

Virtually a Sisterhood: Social Connectedness and Online Collaboration

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Abstract

The purpose of this ethnographic research was to uncover the experiences of culturally diverse women participating in an online business strategy course and to evaluate the impact of virtual collaboration on social connectedness among this group. This study was situated within a national organization for women of color who are entrepreneurs. Data was collected from three members during an eight-week online course that also functioned as a virtual community of practice. Qualitative data was collected in three phases of semi-structured interviews with each participant being interviewed at the beginning, midpoint, and end of the course. Inductive analysis revealed that virtual collaboration positively impacted participants' feelings of social connectedness when activities were supported by use of virtual collaboration tools. The virtual collaboration tools allowed participants to work towards common goals, build a support network, and participate in skill development that contributed towards their career advancement.

Keywords: social connectedness, virtual community of practice, virtual collaboration tools, social capital, and women of color

Virtually a Sisterhood: Social Connectedness and Online Collaboration

Professional women of color often encounter discrimination and marginalization that negatively impacts their careers (Neville et al., 2018; Scott & Hussein, 2019). Additionally, based on their status as double minorities, these women also experience threats of being stereotyped which can leave them feeling isolated (Alfred et al., 2019; Johnson et al., 2017). Among the challenges faced by these individuals is the lack of access to support systems that provide them opportunities for mentorship, networking, and professional development opportunities (Ong et al., 2018; Rice, 2017). Research has shown that when these women have access to resources, networks, and spaces where they feel supported, understood and connected, it has a positive impact on their personal and career success (Kumi-Yeboah et al., 2017; McLoughlin et al., 2018).

The purpose of this study was to evaluate the impact of virtual collaboration on social connectedness among a group of culturally diverse women participating in an online professional development course for entrepreneurs. Social connectedness is identified as a factor in the success of underrepresented populations and past research has expressed a need for more studies centered on the professional experiences of these individuals (Ong et al., 2018). Specifically, the research question that guided this study was how does virtual collaboration impact social connectedness among a group of culturally diverse women participating in an online business strategy course for entrepreneurs.

Conceptual Framework

Social capital theory holds that social constructs impact how one views their role in a group (Bourdieu, 2011). Current research on social capital evolves this theory, identifying social capital as a construct that can be directly aligned to the social and economic well-being of individuals who belong to groups, networks, or communities (Waller et al., 2011; Zhang et al., 2011). Waller et al. (2011) highlighted that the degree of social capital's influence can be connected to an individual's perception of belonging within these groups, and how this perception impacts their connection to other individuals in this group. There is value connected to an individual's sense of belonging and subsequently their social connectedness to a group or network, with these two components often identified as the two major tenets of social capital theory (Waller et al., 2011).

When an individual has a strong sense of belonging it means they feel fully integrated into their environment and as such, can maximize opportunities to benefit from the resources of that environment. An internal form of sense of belonging is social connectedness (Costen et al., 2013). Social connectedness is centered on the opinion of one's self in relation to other people within a group or network and represents the emotional distance between one's self and other people within their network (Paolucci et al., 2021). Social connectedness is also viewed as the strength of the relationships that an individual has with others, and how these relationships influence their interactions with others in a particular network.

Social Connectedness and Underrepresented Populations

As it relates to underrepresented populations, Costen et al. (2013) revealed that social connectedness can be an influencer in an individual's ability to acclimate to an environment. Aligning with this study, Museus and Saelua (2017) highlighted that more culturally engaged climates can positively impact feelings of connectedness and belonging among underrepresented individuals in learning environments. In these environments, individuals from underrepresented populations seek out or build their own support systems (Ong et al., 2018; West, 2017, 2019). Participation in these types of support networks, also known as

counterspaces, has been shown to lessen feelings of isolation by helping women form connections with others who may also have had similar challenges with discrimination and marginalization (Johnson et al., 2017; Ong et al., 2018; West, 2017, 2019).

