

The role of collective trust and gender in fostering collaboration within women-only networks in a niche industry

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Abstract

Drawing from a study of an informal network of women brewers, this article explores the multi-faceted role trust and single-gender membership play in strengthening collaboration and forging relationships within contemporary women-only entrepreneurial networks. It argues that trust is not only integral but also a facet without which such networks would not work effectively. It is also argued that for trust to emerge and maintain, creation of a safe environment and trust building activities - both online and face-to-face - is necessary.

While studies have been conducted on trust in networks, these are largely quantitative, gender-blind and based within large organisations. Providing an in-depth and nuanced exploration of women brewers' experiences of belonging to a women's informal network within a niche industry, perceived benefits as well as examining the gendered dimension of trust in networks, this article addresses this gap and argues for more qualitative research in this area. In so doing, the article furthers debates on the gendered nature of networks and trust within informal networks. It presents a six-pillar framework to further understanding of the role of trust in networks, and calls for further research into gender and trust as well as the nature of online communities in contemporary networking.

Keywords:

Women Entrepreneurs; Networks; Trust; Collaboration; Microbreweries; Gender; Small enterprises;

1. Introduction

Limited literature exists on gender and entrepreneurial networks (Hanson and Blake, 2009: 143). Research into entrepreneurship has been critiqued for not paying sufficient attention to the environment and the social identities of entrepreneurs (e.g. gender, race and social networks) as well as failing to recognise 'the role and importance of social capital and trust-related aspects during entrepreneurial activities' (Ulhøi, 2005: 939). Existing studies focus largely on sex composition of networks when comparing networking of men and women, rather than on how networks are used by women

and men (Hanson and Blake, 2009: 141). Nonetheless, the broader literature on networks and gender indicates that there exist ‘important gender differences in the composition and functioning of people’s network’ and thus exploration of ‘the intersection of gender and entrepreneurs’ networks should prove extremely fruitful’ (Hanson and Blake, 2009: 145, see also Durbin, 2011).

Additionally, studies on entrepreneurial networks are largely quantitative and rely on cross-sectional survey data, and limited knowledge exists about how networks work, how individuals build, use and benefit from networks, and ‘how gender and other dimensions of social identity operate in and help to shape entrepreneurial networks’ (Hanson and Blake, 2009: 145). Yet, it is important to take into account social identities, as these impact on an individual’s access to and composition of their networks, as well as the effectiveness of the network for that entrepreneur (Hanson and Blake, 2009). Gaining this understanding requires adoption of qualitative approaches that allow for a more in-depth and nuanced exploration of these phenomena (Hanson and Blake, 2009).

Addressing these gaps, this paper explores entrepreneurial networks of microbrewers, specifically women brewers. While more women enter the microbrewing sector each year, brewing remains male-dominated and breweries constitute largely masculine territories. The past decade has seen significant expansion in the number of microbreweries and the sector is becoming increasingly competitive (Danson et al., 2015: 141). There are over 1,100 microbreweries in the UK (SIBA, 2013, CAMRA, 2013), with a large number of younger businesses (Danson et al., 2015: 139). Women entering the sector face numerous challenges. They have to prove their competency for this traditionally masculine role, their ability to perform the hard physical work that brewing involves and challenge masculine norms in their workplaces. Women brewers are often under-represented in the sector’s formal networks and committees, and their breweries are geographically dispersed. Additionally, they have to confront sexist attitudes and stereotypical assumptions about who produces and consumes beer.

As a result of these challenges as well as the lack of role models, mentors and networks that could act as a means of support and empowerment for women brewers, back in 2011, Project Venus – a women only network – was established. Project Venus has nearly 50 members, referring to themselves as *brewsters*, and the members share common characteristics and challenges. Many are entrepreneurs, wanting to be, or work in small businesses. Their microbreweries are geographically dispersed across the UK and based mostly in rural areas. Their profession remains male-dominated and women brewers are in minority, facing a number of challenges and constraints, such as gendered

stereotyped assumptions. Project Venus is an informal network - fluid in nature - and the only prerequisite is to be a woman and a brewer (or have a strong interest in becoming one or setting up a microbrewery). As a contemporary network which embraces the opportunities afforded by new technologies, network activities are partly facilitated by a dynamic online community peer group on the Facebook platform, which also acts as the key online communication platform. Members network quarterly at brewing events (each hosted by a different microbrewery) during which members collectively brew a recipe. It is argued that these brewing events act as trust building activities.

Drawing on brewsters' experiences of participation in and belonging to the Project Venus network, this article explores how women brewers collaborate and collectively support each other within the network to challenge constraints they face in an industry that is male-dominated and holds strong gendered preconceptions around the role of the brewer. Trust has been identified as the key enabler of collaboration that allows this informal network of geographically dispersed members to function effectively.

The aim of this paper is to provide an in-depth insight into women brewers' experiences of belonging to a women-only network and the extent to which trust underpins the network activities. The paper addresses the following questions: How do members perceive and experience the benefits of belonging to the network? How do women brewers actively build, use and benefit from their network and what role does trust play in this process? How does gender impact and shape this women-only network? What are the factors enabling trust? How do single-gender networks help facilitate a trusting relationship among network members?

