network environment was successfully created, participants formed bonds with each other that created a sense of commitment and accountability to one another which increased their motivation to engage and the network evolved into a community structure where bonds were solidified and participants felt a heightened sense of commitment to each other as a result of the relationships they had built. This provided participants with valuable

outcomes from their meetings, positively impacting the valence associated with engagement within this environment, thus sustaining participants' motivation to engage.

Referencing back to Table 7.1, presented again below to refresh the reader's memory, which provided an overview of positive network environment characteristics per network, it is not surprising that the networks evolved the way they did.

Network	Accountability	Peer-to-Peer Engagement	Learning	Support	Sharing	Trust
Female Ireland	High	High	High	High	High	High
Male Ireland	Moderate	High	Moderate	Moderate	High- for some participants	Moderate
Mixed Ireland	Moderate	High	High	Moderate	High	High
Female Wales	None Observed	High	High	High	High	High
Male Wales	Low	High	Moderate	Low	Moderate	Moderate
Mixed Wales	Low	Moderate	Moderate	Moderate	High – for some participants	Moderate

Table 7.1: Characteristics of Network Environment in Each Network (Source: current research)

None of the networks in Wales continued to meet after the SLNIW project ended. Given the high levels of peer-to peer engagement, learning, support, sharing and trust which were observed in the female network in Wales it is interesting to see a complete lack of accountability. Where network members did not feel accountable to one another, it is not surprising that the network ceased to meet. While the female network in Ireland fostered high levels of all the features of positive network environments, the mixed network in Ireland also displayed relatively high levels across each factor. The male network in Ireland, while showing high levels of peer-to-peer engagement, they were somewhat lacking in the other components contributing to the development of a positive network environment. However, through the amalgamation of the Irish networks, this network survived in the new form with the input of the other two Irish networks.

Chapter 8

Bringing it all Together – Summary of Research Findings

8.0: Summary of Research Findings

The purpose of this chapter is to provide a brief overview of the findings that were presented in the Findings Chapters. Section 8.1 provides an overview of the details of the participants of this study; namely the profiles of the six learning networks under study. Section 8.2 examines the first finding of this research; that entrepreneurs are motivated to engage with networks that provide the opportunity for peer engagement to share information, ideas and advice. Section 8.3 addresses that clarity of network purpose is important for initiating participants' motivation to engage with learning networks. Section 8.4 reveals that defined network structures and processes have a positive impact on successful network operations which create value for participants thus sustaining their motivation to engage. Section 8.5 demonstrates the role of personality characteristics in sustaining individuals' motivations for engagement. Finally, Section 8.6 addresses the positive aspects of network environment that contribute to participants' motivation to sustain engagement with learning networks over time.

8.1. Participant Details

Table 8.1 presents the overview of the six network profiles; within Chapter 4, the details of all the participants who signed up to the networks were presented. However, there was a significant level of non-engagement and so the chapter proceeded to present a more accurate representation of network participants who engaged with the SLNIW networks. Table 8.1 presents these amended figures; the number of participants in each network, the sector split within the network, the average years in business of participants in that network and the average number of employees of participants in each network.

Network	Female Ireland	Male Ireland	Mixed Ireland	Female Wales	Male Wales	Mixed Wales
Participants	13	14	16	12	6	11
Sector Split	8 Serv; 4 Manuf; 1 Tech	6 Manuf; 5 Tech; 3 Serv	7 Manuf; 5 Tech; 4 Serv	9 Serv; 2 Manuf; 1 Tech	3 Tech; 2 Manuf; 1 Serv	5 Serv; 3 Manuf; 3 Tech
Years in Business	12	11	16	9	15	7
Number of Employees	4	13	27	5	13	3

Table 8.1: Overview of network composition by network (Source: current research)

From Table 8.1, it is clear that the Welsh male network had significantly fewer members than any other network in this study; the impact of this has been explored throughout Chapter 4. The mixed network in Ireland started with the highest number of participants but also experienced the highest level of participant withdrawal of any of the networks. The mixed and male networks in Ireland had the greatest levels of sector diversity of the networks. The mixed network in Wales and the female networks in both Ireland and Wales consisted of smaller businesses in terms of employee numbers. These networks were very effective and through observation, it would appear that this style of network is more beneficial for smaller businesses as they experience less support within their own businesses.

8.2.   Entrepreneurs will be motivated to engage with networks where they are provided the opportunity to engage with like-minded people for information sharing, learning and problem solving

A combination of face-to-face interviews and questionnaires were used to uncover the primary motivations for participation among participants.

- Meeting with other business people represented the greatest motivation for engagement among the majority of the network participants; for the male participants in Wales, making business contacts in Ireland was the primary motivation followed by meeting other business people
- Sharing information, learning and advice are the activities which motivated the majority of participants to engage

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- The female network participants were more enthusiastic about information sharing and accessing new ideas than their male counterparts
- There were no notable differences between cultures in the initial motivations for engagement

8.3.   Clarity of Network Purpose among participants increases motivation to engage with the learning network

Within Chapter 5 this theme was explored in detail to expose the following:

- The majority of participants were unclear as to the purpose of the learning networks; almost one third of those who signed up, did not engage with the networks; the theme of network purpose was revisited on numerous occasions by the networks for a significant period of time (over a year after network formation)
- "Contracts of Engagement" represented a positive mechanism for securing participant engagement within the LEAD Wales programme; this could have been effective for the networks in this study
- Participants agreed that without a definitive understanding of network purpose, the recruitment of new participants would not be possible
- Network champions (those participants who bought into the network ethos) were instrumental in encouraging their fellow participants to engage openly and benefit from their network engagement under the ethos of "learning together and from each other to overcome business challenges"
- Where participants understood and bought into the network ethos and engaged in accountability within their network sessions (following up on actions they were advised to take by their peers on real problems they were experiencing within their businesses), real, actionable value was sought from engagement which encouraged participants' motivation to sustain engagement and remain with the networks

8.4. Defined Network Structures and Processes enhance commitment to networks and motivation for sustained engagement

The data was presented in Chapter 5 to expose the following key findings in relation to network structures and processes

- Those networks that engaged on a routine basis (meeting on the same day of the month, at the same time in the same location) had more meetings than those that did not, participants motivation to engage sustained and they became sustainable structures (the Irish networks still meet on a monthly basis – March 2015)

- The networks that engaged in meetings which had a specific focus (training on a topic from an external facilitator) alongside time for peer-to-peer engagement were most successful for delivering value to participants which reinforced participants' motivation to engage and remain engaged with the networks

- Where there was some formality surrounding network operations, network engagement was more likely to result in valuable outcomes for participants thus encouraging sustained engagement to remain with the networks

- Participants of networks that had defined structures and processes in place for the operation of their networks sustained their motivation for engagement to remain with their networks

8.5. Participants' personality characteristics play a role in the attraction they feel toward a network and their motivation to engage with the network

Participants completed personality inventories which addressed five different characteristics of their personalities before addressing their attraction to and loyalty to the networks. The findings were presented in Chapter 6 to reveal the following key insights:

- Participants sustaining engagement with the networks displayed high levels of agreeableness (88%), followed by intellect (68%), conscientiousness (63%), extraversion (56%), and emotional stability (46%)

- Female participants were more inclined toward conscientiousness which was observed through network observation in the manner through which they conducted their network meetings

- Male network participants reported the lowest levels of loyalty to their network

- Almost two-thirds of participants reported satisfaction with their network

- 84% of participants felt that being in the network let them be part of a community

8.6. **A network environment where there is a high degree of accountability, peer-to-peer engagement, support, sharing and trust increases the likelihood of entrepreneurs remaining engaged in the network**

Within Chapter 7, the findings emerging from the data in relation to the impact of the network environment on participants' motivation to engage and remain engaged with their networks were presented. The key observations emerging from this are:

- Accountability to fellow network participants (the act of following up on advice received in network meetings and reporting the outcomes of any action taken in subsequent meetings) represented a powerful tool for the motivation of participants to sustain engagement with the networks as participants felt this forced them to take positive action in the development of their businesses. Those networks that engaged with accountability (formally or informally) became sustainable networks

- Peer-to-peer engagement (encompasses the learning that participants achieved from each other and with each other, the feedback they received from their network peers and the support that they perceived from engagement with their network peers) represented the most valuable component of the

networks to many participants; however, peer-to-peer engagement is most effective when integrated into focussed network sessions where topics for discussion have been highlighted ahead of the network meeting. The level of peer-to-peer engagement which occurred impacted the rate at which relationships formed and participants felt a responsibility to each other which had a positive impact on the commitment participants perceived to their peers and their network.

- Support was a significant benefit of network engagement perceived by the majority of participants. SME isolation is common among small entrepreneurs as there is often great loneliness in the journey of entrepreneurship. As such, the networks represented a positive mechanism for participants to seek validation of the activities they were engaging in and for support in the challenges they were facing as they endeavoured to develop their businesses.

- When trust had formed within the groups and participants began sharing the challenges, successes and failures of their business experiences, there was great value perceived in the exchanges which occurred. This took time to form and there was resistance from some participants to engage this way. It was observed that participants' interest and engagement was heightened once they were taking part this way.

8.7. Summary

From the extensive data collected, analysed and presented across Chapters 4 to 7, it is plain to see that the female network in Ireland represented the most successful and sustainable network of the six studied. This was influenced by a number of key factors which are presented graphically in Figure 8.1. The conditions for the success of this network were favourable. The most important success factor was the participants themselves who directed their network to ensure that valuable outcomes were being achieved at all times. The enthusiasm of the members coupled with the structures and processes put in place and the high levels of accountability and action observed in their network meetings proved highly successful in sustaining the motivation of these participants for network engagement. The network environment created by the

female participants in Ireland, quite quickly represented a "community" environment which fostered strong relationships and trust and a sense of reciprocity across participants. This proved hugely powerful in sustaining participants' motivations to sustain engagement with the network. In the development of learning networks in the future, efforts should be made to recreate these favourable conditions to optimise network success.
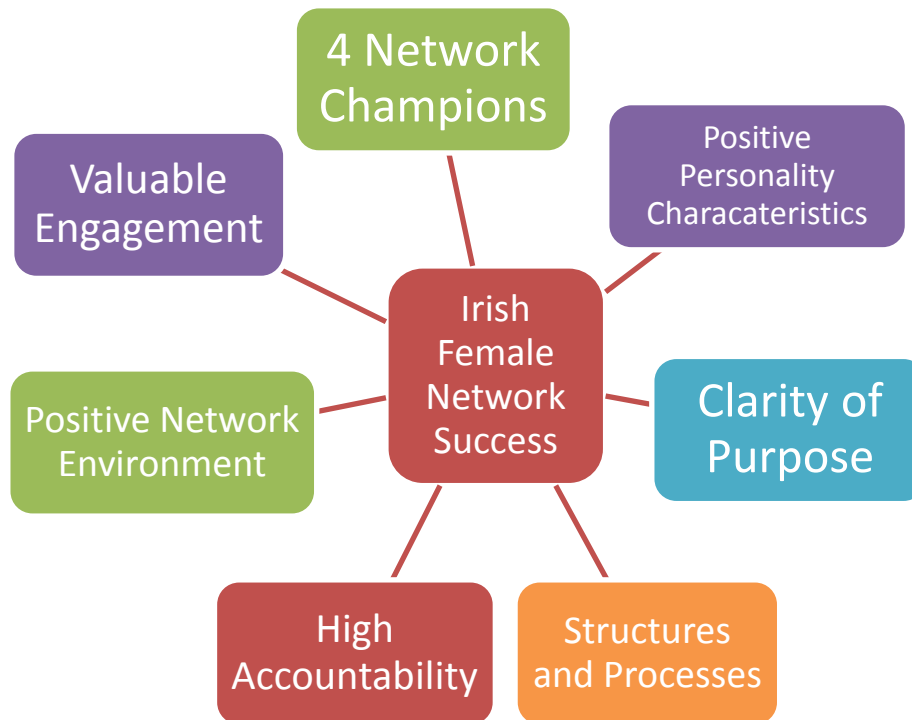
Fig. 8.1: Success Factors for Irish Female Network (Source: current research)

On the other hand, the least performing network was the Welsh male network and this was the first network to cease. There were a number of factors which impacted this and these are presented in Figure 8.2:
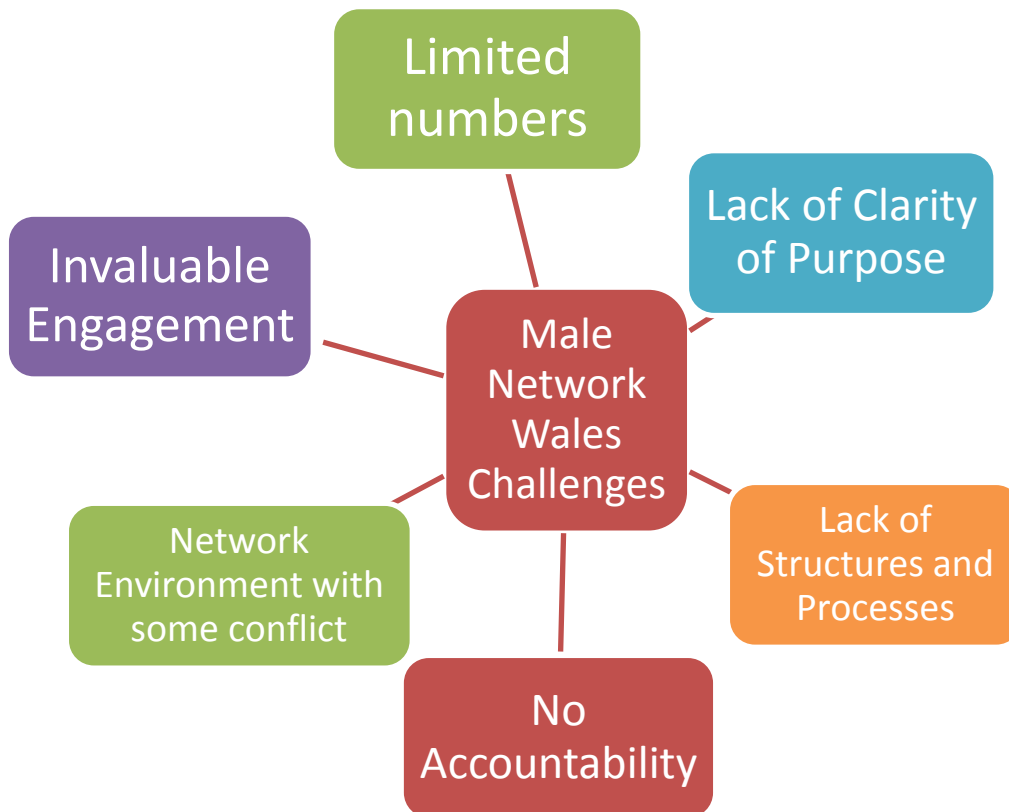
Fig. 8.2: Challenges in the Male Network in Wales (Source: current research)

8.8.   Overall Summary

The research that was conducted to inform this thesis was extensive both in the time and variety of tools employed. The author became embedded in the network structures in order to gain a heightened understanding of what motivated participants to engage with learning networks over time. This involved a study which lasted nearly three years, with almost 350 hours of network observations, over 100 initial interviews with participants, 37 in-depth interviews with participants and various questionnaires and evaluation forms which participants completed.

The findings presented in this summary represent the most significant components of engagement impacting participants' motivation to engage and sustain engagement with learning networks. Firstly, after participants are initially motivated to engage, they must understand and buy-into the ethos of the network during network formation. This served to initiate their motivation to engage. Agreeableness was the personality characteristic most prominent amongst sustaining network members;

people with high levels of agreeableness are most likely to sustain engagement. As the networks developed, defined network structures and processes encouraged sustained engagement among participants as the outcome of engaging this way was that participants were planning their network meetings around topics which were of value to them and as such, were benefitting from their network engagement which reinforced their motivation to engage. Where understanding of the ethos of the networks combined with defined structures and processes for network operation, an environment was created which promoted entrepreneurs to engage with their peers in a trusted environment where they can share their knowledge and experiences and gain support in the challenges they faced in order to develop their enterprises.

Chapter 9

A Blueprint for Enhancing Sustained Participant Engagement with Networks

9.0 Discussion

The purpose of this chapter is to discuss the impact of this research within the field of entrepreneurial network research. There were six networks studied, three in South East Ireland and three in West Wales. The Welsh networks no longer meet on a formal basis. However, the three Irish networks amalgamated and this amalgamated network, known as Bua[21], continues to meet as of January 2016 (almost six years after formation). Bua has been successful in sustaining participants' motivation to engage and remain engaged with the learning network. This research is highly valuable in that it took a longitudinal approach which facilitated understanding of the dynamic nature of networks over time, an area previous research highlighted as lacking. Previous network research features cross-sectional studies predominantly which fails to capture developmental dynamics (Hoang and Antoncic, 2003; Jack, Drakoupoulou Dodd and Anderson, 2008; Martinez and Aldrich, 2011). This current research design facilitated the in-depth study of six networks over a period of almost three years, providing the author with a distinct depth of engagement with the research subjects.