A high degree of social connectedness in learning environments can also have implications for an individual's success (Mishra, 2020; Museus & Saelua, 2017). Factors that positively influence social connectedness in learning environments are those that intentionally embrace diversity and inclusion as well as depth and quality of relationships with peers who share similar ethnic backgrounds (Costen et al., 2013), and support services such as counseling, coaching, or mentorship (Mishra, 2020).

With the advancement of technology, recent research has explored the role technology plays in building social capital in online environments. Much of the research showcases the ways in which individuals engage or leverage technological tools within these environments to engage with others, to find and create communities, and to learn in ways that impact or help individual's form their social identities and acquire social capital (Grottke et al., 2018; Roldan et al., 2017). As such, online interactions have implications on an individual's feelings of connectedness to other individuals in those networks. Additionally, past research on building social capital in an online forum uncovered how the use of technology, namely computer mediated communication tools, both supports and interferes with an individual's feelings of connectedness (Roldan et al., 2017).

In in-person environments an individual's feelings of social connectedness can be assessed through their perceptions of their position or belonging in that group, how they feel they demonstrate the predictable behaviors of that group, and the physical traits of the environment (Callahan et al., 2015; Irgens, 2019). However, in online environments, each of these aspects are more challenging to observe (Slagter van Tryon & Bishop, 2009). Further suggesting that enhanced feelings of social connectedness in online environments are closely tied to activities and behaviors that support collaboration, open communication, and provide opportunities to identify common goals or to share resources (Grottke et al., 2018; Mays, 2016). When these strategies and activities are leveraged in online environments and strong feelings of social connectedness are able to develop, it can be an influencer in career development, persistence, and achievement (Donelan, 2016; Heidari et al., 2020). These opportunities are often presented through the use of online social networking tools, where individuals can build formal or informal networks (Donelan, 2016; Heidari et al., 2020; Roldan et al., 2017). Through these networks, individuals can contribute their own knowledge and at the same time, learn from others, and gain access to career opportunities.

Virtual Communities of Practice & Virtual Collaboration

Lave and Wenger (1991) defines communities of practice as systems or networks where members develop a shared understanding about who they are, what they are doing, and how each of these components apply to them individually as well as within a collective community. Virtual communities of practice (VCoPs) are defined as communities where members build, share, and create knowledge in an online environment and have been heralded as vital to collective learning in a society that is more reliant on technology (Ardichvili et al., 2003; Ardichvili, 2008). Through VCoPs, those individuals who are novices can build knowledge and acquire resources from more experienced individuals (known as experts) participating in that community (Hafeez et al., 2019; Hernández-Sotoa et al., 2021).

Research of Callahan et al. (2015), Liu et al. (2017), and West (2019) suggested to combat underrepresentation and improve the retention of diverse talent in professional industries,

activities that enhance social connectedness must be integrated into virtual collaboration strategies which are essential to the success of a VCoP. Although definitions of virtual collaboration are varied, it is most commonly defined as activities or acts in a virtual environment centered around a common goal, purpose, or task (Taras et al., 2013). For purposes of this study, virtual collaboration was defined as a group of individuals working toward common goals in an online professional development environment. These common goals were supported through the use of audio-conferencing, videoconferencing, or computer-mediated technologies also known as virtual collaboration tools (Poppe et al., 2017). Several virtual collaboration strategies have been identified as relevant to knowledge sharing and learning in VCoPs. These strategies stress the importance of creating inclusive environments where all members feel they can actively participate, even though their participation is often framed as voluntary (Ardichvili, 2008; McLoughlin et al., 2018). Porter et al. (2011) identified that VCoPs are more successful in driving participation from members when those who belong to that community have role clarity and defined responsibilities. This can also include opportunities for members who are experts to provide mentorship to others (Hernández-Sotoa et al., 2021) as well as find ways to disperse knowledge creation equally across members (Barnett et al., 2016). In addition, Hernández-Sotoa et al. (2021) holds that members of the community must not only understand what their role is, but also how it aligns with the greater mission, values, and goals of that VCoP.

