

EMPOWERING WOMEN ENTREPRENEURS IN SOUTH AFRICA

The Role of Information
Communication Technology in
the Direct Selling Marketplace

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FOREWORD

by the U.S. Direct Selling
Education Foundation

The direct selling industry has long represented a low-risk means to entrepreneurship for women in emerging markets. A direct selling business offers a distinct and powerful value proposition through the benefits it provides women entrepreneurs on both a professional and personal level.

Concurrently, we have witnessed how the use of social media and digital technology expand and enhance network ties among women and contribute to self-efficacy, the creation and use of social capital and greater sense of empowerment.

In South Africa, women who are direct selling business owners are using social and digital technology to connect socially with peer groups, share and learn from others in the direct sales organization and communicate with existing and prospective customers. As they continue to use and become proficient with these technological tools and strengthen their ties with others both inside and beyond their respective communities, women experience a multitude of benefits, including greater self-efficacy, creation and maintenance of social capital, and empowerment. Ultimately, all of those benefits contribute to the development of successful businesses that make a profound difference in the lives of women, their families and their communities.

The Direct Selling Education Foundation would like to extend its gratitude to the Direct Selling Association of South Africa and its member companies for their partnership and

participation in developing this insightful study. Special thanks to our DSEF Fellows and Principle Researchers, Dr. Victoria Crittenden and Dr. William Crittenden, for their leadership, support and lifelong interest in the direct selling channel and to Dr. Haya Ajjan, for her many contributions to this project.

Our research reveals how women have used direct selling as a vehicle not only for self-transformation and empowerment, but also for the betterment of their families and communities. Now, coupled with the capabilities of technology, the direct selling industry holds tremendous promise as a potential solution for poverty and gender inequality, particularly within South Africa, where strong technology infrastructure already exists and where a significant percentage of women currently participate in the informal business sector.

Some key takeaways:

- Social and digital technology now provide the means for direct selling business owners to reach new customers, exchange advice and information with peers, share products and information, and grow their businesses faster and more easily than ever before.
- Direct selling removes the traditional barriers to small business ownership. Independent distributors are backed by established brands who provide them with a “business in a box,” so to speak, comprised of quality products, marketing tools, business education, and a wealth of digital resources for professional and personal development.

- As women use technology to forge relationships that likely wouldn't have occurred otherwise, they accumulate social capital. These loose connections give women access to potential new customers, new information and new insight (bridging social capital). Social media may also help women establish closer ties to those with whom they already have strong relationships, including other women entrepreneurs, close friends and family (bonding social capital).
- Social ties improve women's feelings of authority and control over the way they run their businesses and how effectively they feel they do their work, along with their sense of impact and influence on their businesses.
- The more time a woman entrepreneur invests in engaging with customers and other women in her direct selling community, the greater the impact empowerment she experiences.
- Technology use in direct selling helps women entrepreneurs improve their goal internalization by inspiring them toward the direct selling organization's objectives.
- The significance of ICT both economically and socially suggests that direct selling companies should include ICT training for its independent contractors and encourage the use of ICT tools and platforms.

Direct selling has a long history of providing meaningful income opportunities for women around the world through the distribution of quality products, personalized service, building networks company support and open-ended opportunities for advancement. Harnessing the power of technology and the profound benefits associated with a direct selling business, women can lead the way toward positive social and economic change in emerging markets and underserved communities throughout the globe. These findings also provide valuable insights for companies as they consider entering and supporting emerging markets throughout the world. Further, the direct selling industry offers fertile ground for the continued exploration of social and digital technology and its link to women's empowerment.

EXECUTIVE SUMMARY

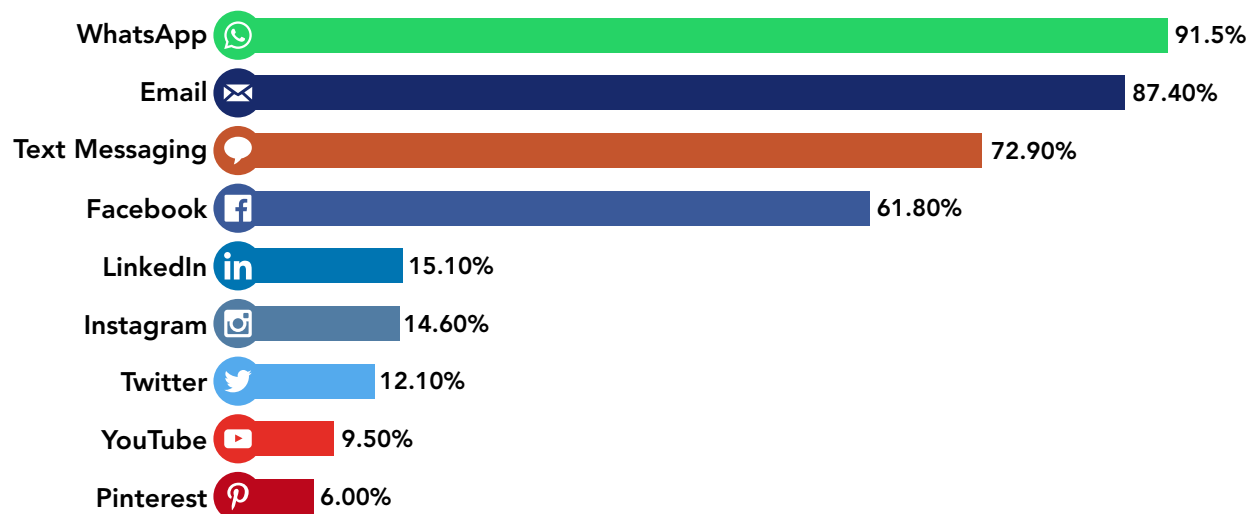
As noted by South Africa's Minister of Economic Development in 2013, direct selling has the potential to create thousands of jobs for youth and women and the direct selling opportunity provides an environment for learning, personal development, and business building skills that are critical elements of entrepreneurship. This was consistent with research findings that explored the nature of organizational practices of one direct selling firm in South Africa, where the researchers discovered that the unique nature of the direct selling marketplace offered vast opportunities for women to engage in entrepreneurial activity as a market-based solution to poverty and gender inequality. Other scholars have suggested that a woman's use of technology can increase and improve her entrepreneurial involvement and lead to social and financial benefits for her and her family. As such, the purpose of the

research reported here was to understand the empowering benefits of information communication technology use by women engaged in direct selling in South Africa.

Face-to-face conversations with 50 South African female direct sellers in November 2016 resulted in a survey suitable for online dissemination in the spring of 2017. The sampling process for the online survey targeted women engaged in direct selling within six companies in South Africa. A total of 199 complete survey responses were included in the data analysis that resulted in the several general findings about technology use by women direct sellers:

- WhatsApp was used most often by respondents to support their direct selling businesses, followed closely by use of email, text messaging, and Facebook.

% OF DIRECT SELLERS USING TECHNOLOGY BY APPLICATION



- Almost all of the women use their mobile phone in the direct selling process, and the direct sellers spend, on average, more than one hour per day using technology to support their direct selling businesses.
- South African women engaged in creating their own direct selling, entrepreneurial businesses are utilizing technology to: (1) connect socially with peer groups, (2) share with, and learn from, other sales people in the direct selling organization, and (3) communicate with customers to both introduce and sell product.
- The ease of use of these technologies is key in supporting direct selling daily activities.