This research also provides a lens into the development of single gender (as well mixed gender) networks, another avenue where research was lacking (Hanson and Blake, 2009; Hampton, Cooper and McGowan, 2009). While it would have been great if all six networks had succeeded, the varied evolution of the six networks provides strong justification for what characterises successful networks which sustain participants' motivation to engage and remain engaged over time.

9.1. The Research Questions

This research sought to gain an understanding of entrepreneurs' motivations to engage and sustain engagement with networks over time. The most important part of this research was in determining what sustains participant motivation to engage.

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[21] When the SLNIW learning networks in Ireland amalgamated to become one network, one of the first activities they engaged in was renaming the network and negotiated their joint purpose. "Bua" is an Irish word which means "victory" and the network participants chose this as the name for their group to capture their identity

Learning networks represent a valuable means of entrepreneurial development with relatively little cost. Research around learning and management development within the SME context has shown that traditionally, this sector has little uptake in training and development and struggles to see the value in a lot of the more traditional supports offered (Pittaway, Missing, Hudson and Maragh, 2009). Learning networks are different as entrepreneurs can see the value in engagement as the focus of the networks is on the development of their own businesses, thus providing them with keen value for their engagement (Kiely and Armistead, 2005; Clarke, Thorpe, Anderson and Gold, 2006). Therefore, understanding how these structures can be sustainable is significant for academics, entrepreneurs and policy makers alike.

9.2. Research Question 1 (RQ1) - Determine what motivates entrepreneurs to engage with networks

The first research objective was to determine what motivates entrepreneurs to engage with networks. This was explored at a relatively superficial level before network formation in this current research. The key finding emerging in relation to this research objective was that entrepreneurs will be motivated to engage with networks where they are provided the opportunity to engage with like-minded people for information sharing, learning and problem solving.

It was quite easy to get entrepreneurs to agree to engage with a network but identifying what brings individuals from this initiation to a higher level of commitment and engagement is key to understanding what motivates entrepreneurs to sustain engagement with learning networks over time. From this current research it was found that there will be "joiners" who join networks out of fear of missing out on something but who really have no commitment to the process. This is evidenced by the fact that nearly a third of those recruited either never engaged or engaged only on a limited basis with their network. In order to develop a learning network to ensure that participants are achieving valuable engagement, the participants must engage. Referencing back to Social Exchange Theory, with engagement in the right conditions, a group will become cohesive, they become a network, and when a network has

become cohesive, the exchange of information and resources is heightened as a sense of reciprocity develops to ensure equitable exchange (Homans, 1958; Blau, 1960). As such, in learning network development, avoidance of these "joiners" is key and time must be committed to participant recruitment to ensure that the participants enlisting are fully committed to the process and to the development of the network.

Bergh, Thorgren and Wincent (2011) highlighted that entrepreneurs are motivated to engage with networks for the opportunity to learn from one another and share information but highlighted how this does not happen unless relationships develop and trust is built. In the work of Zhang and Hamilton (2009), they addressed the theme of trust within entrepreneurial networks and identified the importance of participation in the development of this trust as it is not something that is present at network formation. As such, this theme is discussed more in Section 9.3 which discusses the theme of motivation and sustained engagement with networks over time as these developmental processes occur over time.

Previous research suggested motivations for engagement which included facilitation of innovation (Jørgensen and Ulhøi, 2010) and enabling cooperation (Martinez and Aldrich, 2011) and the opportunity to achieve positive results for the organisation (Zaheer and Soda, 2009). Within the initial interviews with network participants they were asked about a number of different factors and the least number of respondents opted for "increasing business competitiveness" as their motivation to engage, though there was still an average of 42% of participants citing this factor. However, the initial focus of participants in this study was on meeting other business people with as many as 90% of the female respondents in Ireland electing this option and on average 77% overall. This is in line with the research of Bergh et al. (2011) which highlighted the benefit of engaging with other business people. Information sharing and learning were cited by almost two thirds of participants as motivations for engagement which is also in line with previous research (Gellynck and Kuhne, 2010) which highlighted that entrepreneurs were motivated to build networks which assist them to overcome their knowledge deficits. Therefore, this research supports existing research around what

initial motivations/benefits individuals perceive as they embark on a new network venture.

Another factor impacting individual's propensity to engage with networks is their basic personality characteristics. This current research found that personality characteristics played a role in the attraction individuals feel toward a network and their motivation to engage and sustain engagement with that network. Conley (1985) conducted an extensive longitudinal research study of personality characteristics in adults over 50 years. This revealed that personality characteristics were stable over time and thus worthy of study in the context of this current research to determine the impact of personality on participants' motivation to engage with learning networks.

Barrick, Mount and Strauss (1993) and Gellatly (1996) identified that the personality characteristic of conscientiousness was positively linked to motivational processes within individuals. This current research supported that with almost two-thirds of participants overall reporting accuracy with this trait. This is also in keeping with the findings of Zhao and Seibert (2006) who found conscientiousness to be most indicative of entrepreneurial status and defined it upon the characteristics of being deliberate and methodical toward the fulfilment of responsibilities. Therefore, if the network is in keeping with achieving participants' goals, they will be more inclined to sustain engagement (Locke, 2000). Agreeableness did not represent a particularly entrepreneurial trait from previous research (Zhao and Seibert, 2006), however, within this current research, it was the personality trait which had the highest accuracy with participants with 88% of participants reporting accuracy. The personality inventories within this current research were conducted after participants had been involved with their respective networks for over a year. Therefore, those participants who completed them were participants who had sustained engagement and it can be hypothesised are more agreeable in engagement with networks. Future research could benefit from conducting personality inventories at the very beginning with all participants entering onto a network programme.

9.3. Research Question Two (RQ2) - Investigate what motivates entrepreneurs to sustain engagement with networks

The second research objective was to investigate what motivates entrepreneurs to sustain engagement with networks. This is the crux of this current research. Identifying what it is that motivates individuals to sustain their engagement is most significant in determining what it is that sustains participants' motivation over time.

Previous research (Jack et al., 2008; Martinez and Aldrich, 2011) called for longitudinal studies to be conducted into network dynamics to facilitate understanding of how networks evolved. This current research, therefore, is of significant value as it provides insight into networks that failed to become sustainable and those which did in fact become sustainable community structures and highlights the factors influencing this process. A unique combination of the right people, with the right purpose/goal, with high levels of commitment, the right structures/processes to create the right network environment leading to focussed, contextual, action which results in value for themselves and their businesses will lead to a sustainable network.

The current research found that clarity of network purpose among network participants increases participants' motivation to engage with learning networks. This encompasses the goals and ethos of the networks. Bessant and Tsekouras (2001), Morrison, Lynch and Johns (2004) and Foley, Harrington and Kelliher (2006) all highlighted this requirement for network purpose and goals to be clear. Within this current research, the network purpose was not clear to all participants and the evidence from the data suggested that this was something all the networks struggled with. Before the networks formed, there was a huge amount of information provided by the SLNIW team outlining the purpose of the networks. However, within the sample (17) of participants who were interviewed after one year of network engagement, only one participant was sure about what the networks had been about. Within observations of network meetings, the theme of network purpose was revisited regularly, twice within the female network in Wales and up to as many as five times in the male network in Wales. Purpose was highlighted by participants as necessary for

the attraction of new participants to the networks as without a clear purpose to outline to new participants, it would be challenging to get them to participate. As part of this research, the author visited the LEAD Wales programme in Swansea University where they had achieved a huge amount of commitment from their participants. They had utilised a "contract of engagement" when signing up participants and it was very effective in ensuring participants understood the parameters of their participation and understood exactly what was required of them. Finally, it was identified from this research that network champions are imperative to reinforcing the network purpose and keeping the networks on track. In the cases of four of the learning networks studied, the network champions took on strong leadership roles. This is in keeping with the literature surrounding networks as Bessant and Tsekouras (2001) and Gausdal and Nilsen (2011) identified the critical role that leadership plays within the sustainable development of networks.

In terms of the sustainable development of the network structures, those networks that engaged with routine structures and processes supported their engagement proved more valuable and successful than those which did not. In the end, the Welsh networks ceased meeting while the Irish networks continued. The Irish networks were significantly more organised than their Welsh counterparts and approached their networks with a strong sense of routine. Bessant and Tidd (2007) identified the challenges in running successful knowledge networks and the role that basic logistics have in ensuring their development. Table 9.1 presents the routine of each of the networks studied in this current research, the structure and processes they employed and the purpose of their networks. Routine was present across the three Irish networks but the structures employed varied; and the male network in Ireland would not have continued without the amalgamation of the three networks. This shows the importance of routine on one hand but more importantly, the necessity for the structures and processes surrounding network operation to be in place as well as to ensure regular, valuable network engagement.

	Routine	Purpose	Structures & Processes	Outcomes	Status
Female Ireland	Same day, date, venue	Learning, Action and Support	Organised and structured with strong planning	Network participants gleaned great value from the network and after significant discussion and organisation of facilitator to handle the process, agreed to amalgamate with the other Irish networks	Still meeting as amalgamated group engaging in the same routine from network formation (January 2015)
Male Ireland	Same day, date, venue	Learning	Loosely structured with moderate planning	After 18 months, the network decided that the group could only be sustainable if amalgamated with the other two Irish networks	Still meeting as amalgamated group engaging in the same routine from network formation (January 2015)
Mixed Ireland	Same day, date, venue	Learning	Organised and Structured with strong Planning	Committed network with two new members integrated successfully; open to the amalgamation of the groups as put forward by the Irish male network	Still meeting as amalgamated group engaging in the same routine from network formation (January 2015)
Female Wales	Varied; routine from 11th month	Support and Learning	Initially lacking structure; more formal with time; required SLNIW extension to motivate sustained engagement	There were a strong core of nine participants in this network who were primarily motivated to engage to support one another. After initial SLNIW withdrawal, meetings were sporadic but the extension period motivated the group to continue for a time	No longer meeting (August 2012)
Male Wales	Varied; routine from 11th month	Learning	Initially lacking structure; more formal with time; issues with membership numbers	There were a core of six members in this group who engaged well together but they lacked structure and focus and the group naturally fell away with no official cessation	Ceased meeting as a network before SLNIW extension; though three participants attended training provided by SLNIW during the extension period
Mixed Wales	Varied	Learning and Support	Lacking structure and focus	Network core reduced to six from very early in the process. There were two significant business developments within this network which occurred following feedback from their network peers	No longer meeting after SLNIW support was withdrawn (May 2012)

Table 9.1: Overview of Impact of Structures and Processes on Sustained Engagement (source: current research)

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Each network had autonomy over the purpose and structures that they each opted for in the development of their networks. Within the networks in Ireland, the female and the mixed networks opted for very similar structures and processes while the purpose of the female network strongly advocated "action" from their engagement. This is supported by Kyrö (2015) who advocated the role of action in entrepreneurial learning. This "action" focus was highly valuable for this network and ensured that engagement was resulting in value for these participants. This is in keeping with Wenger, Trayner and deLaat (2011) and the cycle of value creation as these participants were applying and realising the value of their engagement (cycles 3 and 4 of the *cycle of value creation*) which maintained positive valence (Vroom, 1964) toward the behaviour of engagement which therefore sustained their motivations to engage with the learning network.

Provan, Fish and Sydow (2007) identified that network structures and governance require attention within network research as very little work has been done with regard to determining what works best in the development of networks. Given the longevity enjoyed by the Irish networks, it appears that engaging in routine structures provides the networks with a good basis for development. However, as seen in the development of the male network in Ireland, routine alone is not enough and it is imperative that routine is structured in such a way as to ensure valuable engagement. Linking back to the discussion around network purpose and leadership, the structures and processes employed in networks require leaders/facilitators to ensure this happens. Foley et al. (2006) highlighted the critical role that external facilitators play in learning networks; however, Bessant and Tsekouras (2001) and Gausdal and Nilsen (2011) while recognising the necessity for leadership and facilitation, did not insist upon the provision of this by an external agent. Within this current research, there were network champions who took on leadership roles within the networks. However, there was no formalised process around which this happened. Ideally, networks should have recognised facilitators/leaders to drive the process and encourage full participation from all members.

The fifth finding of this current research was that a network environment where there is a high degree of accountability, peer-to-peer engagement, support, sharing and trust increases the likelihood of entrepreneurs remaining engaged in the network. Of all six networks studied, only one network, the female network in Ireland, was successful in achieving high levels of all of these characteristics.

Table 9.2 presents the overview of the environment characteristics observed in each of the networks studied in this current research.

Network	Accountability	Peer-to-Peer Engagement	Learning	Support	Sharing	Trust
Female Ireland	High	High	High	High	High	High
Male Ireland	Moderate	High	Moderate	Moderate	High- for some participants	Moderate
Mixed Ireland	Moderate	High	High	Moderate	High	High
Female Wales	None Observed	High	High	High	High	High
Male Wales	Low	High	Moderate	Low	Moderate	Moderate
Mixed Wales	Low	Moderate	Moderate	Moderate	High – for some participants	Moderate

Table 9.2. Overview of network environment characteristics (source: current research)

The female network in Ireland provided great value to participants and thus these participants demonstrated the highest levels of loyalty to their network. Figure 9.1 presents an overview of attraction and loyalty measures collected for each of the networks, demonstrating how the female network in Ireland reported the highest levels for the majority of these factors (seven of 11 measures).
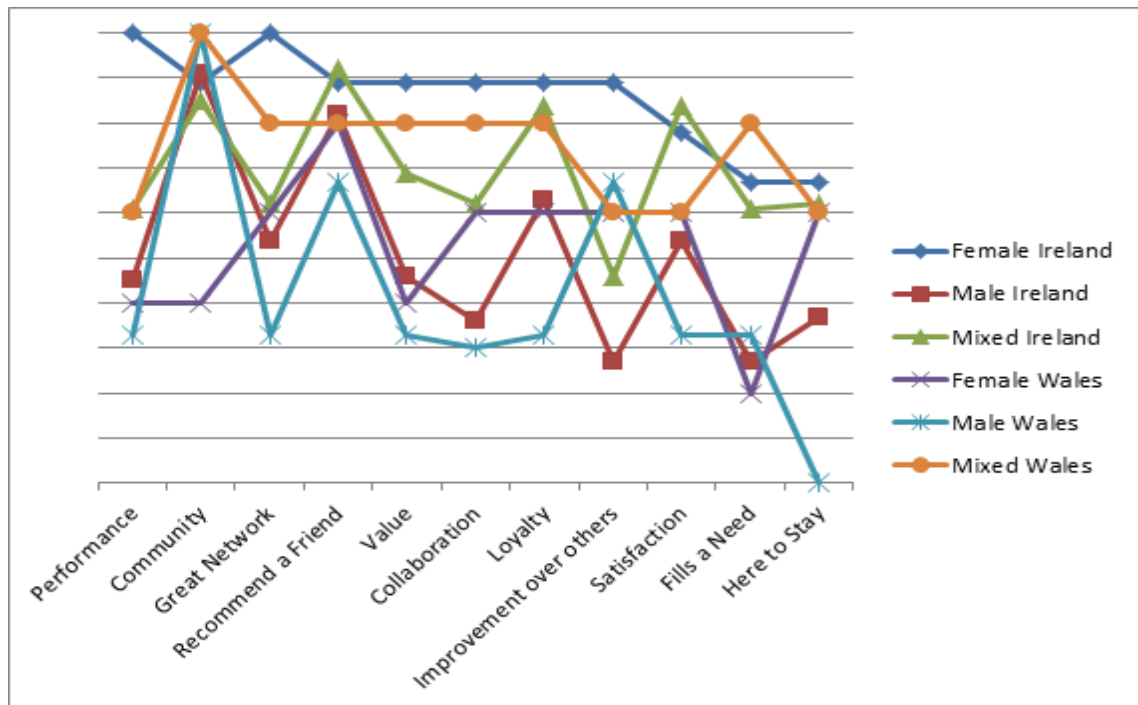
Fig. 9.1. Loyalty and Attraction measures for each network (Source: current research)

Within the theme of accountability, it is appropriate to look to social exchange theory and Cropanzano and Mitchell's (2005) definition that "social exchange comprises actions contingent on the rewarding reactions of others, which over time provide for mutually and rewarding transactions and relationships" (p.890). Thus where there is accountability between network participants, the motivation induced under social exchange theory will be maximised. The theme of sharing is inherently linked into Social Exchange Theory as it feeds into reciprocal transactions between individuals whereby the value provided will be reciprocated. Where participants are realising value (Wenger et al. 2011) from their engagement, they will perceive positive valence toward network engagement and thus their motivation to engage will sustain (Vroom, 1964).