Methods

Approaching the research through an ethnographic lens, this study was conducted through The Prominence Association for Women (a pseudonym), a national membership organization for professional women. Founded in 2012, The Prominence Association for Women was founded to provide professional coaching, mentorship, and educational resources for women of color who were seeking to grow their career or their business. As a part of their membership in the organization, women benefited from access to a suite of online self-paced courses, one-on-one coaching opportunities with the organization's founders, and invitations to participate in specialized career and professional development programs known as Mastermind Sessions. Mastermind Sessions take place over an eight-week period at least four times per year. Each course is guided by a different theme and are designed to provide members of the organization opportunities to quickly develop and execute specific strategies for their business or to hone a specific set of skills related to growing as professionals. The topic of the Mastermind Session that underpinned this research focused on developing a growth and customer engagement strategy for an online business. The course was conducted entirely online through a mix of weekly one-to-two-hour workshops led by leaders of The Prominence Association for Women or industry experts, and involved developing and presenting a final project or presentation to the leadership team. The five free virtual collaboration tools available for the women to use in completing their final project were Zoom, Facebook Groups, Facebook Messenger, E-mail, and Google Drive. In addition to the weekly workshops, each week participants were assigned an accountability partner, who was one of their peers in the course. The Mastermind Session referenced in this study was viewed as a VCoP because all interactions occurred online and virtual collaboration tools were used to stimulate feelings of social connectedness. Being an entrepreneur and marketing professional of color, the lead researcher of this study served as a board member of The Prominence Association for Women to advance equality for the underrepresented female membership of this organization. The lead researcher also served as a facilitator of other Mastermind Sessions; however, was not the facilitator of the

professional development session for this study. While the lead researcher shared similar cultural standpoints, professional predispositions, and personal experiences of this study’s participants, their internal positions did not influence the outcomes. The second author, who did not share characteristics of the study’s participants, assured that bias or influenced inquiries were removed.

A purposive sampling (Etikan & Bala, 2017) of Mastermind course participants allowed for factors of race/ethnicity, age, educational background, profession, and tenure in the organization to be considered. Members participating in the online business strategy course who were with the Prominence Association for Women for less than a year were excluded from this study. At the beginning of the online business strategy course, an e-mail was sent to the nine potential participants who had enrolled in the professional development course asking for their consent to participate in the study. The three women who responded and provided consent to participate in this study offered culturally diverse backgrounds and had varied levels of experience with technology. Table 1 provides a description of each participant, aligned to their pseudonym, and includes their age, race, tenure of membership, education, geographic location and entrepreneurship business type.

Table 1
Participant Descriptions

Pseudonym (She/Her/Hers)	Age	Race	Tenure of membership	Education	Location	Business
Jordan	30's	Black	3 Years	Master Degree	New Jersey	Real Estate / Travel
Louisa	40's	Hispanic	1.5 Years	Bachelor Degree	New Jersey	Floral Design / Event Planning
Maisie	50's	Hispanic	1 Year	Bachelor Degree	Pennsylvania	Non-Profit Scholarship Fund

Data Collection and Data Analysis

Ethnography, a qualitative research method, was used to deeply understand the social and cultural life of the women in this study (Glesne, 2016). The qualitative data was collected from a three phase semi-structured interview protocol that produced thick written cultural descriptions of the women's experiences throughout the course. Interviews took place at the initiation, midpoint, and at the conclusion of the course, each lasting 30 - 45 minutes in duration. Because participants were geographically dispersed, interviews were conducted via Zoom Meeting with the lead researcher. Methods for rigor and trustworthiness included triangulation, member checking, and weekly peer debriefing with the co-researcher (Mertler, 2017). Member checking was a multistep process that began with gaining participants feedback by providing them a presentation consisting of data collected from interviews, analytical memos, and researcher notes. Next, an individualized report of their specific responses was sent via e-mail to each woman who participated in the study. Finally, a 30-minute member check discussion was scheduled via Zoom Meeting with each participant to review their feedback and ensure their experiences and words were captured correctly. Each of the three participants validated their semi-structured interview transcripts to accurately capture their interaction and offered no feedback that changed the findings of the qualitative analysis.