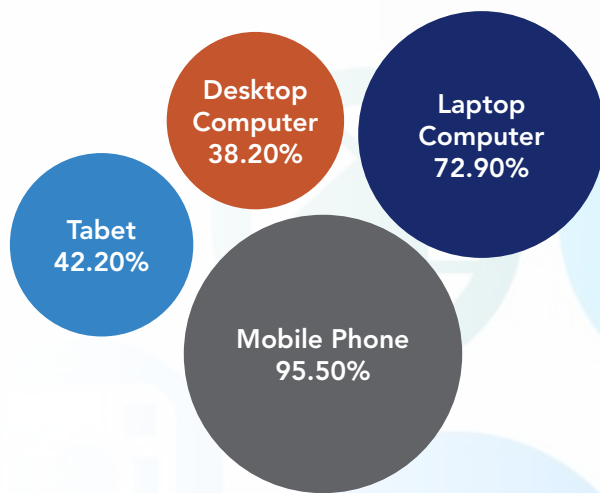
With these general findings, it is clear that women entrepreneurs engaged in direct selling in South Africa are utilizing various devices and platforms to facilitate success in their direct selling businesses. While there are likely economic gains from the use of information communication technology, the research reported here provides evidence of the social impact of the use of technology in the direct selling marketplace.

- The use of technology can help direct sellers communicate quickly and effectively with family and close friends to seek advice and support about their direct selling activities.
- The use of technology can help direct sellers lower the barriers to entry within the community and encourage new relationships by helping them maintain community ties cheaply and easily and lowering the barriers to connect with others. Thus, women direct sellers who might otherwise not initiate communications with someone to whom they are not acquainted are enabled to do so through IT affordances (e.g. WhatsApp, Email, text messaging, Facebook).
- The strong ties women entrepreneurs create, through their use of technology, will positively influence their feelings of authority, freedom, and competence to run their direct selling businesses and their beliefs as to the impact they can make in their direct selling community. The strength of connections with both close family and friends and with new members of the community likely nurtures these feelings of independence.

Given the power that information communication technology has in helping shape the belief in one's self, direct selling companies should:

- Encourage the use of technology among independent contractors,
- Include technology (e.g. mobile and social Apps) training for independent contractors,
- Determine which types of turnkey material and communications should be made available to the independent contractor based on her technology use, and
- Create digital marketing messages that can be easily customized and diffused into the independent contractor's network on her mobile and social platforms.

% OF DIRECT SELLERS USING TECHNOLOGY BY DEVICE



The belief in one's self is critical to success. The woman entrepreneur who makes plans, does not give up, and keeps trying until the job is done will continue to strengthen her skill set and work ethic which will likely lead to positive rewards both economically and socially.

This research shows that direct selling, in conjunction with the availability and capabilities of today's technology, can facilitate entrepreneurial activities in emerging and underserved markets. Direct selling firms prosper from the increased sales opportunities, a qualified workforce, marketable innovations, reduced costs, and increased quality, and the women entrepreneurs engaged in direct selling can reap vast social and economic benefits.

ABSTRACT

Cyberfeminism, a term coined decades ago, advocates the use of information communication technology (ICT) for the empowerment of women. The current study attempted to capture cyberfeminism and the empowering benefits of ICT adoption by exploring the relationships among ICT use, self-efficacy, creation and maintenance of social capital, and multidimensional aspects of women empowerment. Results from a survey of women entrepreneurs engaged in the South African direct selling marketplace suggest that ICT use can expand and enhance network ties among women and, in turn, lead to greater empowerment.

Thus, enabling and encouraging ICT use among women entrepreneurs in the direct selling channel will likely lead not only to greater financial security for these women but also positive change across various aspects of society.

The statistics on women in the workforce worldwide provide, on the one hand, feelings of increased well-being in that more women are earning income that can be used to improve standards of living for their families while also gaining autonomy with regards to challenging personal situations (Kelley, Brush, Greene, Litovsky, & Global Entrepreneurship Research Association, 2013). On the other hand, however, the improving statistics are somewhat misleading in that it is estimated that approximately 50% of women globally are underutilized in terms of economic contribution (United Nations, 2010) and that female participation in the workforce is limited particularly in emerging economies (Beninger, Ajjan, Mostafa, & Crittenden, 2016).

However, research on women entrepreneurs is scarce, constituting less than 10% of all research in the field of entrepreneurship (Welsh, Memili, Kaciak, & Sadoon, 2014).

Society now recognizes that closing the gender gap results in increased national productivity, better nutrition, lower disease transmission, lower child mortality, better education, and reduced violence.

Gender inequality is rooted in tradition, yet society now recognizes that closing the gender gap results in increased national productivity, better nutrition, lower disease transmission, lower child mortality, better education, and reduced violence (Scott, Dolan, Johnstone-Louis, Sugden, & Wu, 2012). One tool identified by Ajjan, Beninger, Mostafa, and Crittenden (2014) to enable greater empowerment of women is that of information communication technologies (ICT). Such communication technologies have created a tempest in emerging economies, with ICT credited with helping women create new employment and self-employment opportunities (Crittenden & Crittenden, 2012; Huyer & Mitter, 2003). While these opportunities naturally lead to improving the woman's financial wellbeing, we suggest that the opportunities enabled by self-employment also allow women to mitigate possible patriarchal domination that is occasionally embedded in the culture of some emerging economies.

With women comprising a large portion of independent contractors engaged in direct selling (Wylie, 2016) and, based on statistics provided by the World Federation of Direct Selling Associations (WFDSA), it is clear that direct selling offers an opportunity for women worldwide to enjoy the advantages and independence offered by engagement in this form of micro-entrepreneurship (Tortora, 2015). Interestingly, Dolan and Scott (2009) bemoaned the lack of research on women entrepreneurs in emerging markets while it is the emerging markets (as a group) that have experienced a high compound annual growth rate (CAGR), especially relative to advanced and more developed markets, in the direct selling channel. With a CAGR of 10.7%, compared to a CAGR of 3.5% for advanced/more developed markets, it is important that we better understand the drivers of this growth to achieve even greater economic and social success for women entrepreneurs.

With women comprising a large portion of independent contractors engaged in direct selling (Wylie, 2016) and, based on statistics provided by the World Federation of Direct Selling Associations (WFDSA), it is clear that direct selling offers an opportunity for women worldwide to enjoy the advantages and independence offered by engagement in this form of micro-entrepreneurship.

Additionally, Wang and Cuervo-Cazurra (2017) and Rivera-Santos, Holt, Littlewood, and Kolk (2015) noted that business issues occurring within the African continent were very rarely studied in management research, with Walsh (2015)

suggesting that scholars need to become better acquainted with Africa very quickly. Given this dearth of African research, in conjunction with the opportunities provided women entrepreneurs in the direct selling marketplace, South Africa appeared particularly conducive to exploring relationships between ICT and women entrepreneurs. Thus, the research reported here attempts to capture cyberfeminism and the empowering benefits of ICT adoption in South Africa.

The paper is organized as follows. The next section discusses women empowerment within the framework of feminist theory and relates that theoretical structure to the country of South Africa and the minimal research that has taken place within the direct selling marketplace in South Africa. Utilizing pragmatist feminist theory, cyberfeminism in South Africa is then discussed with respect to the variables of Information Communication Technologies, Social Capital, and Self-Efficacy, and the study hypotheses are presented. In the next section, the methodology employed in the research is described. The results derived from the online survey and rigorous statistical analysis are then provided, followed by an in-depth discussion of these results along with some practical implications for direct selling companies. Finally, study limitations and future research opportunities are discussed.