Conceptually, this article furthers knowledge on gender and networks, specifically the complex role of trust within women-only informal networks, exploring the gendered nature of trust and the extent to which trust among members can improve self-confidence, strengthen belonging to the network as well as fostering knowledge exchange and encouraging innovation. The article argues that trust is integral and is facilitated by the shared characteristics of the network members (i.e. single-gender, shared experiences and constraints) and the creation of a safe-space environment (both online and face-to-face). A six-pillar framework is developed to further understanding of the role of trust and gender within women-only informal networks. This is timely and important as it provides an in-depth understanding of how trust is enabled within informal contemporary and geographically dispersed single-gender networks.

2. Literature review

Networks and gender

Scholars widely agree that successful entrepreneurship requires networks (Hanson and Blake, 2009; Nijkamp, 2003). Within SMEs, the use of networks is considered influential and supportive in the developmental process of entrepreneurial activity (Baines and Wheelock, 1998). At the micro-level, the term network refers to 'a social relationship between actors according to content (products or services, information), form (duration and closeness of the relationship) and intensity (communication frequency)' (Durbin, 2011: 92). Networks are the mechanism through which resources (e.g. information, capital) are introduced and moved between individual agents within a social field and through which individuals become connected to and positioned within that social field (Hanson and Blake, 2009: 137).

Although networks 'play an active role in the ongoing development of individual and group identities', to date, social identities of entrepreneurs and their impact on the effectiveness of the network have been largely overlooked (Hanson and Blake, 2009: 136-137). Indeed, gender and entrepreneurial networks have received limited scholarly attention and most studies examine networks and entrepreneurship without paying attention to gender or merely treating sex as another variable (Hanson and Blake, 2009: 141). Nonetheless, gender shapes the ways that networks are built and utilised and 'the importance of studying women's entrepreneurial networks separately from men's has long been recognised' (Hanson and Blake, 2009: 139). For women entrepreneurs, one key underlying barrier to entrepreneurship, which often limits scale and success, is the limited access to relevant role models, mentors and professional networks (Deloitte, 2016), which can lead to isolation. Overall, women entrepreneurs are less likely to have access to those in power and more likely than men to exchange information with women (Hanson and Blake, 2009: 143).

Women join networks mainly for social reasons, psychological benefits and to develop personal skills, while men use networks to for career advancement (Durbin, 2011: 94). Although male-dominated networks are considered more powerful, women often encounter difficulties in accessing these (Ehrich, 1994; Pini, Brown and Ryan, 2004) or are excluded from them (Davidson and Burke, 2000; Fawcett and Pringles, 2000). This leads to women showing preference for single-sex networks (Durbin, 2011) and establishing their own women-only networks to provide support (Pini et al., 2004: 287). Indeed, increasingly women are 'creating, building and participating in organisational and cross-sector networks in both the private and public sectors' (Durbin, 2011: 98), and the Project Venus

network is an example of this. Homophily - 'the tendency for people to interact with others who are like them in one or more ways such as race, gender, profession, or stage in the life course' (Hanson and Blake, 2009: 140) - characterises networks of both women and men. Gender-based homophily is also characteristic of entrepreneurial networks (Hanson and Blake, 2009: 142).

On the one hand, women's networks can be an important source of support for women when they are in the minority and can be beneficial for their careers, providing a sense of collective identity, increased self-confidence, learning opportunities and gaining of new skills (e.g. Durbin and Tomlinson, 2010; Ibarra 1993; Perriton, 2006; Pini et al., 2004; Travers et al., 1997). Those women who experience exclusion from organisational networks are more likely to search for ties with women who are similarly excluded (Ibarra, 1992; Durbin, 2011: 97). On the other, women's desire to fit in with masculine cultures often means rejecting participation in women-focused activities (Durbin, 2015; Wright, 2016). Some women may be reluctant to join anything that is women-only due to their higher visibility, their single gender focus, backlash from male (and sometimes female) colleagues, women's networks being perceived to be less powerful and the perceived stigma of attending a women's network (e.g. Coleman, 2008, 2010; Durbin, 2015). Indeed, studies report that women's opinions about women-only networks varied from considering these essential, bringing positive outcomes, providing 'valuable psycho-social support' and interrupting a sense of isolation, to these being perceived exclusive and not representing a perfect solution for barriers to progression as women also need to participate in mainstream networks (Ehrich, 1994: 4; Pini et al., 2004).

Homophilous ties are considered 'less available, have less instrumental value and require more time and effort to maintain (due to dispersion and turnover) for women and minorities than for their male counterparts' (Durbin, 2011: 97). Also, while 'the spatial aspects of gendered networks have received surprisingly little attention' (Hanson and Blake, 2009: 140), research has shown that women are more limited geographically and less mobile, which can impact on their participation in networking.

Overall, women show preference for belonging to informal networks with a 'strong social element' (Durbin, 2011: 94). As opposed to formal networks, which tend to be more business related, informal networks tend to be 'personal, voluntary, and have fluid boundaries', participation in these is 'not formally governed or officially recognised' and their goal can be 'work related, personal, or social' (McGuire, 2000: 503). Informal networks are 'more interactive and based on friendship and support, and broader in scope' (Durbin, 2011: 94). Informal networks are thus, by their nature, more difficult to identify, and women are considered not as 'skilled as men in building informal networks' (Durbin,

2011: 97). However, informal networks and their gendered nature are under-researched. With informal networks, such as Project Venus, trust becomes more critical than in a formal network. While trust has been shown to develop in networks based on weak ties, the extent to which gender plays a role in generating trust remains under-explored.