Utilization of Delve coding software assisted in an inductive analysis of the nine transcribed interviews. Saldaña's (2016) first and second cycle coding techniques (Structural, In Vivo, Process, Value, Pattern, and Focus Coding) resulted in 224 codes, eight categories, three themes and one assertion: Participants perceived technology can support the development of strong intimate relationships when entrepreneurs who are women share similar backgrounds, common goals, and past experiences.

Findings

The findings of this study illustrate that the participants' use of virtual collaboration tools had an impact on their personal growth and skill development throughout the course, the ways in which they interacted with others in the course, as well as the authentic connections and bonds they were able to build as a result of their participation. Participants indicated that skill development and relationship building were enhanced by synchronous one-on-one and group interaction that allowed them to engage in discussion, provide feedback to each other, and offer guidance in real time. Participants expressed those activities that supported these types of interactions also lessened the feelings of isolation they feel as women of color who are pursuing entrepreneurship. Additionally, the activities created a learning environment where they felt supported and resulted in them identifying a positive impact on their personal and career success. These findings led to the assertion that participants perceived the use of technology can support the development of strong intimate relationships between women entrepreneurs who share similar backgrounds, common goals, and past experiences. These findings align with the existing body of research on VCoPs that has revealed technology supported activities are essential to an individual's social connectedness and subsequently their engagement with other members of that community (Ardichvili, 2008; Hafeez et al., 2019; McLoughlin et al., 2018). As well, the findings also align with research on counterspaces and women of color, where social connectedness is identified as an indicator in one's ability to develop relationships, and as such, garner benefits from those relationships that are built with others in that counterspace (Johnson et al., 2017; Ong et al., 2018; West, 2019). Support for the assertion and the existing body of research was illustrated through the three themes that emerged out of the qualitative data collected: (a) Entrepreneurial Progression, (b) Richness of Synchronous Interaction and (c) Interdependence Fosters Authentic Connections.

Theme 1: Entrepreneurial Progression

Entrepreneurial progression centered on how an individual's personal history, background, and experiences as women of color who are professionals affected their participation in the online business strategy course. This included aspects of the course that impacted professional skill development and learning outcomes. Research suggested that entrepreneurs who are women often experience discrimination and marginalization in ways that can leave them feeling isolated or unsupported in their careers (Block et al., 2019; Callahan et al., 2015; Wilkins-Yel et al., 2019). Research has also shown that being provided opportunities to connect with others who share similar background and professional experiences can lessen feelings of isolation (Ong et al., 2018; Vaccaro et al., 2019), and can help them to develop and hone skills necessary to succeed in their careers (Johnson et al., 2017; Ong et al., 2018; West, 2017, 2019). In this study, entrepreneurial progression was categorized by how an individual's identity as a woman of color shaped their views as an entrepreneur, the activities these women felt contributed to their skill development, and the specific outcomes and impacts to their career development they described as a result of their participation.