WOMEN EMPOWERMENT

In terms of feminist theory, the common objective is the empowerment of women. In gaining a greater share of control of intellectual, material, and financial resources in the decision-making process, women become empowered socially, economically, educationally, and politically (Vimalraj Kumar, Mathialagan, & Sabarathnam, 2016). Empowerment is a multi-faceted and multidimensional construct, however, with Thomas and Velthouse (1990) denoting a difference between situational attributes of empowerment (e.g., management practices) and job incumbent cognitions about those attributes (e.g., psychological empowerment). Summarizing Menon (1999) and Spreitzer (1995), the psychologically-empowered woman will possess a cognitive state characterized by competence, perceived control, goal internalization, and impact.

While empowerment is the end goal, there are steps to attain this empowerment and Information communication technologies, through its ability to create sharing communities (i.e., networks for collective action), can enhance women's independence and self-confidence.

Scott et al. (2012) extended feminist theory by exploring it as pragmatist feminist theory. That is, while the overall focus is the empowerment of women, pragmatists consider how communities can carefully apply collective intelligence gained from experience and sharing to attain positive goals along the process toward empowerment. That is, a



pragmatist will form communities in which knowledge can be shared for the betterment of all in the community and, thus, emancipate these pragmatist women from domination by others. Thus, while empowerment is the end goal, there are steps to attain this empowerment and ICT, through its ability to create sharing communities (i.e., networks for collective action), can enhance women's independence and self-confidence.

According to the World Bank's South Africa Economic 2012 Update, the emerging economy of South Africa, with women representing slightly over half of the South African population, is one of the most unequal societies in the world.

According to Bullough, De Luque, Abdelzaher, and Heim (2015), Shabangu (2015), and Pounder (2016) entrepreneurship is a form of business engagement that enables women to generate financial security while also engaging in a social process for positive changes at the levels of the individual woman, organizations, communities, and

society as a whole. Thus, entrepreneurship promotes both societal and economic advancement. However, attributable to the often historic and cultural gender inequality and division of labor, women entrepreneurs face considerable perceived trade-offs in making those societal and economic advances; that is, the role of women in unpaid productive activities fosters gender inequality in many emerging economies. According to the World Bank's South Africa Economic 2012 Update, the emerging economy of South Africa, with women representing slightly over half of the South African population, is one of the most unequal societies in the world (Department of Women, 2015).

SOUTH AFRICA

According to a report published by the Department of Women (2015) in the Republic of South Africa, little disaggregated economic information exists on women in terms of race, class, or other factors. In providing that disaggregated data, the department discerned that South African women were substantially less likely to be economically active than South African men. This prevailing social norm of gender discrimination in South Africa (George, Corbishley, Khayesi, Haas, & Tihanyi, 2016) is a strong impetus for women to venture into business for themselves (Witbooi & Ukpere, 2011), and

South Africa's government has long stressed the importance of developing women entrepreneurs so as to attain equity in income and wealth distribution (O'Neill & Viljoen, 2001). Female entrepreneurship is critically important for overall prosperity when one considers the high unemployment rate (approx. 25%) of the economically active population (Olawale & Garwe, 2010) and a Gini coefficient¹ of around 0.6 which makes South Africa a lead contender in income inequality worldwide (Bhorat, 2015; Mensah & Benedict, 2010).

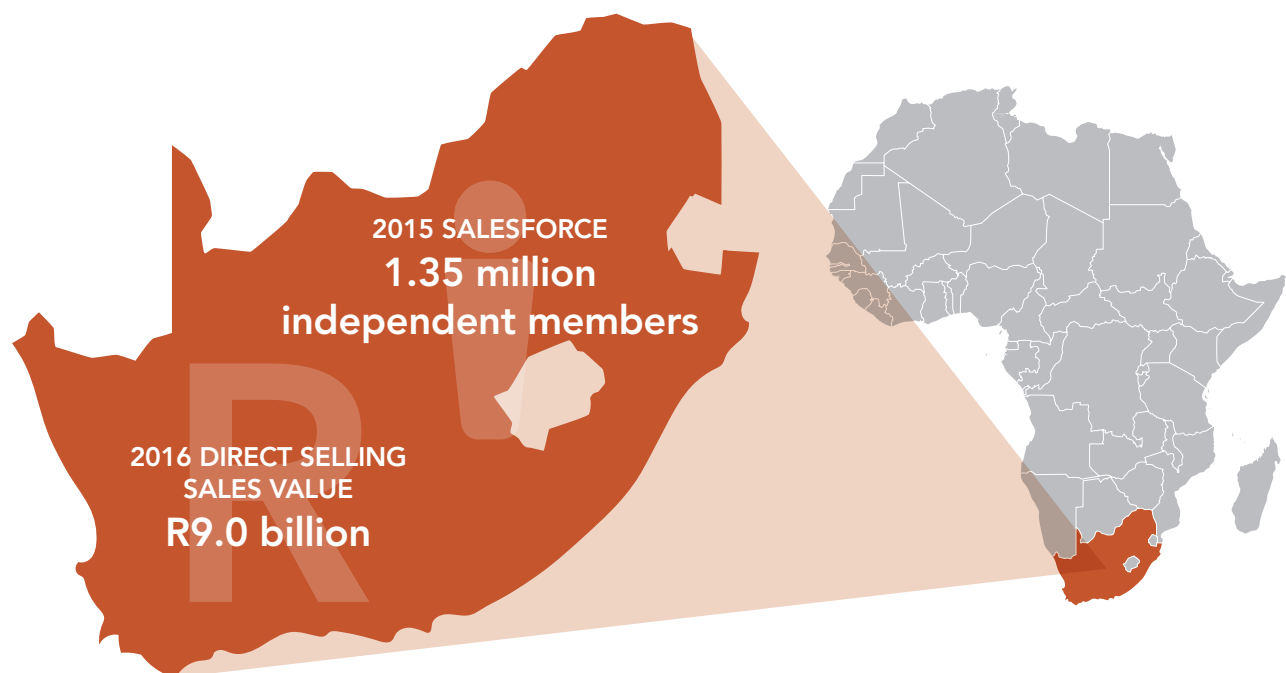
Female entrepreneurship is critically important for overall prosperity when one considers the high unemployment rate (approx. 25%) of the economically active population.

Unfortunately, South Africa is experiencing a decelerating economy, one of the sharper slow-downs on the African continent, which is putting many households under distress (McKinsey Global Institute, 2016). Maintaining the household's current standard of living has become more and more difficult to achieve, and one organizational structure that many South Africans turn to for income generation is the informal enterprise (Rolfe, Woodward, Ligthelm, & Guimaraes, 2010). According to Fatoki (2012), micro-enterprise² retail trade is the most pervasive entrepreneurial activity in the informal sector of Africa, with Ligthelm (2004) noting that over a third of retail sales in South Africa occurred through informal outlets. These informal enterprises offer entrepreneurial opportunities in that the businesses are often integrated into households of the micro-entrepreneurs (Ligthelm, 2004), with women often supporting families with low, erratic income from the informal sector (Rolfe et al., 2010).

1 A Gini coefficient can range between 0 and 1, with 0 a perfectly equal society and 1 a perfectly unequal society.

2 According to Abor & Quartey (2010), a micro-enterprise is one where the turnover is less than the VAT registration limit annually and employs fewer than five people.