Several gaps have been identified through analysing the literature on gender and networks. Research into gender and entrepreneurial networks, particularly informal networks, while expanding, remains limited. The spatial aspects of gendered networks have to date received scarce attention. More studies from a micro-sociological perspective are needed to explore the gendered nature of networks. Quantitative analyses predominate but these treat sex composition as a variable and fail to explore the in-depth experiences, perceptions and benefits of belonging to women-only networks, missing out on the rich insights into women entrepreneurs' perspectives. Drawing on the Project Venus network of women brewers and adopting a qualitative approach, this paper aims to address some of these gaps.

Trust, gender and networks

The concept of trust has - to some extent - been explored in research into organisations (see edited book by Kramer and Tyler, 1996) as well as other disciplines (e.g. sociology, psychology, philosophy and economics), and to a lesser extent in entrepreneurship literature (e.g. Hohmann and Welter, 2005; Welter and Kautonen, 2005; Welter and Smallbone, 2006, see Welter, 2012 for review). For example, studies have looked at the role of trust in entrepreneur's venture network development (e.g. Smith and Lohrke, 2008). However, few studies have focused directly on how trust is built in entrepreneurship (Welter, 2012: 203) and its role in entrepreneurial networks.

In 1996, Misztal (p. 29) argued that 'modern social sciences have not contributed significantly to our understanding of the concept of trust and the conditions under which trust relations thrive or struggle or survive' (cited in Hohmann and Malieva, 2005: 11). Since then, further research has been conducted on trust, although exploration of the role of gender in determining trust relationships remains scarce. Indeed, limited research has been conducted into the gendered nature of trust in the context of informal networks, and there is a need for a more gender-aware examination of trust in such networks.

Difficulties in examining and measuring trust have also been acknowledged. Trust is 'not an "objective" phenomenon that can easily be measured and understood across cultures and countries' or

contexts; it is a socially constructed phenomenon which 'renders its measurement and empirical analysis difficult' (Welter and Smallbone, 2006: 469). Most trust-related studies rely on large-scale surveys and quantitative approaches (Welter and Smallbone, 2006), with in-depth qualitative approaches and micro-sociological analyses of the role of trust largely missing. Such analyses would allow for a richer and deeper exploration of the social mechanisms related to the successful functioning of networks (Ulhøi, 2005: 943).

Numerous definitions of trust exist in various disciplines (Hohmann and Welter, 2005; Welter, 2012). Most definitions of trust contain the common elements of '[r]eciprocity, expectations or beliefs about the intentions and trustworthiness of others' (Welter, 2012: 195). Trust is built when peers share common values and norms (Fukuyama, 1995; Belevander and Page, 2011: 626). It is built over time in response to prior actions and develops through personal experiences, and for trust to emerge, some form of risk is necessary (Belevander and Page, 2011: 626). Emotions - respect, affection, empathy - are all important in the production of trust (Hanson and Blake, 2009: 137). From the perspective of businesses, trust 'lowers transaction costs, fosters intra- and inter organisational relationships, and helps with innovation and information sharing' (Doney et al., 1998; Belevander and Page, 2011: 626). In their examination of the concept of trust, Hohmann and Malieva (2005) establish three common elements of trust: reciprocity, expectation and knowledge. These elements, discussed below, often overlap, intersect and feed into each other, and constitute a useful starting point for the analysis.

Reciprocity relates to social interaction i.e. 'the relationship between a giver and an object of trust' (Hohmann and Malieva, 2005: 11). Reciprocity 'signals to both trustor and trustee that the trust they extend to each other will be returned' (Welter, 2012: 195). Thus, trust is based on a belief that others will 'behave in a way that is expected and benevolent' (Welter, 2012: 195). These perceptions develop from 'signals (or trust cues)' and are based on a 'willingness to be vulnerable to another party' (Welter, 2012: 195). By signalling that one is worthy of trust, one encourages trustful behaviour in others (Mayer et al., 1995; Welter, 2012: 195). Trustworthiness is demonstrated through 'personal characteristics, past behaviour and emotions such as demonstrated honesty, loyalty, sympathy and empathy' (Nooteboom, 2002; Welter, 2012: 195). Trust can be difficult to foster in an entrepreneurial network, due to perceived competing self-interests.

In this context, trust means to rely on someone or something and is strongly related to self-confidence. Self-confidence is a pre-requisite for reciprocity. It is considered 'one of the most important

subjective factors of trust' and refers to 'a behavioural attitude connected with two-way interaction' (trusting relationship, a pre-requisite allowing trust to be won) (Hohmann and Malieva, 2005: 11). Self-confidence is 'the foundation of all trust' and refers to 'one's ability to recognise and accept one's own potential' (Hohmann and Malieva, 2005: 13). In a network context, reciprocity means that network members have the confidence to take from and give to the network, a belief that they can make a positive contribution. Of interest in this article is to explore how women brewers perceived the relationship with other members, the role of social interaction and their own contribution to the network i.e. their self-confidence.