Peer-to-peer engagement has been advocated as the most efficient means of facilitating entrepreneurial learning (Kutzhanova, Lyons and Lichtenstein, 2009; Bergh et al., 2011). Within this current research, this proved true, with the most valuable and meaningful learning for participants coming from the knowledge and experience offered by their peers. In fact, the diversity of members was advocated by participants in terms of the variety of perspectives offered in meetings. The mixed network in

Ireland engaged with nine trainers over the course of network engagement but it was asserted that even with the input of external expertise, it was still the inputs of network participants within the context of the training where the most value was achieved. This current research supports previous research advocating the peer-to-peer context of entrepreneurial learning and support. Furthermore, it also supports the inclusion of external expertise which is in keeping with the needs of participants. However, the delivery of the training must be inclusive and engage the participation of the entrepreneurs to provide the most significant value.

Isolation among SMEs can cause both personal difficulties and business development challenges (Ruef, Aldrich and Carter, 2003) where entrepreneurs do not address the isolation they are experiencing (Hamm, 2002). Kutzhanova et al. (2009) asserted the importance of networks for entrepreneurs to overcome these feelings. This current research highlighted just how valuable networks are within this context. Fifteen of the 17 participants interviewed referred to the value of the supportive environment within their networks. From direct observations, it was deduced that participants' engagement was heightened when they were assisting their network peers through a problem they were facing. It was comforting for the entrepreneurs to see the issues they were facing were also being experienced by the other participants. This research supports the promotion of a supportive environment for the successful development of learning networks of entrepreneurs.

Finally within the context of the network environment, the development of trust between participants was crucial to the exchange of knowledge and experience (Neergard and Ulhoi, 2006). Previous research has advocated the role of trust in promoting inter-organisational exchange (Gulati and Nickerson, 2008) and network development (Bessant and Tidd, 2007; Lefebvre et al., 2015). Trust takes time to develop. Within the context of this current research, the learning networks engaged in induction sessions which aimed to accelerate this process and one particular session which was dedicated entirely to team-building was highly successful in this regard. In five out of the six networks studied, attendees of the team building day were less likely to withdraw than non-attendees. An interesting finding in this regard was that for male

participants, this was particularly relevant as none of the Welsh male participants who had attended the team building and only one of the Irish male participants who had attended subsequently withdrew from their respective networks, potentially indicating the requirement for teambuilding among male participants, particularly. However, the female networks were displaying strong levels of trust from the third network session whereas the male networks took significantly longer to engage as openly. Nonetheless, the necessity for trust was highlighted by participants of this current research as imperative to the successful functioning of the networks. Thus, trust-building mechanisms such as team building days are a valuable tool for assisting in the development of learning networks of entrepreneurs.

Over time, it became clear that the networks were beginning to take on the profiles of Communities of Practice. Recent research conducted in France on the Entrepreneurs Club of the Paris Chamber of Commerce, highlighted the evolution of this network to a community also with the shared identity of members being the key to this process (Lefebvre et al., 2015). Wenger et al. (2011) identified the challenges surrounding the differentiation of "pure" networks and "pure" communities, in fact, the characteristics often overlap. However, there were a number of key characteristics within Community of Practice theory which are exceptionally relevant in the case of the amalgamated Irish network from this current research, Bua. The Bua network which took on community characteristics in their evolution proved to be sustainable whereas the networks in Wales, ceased to meet. Communities of Practice members are informally bound by what they do together and what they have learned from engaging with each other. Wenger (1998) defined them on three dimensions, what they are about (joint enterprise), how they work (mutual engagement) and the capability they have produced (shared repertoire). The BUA network has worked tirelessly to ensure that they are continuously working to the purpose of learning, solution building and support of members; this is their joint enterprise. The dimension of mutual engagement is characterised by the means through which participants are held accountable to the other members of the group for implementing the learning and advice to take positive action in their businesses and report the results back to the network. Finally, the shared repertoire of Bua is in the solutions, business

developments and collaborations that have arisen from the network. The theme of *value* has been discussed throughout this chapter in the promotion of sustained motivation for engagement with learning networks and within the context of Communities of Practice, the life cycle of a Community is determined by the value that it is providing to members (Wenger, 1998). This is facilitated by the leadership of the communities. Leadership was discussed earlier in this section with regard to the successful development of learning networks. The development of networks and communities requires a focus on leadership; future programmes would benefit from the accentuation of this theme to ensure sufficient leadership is in place in the network. Wenger, McDermott and Snyder (2002) highlighted a number of characteristics that feed into the "aliveness" of a community. These are presented in Table 9.3

Characteristic of "Aliveness"	Current Research Finding
Design for Evolution	The act of amalgamating the Irish networks under the ethos of learning and support characterises the evolution
Inside/outside Perspectives	Bua was focussed on attaining the expertise required for the generation of knowledge under specific themes and were keen to engage with appropriate outside perspectives
Levels of Participation	The Bua network consisted of active, core and periphery members though the ratio of membership was not at the level advocated by Wenger et al. (2002) who proposed that only one third of members would be in core or active roles
Public/Private Spaces	Bua members engaged publicly at meetings and privately in one-to-one engagement for advice, collaboration, referrals, etc
Value	The value of engagement has been discussed throughout this chapter and is of tantamount importance to the sustained motivations for engagement
Familiarity and Excitement	Familiarity was achieved through the routine engagement of the network with "excitement" provided through external facilitators and workshops that the network engaged in
Community Rhythm	The effective rhythm identified for Bua was monthly engagement

Table 9.3: Community "aliveness" and current research (source: current research)

Table 9.3 presents a brief overview which demonstrates the characteristics of community aliveness and the associated characteristics from the Bua network in Ireland. With the community's life cycle determined by the value that the community/network is providing to participants, when a network is achieving value,

participants' motivation to engage will be sustained. Wenger et al. (2011) separated the value that can be provided in communities and networks into five cycles: (i) immediate value, (ii) potential value, (iii) applied value, (iv) realised value, and (v) reframed value. While participants maintain their position within/across these cycles, their participation represents value and thus their motivation to engage with the learning network is sustained. This cycle is a key component of the conceptualisation of this research, presented in Figure 9.2.

In Figure 9.2 it is presented that the "Entrepreneur (influenced by) – Personality and Values" combined with "Eight Core Network Processes" and "Enabling Aids" to create the initial positive motivation (+ VIE) to engage with the network. This creates positive valence for the individual to engage. At this point, they enter the first point on the cycle of value creation which is "Immediate Value". When participants remain on the cycle of value creation, moving through "Potential Value", "Applied Value", "Realised Value" and "Reframing Value", their motivation to engage is sustained over time. It is further conceptualised that the next level of engagement (achieved through sustained valuable activities) characterises the network as a Community of Practice. This is based upon the dimensions of "Mutual Engagement", "Joint Enterprise" and "Shared Repertoire". At this point, the network has become sustainable and participants' motivation is secured through the commitment they feel toward their network/community. Figure 9.2 also depicts the withdrawal of participants through the use of red arrows signifying negative valence (- VIE) depicting that participants who are not perceiving value from the network activities will not be motivated to sustain engagement. Understanding what motivates individuals to disengage from networks is helpful in determining what to avoid in the design of networks. Section 9.4 discusses this theme in relation to the findings of this current research.
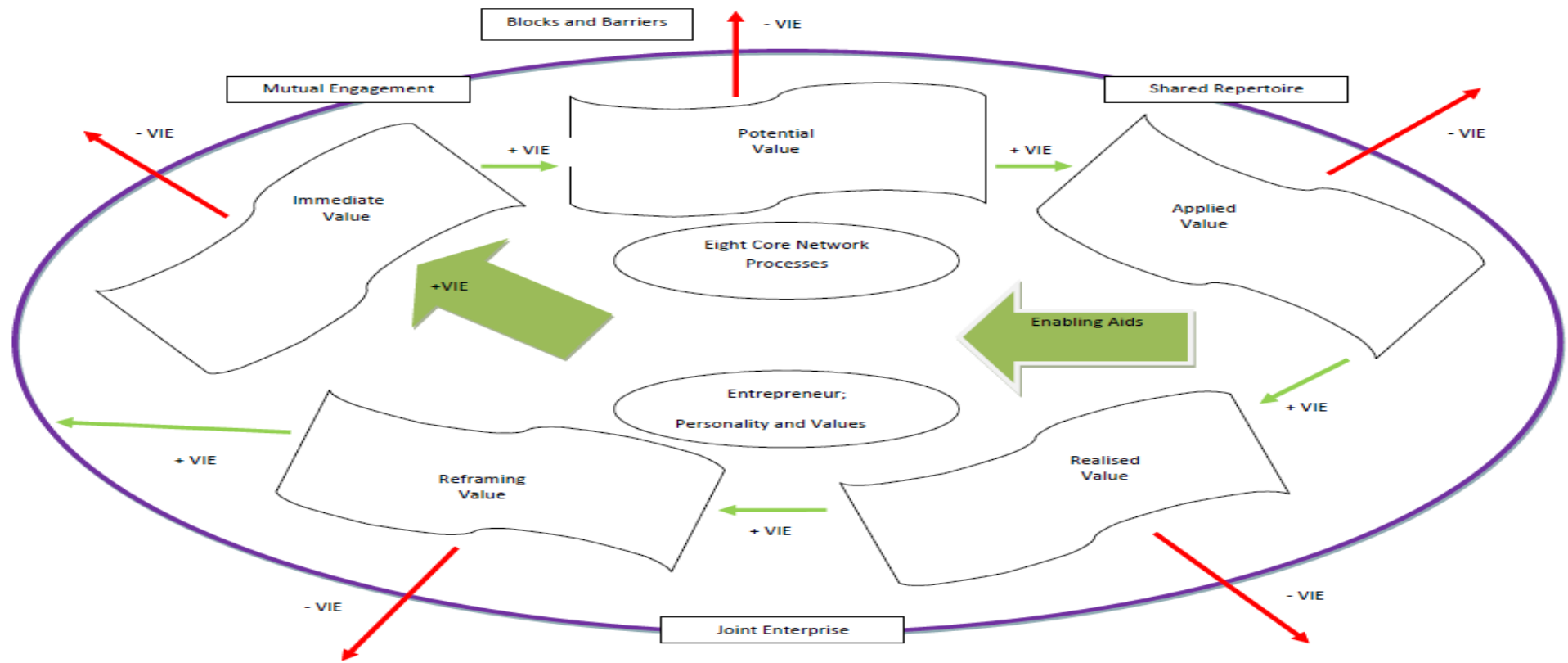
Fig.9.2: Research Conceptualisation (Source: current research)

9.4. Research Question Three (RQ3): Examine what motivates entrepreneurs to disengage with networks

The third research objective was to examine what motivates entrepreneurs to disengage with networks. Throughout the findings chapters, the theme of disengagement/participant withdrawal was analysed. There were participants who were never really committed in the first place to engage with the learning networks but who enlisted their participation anyway. Commitment is key to network success and therefore, recruiting people who are not committed is a fruitless effort. Naturally this theme of commitment was observed in what motivated entrepreneurs to sustain their engagement. The participants who ceased engagement could not have felt full commitment to the networks. Theory surrounding commitment was presented in Section 2.3.5 of the Literature Review and identified the importance of commitment for the development of relationships (see for example: Morgan and Hunt, 1994; Blankenburg Holm, Erikson and Johanson, 1999; Zhang and Hamilton, 2009; Wenger et al. 2011). As the depth of relationships required for Learning Networks to work is extensive, individuals who lack commitment to the process will have a negative impact on others before withdrawing their engagement altogether. However, it would be impossible for an individual to feel commitment toward an activity that was not pursuant to their goals (Barrick et al, 1993; Feather, 1995; Locke, 2000). Relating this back to Vroom's VIE theory (1964), an individual will not feel positive valence toward activities that are not instrumental to achieving the individual's goals.

From Wenger et al.'s (2011) cycle of value creation, it is expected that where individuals do not gain value from their engagement, their motivation to sustain engagement will naturally cease. Ultimately, individuals need to be fully and thoroughly informed of the purpose of the network and committed to that purpose BEFORE engaging and should only enrol if they are fully committed to that purpose. A key finding from this research is that a mechanism such as a "contract of engagement" is required when enlisting individuals for networks such as these. One of the most significant limitations of this research was the impact that lack of engagement had upon network participants; particularly in the male network in Wales where almost

half (45%) of participants recruited for this network NEVER engaged with any network activities. Potentially, this network would have formed more efficiently with the members who were committed had they not been so focussed on "searching for the members that they felt they had lost".

9.5 Research Question Four (RQ4): Determine if differences occur across gender and culture in the motivations of entrepreneurs to engage and remain engaged with networks

The final research objective was to determine whether differences occur across gender and culture in the motivations of entrepreneurs to engage and remain engaged with networks.

Again, researchers have called for research to be conducted that addresses the development of single gender networks (Hanson and Blake, 2009). This current research provides a valuable insight in this regard with longitudinal examination of two female networks and two male networks.

From a cultural perspective, there were significant differences noted across the networks in South East Ireland and West Wales. Logistically, West Wales represented a more rural region than South East Ireland and this seemed to impact the development of their networks. In the development of regional networks, geographical proximity is thought in some instances to assist network development (Sherer, 2003) and in others (Jorgenson and Ulhoi, 2010) to impede development. In this current research, travel was easier in South East Ireland and this meant that these networks were happy to utilise the centralised facilities of Waterford Institute of Technology (WIT) to conduct their network meetings and no participant had to travel for more than one hour to get to meetings. This certainly appears to have led to the more structured routine in Ireland. In Wales, in an attempt to facilitate all members, all three networks tended to move around and did not set a specific day each month (second Tuesday of every month, for instance) and this more limited engagement led to slower development. The development of trust and relationships is accelerated by face-to-face interaction

and thus, the author advocates the development of networks whose participants are relatively geographically proximate.

The gender differences were significant. Both the female networks in Ireland and in Wales, developed significant relationships and bonds, the Irish network particularly (facilitated by the heightened sense of routine they engaged with). The research of Ekanem (2015) highlighted the gender differences in the ways entrepreneurs learn and found that women were more inclined to engage in routinised learning. Thus, the routine nature by which they engaged in their networks may have induced a positive perception of the learning being achieved and in turn, the value being created by the network. In both countries, the male networks ceased to meet. The Welsh male network were the first to cease engagement and the Irish male network participants asserted that without the amalgamation of the Irish networks, it (the male network) would never have continued to engage in a structured way. Table 9.1 presented an overview of each of the networks, demonstrating these differences.

9.6. Conceptual Summary

Having completed a review of the literature, the information underpinning this research was synthesised into a framework for data analysis which was a graphical representation of the research hypothesis which was expanded to include CoP theory (See Figure 9.2). Network theory, outlining the necessary structures and processes, enabling aids and blocks and barriers to network formation, alongside the personality characteristics of the entrepreneurs under study, impact the entrepreneurs' initial motivation to engage. For those that engaged in these initial stages, it was assumed that the network activities held positive valence for them. Thus, it was conceptualised that they entered the first stage of the "Cycle of Value Creation" as outlined by Wenger et al. (2011). As the networks developed, participants' motivation to engage was either sustained (they continued to move through the stages in the cycle of value creation) or they perceived the activities with negative valence and were motivated to withdraw. Where participants' motivation to engage sustained and their engagement represented value to them, they had evolved into a community structure characterised

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by the themes of "joint enterprise", "shared repertoire" and "mutual engagement". This sense of community heightened participants' motivation to engage, ensuring sustainability.

9.7.   Summary

When designed well, entrepreneurs were motivated to engage with networks which provided them with access to highly contextual and applicable knowledge which assisted them in the development of their businesses. This style of network/community represents a highly cost-effective support and learning mechanism for entrepreneurs. While the tangible benefits are sometimes hard to measure, the motivational and supportive function of these networks is invaluable. While the intention in the design of the networks in this current research was never specifically for them to become Community structures, it was evident as they developed that that is what the networks in Ireland had become. Designing learning networks for evolution to Community structures would be incredibly beneficial to entrepreneurial development and can be achieved through the careful consideration of a number of factors. The participants must be from diverse businesses to facilitate a variety of perspectives, knowledge and experience. This diversity should also extend to gender as although the female networks formed and developed more efficiently than their male or mixed network counterparts, the fundamental idea of separating the networks by gender was not popular. The purpose of the networks must be transparent and considered by all those interested in participating as full commitment is necessary to ensure the successful development of the relationships and trust that must emerge in order to secure the ongoing commitment of participants. With the participants and purpose in mind, the structures and processes of the network activities must be such that they create value for participants so that they remain within the cycle of value creation and participants perceive positive valence toward the activities.

Learning networks represent a positive tool for enterprise development. Understanding entrepreneurs' motivations for engagement provides a distinct

advantage for the design, formation and development of such structures. Participants must be fully committed to the learning network process and ethos in the first place. The networks must then be structured to ensure value is perceived from network activities that generate positive actionable outcomes for participant businesses. Given the tantamount importance of peer-to-peer engagement, participant relationships must be nurtured and a positive environment of trust, openness and learning fostered. The successful creation of these conditions will promote entrepreneurs sustained motivation for engagement and the development of their enterprises will organically occur.