SOUTH AFRICA BY THE NUMBERS



Kelley et al. (2013) reported that as many as 80% of women entrepreneurs in Sub-Saharan Africa sell to consumers directly. Dolan and Scott (2009) suggested, however, that many women have moved away from the traditional hawking of small-scale and perishable products in the informal sector to the direct selling of manufactured consumer goods.

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DIRECT SELLING

Direct selling of consumer products, with its low barriers to entry, offers a low-risk opportunity for the un(der)employed to become entrepreneurs (Dolan & Scott, 2009). In a speech given in 2013, the Deputy Minister of Economic Development of South Africa noted, "Direct selling has the potential to dramatically impact unemployment levels in South Africa by creating thousands of jobs for youth and women...More than simply creating jobs, direct selling provides an environment for learning, personal development and business building which are critical elements of entrepreneurship" (Mkhize, 2013). Direct selling moves the micro-entrepreneur beyond the informal enterprise into being a micro-entrepreneur operating as a small business with the support of a larger corporation that can provide access not only to manufactured products, but also training and development.

Worldwide, both the volume of retail sales and the total salesforce engaged in direct selling reached all-time highs in 2015, with the World Federation of Direct Selling Association estimating a marketplace of US\$183.7 billion and a salesforce of approximately 103 million people (Tortora, 2016). Direct selling in South Africa attained a sales value of R9.0 billion in 2016 and was the most active direct selling market in the Africa-Middle East region in 2015 with 1.35 million independent

members of the salesforce (World Federation of Direct Selling Associations, 2017).

In a scoping study in which direct selling was explored as a viable mechanism for poverty reduction and empowerment among poor women in South Africa, Dolan and Scott (2009) found that, in addition to earning an income, working for Avon was an instrument for personal and social transformation. Expanding that research, Scott et al. (2012) examined the emancipatory potential of entrepreneurship in a three-year multiple-methods study among poor black women in South Africa. The findings from this extensive study were substantial: (1) Avon provided women with the entrepreneurial support needed to build and maintain their sales businesses (e.g., capitalization, networking, mentoring and training, and strategy and growth) and (2) Avon empowered women and helped them alleviate poverty (e.g., earnings, self-perceptions, family relations, and interactions with other classes and races). Ultimately, the work by Dolan and Scott (2009) and Scott et al. (2012) found that women's participation in the direct selling network created by Avon helped impoverished South African women earn a better income and inspired empowerment through a range of organizational practices.

Direct selling has the potential to dramatically impact unemployment levels in South Africa by creating thousands of jobs for youth and women...More than simply creating jobs, direct selling provides an environment for learning, personal development and business building which are critical elements of entrepreneurship.

CYBERFEMINISM IN SOUTH AFRICA

Cyberfeminism is a term coined in 1994 to describe the work of feminists interested in theorizing, critiquing, and exploiting the Internet, cyberspace, and new-media technologies (Consalvo, 2002). Utilizing pragmatist feminist theory and following on the findings related to the emancipatory potential of entrepreneurship, the current research engages the woman-centered perspective of cyberfeminism that advocates the use of information communication technologies (ICT) for empowerment (Ajjan et al., 2014).

Research regarding women's use of ICT suggests the following empowering benefits of ICT adoption:

- Creation of new and self-employment opportunities (Huyer & Mitter, 2003),
- Improved access to formal and non-formal education (Huyer & Mitter, 2003),
- Access to information and services related to health services and gender issues (Huyer & Mitter, 2003),
- Helping small business owners grow their businesses via increased access to customers and suppliers (Ahmed, Islan, Hasan, & Rahman, 2006; Beninger et al., 2016),
- Poverty alleviation (Huyer & Sikoska, 2003),
- Expansion and maintenance of social networks and social capital (Wheeler, 2007), and
- Strengthened self-esteem and self-worth (Wamala, 2012).

Thus, the use of ICT allows women to transform their social, political, and economic lives by changing and reshaping processes that enable opportunities for growth and development (Ajumobi & Kyobe, 2016; Nath, 2006). ICT has the potential to bridge many gaps in human socio-economic development (Ajjan et al., 2014). Ali (2011) suggests that social media, in particular, has the capacity to empower individuals in developing nations, while Ukpere, Slabbert, and Ukpere (2014) suggest that women entrepreneurs are able to establish a stronghold in business-to-consumer selling because they embrace the concept of social selling by adapting to social media platforms quickly.

As noted previously, the work conducted by Dolan and Scott (2009) and Scott et al. (2012) explored the nature of organizational practices of one direct selling firm in South Africa and the subsequent benefits to women. In doing so, these researchers discovered that the unique nature of the direct selling marketplace offered vast opportunities for women to engage in entrepreneurial activity as a market-based solution to poverty and gender inequality. Building on these findings about this particular marketplace, the current research explores cyberfeminism within the context of direct selling. That is, does a woman's use of ICT in the formal direct selling marketplace instill self-efficacy and increase social capital and, thus, facilitate empowerment? This pragmatic process approach to women empowerment views empowerment as a multi-dimensional construct and was proposed by Ajjan et al. (2014) in the conceptual model shown in Figure 1.

INFORMATION COMMUNICATION TECHNOLOGIES

Information communication technologies were described at the 2002 World Summit on the Information Society as a tool to empower women so as to improve their participation in the economy and their quality of life (Obayelu & Ogunlade, 2006; Ojokoh, Zhang, Oluwadare, & Akintola, 2013). With a network that is 99% digital and includes the latest in fixed-line, wireless, and satellite communications, South Africa is, reportedly, the leader in ICT development on the African continent, fifth in terms of Internet users in Africa, and the 20th largest consumer of information products and services in the world (Goldstuck, 2012; Mutula & Mosert, 2010). South Africa ranked 16th in an Ernst & Young report that measured the digital dimensions of entrepreneurship across G20 countries (Malik, 2016). Ukpere, Slabbert, and Ukpere (2014) note that ICT has been recognized by modern African entrepreneurs as the key to unlocking financial success. Chikandiwa, Contogiannis, and Jembere (2013) found, however, that social media, as a form of ICT, is still in its infancy in South Africa. Although the use of social media is growing, Dlodlo and Dhurup (2013) assert that social media is a largely unexplored area of study in South Africa. Importantly, Ajumobi and Kyobe (2016) suggest that there is a dearth of research in women entrepreneurs leveraging ICT in their businesses.

Technological developments, and the use of social media in particular, can serve as enablers for a salesperson to exploit both formal and informal networks to enhance a salesperson's perceived value (Agnihotri, Kothandaraman, Kashyap, & Singh, 2012). According to Ferrell, Gonzalez-Padron, and Ferrell (2010), technology has become a driving force in the direct selling marketplace, affecting interactions between the direct selling firm and its salesforce, between the salesforce and end-users, and between the direct selling firm and end-users. Corroborating these interactions, the Direct Selling Association (2016) noted that e-commerce, social media, and mobile technologies have created opportunities for direct selling companies to broaden company and salesperson reach and increase the efficiency of the customer experience. Technology and social media are considered driving forces in the growth of direct selling in emerging economies (Tortora, 2015), with Bidwell, Robinson, Vartiainen, Jones, Siya, Reitmaier, Marsden, and Lalmas (2014) suggesting that ICT access improves self-efficacy and, thus, the ICT user's ability to change her situation in rural South Africa.