The three participants in the study - Louisa, Maisie, and Jordan - highlighted that they were attracted to becoming members of The Prominence Association for Women because its focus was about women of color who are entrepreneurs. Each of these women shared that they experienced feelings of loneliness, lacked a connection with like-minded female business owners who shared similar backgrounds, and had a desire for the support and encouragement that The Prominence Association for Women offered them. In fact, the desire to connect and to collaborate with other women of color was one of the leading reasons each participant was attracted to this organization. All participants described that as women of color, they had not encountered organizations like The Prominence Association for Women that allowed them to connect with like-minded business owners who share similar backgrounds. For example, Jordan in her initial interview stated, "I hadn't heard of a membership organization that was specifically for entrepreneurs who are women of color...that was founded by a Black woman... and that was really fostering this environment of collaboration and learning and growing together." This statement was similar to one by Louisa, who highlighted in her final interview that she felt less isolated and alone as a result of taking the course. Louisa said, "Being an entrepreneur is a very lonely journey...but then I was able to find another chick out there that has the same struggle. It doesn't have to be the same business, but she's living her own, same, lonely race."

While the desire to connect with other women of color who were entrepreneurs and building a support network was one of the main attractors to the organization, participants expressed that they enrolled in the online business strategy course to cultivate skills that they felt would aid them in their future success as entrepreneurs. At the onset of the course, Louisa and Maisie, expressed a lack of self confidence in the skills they felt were essential in their roles as entrepreneurs. These skills included better understanding how to market their businesses, how to communicate with customers, how to gain funding and sponsorships, and how to expand their products or services. However, as time moved forward in the course, each of the three participants expressed feelings of appreciation, confidence, and competence as it related to their skill development. Jordan stated in her final interview, "I had tried using these [content] creation tools on my own. [After the course] I was like, wow, I can't believe I did that compared to what I was creating before." By the conclusion of the study, all three participants indicated that they felt they had cultivated skills in social media, marketing and branding, and collaboration to a level where they were able to complete a variety of tasks on their own without assistance. Louisa expressed in her final interview, "Before I was intimidated...now it's like I can walk on my own, and I am a lot more tech savvy." For communications skills, specifically, all participants commented that over the duration of the online business strategy course they were able to increase their capability to communicate with their peers and pitch their business to potential investors or donors. For example, Louisa stated in her midpoint interview, "I actually feel like I'm developing better communication skills because before I just didn't have the words [to explain] or I didn't have everything in order in my brain."

In the final interviews, each of the participants shared that through working alongside and receiving encouragement from the other women enrolled in the course, that they were able to learn how to use social media tools, video conferencing, and web design technologies as well as gain access to professional and financial resources that would benefit their business. Additionally, they discussed creating a stronger network of professionals through the relationships they were able to build with one another. Maisie noted in her final interview that through the help and coaching she received from other members in the course, she was able to learn about the different types of customer relationships she needed for her business to grow.

Building the relationships that I did with everybody and how we helped each other, there was times that I would feel stuck and didn't know what to do and they really reached out to me and helped me out a lot. Um, that meant a lot. It still means a great deal to me and you know, learning about the different relationships, the customer relationships.

These sentiments supported these findings that when women of color have access to counterspaces, they are able to gain support and mentorship that they may not have in mainstream forums.

Theme 2: Richness of Synchronous Interaction

Throughout the study the participants' experiences were explored based on how interactions occurred within a VCoP (Ardichvili, 2008; Hafeez et al., 2019). Research has shown that in VCoPs, interactions can happen using a multitude of virtual collaboration tools (Mather & Cummings, 2014; McLoughlin et al., 2018). The nature and use of these various technologies can have an impact on the value a member may glean from their participation in the VCoP (Altebarmarkian & Alterman, 2019; Barnett et al., 2012). In this study these tools supported various types of interactions including communication between members, sharing of information, and task completion. Additionally, participants were able to leverage these virtual collaboration tools for both synchronous and asynchronous interactions throughout the study.