Chapter 10

The Learning Network

Research Journey

10.0. Conclusion, Limitations and Recommendations

This chapter concludes this thesis and outlines the implications of this current research from the perspectives of academics, practitioners and policy makers. The limitations of this research are presented and recommendations made for future work. The main body of the thesis is briefly summarised in section 10.1.

10.1. Thesis Summary

Chapter 1: Introduction and Background outlined the motivation for the study. It highlighted the requirement for research to be conducted into learning networks as a support mechanism for entrepreneurial development. The hypothesis of the research, the research questions, the conceptual framework and the contributions of this study were all outlined.

Chapter 2: Theoretical Framing, presented the theoretical framework upon which this research is based. Theories of motivation were addressed firstly, with specific attention paid to Valence Instrumentality Expectancy (VIE) theory and social exchange theory as these are inherently linked to the research context. Personality and its influence on motivated behaviour were also examined. The next section addressed theories of entrepreneurship in order to define the entrepreneur and identify characteristics common to entrepreneurs which influence their motivated behaviour. Network theory was then examined in this chapter with the various network types presented before focussing on the learning network construct in particular. In the initial conceptual framework of this research, Community of Practice theory was not included. However, as the research developed and the author presented her work for peer review, the importance of Community of Practice theory in the context of this study emerged. Thus, the final section of the literature review focussed upon Community of Practice theory. This chapter concluded with a framework integrating the components of theories influencing the hypothesis of the research presented again here in Figure 10.1.
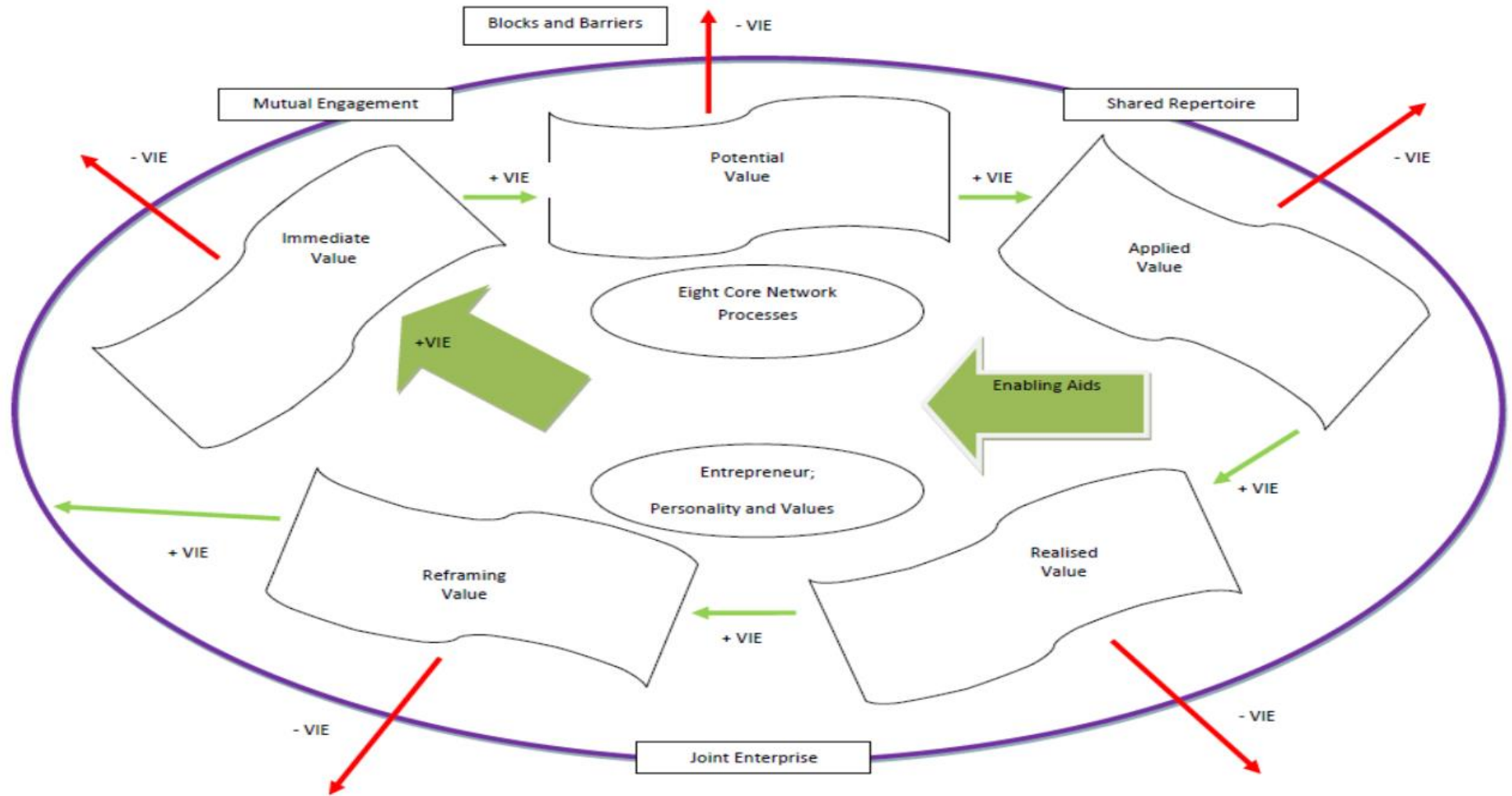
Fig. 10.1: Research Conceptualisation (Source: current research)

Chapter 3: Approaching Learning Network Research presented the author's research paradigm: pragmatist with influence from the critical realist and phenomenological perspectives. The author's priority was to address the research questions emerging from the conceptual framework and utilise all the tools required to achieve this. Thus a longitudinal mixed method research design was selected for this research. The research design and approach were described in detail with the various tools employed over the course of the study outlined.

Chapter 4: Motivations to engage with Learning Networks was the first chapter of data analysis and presented the participants details and the initial motivations for the participants of the study to engage with the networks. The initial motivations of the entrepreneurs in this study for network engagement involved connecting with like-minded individuals where they would be provided with the opportunity for sharing information, learning and accessing advice. There were some differences to note in the motivations of male and female participants with the female participants reporting more enthusiasm for sharing information, learning and new ideas than their male counterparts.

Chapter 5: Network Purpose, Structures and Processes for Sustaining Participant Motivation was the second chapter of data analysis and presented two key findings from this study. Firstly, that clarity of network purpose among network participants increases their motivation to engage with and sustain engagement with learning networks. This was inherently linked with the commitment experienced by participants; as when they fully understood the network purpose and were committed to that purpose, they were more likely to sustain engagement. Secondly, it was identified that defined network structures and processes enhanced commitment to networks and sustained engagement where network activities were efficiently organised to ensure valuable engagement for network participants.

Chapter 6: Personality Characteristics and Participant Motivation presented the data analysis in relation to the fourth finding of this research: Participants' personality characteristics play a role in the attraction they feel toward a network and their

motivation to engage and sustain engagement with the network. Agreeableness was found to be the greatest indicator of sustained motivation among participants in this study. In keeping with previous research, conscientiousness was also prevalent among participants and influenced their motivation to persevere with network activities, once congruent to their goals.

Chapter 7: Building a Positive Network Environment presented the final finding of this thesis: that a network environment where there is a high degree of accountability, peer-to-peer engagement, support, sharing and trust increases the likelihood of entrepreneurs remaining engaged in the network. The female network in Ireland had high levels of all of these characteristics in their network. This network was the most successful in sustaining participants' motivations to engage as the environment they created for their network created real value for participants.

Chapter 8: Bringing it all Together - Summary of Research Findings presented an overview of the findings chapters. Given the mixed method longitudinal approach adopted for this current research, a significant amount of data analysis was presented. Thus, this chapter provides a reminder of the key points emerging for each finding.

Chapter 9: A Blueprint for Enhancing Sustained Participant Engagement with Networks discussed the research findings in relation to previous research. It presented support for the framework (Fig. 10.1) that had been devised through synthesising motivation, entrepreneurship, network and Community of Practice theories. This showed that with the right participants, facilitated by the right network conditions, that relationships formed and the network activities created value for participants which sustained their motivation to engage. The relationships that formed among network participants were crucial to the networks' development.

10.2. Contributions

Table 10.1 outlines each research question (RQ) in turn and the chapter of the thesis and associated publication in which they are addressed. Understanding what

motivates entrepreneurs to engage and sustain engagement with learning networks over time was the overarching aim of this research. Thus, each research question had a role in building this understanding.

Research Question	Chapter(s) Addressed	Associated Publication(s) (See p. iv for list)
RQ1: What motivates entrepreneurs to engage with learning networks?	4, 5	9
RQ2: What motivates entrepreneurs to sustain engagement with learning networks?	5, 6, 7	1, 4, 5, 7, 8
RQ3: What motivates entrepreneurs to disengage with learning networks?	5	6
RQ4: Are there differences across gender and culture in the motivations of entrepreneurs to engage and remain engaged with learning networks?	4, 5, 6, 7	1, 4, 5, 7, 8, 9

Table 10.1: Research Questions and Relative Chapters and Publications (Source: current research)

This thesis contains a number of novel contributions, arrived at through directly answering the relevant research questions as outlined in the table above. The contributions are as follows:

- A structural understanding of the dynamic nature of learning network structures and the developmental processes that networks undergo as they form were outlined. In addressing each of the research questions in turn, contributions have been made both from a practical and theoretical perspective. Previous research has highlighted the requirement for longitudinal research into networks to capture this depth (Hoang and Antoncic, 2003; Jack, 2005; Provan et al., 2007; O'Donnell et al., 2011). Given this deficiency within the research, this contribution to theory in the developmental dynamics of learning networks is the most valuable contribution emerging from this current research.

- Given the complexity of the research methodology and the examination of the evolution of learning networks into Community Structures, this research contributes beyond basic learning network theory. The methodological contribution is significant given the dearth of network studies which consist of

(i) longitudinal, (ii) in-depth qualitative components and, (iii) mixed methods in their design. This research also develops the work of Wenger, Trayner and deLaat (2011) in the conceptualisation of the value that network and community structures can provide to participants, thus contributing to the field of CoP theory specifically in the entrepreneurship and inter-organisational context.

- Throughout the findings chapters, analysis was conducted based on the gender compositions of the networks. Though the female networks had great success, mixed gender networks emerged to be the ideal network composition. Within network theory, there exists interest in the development of single gender networks (Hanson and Blake, 2009; Hampton, Cooper and McGowan, 2009). While there was significant success observed within the female networks in this current research, the overarching preference among these participants from the female networks was that they would prefer to network in mixed groups, as this is more representative of "real life". While this finding is expected, a valuable contribution of this research is that it provides the empirical evidence to support this assertion.

- In the study of personality, this study contributes to network theory in identifying the positive role that the trait of conscientiousness has in sustaining the motivations of entrepreneurs to sustain engagement with networks. Given the fact that the personality inventories were conducted one year into network engagement highlights the relevance of the findings to the theme of sustained engagement. This is a significant contribution given the advantages identified with the development of relationships over time in network settings which lead to increased knowledge sharing, collaboration and trust (Jack, 2005; Cropanzano and Mitchell, 2005; Gulati and Nickerson, 2008; Zhang and Hamilton, 2009; Bergh et al., 2011; Lefebvre et al., 2015).

- From a regional comparative perspective, there were no significant findings in relation to culture specifically that influenced the outcomes. However, the networks in Wales ceased to meet as formal networks after a period of two and a half years. The networks in Ireland amalgamated into a single network and are still meeting almost six years after network formation. This outcome was

attributed to the structures and processes employed in the networks. It supports the finding that network structures and processes are fundamental to the successful and sustainable motivation to engage amongst participants.

- The practical contributions of this research are significant in the development of learning networks in the future. This is applicable not only to network facilitators but to individual entrepreneurs who wish to either create or participate in networks to develop their enterprises over time. The practical implications hold importance also for policy makers with regard to the support of entrepreneurs within regional economies. Fostering learning network structures such as these would empower regions to become more innovative and create value via maximising the skills and knowledge in the region and encourage synergy between enterprises. These practical contributions are discussed in more detail in sections 10.2.1 and 10.2.2.

10.2.1. Conclusions for SMEs and Entrepreneurship

Learning networks represent a highly effective and cost efficient means of enterprise development for entrepreneurs.

Network structures, processes and routines were paramount to network success. A significant advantage of learning networks is the manner through which they are driven by participant needs. However, it is important that these needs are addressed within the parameters of network structures to ensure network meetings occur, that meetings are valuable and that real change can be applied to working practices as a result of engagement with the network. Those networks that functioned within a routine structure were more successful and sustainable than those which did not (Irish networks continue to meet almost six years after formation).

Those participants that were committed to the network ethos and thus spent a significant amount of time developing their network environment were more successful than those which did not. With time, such committed, loyal participants developed their network environment into one of complete trust and accountability

and as such, encouraged heightened engagement resulting in valuable outcomes for participants and sustainability of the network.

Fostering learning networks represents a positive and efficient means of entrepreneurial development and support. This results in positive outcomes for the entrepreneurs involved. As such, policy focus should incorporate the development and nurturing of learning networks.

10.2.2. Implications for Policy

The findings emerging from this research reveal the importance of entrepreneur-to-entrepreneur engagement in the context of enterprise development and the motivation of entrepreneurs to engage in such activities. Enterprise policy is committed to the development of entrepreneurs; however, a number of the supports have not sufficiently addressed entrepreneurs' needs. The findings of this research revealed the huge opportunities arising from peer-to-peer engagement within the entrepreneurship context. Policy efforts could benefit from encouraging significant levels of engagement of entrepreneurs from diverse businesses in learning networks. The learning network structure facilitated support, learning, collaboration and solution building to occur in an efficient and cost-effective manner and was designed around the needs of the participants, as dictated by the participants themselves. As such, there is an opportunity for policy and programme development to utilise learning networks to provide these highly contextual benefits to entrepreneurs.

Traditional programmes and networks generally cease to function once the official facilitator completes their engagement. However, learning networks can survive indefinitely as long as the participants are continuing to achieve valuable engagement (almost six years after initiation, the Irish networks established in this study, continue to meet). Where entrepreneurs are gaining these benefits, their motivation to sustain engagement with the network is heightened and the learning networks in question become self-sustaining. Four focal points emerged from this study:

- Support is key, entrepreneurs experienced heightened motivation for the growth of their enterprises through the peer engagement they achieved on the networks. Sustaining the motivation of entrepreneurs to develop their enterprises will enhance the sustainability of regional economies through business expansion, potential for job creation and increased levels of business survival.

- Learning is necessary for the continued growth of enterprises. Programme and policy makers are continually searching for ways to improve the learning experience of entrepreneurs and as such, the success of the peer-to-peer learning element of these learning networks represents a significant benefit.

- Collaboration occurred organically within these learning networks where participants came together to work on projects jointly after relationships had formed. This can result in the development of spin-out enterprises which serves to grow the economy sustainably.

- Finally, one of the greatest benefits of learning networks is the solution building that occurs within this context. Participants found that the diversity in responses to the challenges they faced were vast and as such provided them with many perspectives for overcoming the difficulties they faced in the development of their enterprises.

10.3. Conclusion

This thesis was concerned with understanding what motivates entrepreneurs to engage and sustain engagement with learning networks over time. The focus of this research was on the dynamic nature of motivated behaviour in the context of learning network engagement. In order to capture this, a mixed method longitudinal research design was employed which was highly effective. Using 170 questionnaires and 223 monthly evaluations, basic information was gathered from participants. However, the most valuable data was gathered through direct participant observation (350 hours) and in-depth interviews (37). Table 10.1 outlined each of the research questions and the sections of the thesis where they were addressed. This current research

thoroughly addressed the dynamic nature of network development. Given the scarcity of research addressing network dynamics, this contributes significantly to research in this domain.

10.4 Limitations of the Research

In every research study, there are some limitations to be noted. Therefore, firstly, a limitation of this research was that it occurred in the context of six learning networks developed by the SLNIW project. The data collection and analysis of these networks alone represented a significant undertaking for the author. However, it is likely that the research may have been more valuable had the six SLNIW learning networks been analysed in a comparative study with other networks having different formation processes; for example, sector-specific networks.

Secondly, within the research design, the personality inventories were not in the original data collection plan. It was during the observation of the networks that it became increasingly apparent just how much personality was impacting the development of the networks. Thus, 12 months into network engagement, the author elected to include personality inventories and conduct them amongst the remaining network participants. This was effective in terms of highlighting the personality characteristics disposing individuals towards sustained network engagement. However, given the number of participants that had withdrawn at this stage (45 of 104 recruited participants had withdrawn) the value of this tool was limited. It would have been highly valuable to conduct these inventories at the very beginning and thus identify those personality characteristics dominant amongst participants who withdrew also.