ICTs such as mobile apps and social media provide individuals with opportunities to form new knowledge in ICT-mediated spaces, participate in social conversations, contribute to the development of new content, and build socially relevant connections and networks (Maidment &

Technology has become a driving force in the direct selling marketplace, affecting interactions between the direct selling firm and its salesforce, between the salesforce and end-users, and between the direct selling firm and end-users. [T]he Direct Selling Association (2016) noted that e-commerce, social media, and mobile technologies have created opportunities for direct selling companies to broaden company and salesperson reach and increase the efficiency of the customer experience.

Macfarlane 2009; Wilding 2009). In the context of direct selling, ICTs can serve as a vehicle for promoting participation in work-related activities such as learning about new products, connecting with customers, and providing product and sales information to current and potential customers.

The growing use of social and mobile technologies can be attributed to the ease of use and effectiveness in meeting an individual's need to connect with others and learn and share information (Rauniar, Rawski, Yang, & Johnson, 2013). Perceived ease of use can be defined as the degree to which a person believes that using a particular technology system is free of effort (Yen, Wu, Cheng, & Huang, 2010). Previous research has demonstrated that individuals are more likely to use a new ICT if they perceive their interaction with the technology to be clear and understandable. Moreover, Davis (1980) defined usefulness as the extent to which an individual perceives that using ICT enhances his or her job performance (e.g. sales). Many scholars have found that user perception of ICT's usefulness has a great influence on adoption and use (Yen et al. 2010; Wu, Chen, & Lin, 2007; Pontiggia & Virili 2010; Zhou & Wang, 2009). Venkatesh (2000) reported that perceived usefulness will be influenced by ICT ease of use given that the easier it is to use the system, the more useful it can be.

SOCIAL CAPITAL

The principle of *ubuntu* confers that *a person is a person through other people as well as a part of a collective (or I am how I am through others)*, and that spirit is an intricate part of an entrepreneur's network of social relations (Grant, 2013; Zoogah, Peng, & Woldu, 2015).

According to Mangaliso (2001), *ubuntu* is a sociocultural institution in which members share resources and support each other in exchange for unquestioning loyalty; members demonstrate caring, respect, and compassion that ensure a

high-quality community life; and members create networks of social obligations that link managers and extended families, villages, and ethnic groups. The significance that these types of social networks play in the structuring of entrepreneurial activities is critical to success (Grant, 2013). For example, Barr (2000) reported on a study of impoverished African entrepreneurs running small-scale firms and found that social networks were forged to reduce risks and uncertainty.

The principle of *ubuntu* confers that a person is a person through other people as well as a part of a collective (or I am how I am through others), and that spirit is an intricate part of an entrepreneur's network of social relations.

Historically, trust built via *ubuntu* was created based on place-specific context depending on geographically proximate resources (Grant, 2013). Woman entrepreneurs often located their businesses close to home due to spatial entrapment (Downing & Daniels, 1992). In his study of gendered spaces of informal entrepreneurs, Grant (2013) found that women were mainly connected to consumer retail-type operations, with tight social networks generating the word-of-mouth customers and referrals. Gumede and Ramussen (2002), however, found that small and medium-sized enterprises (SME) in South Africa were not necessarily engaged in the creation of social capital. To this end, Fatoki (2011) called for SMEs to take responsibility for improving their networking and creation of social capital.

Nahapiet and Ghoshal (1998) defined social capital as "the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an

individual or social unit" (p. 243). Putman (2000) distinguished between two categories of social capital, bridging and bonding. Bridging social capital is typically associated with extending and maintaining "weak ties" (Granovetter, 1982). Bonding social capital is found among individuals with strong-knit connections, such as family and close friends, and is typically associated with emotional or substantive support through continued reciprocity (Williams, 2006).

Social networks comprised largely of women were perceived to create greater social capital than male or mixed networks, and the women entrepreneurs participating in the study reported the acquisition of both new customers and suppliers through their Facebook connections.

ICTs can lower the barriers to interactions within one's social community by encouraging social self-disclosure and the forging of new relationships that might not occur otherwise (Bargh, McKenna, & Fitzsimons, 2002; Tidwell & Walther, 2002). These new connections may result in an increase in social capital. For example, a 2009 Pew Internet survey reported that ICT users were more likely to have a larger, more diverse core discussion network than non-ICT users (Hampton, Goulet, Her, & Rainie, 2009). Constantinidis (2011) found that women entrepreneurs found social media, Facebook in particular, to be a useful tool for balancing work and family.

Social networks comprised largely of women were perceived to create greater social capital than male or mixed networks, and the women entrepreneurs participating in the study reported the acquisition of both new customers and suppliers

through their Facebook connections. Beninger et al. (2016) provided evidence that the social capital of women entrepreneurs in Egypt was enhanced by the increased reach and exposure enabled by the use of social media.

Past research has hypothesized that ICTs such as social media could greatly increase the number of weak ties; individuals gain new resources (such as information or perspective) from loose connections with little effort and cost (Donath & Boyd, 2004). On the other hand, some have questioned the impact of ICT on bonding strong ties (Bargh & McKenna, 2004). For example, Nie and Erbring reported that Internet use resulted in the neglect of one's close network (2000). However, Howard, Rainie, & Jones (2001) found that the Internet allows people to increase their level of communication with close ties, and the authors suggested that ICT tools were likely to extend social ties rather than detract.

Social capital allows a person to utilize resources from other members in the network (Ellison, Steinfield, & Lampe, 2007). Women entrepreneurs with high bridging social capital (i.e., facilitating interactions outside of their family and close friend networks) could gain a broader set of information and opportunities as they more frequently interact with community members with diverse backgrounds. Also, women entrepreneurs with high bonding social capital (i.e., close interactions with family and close friends) could gain emotional and substantive resource support from one another through reciprocity (Williams, 2006). Additionally, social capital researchers have found that both forms of social capital are related to an increase in individual psychological well-being (Helliwell & Putnam, 2004; Ellison et al. 2007).

Moreover, social support from a peer network has been confirmed to enhance perceptions of psychological empowerment (Seibert, Wang, & Courtright, 2011). Thomas and Velthouse (1990)

defined psychological empowerment as intrinsic task motivation manifesting as a sense of control, determination, and belief in one's work and values. Feelings of empowerment can foster flexibility, stimulate change, improve innovative behavior, increase job satisfaction, boost task performance, enhance organizational commitment, and reduce strain (Conger & Kanungo, 1988; Thomas & Velthouse 1990; Seibert et al., 2011). In the context of direct selling, social support can provide women entrepreneurs with feelings of self-determination since, as an accepted member of her direct selling community, she has the right to determine her own business goals and scope. The access to a social network might enhance the woman entrepreneur's enthusiasm and inspiration in her work-related tasks and goals. Social support can also intensify feelings of task competence and impact because of the availability of resources, information, influence, and support needed to accomplish the work-related tasks and goals (Seibert et al., 2011).

In the context of direct selling, social support can provide women entrepreneurs with feelings of self-determination since, as an accepted member of her direct selling community, she has the right to determine her own business goals and scope.

SELF-EFFICACY

According to Bandura (1997), self-efficacy is one's belief in her capacity to employ the necessary resources needed in a particular situation. This process of inner transformation occurs when a woman recognizes both her ability to define her own self-interests and her entitlement to make her own decisions (Sen, 1999; Kabeer, 2001; Nussbaum, 2001). Botha, Nieman, and

van Vuuren (2007) reported that the literature on women entrepreneurship suggests that women are more disadvantaged than men regarding both entrepreneurial options (e.g., occupational choices) and entrepreneurial resources (e.g., sources of capital and training).