Participants engaged in synchronous interaction through the use of technologies such as Zoom, Facebook Messenger, and through text messaging and telephone calls. However, each of these tools served different purposes for participants based on their individual needs at the time. For example, when discussing Zoom, participants highlighted a number of key benefits including the opportunity for face-to-face communication (which participants felt were more personable) as well as capabilities such as screen and desktop sharing which allowed for other participants to provide feedback on their work. Participants also discussed the value of Zoom breakout rooms for engagement in personalized small group discussions and activities. This supports research that using these synchronous tools with a collaborative purpose can often create more value in VCoP (McLoughlin et al., 2018; Wang & Huang, 2018). This value was expressed by Louisa who identified how the breakout rooms offered an opportunity for others to ask her questions or for her to express opinions that she may have felt uncomfortable asking in the larger group. Louisa stated in her midpoint interview,

Let's say maybe a person who's more of an introvert may feel intimidated because I'm an extrovert and I got all these questions, the breakout room helped... If I'm by myself with someone who I feel is at a plateau, then I will start asking questions...reiterating things we've learned in the course.

Outside of the weekly workshops facilitated through Zoom, participants used Facebook Messenger, text messaging, and phone calls to communicate with their assigned accountability partners and to get assistance from their peers regarding their businesses. For example, Maisie expressed a point where she was trying to find funding for her business while completing her final presentation and how she was able to leverage text messaging to accomplish this. She stated in her midpoint interview, "I texted my accountability partner to ask her about different funds that I wasn't aware of and she helped me with that..."

In addition to synchronous interactions, virtual collaboration tools can also support asynchronous interactions and have been found helpful in document editing and feedback, formal or informal discussions, or sharing resources (Antoci et al., 2012; Porter et al., 2011). In this study, the asynchronous interaction occurred primarily through Facebook Groups. Aligning with research on computer mediated communication such as discussion boards and information

sharing tools (Antoci et al., 2012; Kabilan, 2016), Facebook Groups functioned as a repository of questions and where resources were shared over the duration of the eight-week online business strategy course. Additionally, participants took advantage of Facebook Groups to engage their peers when they needed assistance, to ask questions that they felt would be beneficial to others, to provide encouragement, when they had news or information to share, or to keep up to date on content they may have missed in one of the weekly workshops. For example, Maisie noted in her final interview, “In the Facebook Group itself I would post questions or concerns if there was anything going on that I wasn't too sure of or I would help them out and encourage them.” Similarly, Jordan highlighted that Facebook Groups provided her an opportunity to share resources and information that could benefit her peers. In her final interview she provided an example, “I literally went to a training and then straight from the training...I wanted to share the information with [my classmates] ...so I posted it in the Facebook Group.”

Although other technologies such as E-mail, Instagram, and Canva were mentioned, as it related to asynchronous interaction they were used sparingly. In instances where they were used, they served as a way to share information or to ask a question, however, as already identified Facebook Groups was the preferred method of communication and asynchronous interaction.

Theme 3: Interdependence Fosters Authentic Connections

When an individual has a strong sense of connection to others in a specific organization or group, it can positively impact their personal and professional success (Virick & Greer, 2012; Yoon et al., 2012). During the eight-week online business strategy course used for this research, participants cited many opportunities they were given to build strong and authentic bonds and relationships. Relationships that they believed contributed to their success in the course, but also aided them in furthering their businesses. The theme of Interdependence Fosters Authentic Connections focused on the behaviors and activities that fostered these connections and how those behaviors and activities created feelings of interdependence among the participants. There were multiple occasions where the participants likened the relationships, they were building with their peers to those they had with their family. This aligns with research on social connectedness which asserts that in order for someone to feel like they belong to a group they must feel some type of connectedness, affiliation, and companionship to others (Framke et al., 2019; Irgens, 2019). Each of these feelings were expressed when participants discussed the bonds, they were building with others in their course. These bonds were initially described during the first weeks of the online business strategy course, and were revealed by all participants in both the initial and midpoint interviews. For example, Jordan, in her midpoint interview shared, “We have a sisterhood, an environment, a safe place, for Black and Brown women to come together ... where our voices and frustrations can be heard. ... We can work together and give each other support through hard times.”