Thirdly, within the design of the network process, there was an induction period which included teambuilding for all participants on a network-by-network basis. The purpose of these sessions was to equip participants with the skills they would require to become self-facilitating networks. While participants did complete evaluation forms from these sessions and these sessions were discussed in the interviews, it would have

been beneficial to conduct a deeper level of research into the impact of these sessions. For example, did participants who engaged fully with the induction sessions achieve more valuable engagement and therefore more valuable outcomes from the networks than those who did not?

Finally, an area that could have been addressed in more detail within the research was with regard to the impact of participants withdrawing from the networks on those that remained engaged with the networks. Some of those who withdrew from the networks were interviewed and their motivations for withdrawal were analysed. Similarly, within the interviews conducted with those that sustained engagement, they were asked about participants withdrawing and the impact this had on network development. However, further examination would be warranted into the full extent of the impact of withdrawing participants on the participants who remained.

Section 10.5 presents recommendations for future research emerging from this study.

10.5. Recommendations and Future Work

This current research has provided significant understanding of network dynamics. Thus, a natural avenue for future work is in the application of the learning emerging from this study into the design of new learning networks. This would provide a practical landscape to determine the applicability of the principles derived from the current research. The author would like to develop these networks across different contexts to determine, for instance, whether it would be valuable to develop these structures in specific sectors. This was highlighted above as a potential limitation of this research (that networks created in different contexts were not also analysed). This would provide for research which could continue to develop learning network theory and further increase the understanding of the developmental dynamics of networks. The research approach of the author is such that the focus on "real world research" signifies that future work will also provide practical value to entrepreneurs while at the same time generating valuable research

Given the research limitations noted in Section 10.4, it would be beneficial to begin a programme of network research by conducting personality inventories with all participants at the beginning of creating a new network so as to be able to identify the personality characteristics impacting sustained engagement as well as withdrawal. Such research may also identify the "personality characteristic" mix required to create and develop self-facilitating, sustainable learning networks.

While background information about participants' businesses was collected as part of this current research, the emphasis was on the motivation of participants to engage and sustain engagement with learning networks over time, and not on the impact of participant engagement with learning networks on business performance. Therefore a recommendation for an interesting piece of future research would be to include significant analysis on the business development and performance of participants' businesses. This could be conducted alongside the network research methodology whereby the researcher would examine in-depth the impact of network engagement on business development activities. This would involve a significant research study whereby the researcher would ideally become embedded in both the network and the participant business to analyse the activities that can be linked to the network. This would provide an opportunity to quantify the impact on participants' businesses resulting from their network engagement. This would also significantly enhance network theory.

Finally, ensuring that the research is published is highly important. As such, the author has identified a number of journals that she will target for the dissemination of this research; including, but not limited to the following:

- Irish Journal of Management;
- International Small Business Management;
- Journal of Management Studies;
- Entrepreneurship and Regional Development;
- Regional Studies;
- Journal of Mixed Methods Research.

The author is keen to collaborate with other researchers in the development of papers with a view to incorporating the research of others into future work.

10.6 Reflections on my Learning Network Research Journey

Completing this PhD project was one of the most significant and challenging undertakings of my life. When I began the research, I had unlimited passion and enthusiasm for the project. As such, I selected a methodology which required an intense amount of time and effort. The longitudinal mixed method design I elected meant that I spent three years collecting a mine of data. I immersed myself completely in the networks.

Upon completion of the data collection, I was absorbed by the analysis. I became quite overwhelmed by the data. This lasted approximately two years. However, my commitment to the network participants, the research and my supervisor meant that I continued on my path, albeit incredibly slowly. While this represented a painful process, the resultant journey was one of immense value.

The learning I have gained and the personal growth I have achieved from completing this process is unparalleled. It is surreal to think back to all the hours spent writing up my observations and reflections from network meetings, endless coding of a maze of data. All that time, all those reflections, all that immersion in the data, has allowed me to emerge with a piece of work I am truly proud of and that makes a significant contribution to theory and to practice.

An interesting observation that I can make now is that there was no need for me to conduct so many interventions in my research process. This is the most significant learning. The longitudinal design married with the qualitative depth achieved via the direct participant observations and interviews revealed the heart of the network dynamics at play. This allowed me to capture the motivations of entrepreneurs for their sustained engagement with the networks. The other interventions had their place, and provided a solid backdrop to the research. However, the value they added

did not merit the quantity of time taken to collect, code and analyse them. Alas, this is a realisation I have made upon mature reflection of the process and one that could never have been made without completing the PhD journey.

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Appendix A

Example of Completed 6-Monthly Questionnaire

SLÑIW

Sustainable Learning Networks in Ireland and Wales

Centre for Enterprise Development and Regional Economy (CEDRE), School of Business, Arclabs Research and Innovation Centre, West Campus, Waterford Institute of Technology, Ireland   Tel: +353 51 845681

SLNIW Project 6 Month Evaluation - January 2011

The following questionnaire seeks to evaluate your experience as a member of the Sustainable Learning Networks in Ireland and Wales programme. The information you disclose will be used for general research purposes only and will _not_ be disclosed to any third parties.

Please answer all questions to the best of your ability keeping in mind your involvement in your network over the past six months (July – Dec. 2010). Where applicable please circle or tick (√) your chosen response to each question.

General Details			
Name			
Organisation Name			
Network	Male ○	Female ⊘	Mixed ○
Please state the highest level of education you have attained	W.I.T. '82		

Organisation Details
Please provide a description of current products/services
Self Adhesive Label printer.
Please provide details of recently added products/services
Please list your main markets /export markets served
Food & Drink Sector, 1% export to UK/France

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Business Developments	Full Time	Part Time
How many people do you currently employ	3.	
Do you expect to take on any new employees in the next 6 months	● Yes	○ No
Please indicate the **annual turnover** of your business in the last 12 months	€360 000	
Please indicate the **profit** as a percentage of turnover in the last 12 months	10 %	

For each of the item below please indicate (√) if in your business they have increased, decreased or remained the same. For instance, has the *number of product/service offering*, has it increased, decreased, or has it remained the same.

	Increased	Decreased	Same
Number Product/service offering	○	○	✓
Number of employees	○	✓	○
Turnover	✓	○	○
Profit as a percentage of turnover	○	○	✓
Number of customers	✓	○	○
Number of markets	○	○	✓

Which of the following are your main *constraints to growth*? Please tick (√) as appropriate.	✓ Finance
	✓ Staff
	○ Lack of work
	○ Confidence
	○ Insufficient sales
	○ Current economic downturn
	○ Other (please specify):

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Business Developments (cont'd)			
Can your involvement in this network help reduce barriers to growth	○ Yes		○ No
Please specify how			

Have you diversified into a new business area in the last six months	○ Yes		○ No
What percentage (%) of your customers are local, national and international	Local	National	International
	30%	69%	1%

Please tick (√) what are the *growth intentions* for your company?	○ Develop new products
	○ Develop new services
	○ Enter new domestic markets with *existing* products/services
	○ Enter new domestic markets with *new* products/services
	○ Enter new international markets with *existing* products/services
	○ Enter new international markets with *new* products/services

Learning	
	○ Reading books/internet (self taught)
	○ Attending courses
How do you currently learn new skills and knowledge? Please tick (√) as appropriate.	○ Talking to others that work in my business
	○ Talking to others from different businesses
	○ Professional affiliation/group
	○ Networking
	○ Other (please specify):

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Learning (cont'd)		
Can a learning network help you develop new skills	⊘ Yes	○ No
Can a learning network help you train employees	⊘ Yes	○ No

Which of the following statements best describe a *learning network* (please tick (√) one response)	○ A place/event where you meet new business contacts
	○ An event organised by a professional body/association
	○ An event where you learn some aspect of business performance
	⊘ An environment where participants learn from each other
	○ An event where participants learn some aspects of business performance improvement from a presenter

Over the last 6 months (July – Dec. 2010), which of the following topics were discussed in your network meetings. Please tick (√) as appropriate.	⊘ Business development
	⊘ Business problems
	⊘ Finance for business
	⊘ Taxes, VAT, rates etc.
	⊘ Government support
	⊘ Social
	○ Family
	○ Sport
	○ News
	⊘ Ideas
	⊘ Personal problems
	○ New products/services
	○ New markets/exporting
	○ Other (please specify):

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Learning (cont'd)	
What are the main *advantages* **of belonging to the SLNIW network**	○ Provides an opportunity to establish business contacts
	○ Helps increase sales
	○ Provides training/learning opportunities
	○ Enables the sharing of ideas/resources/skills
	○ Facilitates the generating of ideas/innovation
	○ Other (please specify):
What are the main *disadvantages* **of belonging to the SLNIW network**	○ Time consuming
	○ This network does not address my needs
	○ It is difficult for others to join this established network
	○ You can quickly run out of new networking opportunities
	○ It does not offer the services that I require
	○ Other (please specify):

Please circle the response that best describes your reaction/opinion to each of the following statements in relation to your network over the last six months (July – Dec. 2010).	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
The other members of the network were friendly	1	2	3	**4**	5
I was able to talk to a number of people in the network	1	2	3	**4**	5
The other members of the network were not interested in talking to me	**1**	2	3	4	5
I was able to bounce some ideas off the other network members	1	2	3	**4**	5
The other members gave me some good advice	1	2	3	**4**	5
It is difficult to talk about financial details with the other network members	**1**	2	3	4	5

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Please circle the response that best describes your reaction/opinion to each of the following statements in relation to your network over the last six months (July – Dec. 2010).	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
I was hoping to increase sales by being part of this network	1	2	3	4	5
The other network members were happy to share information	1	2	3	4	5
There was some tension in the network	1	2	3	4	5
I got on well with the other members of the network	1	2	3	4	5
There were some disagreements in the network	1	2	3	4	5
I was hoping to develop new markets by being part of this network	1	2	3	4	5
Trust is important in a network	1	2	3	4	5
The other network members were very supportive	1	2	3	4	5
People who network are more likely to have a successful business	1	2	3	4	5
This networks provide learning opportunities	1	2	3	4	5
This networks can help entrepreneurs become better managers	1	2	3	4	5
I have learnt new skills from this network	1	2	3	4	5
I have not learnt anything much from this network	1	2	3	4	5
Co-operation is better than competition	1	2	3	4	5
The other network members helped me with my business problems	1	2	3	4	5

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Reflection					
Please circle the response that best describes your reaction/opinion to each of the following statements keeping in mind the following statement: **My involvement with THIS network over the last six months (July – Dec. 2010) has impacted/changed...**	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
The number of people I now employ	1	(2)	3	4	5
The way I communicate with employees	1	2	3	4	5
The way I develop employees	1	2	(3)	4	5
The way I train employees	1	2	(3)	4	5
The way I manage people	1	2	3	(4)	5
The way I manage my business	1	2	3	(4)	5
My involvement in this network has positively impacted *business growth*	1	2	(3)	4	5
If yes, please indicate how					
My involvement in this network has negatively impacted *my business*	(1)	2	3	4	5
If yes, please indicate how					
My involvement in this network has positively impacted my *business development intentions*	1	2	(3)	4	5
If yes, please indicate how					
Has your involvement in the SLNIW programme positively impacted *you, your business or both*	○ You		○ Your Business		○ Both

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SLŇIW
Sustainable Learning Networks in Ireland and Wales

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What are your key *motivations* for remaining involved with this network? Please tick (V) as appropriate.	○ Collaboration
	○ Personal contacts
	○ Enabling innovation
	○ Information sharing
	○ Overcome isolation
	○ Learning
	○ Advice/problem solving
	○ New ideas
	○ Improving effectiveness
	○ Socialising
	○ Problem solving
	○ Technology
	○ Economies of scale
	○ International business
	○ Sharing skills
	○ Sharing resources
	○ Influence peoples opinion
	○ Positive effect on the local economy
	○ Other (please specify):

How has SLNIW helped your business

networking opportunities improve my networking skills. guest speakers (social media, business planning) added value

What are you achieving from your SLNIW network

sharing ideas with likeminded people generating new ideas.

Please indicate how the SLNIW programme can be improved

continuing with flexible Regular events with networking opportunities, making speakers available.

www.slniw.com

Appendix B

Example of In-Depth Interview Transcript

Date of Interview: **Time:**   **Location:**

Date of Interview:13/04/11 **Time:**10.30am   **Location:**██████

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Technology
Number of employees:3
Location of business: Llandysul, Wales
Type of network belonged to: Mixed

Prior Networking Experience

1. Before joining the SLNIW network, were you already a member of a network?

I've been involved very infrequently with the software alliance in Wales; we've been involved with the University Business team in Aberystwyth because we used to have the business up there in the technium building and one of the things to come out of that was the skills network that I have which is trying to promote links between university and commercial skill settings. There was a lot of those networks going on and back at the time when this came around I thought we have a lot of networks going on can we not get these to gel together so I've been on the fringes; they were far more formal business networks for people to come together.

a. What attracted you to that network?

The main things for the software alliance; being in Wales trying to be aware of what the IT software industry was doing in Wales and again the links with the university environment one of the key things in terms of the growth bit and ties between the university and small enterprise in Wales has been quite strong. The key interest was the opportunities to get to presentations, find out what's going on in the trade so that's really a learning opportunity. Similarly with the AberBang skills centre which was a learning opportunity. And for them they were trying to see how universities could feed back training to employees and at the time I had more employees and I was looking at how to cascade training to them.

How long were you involved with those? Or are you still involved with those?

I'm still involved. It's infrequent. One of the problems we have is that we are in a very dispersed area of the world and software alliance Wales tended to deliver a lot of their activities in Swansea. AberBang skills centre was all the way up to North Wales so I had an ongoing relationship with them through phone and email but I must have been with software alliance 3 years; It relaunched and rebranded last year and tried to make themselves a little more useful and the leadership has moved to Aberystwyth, mid Wales now. The skills centre isn't really a network, it's more like a small environment of opportunities. Again it's been a good year and a half.

b. What made you leave networks you were previously involved in?

I don't think I've ever willingly retired from a network but the difficulty is that my work takes me away and it's very difficult to remain engaged face to face. All this wonderful IT technology, emails and that allow me to keep abreast of what's going on but actually physically getting to meetings; and I haven't been able to attend the last number of meetings because my work has me in London and that's it. I've not wished to leave networks because they do provide a range of opportunities for me but it is difficult. It's a balancing act. One of the things I've; the Ireland Wales networks are actually quite compact; you've maybe got 10 people in the network and actually what makes them work in many ways is you're developing a character relationship with the individuals. But one of the things I suppose I've been looking at within the networks is how I can learn from that and take that and cascade it to other people. Admittedly, our business has contracted in size but when this started, I was actually looking for opportunities for my employees and one of the issues then within the network is whether to substitute and how that dynamic might work because I might not be here because I'm head of a business and get drawn everywhere but I've got people around who could benefit from those opportunities these networks provide. That's one of the challenges I've seen. The SLNIW network is a bit different perhaps because I think it's based around the character relationships but perhaps in those more formal networks, where yes, you're the communications link but the recipient of that network is actually not me, but my employees. Unfortunately, when we had the presentation and the Irish participants came over and I wasn't able to attend; ████████████ went up and they actually took that opportunity in the conference style and that was really good because otherwise I feel like I'm hogging the networking and I get all the fun!

Successful Network Experience

2. What, to you, is a successful networking experience?

Certainly I don't think I've been to a networking event where…the SLNIW (with the character relationship style) network I would struggle to find any event that did not deliver something ie an opportunity to get out of the business environment, to meet with other people and the thing is that the success with the SLNIW one is that there's a focus around some sort of session, some sort of delivery piece of information or some insight being given in a formal way and then you have the informal networking catch-up which is almost; its not pressurised. I guess people are looking for opportunities from other members but a lot of the time it's more about the learning experience and you're in an environment of trustworthiness, there's a recognition of confidentiality in that respect; integrity's another good word. In that environment you share an issue and though you might not be able to solve it, you feel the burden is shared in some way. In the network setup we have for SLNIW, I think that works. People have come to it …a lot of them are quite small enterprises, if not individuals so I think the problems they're facing have a common ground. Even some of the bigger organisations…it's an entrepreneurial network, regardless of the size of the

organisation behind that person. The people you're meeting are the entrepreneurs facing similar challenges. So from that respect, I think all of them are successful because they cover both those elements; there's something formal to take away from it but also there's a social environment. Us entrepreneurs don't tend to get out much. I see there's a big geographical issue; it's difficult; there aren't networks in this location in Wales; it's quite rural so you can't connect very quickly with the Chambers of Commerce; they do exist to a certain extent in South Wales but you haven't got that formal professional networks you can just drop into. You're also not in a location that you can pop out on a Friday lunch time and be with lots of people. You've got to take a step to get out there networking and the very fact that you do that, you sort of relax cos you've got away from everything.

In terms of the other networks, the success elements are the combination of networking and the formal take away; in those instances the difficulty always being how do you break into that networking. It's all well and good to sit in a conference hall and get talked to but then you have to break out for coffee or lunch or whatever; how on earth do you broker, as an individual coming in, those sorts of clicky groups. Sometimes you walk away saying yes I've taken away something, but did I really get the chance to talk to so and so and actually do a bit of profiling.