While human capital, such as self-efficacy, lies with an individual, social capital is based on links between and among people and groups.

To that end and supporting the findings of O'Neill and Viljoen (2001) who offered suggestions for improved support for women entrepreneurs in South Africa, it was suggested that women might require greater nurturing in self-confidence and esteem. A low-level of self-confidence that served to reduce entrepreneurial impetus was also reported by Preisendörfer, Bitz, and Bezuidenhout (2012) in their study of black entrepreneurship in South Africa. Yet, Urban (2012) suggested that entrepreneurial self-efficacy was an important motivational construct that influenced individual choice, goals, emotional reactions, and persistence of rural entrepreneurs in South Africa. South Africans receive some, albeit limited, emotional support for the development of personal human capital from their familial structures and governmental programs, but there is a sense of under-utilization of human potential (Nel & McQuaid, 2002). Thus, South Africans often rely on the spirit of Ubuntu for fostering a sense of belonging and encouragement (Duh, 2015a & 2015b). While human capital, such as self-efficacy, lies with an individual, social capital is based on links between and among people and groups (Nel & McQuaid, 2002).

Personal traits have a significant influence on the subjective task assessments that make up empowerment perceptions (Thomas & Velthouse, 1990).

Spreitzer (1995) defined psychological empowerment as the way individuals see themselves in relation to their task environment. Individual self-evaluation traits, measured as a combination of locus of control, self-efficacy, emotional stability and self-esteem, have been found to positively influence psychological empowerment in the workplace (Seibert et al., 2011).

The self-efficacy of women entrepreneurs may influence how they use technology to interact with one another and make new friends for bridging and bonding their social capital.

ICT, SOCIAL CAPITAL, AND SELF-EFFICACY

One of the key personality traits of effective salespeople is a sense of self-efficacy (Román & Herrera, 2015, Mathieu, Ahearne, & Taylor, 2007). In general, individuals exert more effort and become more persistent as self-efficacy increases and, in doing so, learn how to deal with task-related obstacles (Gist, 1989; Chebat & Kollias, 2000). Task-Technology Fit theory provides support for a moderating effect of self-efficacy. According to Marcolin, Compeau, Munro, & Huff (2000), it is one's personal abilities, not how the technology is designed or the how the task is defined, that limits one's outcomes. A study in 2008 found that salespeople who have relatively high self-efficacy, experience lower innovation resistance due to the ability to dismiss negative doubts about their abilities (Cho & Chang, 2008). Previous studies also suggest that the impact on outcome (e.g., bridging or bonding social capital) depends on the fit between individual characteristics of the users (e.g., self-efficacy) and functionality of the technology (Goodhue & Thompson, 1995). Thus,

the self-efficacy of women entrepreneurs may influence how they use technology to interact with one another and make new friends for bridging and bonding their social capital. Given these expected relationships, ICTs could play a critical role in the direct selling environment by facilitating communication among buyers and sellers.

AN INTEGRATIVE MODEL OF CYBERFEMINISM

The empowering benefits of ICT to transform the social, political, and economic lives of women entrepreneurs and bridge the gap in socio-economic development resulted in the following hypotheses:

- H1a: The perceived ease of use of ICT has a positive effect on women entrepreneurs' perception of ICT usefulness.
- H1b: The perceived usefulness of ICT has a positive effect on the use of ICT by women entrepreneurs.
- H1c: The perceived ease of use of ICT has a positive effect on the use of ICT by women entrepreneurs.
- H2a: The relationship between ICT use and bridging social capital will vary depending on a woman entrepreneur's self-efficacy.
- H2b: The relationship between ICT use and bonding social capital will vary depending on a woman entrepreneur's self-efficacy.
- H3a: Bridging social capital has a positive effect on the empowerment of women entrepreneurs.
- H3b: Bonding social capital has a positive effect on the empowerment of women entrepreneurs.
- H4: Self-efficacy has a positive effect on the empowerment of women entrepreneurs.



METHODOLOGY

The four major constructs explored in this research were: Information Communication Technology Use, Social Capital, Self-Efficacy, and Empowerment. Multi-item measures were used to assess each of these major constructs via an online survey process. After a rigorous preparatory process, the data collected were analyzed via structural equation modeling. Figure 2 denotes the operational model used in the gathering and analyzing of data collected from South African women engaged in direct selling.

QUESTIONNAIRE DESIGN

Separate scales were used to measure each of the dimensions within each of the four major constructs explored (ICT Use, Social Capital, Self-Efficacy, and Empowerment). Items were derived and adapted from previous research. All constructs, except ICT Use, were measured as reflective first order constructs. ICT Use was assessed as a formative first-order construct. In developing ICT Use in a direct selling business, a large pool of measurement items that were indicators of ICT Use were first identified based on an extensive literature review. The measurement items were selected and refined to ensure that the selected formative measures for ICT Use did not overlap and, in combination, covered all characteristics of the construct. Clarity and lack of ambiguity and avoidance of jargon were assured in accordance with recommendations by Diamantopoulos and Winklhofer (2001). Table 1 provides an overview of each of the scale items and the source of each derivation.

A draft of the final questionnaire was shared with a resident of South Africa to ascertain question phrasing and appropriateness of response categories. After this review, the questionnaire was pre-tested for reading and direct selling content accuracy with market research experts at three institutions of higher education and among five women engaged in direct selling in the USA. Revisions were made based on input from all parties. The revised version was then pre-tested in Johannesburg, South Africa.

This final pre-test of the survey instrument followed a rigorous process in which two of the researchers met face-to-face, over a four-day period, with 50 female independent contractors from six companies engaged in direct selling in South Africa. Arrangements for these company interactions were made through the Direct Selling Association of South Africa. The pre-test process followed a structured process in which participants were informed as to the nature and scope of the research project. Following that brief introduction, each of the participants was asked to complete a paper and pencil version of the questionnaire. Time to complete the instrument was monitored closely, with times ranging from 10 minutes, 30 seconds to 28 minutes, 47 seconds. On average, the questionnaire took around 17 minutes to complete. After completion of the questionnaire, the de-brief engaged the women on a detailed breakdown of each major part of the questionnaire: introduction letter, empowerment questions, self-efficacy questions, decision making and social capital questions, technology

use questions, and demographic questions. The debrief discussion wrapped up with an open-ended discussion on general likes/dislikes about the response process.

Based on feedback from the pre-test in South Africa, minor changes were made to the final survey instrument. These changes were largely in regards to the demographic questions, although some minor adaptations with respect to wording within the direct selling vernacular were also made (e.g., "direct selling job" was used originally in some of the scale items and this was changed to "direct selling business").

SAMPLE DESCRIPTION

The sampling process for the online survey targeted women engaged in direct selling within six companies in South Africa. Since the women targeted for the survey were independent contractors of each of the companies, a process for making the personal connection between the researchers and the company contact was facilitated by a person in the South African Direct Selling Association. The email in Appendix A made the initial connection between the researchers and the company contact. Following this initial introduction, the researchers reached out to the contact person at each company (Appendix B).

The initial rollout of the survey resulted in 242 responses within the first 16 days the survey was open. At that time, brief reminder emails were sent to the company contact to ensure that the email had been distributed. Since the survey dissemination was reliant upon an intermediary for dissemination to potential respondents, another email, similar to the first email request, was sent one month after the initial rollout. In total, there were 359 responses to the survey request. Following review of the data, 40 straight-liners and 71 incomplete surveys were removed for a total of 245 valid

responses. Of these, 199 respondents used ICT technologies to support their direct selling business. Thus, the remainder of the analyses was based on those 199 responses since the study focused on the role played by ICT to support women engaged in direct selling.