Because women of color who are professionals have experienced discrimination over the course of their academic and professional lives, this also impacts how they acculturate into new VCoPs (Ardichvili, 2008; Barnett et al., 2012). These issues are often marked by feelings of doubt, apprehension and judgement which can prevent them from fully receiving the benefits that participation in such communities provide (Hernández-Sotoa et al., 2021). Throughout this study, all three participants shared challenges they encountered or apprehensions they felt due to age, experience, and undeveloped business acumen and technology skills. For example, Maisie cited several examples where she felt uncomfortable, frustrated, or unprepared based on her lack of knowledge or capability to perform a task or participate in a discussion in comparison to her peers. However, by the end of the study each of the participants noted that being in the course

helped them to become less intimidated when using technology, and that they were all able to utilize the other woman as resources. In her midpoint interview, Maisie shared,

I got really frustrated...and I almost started to cry... because I [didn't] know how to do a website ... and I felt alone. So, when [the facilitator] came to me [to describe my website] and I said to her, I can't do this...and I [left] because I was so upset...the next day, Jenny messages me this long message and she just made my day. She's like, I know she says, this is personal for you ... just don't give up. And you know that meant a lot.

Similarly, when asked about her comfort with technology in her final interview Louisa stated, "I don't feel intimidated. I don't know everything. I'm not an expert, but...with the ladies, we can figure it out. We can pull up the YouTube, show me how to do this... but before it would stop me."

Supporting each other and working towards a common goal was another aspect that participants believed had benefited them and their business. In her final interview, Jordan provided specific examples of how this occurred,

I've learned a lot from the other women...I've learned how to be more of a financial steward and take control of your finances, how to deal with difficult people and how to work on dealing with that difficult customer .. and still providing the utmost customer service...I've learned different technologies.

These outcomes were supported and described by Maisie and Louisa as well, and showcased how through collaborative work and mutual support, each of the participants were able to develop skills and garner resources from their participation in the online business strategy course.

Implications

With opportunities for support networks being scarce, women of color have often been forced to seek out or build their own support systems (Ong et al., 2018; West, 2017, 2019). Participation in these types of support networks, has been shown to lessen feelings of isolation helping these women form connections with others who may also have had similar challenges with discrimination and marginalization (Johnson et al., 2017; Ong et al., 2018; West, 2017, 2019). The findings of this study suggest that virtual collaboration could offer these women more access to spaces that are free of the discrimination, sexism, marginalization, and oppression they face in their day-to-day lives. The findings also infer that when these virtual settings are guided by common goals and collaborative activities and are supported by the right choice of virtual collaboration tools, that women entrepreneurs are able to develop strong feelings of social connectedness. This social connectedness can aid in building authentic, intimate relationships with each other in ways that positively impact their confidence, help to hone and develop skills for their careers, and aid them in building a network of support for their professional success (Mishra, 2020; Museus & Saelua, 2017; Ströbel et al., 2017).

In addition, the findings of this study support past research that integrating virtual collaboration tools into online learning environments can be essential to establish common goals, provide opportunities for synchronous interaction, and embed activities that allow learners to develop their technological aptitude (Mather & Cummings, 2014; Nistor et al., 2012). When learners come from underrepresented backgrounds the presence of these components can allow them to build confidence, and encourage relationship building with their peers (Mishra, 2020; Museus & Saelua, 2017). As with this study, the development of these relationships through virtual collaboration can impact social connectedness, and ultimately provide underrepresented learners who are professionals with resources, education, and the support they need to grow and

develop as entrepreneurs. When audio-conferencing, videoconferencing, or computer-mediated technologies are embedded in online professional development courses, social connectedness can be developed and can be an influencer in career development, persistence, and achievement (Donelan, 2016; Heidari et al., 2020).

Compliance with Ethical Standards

Conflict of Interest: The authors declare they have no conflict of interest.

Research Involving Human Participants: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Consent to Participate: Written, informed consent was obtained from individual participants included in this study. No identifying information about these participants is included in this article.

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