I went to aberbangs skill centre conference last year and that was quite interesting because a lot of it was a mix of academic and commercial business. You probably had more academics. They had these tables setting and they put groups together and through that at the end of the day they did networking games and that and that was quite interesting cos you did get to at least discuss what you're doing and share experiences. From the academic side it was quite interesting; these businesses and what they're trying to do. From a business side, seeing what you might get out of academia; there's an interesting one. Those break out ideas are quite fun. Everyone's quite reticent initially but you get into it and so I think it is the marriage of formal feedback and presentation and breaking down the barriers to let you network a bit more.

SLNIW Motivation to Engage

3. Before agreeing to take part in the SLNIW network, what did you think the networks were about?

At the time, there were a couple of these other networks going on and it was interesting because actually, the combination of Ireland and Wales was quite interesting. I'd never thought about getting into the Irish market; clearly there's a partnership there and there's a similar rural small enterprise characteristics so I thought that would be quite interesting to find out a bit more about that. This is a network that might provide opportunities that way. In terms of how it would work out, I didn't really know. I envisaged that it would be a facilitated sort of networking idea; in the sense of perhaps feeding back insight from different businesses and

maybe that's shared from within the membership and then the more informal social setting. I didn't really see it as anything so different and I think actually I was encouraged …certainly the first few events where we were getting into the groups and we had the big meet in aber to kick off. There seemed to be quite crazy stuff going on in terms of relaxation; it was really interesting and was refreshingly different. I think it possibly weeded out the people who were looking for a more straight-jacketed formal network selling business idea. I think support network is probably the wrong term but I'm using this phrase character relationship but it's networking on an individual level and it's more an opportunity to share ideas and problems and become more collective that way. You've got to get a group that's able to work together and say OK we're in this together, what are we going to deal with, which member are we going to try and help out today. It's quite a different approach from the other networks where we'll get a presentation from prof Biggs or whatever on open source technology and all the geeks pour in and soak up this academic insight and then grab something to eat and off they go. That's fine but this is quite different and not what I envisaged.

      a. What did you think you would get out of the networks; for yourself and/or for your business? (expectancy)

I was going in to sort of sell me; and raise my own profile and find out…it was a combination of that and a bit of research on my own part too, to see what other businesses were out there. It was an opportunity to discover how other businesses tick through the people that were there because as an organisation, the majority of my work is exported to England but I'd probably say 90% of my work is England and elsewhere and not Wales. But I wanted to understand about Welsh businesses in this location; I've often felt there must be things I can do within the welsh environment and/or other areas, hence the Irish environment, you sort of think well you know I've got to understand more and you never know. From that perspective if you're going into a network environment and you are meeting with entrepreneurs; how are they doing, what makes them tick? Maybe it helps me to understand where I can sell services and similarly there are things I can learn about running and managing a business because obviously I'm in there as a business manager so I suppose there were those few things of: I am here, this is what I do, are you interested? What makes these businesses tick and what makes them do what they're doing and maybe I can take some opportunity to feel I'm doing the right things and I'm not on my own. But also what opportunities there might be. It was a combination of those things.

      b. Was that what attracted you to the SLNIW networks?

Yes, certainly for this one. There wasn't anything in the area, or in Wales, really providing an outlet. Many years ago I was based in the midlands in England. Back then I was engaged with the chamber networks and when we moved over here to Wales 7/8 years ago we were looking at the chamber business networks because we had gained things from them, support. There's nothing here in the mid wales region and it's something for years we haven't had so here was an opportunity so we thought it was a good network that could develop. When you look at the membership, we have members from Haverfordwest right up to Macllynleth; There's quite a

distance between members and that shows again, how dispersed this area is which in itself is a challenge.

      c. Did you set yourself goals that you wanted to achieve on the SLNIW networks? How did you decide to stick with it? Did you set yourself a point?

I haven't enough time to think like that. As much as I like to think I'm organised in that sense, and think I've not got a sale out of this so I'm going to have to start thinking about things. I think it's almost a case by case situation. I was aware when I got into this that it was an 18 month programme so that to me was an attraction because there was an element of sustainability built in which meant there was a bit of a commitment to it so I suppose, thinking that through I probably didn't feel I would pull away consciously because I would see that through. In that respect, it was a case of going along and taking every event as it comes. I never identified what I wanted to achieve. I've enjoyed all the events and taken things away from it so it's fulfilling that idea.

SLNIW Experience

      d. What have you actually gotten out of the networks in the time you spent in them?? (instrumentality/expectancy)

Certainly there are a couple of areas: 1, with business contracting, one of the key challenges being faced at the moment is how to raise your profile but we're not only geographically disparate but business sector disparate. I don't think there are many members duplicating their industry, I mean some are close but what was interesting from that and one of the things I gained was an understanding of how people sell business and how people sell themselves; we're talking about the social network environments and I think a key outcome from that was that I got involved with the LinkedIn website but I wouldn't have gotten into that if it hadn't come up in network discussions that that's what they do; we now have a LinkedIn group for the network. That was interesting for me cos it forced me to think about the profile and linking up with old guys and associates I'd worked with. It's difficult to quantify that anything financially has come from it, the fact that I've developed that profile and linked in with my website and blogging I do has definitely kept people in touch and inevitably from that, has led to follow through conversations even though I haven't pinned that back to the network. That actually has been quite helpful in terms of thinking about whether the content of what I'm doing is right and actually stepping into that network environment. But from a small network we're actually networking to a much wider audience so actually the catalyst within our small network has been to go around and build up ninety or so contacts through linked in because we've met so and so and they've introduced…case in point from that is that I had an invitation from one of the former directors I worked with 10 years ago; those connections have been recreated because in the environment I'm in, you're moving industry so much that you don't keep in contact with the person you were working for 2 or 3 months ago. Your mind is taken away to the next thing so it's been quite useful as a means to keeping in touch.

(Prompt – anything else from them?) I have to admit, not necessarily me directly but through the links there is interest between some of the businesses in Ireland, because they're in software development and things and some of the industries here which is potentially developing and could lead to further connections. I think it's right to say that's part of this network environment. Obviously the event was a conference style event to get everyone together but that has led to some possible identification of opportunities together. I think there was 2 businesses but that was ███ thing.

e. Is this one of the reasons why you <u>stay involved</u> in the network? Yes

Those potential sales. You are looking at one of the outcomes that you would gain; we are entrepreneurs, if the business isn't working and surviving, then we're not going to be entrepreneurs for long. So I think fundamentally, that's what drives us. Having said that I feel there are more social benefits that I have gained from the network which is the outlet to get away and meet with other people and moan about various issues but I think that's a much more indirect kind of outcome and benefit. It wouldn't happen without the network, there isn't anywhere you can go to and I think what's interesting about that is that while we might consider ourselves friends, we're not neighbours. In my village community here I probably wouldn't discuss business issues in the depth that we would do in the network for a number of reasons: 1) you don't want to go in and brag about the latest big win that you've had because there are sensitivities here and obviously you also don't want to offload your biggest crisis, it may come up in conversation but it doesn't happen but you can go to the network and offload your issue and they can sit around and say well we've witnessed that before and have you thought about these things or they just pat you on the back and say don't worry, we're here for you, chin up and get on with it. So I think you can take those things so it provides an outlet where you can do that. You come away and there's no repercussion. That certainly is something I'm sure will continue. I think there's a core group there that will keep going.

4. What do you think of the other network members?
a. Do you trust them?

Yes I do, it was something we tackled reasonably early on; without being over bearing about it, it had to come about; we had to say we could be in this situation, this could arise and do we trust each other? And not to take things beyond and as a group we said yeah. We all have different personalities. There's a sort of anonymity there which would be possibly different; it works because the membership is so disparate across the different sectors and industries. You haven't got a competitor situation. Interestingly when the group lists were first distributed at the first network meeting, there were a couple of guys there from companies which one of my employees went to work for. I thought it would be interesting to engage with that business a bit more formally but actually they didn't follow through. Having reflected on that I think that was for the better, because it would have been a struggle to network and say we're in a situation and we've done this. In the current group, they might say that's a jolly good

idea but we've all come into it knowing our backgrounds are so unique in many respects so it would be impossible for anyone to go off and take an idea and run with it. They would have to be quite scrupulous to do that. I think that there's a sort of anonymity. It's not to say at every meeting we're going into great detail about every thing that happens but you feel you can do that.

        b. Do you feel they have skills and knowledge that would be beneficial to you or your business?

Yeah. I think so. There's quite a range of business knowledge and background there. Some of the group members have been involved in other business networks and actually can say that they've had so and so for such a presentation and perhaps we should get them. I think that's useful that people have had that exposure to things and are able to bring that and offer that. Others they've been around a long time in different industry sectors. For myself, I'm quite interested in understanding where other people have come from. My background is very much in the public sector so it's quite interesting to get the commercial side, the banking side; retail…there are common approaches but they have had different experiences and they bring that. There are some others who are quite young and are so energetic and enthusiastic and you just think yes I was like that once. It reminds me why I was doing this in the first place.

        c. Are you comfortable exchanging information with them?

Yeah. I don't think we've necessarily got into…I can't think of anyone going into great amount of detail about issues but; and I just don't think there's necessarily the opportunity in those environments to do it. We have certainly in the meetings said ok someone's brought a particular problem or issue and perhaps we'll go away and have a think about that and next meeting we'll come back with some ideas on that. (so do you follow up on things like that? Maybe send an email or…) I have to admit I haven't done anything on it but when we get the blog site going and the actual website going, there has been and there was a lot of exchange of information and people picking up on; here in Wales they have a thing called Supplier Network (ran by the Welsh assembly to promote business) and again not everyone's involved with it but they might say oh there's this networking event going on here or someone was after a source of funding and then I came across a press release on funding and passed it along and so you get some of those conversations going on. The difficulty with that will be maintaining it. The first time it happens, it's quite formal and it kicks it all off. Six months on there are lots of things going on and I'm not sure everybody's picking up on those things and that's where there are challenges. We've the LinkedIn group running, the website is now going, there's certainly a bit of banter going through emails and things so …

        d. Do you feel you had a high level of collaboration with the other members of the network?

I think it would be unfair of me to say yes because I've not really collaborated much in the last few months. I think from what I'm seeing, yes there is and certainly back up to Christmas, there was. The email dialogue; there's a lot going on in terms of sorting everything out and deciding what we're doing.

e. Have you helped any of the network members?

Yes I can think of instances where people have brought an issue to bear and it's been responded to and dealt with. I'm trying to think if I've brought one…Yes there is; I'm just remembering when I started with LinkedIn and off the back of that, I was thinking about introductions and back then I was saying I wanted to understand about sales and get some background in this area; is there someone I can talk to? I could have followed that up at the time. I think there is a lot of support and feedback that does come back. I think there are 6 or 8 members now and certainly from those, there is engagement. One of the interesting elements there is actually the inter network groups because there is a broader network. You have networks within networks. We've the Welsh mixed network but we also have two other Welsh networks and we've also got the Irish networks so there's actually quite a family of things that could go on. At the moment, it's very much been within the mixed group and I wonder sometimes whether that limits the opportunities; I think it's right in terms of it's a character relationship so as soon as you go beyond that, you're not sure who you're talking to and what you're doing with them. The integrity element can then start to get challenged. But I think through the website, and that side I could see a response.

f. Do you interact with network members between meetings?

Yeah there is quite a bit yeah. There does seem to be a lot. Particularly because we're trying to organise what we're doing next; otherwise the danger is that you'll end up having social meetings with no real focus. It's the marriage of the focus with the social element that makes it work so you need the focus.

5. Do you feel that your involvement in the network has had an impact on you/on your business?

Not yet. It has the potential to*. (Business partner talking)From the meeting we did there were a lot of opportunities but with the way things have been over the last few months, we weren't in a position to chase things up but there were opportunities with businesses we were talking to who were thinking more long term and putting feelers out there to see who's around for that so there may well still be things which will come back to us but because we've not been able to reciprocate the visit or get talking to the people on a one to one, it's not been possible to follow things up. There's been a bit of emailing and people have said when they're ready to do it they'll be back and touch. There's an element of waiting to see if those things transpire.* There's definitely not been any financial impact or any additional sales. (has the way you do business changed as a result of the network?) I think it's a difficult one because in the current economic climate, I think there are too many other factors going on to really iron out; it has to be said; I'm probably busier now than I have been in the last twelve months. I can't exclusively pin that down to SLNIW but I think those potential; as I said through the LinkedIn thing the mindset of thinking about what I had to do maybe there was an informal support in that but it would be difficult to say I was spurred on by something I'd seen in the networks. *(Business partner talking) But I think the work ethos that comes out of the network is very good because it is isolating in business and it's very easy to*

dip in and out of the work and then suddenly think well hang on, I haven't got anything going on here whereas I think getting together with those people who are trying all sorts of different things to stay afloat I think keeps you going, maybe there's a part of 'I'm going to have to look further afield'. I didn't go in there thinking we'd land a major deal with anyone in the networks. There wasn't a sales expectation there. The work ethos that meeting with other entrepreneurs and understanding the issues they face; there's certainly an instance there where you've got a woman running a business but her partner is off in the week to generate the other side of revenue and saying that that's a way people work; whether it's acceptable or not, it's what people are doing. The challenge I've got within that; I do feel there are benefits in it.

SLNIW Dependent Variables

Do you feel you have benefitted from your experience on the network?
I certainly have enjoyed the networking meetings and I think that's a benefit cos there's no other outlet for it, it's not something you bring to the local neighbours and things. I benefit from mixing with those people.

a. Are you still benefitting from your experience on the network?
Yes. The engagement there. As I say it's difficult at the moment because it has been so busy in these first few months of the year. I've been frustrated that I've not been able to get to these meetings. *(Business partner talking) I think they're a lot more beneficial in a kind of support and nurturing way than perhaps you give them credit for cos they do really bolster you when you've been and you come back and you're more "ok let's get on with it". There's a bit of support in seeing that other people are in the same boat as much business prospects you get out of it. I think there are very small numbers of employees so these people are effectively your work colleagues and I think that's what you get out of it more than necessarily getting contacts and contracts; it's like the AA for small businesses; you all have very similar standard day to day kind of issues that ye can moan about and ye all understand whereas with your friends and your neighbours, you just don't get that unless they're in the same boat* . You can let your hair down and just have fun to a certain extent but there's an integrity there. I'm not saying we're all in business speak, but what you're laughing and making fun of is serious in some respects and the fact that you can do that, you do come away bolstered. They are your work colleagues in many respects so I suppose they are friends but not neighbours but they're professionals aswell; we've all got different interests from all sorts of skills and trades and things yet they are approaching it in that way so you do benefit.

Do you feel you learned anything from your experience on the network so far?
You do learn, there is learning opportunities but I also recognise that I don't know everything either. There are some things that you've heard before which are sensible and logical in that respect but it doesn't hurt to hear it again. Whether I've learned something new or whether I've been reminded of something I've learned, I'm easy, I'll take that. We are so busy that

sometimes you just need that reminder, that free thinking time and are reminded of that approach and you have the time to think about it and how to bring it to your business and so forth. Having the time when you bring it back to the business.

Have you had Business from the network?
No

Did it motivate you to join?
Because our own business is very much a service to the public sector, the public sector was not going to be represented in these networks so I wasn't expecting to sell more of what I do but we know that there are commercial businesses; we're in the realm of information management and mapping of data and understanding data and trends and these are things that are used in any organisation or any industry so there's an element of understanding what people are taking on board but I would say you have to be an organisation of a fair size; 250 employee kind of size to really feel that you can invest in doing these things. To that extent, I didn't feel we were going to sell directly but maybe because people know people we've gotten into conversation with an organisation who do mapping and things and use an organisation up in this place but now we know you're here we can think about it… there are occasional things that crop up like that. Certainly with the Irish companies, which are bigger, established companies, there are a couple of opportunities there which fit more closely with where an opportunity becomes viable. A couple of entrepreneurs getting together and saying we've had this idea.

What do you like about your network?
I like the colourful array of characters which reminds you how crazy we are and how disparate the businesses we have are; we have all sorts, we've got the IT consultant and the clothing retail side, the sculptress and toys and there's just a very eclectic mix and it's the characters as much as anything else. We've all had an idea of something or other; we've either all had a business idea or are very self-motivated as individuals going forward. I'm not necessarily sure I've had an entrepreneurial idea. I've just taken a service and turned it into my own and found a niche for it. It's not rocket science what I do. The individuals within the group are all strong characters and you have to be, I think you need that hardness in many ways to take a business forward. That's certainly one of the things I like; you get that pull yourself together thing and that's what you've got to do.

What don't you like about your network?
I think we're all just too far apart from each other. Though one of them is just 4 miles down the road which we didn't know. That is a struggle; having to bring together the group. I think the problem aswell is that it takes time to get the groups to work and everywhere we are in Wales and the businesses we're facing and the sizes of the businesses, actually the business comes first and you get that attrition. If we're down to a core of say 6 or so people, there's almost; that starts to become too clicky. You haven't got the variety and you've got the same set of people trying to drive things forward. I know it's falling on the same shoulders to try and take it forward and I think that's not a reason to leave but it is something I

don't like and I don't know how to fix it. I think it's impossible to fix it but we do have the virtual networks.