Since the general perception of ICT might suggest that ICT usage would vary based on age and that there might be a relationship between time on ICT and direct selling income, age and income were utilized as control variables in the study. Additionally, a variety of descriptive data was collected for general informational purposes. Table 2 provides an overview of ICT use by the women entrepreneurs responding to the survey, and Table 3 summarizes the general demographics of the responding women.

Whatsapp was the ICT used most often by respondents to support their direct selling businesses. A messaging service, Whatsapp offers both reliable messaging and call capabilities. Following closely was use of email and text messaging. While Ajjan et al. (2014) had suggested that social media was integral to ICT use and women in South Africa did use social media sites, the more traditional ICT interactions were used for business engagement. Almost all of the women (96.5%) used their mobile phone in the direct selling process, and the independent contractors spent, on average, more than one hour per day using ICT to support their direct selling businesses.

A wide range of ages, race/ethnicity, education, and marital status were represented in the sample set, with wellness and cosmetic/personal care products comprising the majority of products sold by these direct selling entrepreneurs. Close to 68 percent of respondents worked outside the home in addition to running their own direct selling business, and 71.7 percent were the main contributor to the

household income. With this, however, a little over 66 percent of the respondents reported a direct selling income of R5000 or less per month.

ANALYTICAL PROCESS

A structural equation modeling (SEM) with partial least square (PLS) approach was used to test the proposed model and hypotheses. Partial Least Squares (PLS-SEM) is a variance-based approach to structural equation modeling, with the goal to predict key target constructs (Hair, Hult, Ringle, & Sarstedt, 2016). PLS-SEM was selected for the following reasons: (1) it is flexible in analyzing a complex predictive model with a large number of variables and relationships (Hair, Ringle, & Sarstedt, 2011; Hair et al., 2016), (2) it incorporates reflective and formative measurement models easily and is capable of producing robust results with both large and small sample sizes (Hair et al., 2016), and (3) it accommodates the exploratory nature of research.

Common Method Variance

Common method variance (CMV) occurs when an external component influences item response. As such, counteractive measures, such as separating predictors and outcomes by unrelated measures or adding a marker variable, can be used in the survey design to reduce CMV (Podsakoff, MacKenzie, & Podsakoff, 2003). A marker variable (i.e., an unrelated construct on escapism) was added to the survey to adjust the correlations among the principal constructs (Lindell & Whitney, 2001). The marker construct had a low correlation with all other constructs in the model (largest was 0.167). Moreover, a Harmon Factor was conducted, and the results (12.65%) demonstrated that CMV was not present and, therefore, did not threaten the interpretability or validity of the results.

Measurement and Structural Models

The measurement model was validated using SmartPLS 3 software (Ringle, Wende, & Becker, 2015). Appropriate validation procedures were followed to evaluate both reflective and formative measures. Internal consistency, convergent validity, and discriminant validity were evaluated to check the measurement validity of the reflective constructs (Straub, 1989; Gefen & Straub, 2005; Hair et al., 2016). Both discriminant validity and multi-collinearity were examined for the formative measures.

Starting with the reflective measures, outer loadings of each construct were examined. Based upon previous suggestions, any items lower than 0.7 were considered for elimination if the indicator deletion improved internal consistency reliability (Bagozzi, 1980; Hair et al., 2016). Two items had loadings less than 0.7 but greater than 0.4. Removing those indicators did not improve internal consistency reliability above the recommended threshold. Thus, the two reflective items were retained in the model. In regards to convergent validity, all indicators were significant and loaded on the appropriate constructs. The internal consistencies of the reflective measures had Cronbach alphas greater than 0.65 (acceptable in exploratory research), composite reliabilities greater than 0.70, and average variance extracted greater than 0.50. Therefore, as shown in Table 1, the results met the established benchmarks that provide evidence of convergent validity and internal consistency reliability (Fornell & Larcker, 1981). To evaluate discriminant validity, HTMT results were examined (Hair et al., 2016) using a threshold value of 0.90 given the conceptual similarities among the constructs (e.g., empowerment-impact and empowerment-goal internalization) (Henseler, Ringle, & Sarstedt, 2015). After examining appropriate HTMT ratios (Table 4), discriminant validity was confirmed (Anderson & Gerbing, 1988; Fornell & Larcker, 1981).

Convergent validity for the formative construct was supported through redundancy analysis. The results yielded a path coefficient of 0.76, which was above the recommended threshold of 0.70 (Hair et al., 2016). The VIF values were uniformly below the threshold value of 5 (Hair et al., 2016), with the highest VIF value of 2.45 for "I use ICT to be socially connected with my direct selling community." As such, it was safe to conclude that collinearity was not an issue for the estimate of the PLS path model. Next, the outer weight and confidence intervals assessed formative indicator significance at the 5% level. The results showed that items "I use ICT to communicate about business-related issues with my direct selling community," "I use ICT to communicate with my direct selling customers/clients," and "I use ICT to provide information to my current and potential customers about my direct selling products" were not significant. Analysis of the outer loadings of these formative indicators indicated that loadings for the three indicators were significant at greater than or equal to 0.5 (Table 2). Thus, the indicators were retained even though they were not significant as recommended by Hair et al. (2016). Prior research also provided support for the relevance of these indicators in capturing how women entrepreneurs in direct selling channel use ICT to support their business (Beninger et al. 2016). Considering the results, all reflective and formative constructs displayed satisfactory quality of the measurement model.

The structural model was estimated using the bias-corrected and accelerated bootstrapping procedure with 5000 resamples (Efron, 1987). The hypothesized relationships are presented in Figure 3 and Table 5.



RESULTS

Hypotheses 1a, 1b, and 1c proposed that higher levels of ICT ease of use and usefulness would have a positive relationship with ICT use to support direct selling activities. The path relationships between ICT ease of use and usefulness ($\beta = .59, p < .01$), ICT ease of use and ICT use ($\beta = .17, p < .05$), and ICT usefulness and ICT use ($\beta = 0.72, p < .01$) were all positive and significant. Therefore, the hypothesized relationships were supported.

Hypothesis 2a and 2b posited that self-efficacy of women entrepreneurs would positively moderate the relationship between the use of ICT and social capital bridging and bonding. The moderated relationship between use of ICT and social capital bridging was supported and in the right direction ($\beta = .14, p < .05$). The relationship between ICT use and bridging social capital increased by the size of the interaction term (0.50

$+ 0.14 = 0.64$). Contrary to the prediction, the moderated relationship in regards to self-efficacy impact on use of ICT and bonding social capital ($\beta = .09, p > .1$) was not significant. Thus, H2a was supported and H2b was not supported. However, self-efficacy had a direct significant positive relationship with bonding social capital ($\beta = .217, p < .01$), and the relationship between ICT use and bonding social capital increased by the size of the direct path ($\beta = 0.52, p < .01$).

Hypotheses 3a and 3b proposed that the social capital bonding and bridging would have a positive impact on different aspects of empowerment. The path relationship between social capital bridging and goal internalization empowerment ($\beta = .59, p < .01$), perceived control ($\beta = .32, p < .05$), competence empowerment ($\beta = .35, p < .01$), and impact empowerment ($\beta = .29, p < .01$) were positive and significant. Moreover, the

path relationship between social capital bonding and perceived control empowerment ($\beta = .29$, $p < .05$), competence empowerment ($\beta = .23$, $p < .05$), and impact empowerment ($\beta = .22$, $p < .05$) were positive and significant. However, the relationship between social capital bonding and goal internalization was not significant.