In a network, trust manifests as an *expectation* with regards to the behaviour of others and is understood as a belief that the objects of trust react in a desirable way and that the network can be relied upon to be supportive (Hohmann and Malieva, 2005: 12). Rotter (1980: 1 cited in Hohmann and Malieva, 2005: 12) defines trust as generalised expectations 'held by an individual that the word, promise, oral or written statement of another individual or group can be relied on'. Trust in others has a 'communicative and reciprocal character: people who have made the concession of trusting behaviour expect the partner to reciprocate' (Krampen, 1997: 27 cited in Hohmann and Malieva, 2005: 14). Expectation in a network context means that network members believe that other members will consequently react in a desirable and supportive way. Of interest in this paper is to explore how the Project Venus network members projected expectations towards other members, and the ways in which they relied on the advice of others.

Knowledge is about voluntarily and subjectively placing trust on the future behaviour of the other (Sztompka, 1995: 256). It is 'voluntarily taken up, subjectively rationally understood and motivated by self-interest (Welter et al., 2004) and which brings a certain measure of risk, since it can lead to both gain and loss' (Hohmann and Malieva, 2005: 13). In the context of Project Venus, this means the way members decide to place trust in others based on their limited knowledge and information, and trust that the actions taken will have positive impact in the future.

Literature on trust shows that trust and social capital are considered closely linked, as trust supports network relations. It is 'viewed as the "glue" necessary for the social capital's formation' (Belevander and Page, 2011: 626; see also Fukuyama, 1995; Putnam, 1995), and integral to 'establishing and maintaining networks' (Belevander and Page, 2011: 625). For social capital to develop, an environment of trust is needed among members as this 'reduces asymmetrical information concerns, limits

exploitation, and thereby facilitates the exchange process' (Fukuyama, 1995; Putnam, 1995; Belevander and Page, 2011: 624).

Scholars have distinguished between personal, collective and institutional trust (Hohmann and Malieva, 2005; Welter, 2012). *Collective trust*, of particular interest in this paper, means trust in collectives i.e. informal institutions which the collective has adopted (Hohmann and Malieva, 2005: 15). Collective trust often overlaps with personal and institutional trust (Welter, 2012). It develops from: recommendations of others within the network; reputation (i.e. knowledge of others about prior behaviour of potential member); and shared rules and codes of conduct within the group (Welter and Smallbone, 2006; Welter, 2012: 196). Scholars have highlighted the importance of trust building activities (Welter and Kautonen, 2005: 369). However, in-depth analyses of collective trust within single-gender informal networks are limited.

Scholars have also identified the darker sides of trust and have critiqued the idealising of trust-based relationships and the assumption of a generally positive role of trust. The dark sides of trust include lock-ins, over-confidence and over-reliance on trust and blind trust (Zahra et al., 2006; Welter, 2012). Additionally, 'Trust is volatile and fragile - it is easily destroyed' (Welter, 2012: 205) and trust violations occur from time to time.

The concept of trust has been used in entrepreneurship literature as well as other research areas, although there is a gap in knowledge on trust, gender and women's networks. What is of interest in this article is the overlooked gender dimension, the context of women's only networks and how trust can unlock knowledge sharing and can help members cope with hostile attitudes, strengthen occupational identity and drive change as well as how women brewers in Project Venus placed trust in each other and what role gender played in this. Limited qualitative research has been conducted on how a trusting and safe environment is built within networks to enable trust to emerge and how such an environment is created. Although gender also influences trust, the gender dimension is often overlooked in entrepreneurship literature on trust (e.g. Welter, 2012).

3. Methodology

As the focus is on an unresearched group and of interest is an in-depth exploration, this study is necessarily exploratory and qualitative, and adopts a multi-method approach (Denzin and Lincoln, 2005).

Firstly, semi-structured interview - giving the researcher flexibility within a structure - was used. In total, 16 semi-structured interviews with Project Venus network members from across the UK (including the founder) were conducted. The brewer role is multifaceted. As well as brewing beer, it requires to constantly innovate, create new recipes and ways of working. Some brewers also engage with sales and gaining new clients, promotion and delivery of their products, administrative duties, as well as participating in beer festivals. The participants differed in terms of age, location of work (mostly rural), time in the sector, background and education. They also held different roles: from being less experienced to head brewers and brewery owners. Many were entrepreneurs or aspiring ones. In 2015, the network had nearly 50 members. The Project Venus network brings together women brewers with the aim of sharing information, providing support and collaborating. They regularly communicate through a closed Facebook group and meet face-to-face at brewing events, during which they collectively brew a recipe, socialise and exchange knowledge.

Participant observation was the second method used. Observation is useful when interest lies in understanding the context in which participants operate, social relations and people's behaviour and activities (Mack et al., 2005). Observations were made at five brewing events to gain deeper understanding of the network and social interactions between the network members. Participating in and observing these events allowed for building deeper understanding of the brewing process and the network itself.

Taking the interpretative stance, participants' experiences were 'made sense of' through the process of coding, organising, identifying key themes and interpreting the data with the aim of exploring the women brewer's experiences of belonging to the Project Venus network, with the particular focus on collaboration, trust and social interaction. The network members were not explicitly asked about trust within the network. Instead, they were asked them about the benefits of belonging, collaboration, how the network worked and their perceptions of it. The data gathered was coded thematically and trust was one of the key themes that emerged during analysis. It was then chosen to be focused on.