How do you feel about bringing new members in?
I feel yes you've got to find ways of doing that. By it's very name, sustainability is the key but I don't think it's the sustainability of the individuals it's the sustainability of that network and the network can evolve. Over years, say within universities and any clubs you were in; year on year the membership changed but the club remained. *(Business partner speaking) The dynamic of the group is always the same because you always get the same characters, the same types of people join; the characteristics of the individuals remain the same; it's just down to group dynamics isn't it*. The point is, you've got to find a way to bring in networks and that will be one of the challenges going forward. When we started the network, the initial invitations, the contact there was through the mailing system accumulated by the Uni; now that we're a group of 6 or 7, how on earth do you go out and bring in new members? I think what you're trying to do is bring in new people; you want it open to new people you've not met before because otherwise it develops a clickiness.

(prompt: earlier you talked of the support of the group but obviously that was built over a year… what effect will new people have)
I don't think it takes long to build up that level of integrity. I think people go in and within 2 or 3 meetings, you're there. Yes, we've been working for many months together and yes, you do get that but…you move on pretty quickly. It's not taken us more than a couple of meetings to feel comfortable.

How do you feel about people leaving?
Well that's a difficulty. People leave. We leave for all sorts of reasons. I don't want to leave and I've never wanted to leave but it's whether the circumstances have forced me into that situation and we're in that situation with the network. So and so hasn't shown up for x number of events, we need to challenge them as to where they are; are they in or not. You have to decide are people genuinely interested or not. I'm almost in that situation myself; I'm going to have to get challenged by other members of the group. I do want to stay involved but the sustainability of the group comes from what each member can contribute and some people are reluctant to contribute or naturally shy but everyone's contributing one way or another, the fact that they get to meetings and do things, they don't sit there silently, they do engage. Everyone has something to say and everybody does take something away from it.

How long do you think it can go for?
I think you've got to start to think about bringing in new people somehow or other because it will just naturally fizzle away. We will always remain in contact I'm sure. The relationships are there. However, you may find yourself 5 years on and you haven't been in touch for x number of years. Re: LinkedIn I've developed some strong business relationships but I've moved geographically and industry and there's no need for you to keep chatting to these people cos then you'd be at it the whole week.

Future Networking Intention

Are you going to join another network?
I don't think there are any other networks like this; there are trade things that deliver specifically to your industry. This is not about that. This is a much broader remit. It is different..there are things to learn about business issues and general things but it's also an environment where you have a support network without it being a support network

Can you describe your ideal network to me? (valence of networks)
I don't know if there is much I would change about this one to be honest. *(business partner speaking) It's an environment where you get together with people as isolated as you and the only thing that would make it better is if the meetings were at the weekends which would give you a chance to get to them*. I feel that's fair. A Saturday night network meeting in the pub would be better. I don't think people would be reluctant to do that. There the balance is making sure it doesn't just end up being a social thing. *(Business partner speaking) By the very nature of the fact that ye're facing the same problems, all the things you're going to talk and moan about are the same things you would talk about in a much more formal way*. That only works if you've got 4 or 5; if you had 6 or 10 people that just doesn't work which is why you need the combination of the focus point which you talk about and you can deal with that as all of you or break out. If you go in blind you will get those one or two individuals who will dominate and it will be about them and their issues all the time and I think actually the network as it is, delivers on those things. It gives a focus and it's quite democratic, we confer on what issues we're after and we did a 1,2,3 and we identified the common themes that everyone's come in with. That's how we came up with a set of events. You do need that formality for it to work.

Appendix C

Example of Exit Interview Transcript

Date of Interview: **Time:**   **Location:**

6. Name of interviewee: ███████
7. Business name: ████████████
8. Business type/sector: Education
9. Number of employees: 19
10. Location of business: 3 premises; main one in ███████ Ireland
11. Type of network belonged to: Mixed

12. When did you leave the network?:
a. Never started
b. After Induction Day
c. During facilitated/training sessions
d. After which one
e. After the facilitated/training sessions
f. During the self-facilitated sessions
g. After which one (1st, 2nd, 3rd, ...)

I can't remember. (you did attend a couple of those self-facilitated ones didn't you?) I attended; gosh I went to Waterford several times. I don't know what you mean by self-facilitated, there were one or two where somebody structured and then after that we were to our own devices. I couldn't tell you how many but I was in it a good few months.

h. Before joining the SLNIW network, were you already a member of a network?

Yeah I've been in several networks and I find overall networks over the years; I'm over ten years in business and I've found I've gotten a lot out of them over the years. The one that I had just finished up in; first of all this one(SLNIW) is the first one I haven't completed, it's the first one I ever left. But the previous one I was in, I finished. It was Going for Growth, an enterprise Ireland funded one █████████████████████. What they do is they have a leader of each group which is an entrepreneur who's far more experienced; she would have a massive business in comparison to ourselves but she knew exactly where we were coming from and each session had it's structure and each session we met had a particular theme. We met once a month, similar to yourselves and we would have had a theme. We might have had one particular week where we focused on our customers and who our customers were and we had one sheet of paper with a list of questions that we were supposed to answer in our own heads or our own minds before we went there and then we sat down there as a group and the conversation went from there. She structured it, she chaired it and she made sure then that everybody; she would quiz each person so everybody was participating and there was a lot of have you ever thought about this or that. Why do you do it this way; that type of thing so I would have gotten a lot out of it to be honest.

i. What attracted you to that network?

To be honest, there's nothing in any particular network that attracts me other than; I suppose I'd be more careful about what I attend now. I wouldn't go to a self-structured one again. I left this one (SLNIW) and I joined the CIME project and I'm in that now and it is structured and again, it has a leader. (what kind of format does that one follow?) It's your once a month again and you're surrounded by business people. Each session there's a topic and coming at it and they've had this mapping process. At the beginning of the process they got us to look at where we want to be; in simple terms, we all did a gap analysis so they work with us to try get there and then each of us would have put that map up on the board and you basically exposed yourself to everybody. Lots came out of it, some nonsense came out of it but sure; a few hard truths. The bits that you hate are the bits that you already know but you haven't had a chance to get around to yet. They're the most difficult ones. There you go.

Throughout your career, how many networks were you in?
Plato; Enterprise owner manager; going for growth; CIME; that doesn't feel like it's it but it's all I can think of at the moment.

How many networks do you currently belong to?
I'm only ever in one structured; you'd only ever be in one; you'd only have time for one. Other than that, I do network here locally and go to seminars and that but not something where you're committed to. You dip in and out of loads of things. Networking is a part of business; you have to do it so you pick and you choose and dip in and out. I would only ever be part of one management programme at a time.

13.What, to you, is a successful networking experience?
I think I'm struggling at the moment. I'm ten years in business and I've gained a lot of experience and sometimes you find when you go into networks, you have more experience than a lot of them around which is why I found yours particularly disappointing cos I found that you had a super group of people on your group and there would be better people; better quality of businesses would be in the SLNIW group than in the current Cime one. So I would have really loved a good structured management programme so that's a disappointment.

So what attracted you to SLNIW?
Well I got a phone call from the WIT and they made it sound attractive and at the time, I wasn't part of a management programme and I'm in the middle of a new project at the moment and I was just kind of at the idea stage of trying to bring it from idea to action and I felt well you know I need to think of something. I need to push myself and that's why I joined. It just seemed to be in the right place at the right time. I didn't realise it was going to be self-structured and chaotic. I'm well able to manage things and if I was put in charge of a group of people I'd be well able to structure and organise them but I don't feel that's my job when I go into a management programme and when I found that I'd driven down to Waterford to sit down and decide what we were going to do with people if they walked in late, I just thought that whole discipline debate really annoyed me because we're all adults and I've never been on a management programme before where they've gone through that. I just thought I was back in school. And I know

for a fact a lot of people thought that. I'm very honest; I know most people in that room felt the same way that particular day and then when you come down and what'll we do today; what'll we talk about; what'll we talk about next week; Come on!! It has to be structured. Business people bond through successful business; not through cups of coffee. You'd have found if there was structure to it, we'd have bonded very very quickly. I know; I don't know what other people have said in their exit interview but we lost ███████████ aswell and that was a brilliant company and that was a big loss to the project and you lost him for the same reasons you lost me. I felt more of a guinea pig and a lab rat than a business person. I thought the project was more important than the business people. I'm in education and I'm all for research and can see it's place but in one sense when I'm giving up my time, it's about business.

14. Before agreeing to take part in the SLNIW network, what did you think the networks were about?

To be honest, like every other management network. They're all run the same. At the end of the day, you turn up at a said time, typically once a month and you have structure to it and it leads to discussion from that. But if it's not leading to discussion, there's plenty stuff there to do. Down in going for growth there were occasions where we had our set questions but we were so deep into what we were talking about that at the end of it we were like ooh gosh we better get back to our questions. And more times, we depended on those questions. You have to have structure. You can't put 15 people in a room from different backgrounds and walks of life and expect them to. I just found it a waste of my time.

a. What did you think you would get out of the networks; for yourself and/or for your business? (expectancy)

When you're busy in your day to day you can get tunnel vision and what I find from going into these networks, you meet other people you think outside the box you get other ideas, you look at doing the same thing a different way and that can be brilliant. And I still believe in management programmes and I wouldn't go into another one unless it was structured. Usually my complaint even with the CIME one even though it's very well structured and the facilitator is brilliant, I find sometimes the people that are in the room with us on it; I think it's a little bit beyond them if you know what I mean. I don't want to sound horrible but you've got a local transport company that maybe has two or three trucks; they're family business, they don't have HR issues; whereas I've 19 staff in 4 locations.

b. Did you set yourself goals that you wanted to achieve on the SLNIW networks?

I always set myself goals.

i. Did you set measurements to ascertain had you achieved them?

I didn't achieve anything. I wasted time. I'm just being honest. I wasted time and achieved nothing. (can you describe for me some of the goals that you would have had for the networks?) I don't set goals for the network; I set goals for my business and things that I have to do for certain stages in

time. There are certain things. You're always mulling ahead how you're going to do things; issues you may have and so forth. Aswell as that, while you have your existing business which you're always trying to improve, improve your processes, are you monitoring it correctly, everything changes so business has to change; am I making it change the way I should be. If you discuss each type of topic from customers to HR; that type of thing. You'll come up and be able to address these issues. As I've said time and time again, I often find about these management programmes that driving to or driving from the network or whatever is better because while you're driving to it, you can have a good think about what's the topic of todat, apply it to my business and what are my particular issues in my business so I'm straightening it out in my mind on the way and when I'm coming back I'm thinking what did I get from that, am I going to make any changes, that type of thing. So that's what I tend to do. I wouldn't have particular goals for the network and I don't think I'm wrong either; I think my goals should remain with my business not with the network. My business is what's important to me when I go in there; not the network. And I don't particularly go to the network to sell to other people. Now if I happen to make a contact that may be a supplier or whatever when I get in there, well and good but it's never my objective/. I'm there to develop myself as a manager.

c. What did you actually get out of the networks in the time you spent in them?? (instrumentality/expectancy)
Nothing

d. What changed for you between when you started on the networks and when you left?
Nothing changed for me. There's no personal reason why I left because I left that one and went into another one

What did you think of the other network members?

I thought there was a few strong ones. Sure, there were a few smaller, inexperienced business people who might be very good at what they were doing. I thought it was a good mix and I like a good mix; I like male/female and experience mix and there were also people there from different types of businesses so I wouldn't fault the group that was there at all.

e. Did you trust them?
I'm not a mistrusting sort of person. I trust them like I'd trust any group of people that I would go in to like that. I wouldn't have had particular trust issues going in there. And I would speak fairly openly cos I feel you won't get anywhere if you remain a closed box and don't talk freely about your own business to a certain level. I didn't have trust issues in there.

f. Did you feel they had skills and knowledge that would be beneficial to you or your business?
I don't know cos we never got to that stage. I'm sure they would have done.

g. Were you comfortable exchanging information with them?

Yeah absolutely

h. Did you feel you had a high level of collaboration with the other members of the network?
As I said, we didn't get into any meat

Did you feel like you were helping each other?
No

i. Did you feel the other members of the network were similar to you?
I'm sure some of them were. When you get that many people in a room. And maybe it was slightly too big now but I'm sure there was. But in one sense I don't particularly want people who are similar to me because if you're going to get different ideas or thrash things out, you want people who are coming from a different angle. Sometimes the person you most disagree with might be the person to trigger something. That wouldn't have been something I was looking for. (when you say it was too big; are you referring to the number of participants in the group?) yeah well generally speaking for networking and that group kind of thing, 8-10 is usually the recommended. You probably know that yourself anyway. But 15 for bonding, it is too many people.

j. Did you feel valued by the other network members?
Yeah I didn't have any issues there.

k. Did you interact with network members between meetings?
No, I was bombarded with emails. I just put them all to my junk mail in the end.

15. Did you feel that your involvement in the network had an impact on you/on your business?
No

16. Do you think the type of business you are in had an impact upon your network experience?
I don't know cos it's always been the business I'm in. I don't go with a different business each time so I don't know. I'm stuck with this one.

17. Did you get business opportunities from the network?
No
i. Did the idea of business opportunities motivate you to join?

But that isn't my objective. If anyone goes to a management development programme with that in mind, they're misguided. I feel if I start trying to sell to somebody they're not going to take me seriously in anything I say. And then they're wondering what's the reasoning behind what I'm saying and what's the angle. And that doesn't then do anything for relationships within a group so I would have that down as a big no no.

18. Do you feel you benefitted from your experience on the network?

The only thing I benefitted from was that I said I'd steer clear from anything self-structured again. (that's a learning I suppose)

19. Why were you unable to stay commited to the network?
I have to get value from it.

a. What would you consider your main reason for leaving?
Not a valuable use of time – it was the only reason

b. Is there anything you or the other participants could have done to overcome this?
Not at that stage; we had gone through so much trying to decide what we were doing that if we started into discussions about how we would overcome things…I cut my losses and went.

c. What would have made you stay in the network?
More structure and more structured facilitation.

20. Are you going to join another network?
Yes; already joined CIME

21. What are you looking for in your ideal network?
My ideal network, is as I say, with more advanced businesses; businesses in business for 15 or 20 years; more employees; I've 19 so 20+ would be my ideal. I don't think that exists so that would be my ideal but I haven't been out looking for ideal. There's a stage two of the CIME so I might stay with that for the stage 2 but I don't think my ideal exists. What I'd look for at this stage is to know about the structure of it. And I would have never asked that question before; I would now ask how it's going to be structured and what's the main objective of the project because ; the going for growth; the objective for that was to grow businesses whereas I believe the objective of this project was a PhD research, it wasn't actually the main objective (growing business). At the end of the day, you're working toward your main objective so I wouldn't join a programme again unless it's main objective was to develop business.

It needed a leader or someone to structure it that had business experience and more business experience than the participants. Going for Growth and CIME got big businesses involved; the facilitator would be the important part for me to look at in future.

I don't know whether self sustaining exists. Going for Growth also tried the self-sustaining; and I didn't stay and that was a fantastic programme but I just kind of thought what self-sustaining is taking the most important person out of that room. I was the bigger business in there. I don't have the time to do it (take leadership) and then I wouldn't be getting anything out of it for myself so I don't know how successful they are at the self-sustaining part. I don't think self sustaining exists and I think it would take a particularly good group to make it work; one that particularly gelled well. I think women sometimes stay together cos they love to get together for lunch and cups of coffee and things but that's not the right reason to be self-sustaining either.

How long do you think these things can last for? Do they have a shelf-life? Generally you see yourself committing to something for 6-9months, maybe a year. The going for growth one was just 6 months. Plato was an annual thing and that had a fairly good structure to it too. We had the head guy from datapac as our facilitator at that. I'm not sure what happened Plato since; if it still exists. Ours was very well structured so you did get quite a bit from it. But thinking back on it, that was in my very early years so I would have been the naïve business person probably getting loads from the others at the table. I'm sure there was someone there giving more than they're getting but I suppose you're always going to fall into it with that a little bit. I'm selfish with my time now at this stage cos I have to be.

Appendix D

Example of Bales IPA Observations

Event / Date	Network	Observer
Cicliy O'Neill	_Female Network Wales_	19.08.10 - 'Self facilitated Session' 2

Observation	Incidence (note number of 'acts')
1. **Shows solidarity / friendliness / encouragement,** friendly / warm, raises other's status, gives help, reward, shows empathy	
2. **Shows antagonism / unfriendly,** signs of negative feeling, deflates other's status, interrupting, defends/asserts self	|||| |||| |||| |||| ||||
3. **Shows tension release / harmonizing,** jokes, laughs, shows satisfaction, light hearted attempts to reconcile disagreements	|||| |||| |
4. **Shows anxiety,** exhibits conflict, withdraws out of field, embarrassment action e.g. worry, panic	
5. **Agrees,** shows passive acceptance, understands, concurs, complies	|||| |||| |||| ||||
6. **Disagrees,** shows passive rejection, formality, withholds help	
7. **Facilitates,** attempts to keep communication channels open, encourages participation of others, suggests procedures for discussing group problems	|
8. **Compromises,** offers compromise, yields status, admits error, disciplines self to maintain group cohesion	
10. **Gives suggestion/opinion/information / knowledge,,** leads in task direction, attempts to guide, exhorts others to action, provides evaluation or analysis, expresses feeling or wish, reports facts, observations, experiences	|||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| ||||
11. **Asks for information / knowledge/ suggestion / opinion,,** requests clarification, facts, observations, experiences, asks for direction in problem solving, possible action, keeps communications going, requests evaluation, analysis, expression of feeling	|||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |||| |

Notes:

Meeting ended @ 4.15pm – 2 participants left earlier

IT failure which led to great distraction. Within 5 mins two participants had walked out for more tea...
One participant constantly talking + having her voice heard
September 16th Meeting 4pm here! - 2 people speaking over each other + the group

"You're not supposed to use org if you're selling!" → a little confrontational · "You've got a big problem!" Control - Wants an answer re everything
Participants sharing notable...

"Who's facilitating??"   1hr. - Lesley - brief → Dragon's Den?? - Investment?
Meeting Sept 2nd 3 @ 30am - Arts Centre over

Appendix E

Example of Completed Observation Report

Observation Criteria

1.   General Observations – Meeting

1.1	Location of meeting	SEE 3D Aberystwyth University Wales
1.2	Number present	7
1.3	Meeting agenda / format – was this set/followed?	There wasn't much of an agenda after the speaker that they got in
1.4	What time did the meeting start? On time?	The meeting started a little late and there were technical problems which made participants a little unsettled and after 5 minutes a couple of the women had gotten up to get more coffee
1.5	What time did meeting end? On time?	The meeting went 15mins over as the group were discussing their ideas for the competition being held at the conference…a couple of participants left at this stage.

2.   Meeting Facilitation

2.1	Did any participant(s) facilitate / lead?	Yes No x
2.2	If Yes, who?	Na
2.3	Facilitator's performance – comments, Positive/Negative	The lack of a facilitator in this group highlighted to me that these participants see the network as an opportunity to be trained by external specialists as opposed to sharing their own knowledge. They don't seem to be organised in terms of having a plan for what they're going to do and achieve in their network in the coming months.
2.4	General tone of the meeting?	Formal Informal ==Tense== Relaxed ==Upbeat==
2.5	Pace of meeting?	Slow ==Medium== Fast

3. Meeting Content

3.1	What were the major topics discussed during the meeting?	This meeting was focused around e-business and there was a speaker invited in from the university to talk to the participants about using their website better and optimising search engines so that their businesses come out on top in Google. The participants also discussed their idea for the conference competition at length.
3.2	Was each topic resolved / closed during the meeting? Any outcomes reached? Any action points raised? Any action points from previous meetings followed-up?	No, neither topic was closed. The participants are very keen to have the trainer in again to talk to them more about using their websites and they also requested that he provide specific feedback to each of them on their business websites. Nothing was decided upon by the group but it would seem that they hope he would come back for their very next session. When it came to deciding upon their entry for the conference competition, they came up with an idea and designated tasks to different individuals within the group and they decided that they will have another meeting in the mean time to come together with their

I

		product and design the poster for the presentation.
3.3	Was there conflict during the meeting? Briefly describe causes, positive / negative, was it resolved or managed – if so, how?	No real obvious conflict. There was however one participant who hadn't been at a meeting in three months who was constantly interrupting and talking over all the participants as well as the trainer. She seemed oblivious to her disruptive behaviour and the rest of the group didn't react obviously to her. In a number of instances, I saw participants rolling their eyes and even before the meeting I observed participants conducting a conversation and practically ignoring this participant. She sat alone in the room before the meeting aswell while all the other women chatted around the lunch table so potentially her lengthy absence has made her conscious of being an outsider in the group.
3.4	Did meeting participants split into any intra group groupings? How many, how many per group? Comment	Not once the meeting was actually going. It did seem that the group were there as individuals though as opposed to being one cohesive group.
3.5	How inclusive was the meeting? Any particular examples of forced inclusion, forced exclusion?	I didn't observe overt inclusion or exclusion
3.6	Were there any particular examples of transfer of learning or knowledge between participants?	No. The learning the participants experienced was from the trainer.
3.7	Were there any particular examples of innovation/creativity?	No
3.8	Was there any obvious 'Power' play in the meeting?	No
3.9	Were there any notable positives or negatives of networking?	There was some sharing of contacts which is a key benefit of networking.
3.10	Observer's general comments - e.g. overall reaction, general perceptions, good use of participants' time?	This meeting seemed predominantly concerned with training from the external provider. This group does not seem to be focused on learning as a group from the group. There was no facilitator and no agenda that I could see aside from the external speaker session. This session also went way over time. It had been due to finish at 2.30pm I believe but didn't in fact end until 3.40pm at which point everyone started shuffling and moving about as if the session was over. There was no roundtable discussion of how people are getting on nor was there any focussed discussion on any difficulties any of the entrepreneurs may be facing in their work. I feel the participants benefitted from the session in terms of the knowledge shared by the external speaker but I didn't observe any knowledge sharing

| | | between participants which is what these networks are all about. I outlined earlier in this document that I do not feel that this is a solid group; they appeared to all be in attendance as individuals looking for training. Will this network sustain once the SLNIW training budget is gone?? |

Appendix F

Example of Completed Personality Inventory

RESEARCH QUESTIONNAIRE

Dear Network Participant,

As part of my PhD study, I am looking at the personalities of entrepreneurs and assessing the effect this has on the motivations of entrepreneurs to engage with networks. Attached is a questionnaire which looks at personality and your experience as a member of this network.

I would be most grateful if you could take ten minutes to complete this questionnaire as I expect it to prove invaluable in my research. As with all research conducted through the SLNIW project, at no stage during the reporting of the findings, will any individual be identified.

Please note there are no right or wrong answers.

Many thanks,

Aisling

Name:	█████████
Network:	Male Ireland

Below, there are a number of phrases describing people's behaviours. Please use the rating scale to describe how accurately each statement describes **you**.

Describe yourself as you generally are **now**, not as you wish to be in the future. Describe yourself as honestly as you see yourself, in relation to other people you know of the same age, demographic etc.

Please read each statement carefully, and then circle the corresponding number on the scale. Please answer all sections **completely** and **accurately** being as **honest** as you can.

Statement	Very Inaccurate	Inaccurate	Neither	Accurate	Very Accurate
Am the life of the party (1)	1	2	x	4	5
Feel little concern for others (2)	1	2	X	4	5
Am always prepared (3)	1	X	3	4	5
Get stressed out easily (4)	1	2	3	x	5
Have a rich vocabulary (5)	1	2	3	x	5
Don't talk a lot (6)	1	2	x	4	5
Am interested in people (7)	1	2	x	4	5
Leave my belongings around (8)	1	2	3	x	5
Am relaxed most of the time (9)	1	2	3	x	5
Have difficulty understanding abstract ideas (10)	1	2	3	4	x
Feel comfortable around people (11)	1	2	3	x	5
Insult people (12)	1	2	3	4	x
Pay attention to details (13)	1	2	3	4	x
Worry about things (14)	1	x	3	4	5
Have a vivid imagination (15)	1	2	3	4	x
Keep in the background (16)	1	x	3	4	5
Sympathise with others' feelings (17)	1	2	x	4	5
Make a mess of things (18)	1	2	3	4	x
Seldom feel blue (19)	1	2	3	x	5

Statement (cont'd)	Very Inaccurate	Inaccurate	Neither	Accurate	Very Accurate
Am not interested in abstract ideas (20)	1	2	3	4	x
Start conversations (21)	1	2	3	x	5
Am not interested in other people's problems (22)	1	2	3	x	5
Get chores done right away (23)	1	x	3	4	5
Am easily disturbed (24)	1	x	3	4	5
Have excellent ideas (25)	1	2	3	4	x
Have little to say (26)	1	2	3	x	5
Have a soft heart (27)	1	2	3	4	x
Often forget to put things back in their proper place (28)	1	2	3	x	5
Get upset easily (29)	1	2	3	4	x
Do not have a good imagination (30)	1	2	3	4	x
Talk to a lot of different people at parties (31)	1	2	x	4	5
Am not really interested in others (32)	1	2	x	4	5
Like order (33)	x	2	3	4	5
Change my mood a lot (34)	1	x	3	4	5
Am quick to understand things (35)	1	2	3	4	x
Don't like to draw attention to myself (36)	1	2	3	4	x
Take time out for others (37)	1	2	x	4	5
Shirk my duties (38)	1	2	3	x	5
Have frequent mood swings (39)	1	2	x	4	5
Use difficult words (40)	1	2	3	x	5
Don't mind being the centre of attention (41)	1	x	3	4	5
Feel others' emotions (42)	1	2	x	4	5
Follow a schedule (43)	1	2	3	x	5
Get irritated easily (44)	1	x	3	4	5
Spend time reflecting on things (45)	1	2	3	4	x
Am quiet around strangers (46)	x	2	3	4	5
Make people feel at ease (47)	1	2	3	x	5
Am exacting in my work (48)	1	2	3	x	5
Often feel blue (49)	1	x	3	4	5
Am full of ideas (50)	1	2	3	4	x

Please rate your network using the following scale. Read each statement carefully. If you strongly agree with a statement then please circle the number 5, or if you strongly disagree with a statement then please circle the number 1.

Statement	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
This is a great network	1	2	3	4	x
This network is here to stay	1	2	3	x	5
This network fills a real need for me	1	2	x	4	5
This network is a big improvement over other existing networks	1	2	x	4	5
This network gives me real value	1	2	3	x	5
This network fills a need for many people	1	2	x	4	5
Many people believe this network is worth it	1	2	3	x	5
This network connects with the part of me that really makes me tick	1	2	3	x	5
This network fits well with my current stage of life	1	2	3	x	5
This network says a lot about the kind of person I would like to be	1	2	x	4	5
This network lets me be a part of a shared community of like-minded individuals	1	2	3	4	x
This network makes a statement about what is important to me in life	1	2	3	4	x

Please rate the trust you hold in this network using the following scale. When rating this network please keep in mind the following statement *"if this network was to come to life as a person..."*.

If you strongly agree with a statement then please circle the number 5, or if you strongly disagree with a statement then please circle the number 1.

If this network was to come to life as a person:

Statement	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
It would remind me of someone who's competent and knows what he / she is doing	1	2	3	4	x
It would have the ability to deliver what it promises	1	2	3	x	5
It would be someone that I have great confidence in	1	2	3	4	x
It would deliver what it promises	1	2	3	x	5
It would have claims that are believable	1	2	3	4	x
Over time, my experiences would have lead me to expect it to keep its promises, no more and no less	1	2	3	x	5
It would not pretend to be something it isn't	1	2	3	x	5
It would be someone who cannot be trusted at times	x	2	3	4	5
It would be perfectly honest and truthful	1	2	3	x	5
It could be trusted completely	1	2	3	x	5
It would have high integrity	1	2	3	4	x
It would give me individual attention	1	2	x	4	5
It would give personal attention	1	2	3	x	5
It would have your best interests at heart	1	2	3	4	x
It would understand your specific needs	1	2	3	x	5

Please rate how involved you are with this network using the following scale. Please keep in mind the following statement *"To me this network is…"*.

For instance, if you believe that this network is relevant then circle the number 5, if you believe this network to be irrelevant then circle the number 1 etc.

To me this network is:

Factor						Factor
Irrelevant	1	X	3	4	5	Relevant
Important	1	X	3	4	5	Unimportant
Means a lot to me	1	x	3	4	5	Means nothing to me
Unexciting	1	x	3	4	5	Exciting
Dull	x	2	3	4	5	Neat
Matters to me	1	X	3	4	5	Doesn't matter
Fun	1	x	3	4	5	Not fun
Appealing	1	x	3	4	5	Unappealing
Boring	x	2	3	4	5	Interesting
Of no concern to me	1	x	3	4	5	Of concern to me

Please indicate your **overall satisfaction** with this network. If you are very satisfied then please circle the number 5, or if you are very dissatisfied then please circle the number 1.

Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
1	2	3	x	5

Thinking about this network please indicate your response to the following statements by choosing 1 for strongly disagree and 5 for strongly agree.

Statement	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
I would recommend this network to a friend or colleague	1	2	3	x	5
I am pleased to be associated with this network	1	2	3	4	x
I feel an affinity with this network	1	2	3	4	x

Thinking about this network. How would you rate your **level of collaboration** in this network?

Do Not Collaborate				Collaborate A Lot
1	2	3	x	5

Thinking about this network. How likely are you to **remain part of this network**?

Not Likely					Very Likely
1	2	3	x	5

Thinking about this network. How would you rate the **performance** of the network?

Poor					Excellent
1	2	3	4	x

Thinking about why you joined this network, please indicate your response to the following statements by choosing 1 for strongly disagree and 5 for strongly agree. Please keep in mind the following statement *"I joined this network because I thought I would…"*.

I joined this network because I thought I would:

Statement	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Meet like minded people	1	2	3	4	x
Meet people with different views and ideas	1	2	3	4	x
Meet people of a similar character to me	1	2	3	x	5
Meet people with characters very different to my own	1	2	x	4	5

What benefits has your learning network provided to you and/or your organisation?
Different businesses but similar problems

Can you quantify any of these benefits?
Realisation that above is true

How does learning occur in your network and how could this be improved to ensure sustainability of the network beyond the lifetime of the project funding?
Presentations very good. Myself would probably enjoy more manufacturers.

Please rate your network using the following scale. When rating your network please keep in mind the following statement *"if this network came to life as a person, would it...".*

If you strongly agree with a statement then please circle the number 5, or if you strongly disagree with a statement then please circle the number 1.

If this network came to life, would it:

Statement	Very Inaccurate	Inaccurate	Neither	Accurate	Very Accurate
Be the life of the party (1)	1	2	x	4	5
Feel little concern for others (2)	1	2	3	X	5
Always be prepared (3)	1	2	3	X	5
Get stressed out easily (4)	1	2	3	4	X
Have a rich vocabulary (5)	1	2	3	X	5
Not talk a lot (6)	1	2	3	4	X
Be interested in people (7)	1	2	3	X	5
Leave its belongings around (8)	1	2	X	4	5
Be relaxed most of the time (9)	1	2	3	4	X
Have difficulty understanding abstract ideas (10)	1	2	3	4	X
Feel comfortable around people (11)	1	2	3	4	X
Insult people (12)	1	2	3	4	X
Pay attention to details (13)	1	2	3	4	X
Worry about things (14)	1	X	3	4	5
Have a vivid imagination (15)	1	2	3	X	5
Keep in the background (16)	1	2	3	X	5
Sympathise with others' feelings (17)	1	2	X	4	5
Make a mess of things (18)	1	2	3	X	5
Seldom feel blue (19)	1	2	3	X	5

Statement (cont'd)	Very Inaccurate	Inaccurate	Neither	Accurate	Very Accurate
Not be interested in abstract ideas (20)	1	2	3	4	X
Start conversations (21)	1	2	3	4	X
Not be interested in other people's problems (22)	1	2	3	X	5
Get chores done right away (23)	1	2	X	4	5
Be easily disturbed (24)	1	2	3	4	X
Have excellent ideas (25)	1	2	3	4	X
Have little to say (26)	1	2	3	4	X
Have a soft heart (27)	1	2	3	X	5
Often forget to put things back in their proper place (28)	1	X	3	4	5
Get upset easily (29)	1	X	3	4	5
Not have a good imagination (30)	1	X	3	4	5
Talk to a lot of different people at parties (31)	1	2	3	X	5
Not be really interested in others (32)	1	2	3	4	X
Like order (33)	1	2	3	X	5
Change its mood a lot (34)	1	2	3	4	X
Be quick to understand things (35)	1	2	3	4	X
Not like to draw attention to itself (36)	1	X	3	4	5
Take time out for others (37)	1	2	3	4	X
Shirk its duties (38)	1	2	3	X	5
Have frequent mood swings (39)	1	2	3	4	X
Use difficult words (40)	1	2	X	4	5
Not mind being the centre of attention (41)	1	2	X	4	5
Feel others' emotions (42)	1	2	X	4	5
Follow a schedule (43)	1	2	3	X	5
Get irritated easily (44)	1	2	3	4	X
Spend time reflecting on things (45)	1	2	3	X	5
Be quiet around strangers (46)	1	2	3	X	5
Make people feel at ease (47)	1	2	3	4	X
Be exacting in its work (48)	1	2	3	X	5
Often feel blue (49)	1	2	3	X	5
Be full of ideas (50)	1	2	3	4	x