4. Enablers of collective trust within a women-only network

From the analysis of Project Venus members' experiences and perceptions of belonging to the network, trust emerges as the core value that not only underpins the activities within and relationships among network members but acts as the "glue" that binds the group together and without which the network could not function effectively.

The data analysis began with examining Hohmann and Malieva's (2005) three common elements of trust: reciprocity, expectation and knowledge. These formed the initial basis of the data analysis, from which other critically important and overlapping elements - conceptualised here as the six pillars of trust - emerged, to constitute a framework for understanding how trust works within contemporary women-only informal networks.

Self-confidence and trust in oneself

Research shows that engaging in trustful behaviour is strongly related to self-confidence. As a prerequisite for reciprocity, self-confidence is 'one's ability to recognise and accept one's own potential' (Hohmann and Malieva, 2005: 13).

Joining the network requires a member to put themselves forward. Most Project Venus network members discovered the network through word of mouth recommendations from fellow brewers, both male and female: 'My boss told me... He said: "There is a group of girl brewers. You'll need to get in touch with them. You'll learn stuff". He was exactly right. It's been great' (Brewster 2). Some brewsters had already known each other, others were new and first joined the Facebook group and then brewing events: 'She [name of another brewster] let me know about it and I saw stuff on Facebook. I had kept an eye on it for a little while on Facebook but never done anything about eighteen months ago and then started to get a bit more involved with it' (Brewster 1). As the number of women brewers in the UK is low, initially the founder invited potential participants to the group, and with time the group grew organically: 'I just rang up and asked if I could come along basically ... and she said I was more than welcome' (Brewster 11).

Within the confines of the closed online community, the self-confidence to engage could be seen in brewsters' narrations of how they participated in online discussions. Members showed confidence in responding to queries and giving advice to peers:

Someone asked about key kegs the other day and that was one of my main jobs when I first started, managing the key keg supply. So I was able to give some information back about that ... People ask questions about all kind of stupid things. So it's cool, it's actually very useful ... There's a particular hop that we use and I've just learnt today that it's actually at the end of production ... I don't think my manager or anyone knows this, because we still have it, but we must be coming t the end of it and I don't know if they know that. So info I should take back ... I've actually found myself going into Facebook and going onto the page ... I get in there, I

go and have a look what's on the Project list to see if there's anything that's useful (Brewster 4).

Additionally, members felt sufficiently confident to seek advice from peers:

I've put things on Facebook on our private group. For example, we were looking at moving to a brewery that had a spring near it and Environmental Health were worried about the effect that our waste was going to have on the spring, so I put a comment on Facebook about that. I had a dozen replies with really helpful suggestions and way forward, so that's where Venus has come in really helpful (Brewster 2).

Furthermore, belonging to the network and their evolving relationship with other brewsters allowed for self-confidence to develop. The longer members belonged to the group, the more committed they became and their brewster identity developed:

[I]t's [belonging to the network] quantified the self-belief that I'm getting in myself as a brewer. I've not been in the industry long at all; it's been less than two years and I know how green I am. To be able to use other, more experienced people as a sounding board, and for them to nicely say to me "Yes, that's a wonderful idea" or "No, that's rubbish" is hugely invaluable (Brewster 2)

I think sometimes it's helping them [brewsters] to maybe get courage or speak up a bit more. I'm proud of what we're doing. Because if you're surrounded by men in your company, sometimes you get just suppressed (Brewster 5).

Social interaction

Trust is closely related to social interaction (Hohmann and Malieva, 2005: 11) and women show preference for belonging to informal networks with a 'strong social element' (Durbin, 2011: 94). The opportunity for frequent social interaction (both online and face-to-face) in a supportive environment was key to developing trust within the network, facilitating relationship building and forging friendships.

Members spoke about how strongly they valued socialising and friendships made through the network, in particular at brewing events. As a minority group in the sector, women brewers appreciated the opportunity to interact with women peers, which helped build group trust, strengthen relationships, and members saw tangible benefits:

I love being part of the creativity and the lifestyle of everyone, how we all love to meet up and have just a general chitchat about beer. I mean you'd think that you'd exhaust the subject and get bored, but you never do. There's so much to talk about and it's really, really nice meeting up (Brewster 10)

I love it (laughs). You can have a - we just have such a laugh and a giggle about it. I suppose we can talk about things that we maybe wouldn't feel as comfortable about talking to men about maybe. Ups and downs in the brewing industry, as women are when they get together. Just have a good old gossip and have a laugh. Yes, it is really, really good fun (Brewster)

I do love the social element of it and discussing ideas. Every time we go, we sit around saying, "Oh, I've got this problem, I can't seem to do this with this," and everyone will chip in and chat, and by the time you come away you've got some really great ideas or you've solved the problem that you thought you had. It's getting together, seeing them all, getting together and discussing ideas really, that's the best bit for me ... But as soon as I get stuck or I'm thinking, "oh, God, you know, shall I do it like that?", that's the first place I go. I would go there to ask all of them there and generally, you get, you know, a few ideas. ... I know lots of people through it that I would never have known, so that's just been brilliant. Also, for seeing so many other methods and – well not other, so many similar maybe, but you know what I mean – so different brewery to brewery, everyone has their own way of doing things so that's really good. ... But generally, just through meeting so many people and sharing so many different ideas really (Brewster 12)

Social aspects were vital to network strengthening and increasing trust among network members, as the narratives show. Brewsters in the network shared a passion for brewing, appreciated meeting like-minded peers of the same gender who, as women in the male-dominated industry, faced similar challenges. From a trust building perspective, the face-to-face brewing events functioned as trust building activities, bringing brewsters closer together and generating reciprocity, while the online community helped maintain these relationships in-between the events as well as being a platform for knowledge exchange.

Safe space environment

This reciprocity through friendship formation and knowledge exchange could not occur without members feeling that Project Venus was a safe and supportive environment where they could openly

share ideas and feel comfortable seeking support. The importance of creating a safe environment conducive to trustworthiness, openness, collaboration emerged from the data as a key element. Yet, this aspect is often overlooked in the literature on trust in networks.

Two factors contributed to members' active participation and trust building in the forum: (1) the private nature of the online community peer group and (2) shared social identities among members, in particular gender.

Being small scale (approx. 50 members), closed to non-members and women-only, the online community was perceived as a non-threatening and safe environment for members to seek and give advice without feeling exposed, trusting that other members would reciprocate. Brewsters would not have felt the same confidence to be vulnerable if this was a mixed gender space or an open forum (e.g. Twitter):

I call on them [other brewsters] nearly every - well, every week let's say. ... I posted one question just the other day on the forum about water treatment when brewing a lager and got some responses back that are really helpful and it's guided me towards how I'm going to treat my water next week when I make the lager. So I'm more comfortable doing it on a private forum like that ... rather than broadcasting it on Twitter. In all honesty, I probably feel that if I did broadcast it on Twitter, that there would be men out there who think "Oh, a woman. She doesn't know what she's doing. She's not got a clue. She needs to do this, to ask a man what to do". That is probably a little nagging voice in the back of my head. Rather than asking a question openly on Twitter or on the closed SIBA forum not only would I think "Oh, it puts me in a bad light; people might think I don't know what I'm doing" They might also think it's the brewery ... You feel you are asking a silly question, but on Project Venus I don't feel like that at all. There's no silly question. You just get a lot of help back' (Brewster 7).

I think the Facebook thing, it seems like people are more inclined to share information, they don't feel so sort of threatened going out and asking a daft question on it (Brewster 15)

I: Would you still ask for advice if it was a mixed group?

B8: I probably would. I think I'd probably just approach it differently. I think I would just feel probably intimidated is the wrong word to use but probably I'd feel like... I'd probably let other people lead a bit more maybe. Because I'd feel that they had more experience than me (Brewster 8)

Shared social identities

The characteristics group members shared informed the group dynamics in terms of gender, profession, culture (all white British but two Germans), shared passion for brewing, and shared goals: 'it's lovely to get together with like-minded people who share the same interest, to brew beer, and just have a lovely time of it' (Brewster 1). Members felt trust towards each other in part as they shared characteristics, similarity of experience, barriers at work, feeling isolated as women in a male-dominated sector, and wanting to improve the industry. Of these, gender and being part of a minority in the sector were most salient:

Because it's so male-dominated you never get to be around just women, so when you are just around women, it is nice every once in a while. It really is ... When you have women together, it really does bring out all sorts of wonderful creativity (Brewster 10)

It's all very open and honest with each other. It's refreshing and it's comforting to know that everyone else has frustrations and it's not just yourself (Brewster 16)

No, it's not normal to be honest, it's quite unusual. But you do sometimes get some brewers collaborating, but it tends to be just like one of them, you know, maybe a couple of them doing something together. But I think that was quite a nice thing to set up actually, especially with women in the industry, because we're sort of in a minority and we'd probably be a bit backward about coming forwards and getting involved (Brewster 14)

There is a camaraderie between the women. We all want the same thing and we do (not?) have to face the naysayers that "Oh no. Women can't make beer", there are guys out there that just don't like the idea at all: "Why do we need a group to get together and brew a beer?" (Brewster 7)

Trust in others

The belief that others will reciprocate and that they would react in a desirable way is integral to trust formation (Hohmann and Welter, 2005:12). In a network, this manifests as a belief that network members can be relied upon to be supportive, the outcome will be positive, and that learning and knowledge exchange can happen:

You can learn so much from people who have more experience. What I really like is them explaining it in the way you can understand it. It's not in a way that's very patronising or you

feel like a waste of space. ... You know, sometimes I feel like asking these stupid questions, and when I talk to a woman, not always, but sometimes, she might understand in what situation I am, because she was there twenty years ago. You know what I mean? Maybe men think, "Why doesn't she know it?" ... It's like admitting you don't know something (Brewster 5)

Sometimes I find that the women are a bit more approachable, a bit more willing to help. Sometimes the guys that I speak to – this is from my own experiences – are very much like – they're concerned that I'm going to pinch all their business. Whereas the girls are a bit more like, "Yeah. I'll help you," which is what I'm like if someone asks me for help (Brewster)

It was a chance for networking and it was a chance to learn. At that point I was - well I still am - I'm still learning. So it was an opportunity to meet S. who is a very experienced brewer and to meet other brewers to chat about beers and just get some contacts in the business. Because I haven't been in the business that long really and as I say, I'm keen to learn, so that's how I got involved on the very first one and then I've been to most of them since then (Brewster 7)

Members believed that gender mattered when seeking advice, due to the similarity of shared experiences and hopes. This perception of camaraderie among brewsters was often contrasted with their less positive perceptions of male brewers, who were not perceived to have struggled with the same structural barriers. This led to greater trust being placed in women peers and there was an expectation about not feeling intimidated, exposed or patronised, and that their problems and goals are shared with other members of the group.

For brewsters, trust was in part about having confidence that questions will be answered, members can be trusted and that regardless of experience and background, everyone in the network is equal:

[K]nowing that when something goes wrong, I can pick up the phone and ring any number of these thirty brewers that I know now. That's the most useful thing for me (Brewster 4)

If anyone's got a problem or something happens halfway through the brew, it's like "Help! What do I do?" and people go "Do this" ... I think it's just nice to know that there's help out there if you need it and nice to have networking days and share - you can share problems with other people having the same problems (Brewster 6)

Although on one level brewsters were competing with each other for business in a niche and highly competitive environment, the members were proud to have found a space to collaborate and found value in sharing knowledge where they felt treated equally and not seen as a threat:

[I]t doesn't matter how much experience you've got, everybody just treats everybody the same. And there aren't any egos at all ... I've never witnessed any kind of egos from anyone. It doesn't matter whether you, you know, have been voted the best brewer in Britain or you've just started out in a two-barrel brewery, everybody treats everybody the same. And that's what I really like about it. ... People are really willing to exchange ideas and give advice and nobody is there to try and get one up on anybody or anything like that. And, this might be a very sexist thing to say, I'm not sure it would necessarily be the same if it was a mixed group of men and women. ... Because I think men do tend to be more that sort of macho side to it and I think that, I don't know, maybe that's me being - maybe I've just got a bad image of men or some men that I've met in the past. But, you know, there are a lot of men in the brewing industry that have massive egos. I have met them and I'm not sure that the Project would be the same if it was a mixed group (Brewster 8)

[A]nd we know she's [a new member wanting to set up a brewery] picking up tips for how she's going to be using her own brewery, but that's - we're happy to give her those tips as well. So although, we're in competition with each other, we're still willing to help (Brewster 6)

I feel that it's definitely a place where I could go if I've got this problem, or I've got this idea, give me some input. I don't think there is any "Oh, I don't want to tell her that thing because it might be cutting my lunch in some way". I'm not getting that (Brewster 4)

The perceived benefits meant that brewsters travelled long distances and incurred costs to participate in the brewing events: 'Last time I traveled to Nottinghamshire, which was four and a half/five hour drive. I did that. I'd do that again. Absolutely' (Brewster 2). This willingness to travel for networking contrasts with studies arguing that women are limited geographically in terms of how far they can travel and are less mobile (Hanson and Blake, 2009). Distance was not seen as a barrier to the Project Venus members as they saw benefits of participation outweighing costs.

Trust in the future

A key component of trust within a network is that members need to share a belief in the potential positive and tangible outcomes of their participation in the network, and that these will ultimately lead to change and transformation, and that their time invested in the group and risks taken would be worthwhile. This is linked closely to the knowledge element of trust which is about voluntarily and subjectively placing trust on the future behaviour of the other (Sztompka, 1995: 256). Brewsters, trusting in advice of peers in the network (and safe environment), implemented changes in their practice, solved technical problems, learnt new methods, experimented with new ingredients:

Other women out there are much adventurous than me and that's great because being involved in something like Project Venus, I can talk to those other women and get some great ideas for new beers and I can already get a heads up on what works and what doesn't work. Or even spark off new ideas. It also gives me a bit of a kick up the backside to go looking on the internet or researching in books about how particular ingredients would work in a beer or not (Brewster)

I call on them probably nearly every – well, every week let's say. There might be a little question crops up in the brewing, recipes and ingredients-wise and it's - I posted one just the other day on the forum about water treatment when brewing a lager and got some responses back that are really helpful and it's guided me towards how I'm going to treat my water next week when I make the lager (Brewster)

I don't know how to say it but like the togetherness, you know, very supportive, building up friendships, they're not scared to share their ideas, get new ideas. If you want to put ginger in a beer, you know, how much ginger do you put in? You don't want to spice someone's throat out, so we all talk about how much ginger and it's like "Oh, what about this, what about that, what about the other?" (Brewster 10)

Additionally, while superficially a homogenous group in some ways, the group was also diverse and different individuals were able to contribute different things. Members could reciprocate in various ways (both online and offline): through contributing to the Facebook group, attending brewing events, offering their venue for the events, and participating in beer swaps. This contrasts with some literature on negative aspects of homophilous networks and the potential lock-ins:

I've changed quite a lot of the ways we do stuff in the brewery. ... We have tried dry hopping a bit, based on S's advice. ... We've changed the temperature at which we add hops to our

beer, the way that we clean a tank – we use a different method. P. told me about how to clean your mash tun a bit more efficiently using a little bit of caustic in a squirty bottle, and it's R. that told me about putting hops in at 80°. Things like that – it does influence your day-to-day stuff (Brewster 1)

Members also believed that the collaboration within the network gave them some visibility and provided opportunity to innovate and push the industry forward:

I think it's very positive to raise the profile of women within the industry. ... They're so positive about pushing women and making people realise that, just because we are women, it doesn't mean that we're only fit for being chained to the kitchen sink ... I think that by having some high profile people on, that's obviously helped ... So they pushed Project Venus, which then in turn pushed women into the industry, which then in turn pushes the industry. So, we're all cogs aren't we? We all help each other really' (Brewster 2)

Having an opportunity to exchange knowledge and form friendships in a safe and non-threatening environment, resulted in members transforming their practice, innovating and driving change in their businesses and consequently in the industry in general as well as strengthening their brewster identity. Trusting other members' advice, women brewers implemented changes in their practice and tried new ideas.

5. Discussion and Conclusion (N.B. these are still initial thoughts)

This article sought to demonstrate that trust can be a powerful concept to explore and understand collaboration within women-only informal networks as well as furthering knowledge on gendered dimensions of entrepreneurial networks. Building on Hohmann and Malieva's (2005) definition of trust, a six-pillar framework of enablers of collective trust in contemporary women-only networks has been developed consisting of: trust in oneself, social interaction, safe space environment, shared social identities, trust in others and trust in the future.

For the members of the Project Venus network, trust - specifically collective trust - functions as the core value that not only underpins the activities within and relationships among network members, but also constitutes the "glue" without which the network would not have the same character, attributes and value. Indeed, trust, and the fostering of trust, is inherently embedded in brewers' collaborative actions. Trust constitutes a vital component in the context of informal networks, particularly in the absence of formal norms.

The Project Venus network functions as a sounding board for ideas, a key point of reference for information, a springboard for innovation, and a platform where business is discussed but also friendships are made. Trust within the network (openness, togetherness and camaraderie) enables women brewers to create a safe, non-threatening environment where they can be comfortable sharing information, ideas and opinions as well as giving and receiving advice. This in turn, results in members modifying their practice and experimenting with new ingredients, thereby contributing to driving the industry forward creatively.

Social interaction - both online and face-to-face - helped trust to form within the network. Social interaction was highly valued by network members. Being often geographically dispersed and isolated, the opportunity to meet and interact with other women brewers socially facilitated friendship formation which led to different degrees of collaboration. The brewing events functioned as trust building activities, while the online community peer group helped the group maintain momentum and solidify the relationships as well as keeping the knowledge exchange dynamic. Thus, the online interaction and support received and given via the online community was considered as important and valuable as face-to-face brewing events.

Gender mattered in trust building among the network members and shaped the nature of the communication. Both the single-gender nature of the network and the absence of male brewers were perceived positively and contributed to the members feeling more confident in seeking help both online and offline. Their shared characteristics - i.e. common experiences of being in minority as well as constraints faced in the industry - helped bring the group closer. Thus, the trusting relationship among the members was that of collective trust, one that facilitated the strengthening of their brewer identity and developed their bonds in spite of geographical distance.

For women entrepreneurs in male-dominated and niche industries like microbrewery, trust-based women-only networks like Project Venus, can be influential and can constitute an important source of support as well as a platform where occupational identity can be strengthened, particularly in scenarios where organisational support is not present or is limited.

While the network excluded men, Project Venus members did not want the network to be perceived as anti-men, as many collaborated with male brewers and were careful for the network to not create an 'us and them' discourse, whilst appreciating the value of Project Venus as a women-only space.

In interviews, participants were also careful not to criticise the network. This is perhaps due to Project Venus being a relatively new initiative, the lack of hierarchical structure within it and a strong sense of community and shared goals. This brings up questions of over-reliance on trust and it would be however interesting to return to participants in a few years' time to see how attitudes towards the network evolve. Thus far, no incidents of trust violation were reported.

This study is timely. At the current time, with the prevalence of technology-enabled social networking (e.g. LinkedIn, Facebook), it is becoming easier for niche professional online community networks to be established and more research is needed into the nature of these as well as the reasons why these are set up and the ways in which such networks succeed or fail, and the role trust and gender play as well as whether these networks are mostly online or, like Project Venus, function in both dimensions.

Additional notes:

Implications of the study

- Informal women-only networks can be influential as an important source of support (as well as a platform where occupational identity can be strengthened). There is potential for applying good practice in microbrewery to other sectors, highlighting the value of both face-to-face interaction and creating women-only safe online community spaces.
- This study establishes the level, value and nature of support utilised by women brewers and can contribute to scholarly debates around women-only networks. This can be valuable for tackling female under-representation in male-dominated sectors. It is critical to better understand which forms of support are the most effective and what, if any, support is missing.
- Knowledge gained about Project Venus can be utilised to share good practice to offer support for women in other male-dominated industries as well as those women operating in niche sectors (small-scale rural and geographically dispersed enterprises), who find themselves isolated. This can have implications on attraction and retention of women.

Value and further research:

- This study provides insight into an unresearched group and contributes to the scholarly debates on gendered dimensions of networks, collaboration and trust

- The concept of trust can constitute a powerful framework to explore women's networks and their ways of overcoming constraints in a male-dominated industry
- The study aims to understand under what conditions support for women flourishes. Are informal women-only networks most effective? Which types of support are valued and utilised by women? Does the size of the network matter?
- The study highlight the value of qualitative approaches to exploring the nature of networks.
- The article highlights the importance of safe space environment (both online and face-to-face) and social identities in networks
- The article highlights the importance of updating theory of networks in relation to new technologies and their impact on the nature of networks
- There is scope for utilising literature on minority groups networks (e.g. migrants, male-dominated professions)