Hypothesis 4 proposed that self-efficacy would have a positive impact on empowerment. The path relationship between self-efficacy of women entrepreneurs and competence-empowerment ($\beta = .16$, $p < .05$) and between self-efficacy of women entrepreneurs and impact empowerment ($\beta = 0.25$, $p < .01$) were both positive and significant. However, no significant relationship was found between self-efficacy and perceived control or self-efficacy and goal internalization.

The impact of exogenous constructs on endogenous constructs is shown in Table 6. The impact of ICT use on social capital bridging and bonding and on empowerment was significant and meaningful. Upon reviewing the R^2 values of the endogenous latent variables, the R^2 values of ICT Usefulness (35%), ICT Use to support direct selling (69%), Social Capital Bridging

(39%), Social Capital Bonding (39%), Goal Internalization Empowerment (56%), Perceived Control (30%), Competence Empowerment (52%), and Impact Empowerment (46%) were all moderate according to the recommended rule of thumb (Hair et al., 2011; Henseler, Ringle, & Sinkovics, 2009).

The blindfolding procedure was performed (omission distance = 7) to estimate Stone-Geisser's Q2 value (Geisser, 1974; Hair et al., 2016). Stone-Geisser's Q2 is a measure of external validity to analyze the structural model predictions. Positive values indicate predictive relevance for the endogenous constructs (Hair et al., 2016). Following the suggested values (Hair et al., 2016), it was evident that good predictive relevance was achieved.

The analysis of the control variables revealed a significant positive path between direct selling income and competence ($\beta = 0.16$, $p < .01$) and average time spent on ICT per day and impact ($\beta = 0.11$, $p < .1$). On the other hand, there was a negative significant relationship between age and goal internalization ($\beta = 0.11$, $p < .05$) and age and perceived control ($\beta = -0.12$, $p < .10$).



DISCUSSION

Cyberfeminism advocates the use of information communication technologies (ICT) for empowerment. The current study attempted to capture cyberfeminism and the empowering benefits of ICT adoption by exploring the relationships among ICT use, strengthened self-efficacy, creation and maintenance of social capital, and various dimensions of women empowerment.

The results indicate that South African women, engaged in creating their own entrepreneurial businesses in which they sell direct to the consumer the products of large direct selling companies, are utilizing mobile devices and ICT technologies to: (1) connect socially with peer groups, (2) share with, and learn from, other sales people in the direct selling organization, and (3) communicate with customers to both introduce and sell product.

The ease of use and usefulness of these technologies are positively impacting the women entrepreneurs use of ICT to facilitate engagement. Moreover, the easier it is to use ICT to support her direct selling business, the more ICT becomes a part of the woman entrepreneur's direct selling daily activities.

With respect to social capital, the findings suggest that ICT use can help women entrepreneurs accumulate and maintain bridging social capital. The use of ICT allows women

entrepreneurs to maintain community ties cheaply and easily because ICT lowers the barriers to connect with others. Thus, women entrepreneurs who might otherwise not initiate communications with someone whom they were not acquainted are enabled to do so through ICT affordances (e.g. WhatsApp, Email, text messaging, Facebook). The results identified a self-efficacy interaction between ICT use and bridging social capital. That is, women direct sellers who had high self-efficacy (i.e., a belief in her ability to succeed in a specific situation) and used ICT reported higher bridging social capital. One explanation consistent with this interaction effect is that ICT provides benefits such as increased access to community, information, and opportunities which women with high self-efficacy can use to further integrate into their direct selling community.

Thus, women entrepreneurs who might otherwise not initiate communications with someone whom they were not acquainted are enabled to do so through ICT affordances (e.g. WhatsApp, Email, text messaging, Facebook).

Bonding social capital explored the extent to which women could rely on support from close-ties in their direct selling community. Using ICT (e.g., group text, Facebook post), women entrepreneurs can communicate quickly and

effectively and, when a problem arises, they can connect with other women in their close-circle community to seek advice and support. Contrary to the prediction, self-efficacy did not moderate the relationship between ICT use and bonding social capital. Instead, it had a significant direct effect. Women entrepreneurs with high self-efficacy experienced higher bonding social capital. The resourcefulness of these women has likely resulted in them having created strong ties in the direct selling community.

Women entrepreneurs with high self-efficacy experienced higher bonding social capital. The resourcefulness of these women has likely resulted in them having created strong ties in the direct selling community.

Empowerment reflected four dimensions of psychological enablement as identified by Menon (1999) and Spreitzer (1995): goal internalization, perceived control, competence, and impact. The first dimension, goal internalization, assessed the motivating property of an exciting objective or worthy cause provided by direct selling leadership and community. The second dimension, perceived control, assessed the extent to which women entrepreneurs had authority and freedom to run their businesses as they saw fit. The third dimension, competence, measured role mastery to work effectively and belief in her skills and abilities to mentor others. The fourth dimension, impact, was appraised as the degree of impact and influence over her direct selling business. Women entrepreneurs who felt part of the broader community and were willing to spend time to support that community were more likely to experience all four dimensions of psychological empowerment.

THE FOUR DIMENSIONS OF PSYCHOLOGICAL ENABLEMENT

- Goal internalization: The motivating property of an exciting objective or worthy cause provided by direct selling leadership and community.
- Perceived control: The extent to which women entrepreneurs had authority and freedom to run their businesses as they saw fit.
- Competence: The measure of role mastery to work effectively and belief in her skills and abilities to mentor others.
- Impact: The degree of impact and influence over her direct selling business.

Both social bridging and social bonding had effects on empowerment. It was clear that the strong ties women entrepreneurs create will positively influence the authority and freedom to run their direct selling businesses, the mastery of the different work aspects of the business, and the impact these women can make in their direct selling community. With respect to the different dimensions of empowerment, bridging capital had a large effect size on goal internalization and bonding social capital had the largest effect size on perceived control. Since goal internalization focuses on the goals of the direct selling organization and accomplishments of others in the organization, bridging social capital enables the connections with women in the direct selling community with whom the woman entrepreneur might otherwise not have an affiliation. Perceived control relates more closely to the woman entrepreneur's personal authority and freedom. The strength of connections with like-minded people (e.g., family and friends) likely nurtures those feelings of independence.

There was a positive relationship between direct selling income and competence empowerment. That is, women who earned higher incomes from their direct selling businesses were also experiencing greater competence in their workplace abilities.

The positive impact of a woman entrepreneur's self-efficacy on competence and impact empowerment reaffirms the notion that belief in one's self is critical to success. The woman entrepreneur who makes plans, does not give up, and keeps trying until the job is done will continue to strengthen her skill set and work ethic which will likely lead to positive rewards both economically and socially. The incredible power of belief in one's self came through clearly in the data from these women entrepreneurs.

Three of the control variables entered into the model with significant relationships. There was a positive relationship between direct selling income and competence empowerment. That is, women who earned higher incomes from their direct selling businesses were also experiencing greater competence in their workplace abilities. Or, maybe women who were competence-empowered worked their abilities harder which resulted in a stronger income stream from the business (e.g., work harder->sell more product->build the business->higher income).

This same idea was consistent with the positive relationship between time spent in ICT use per day and impact. The more time the woman entrepreneur spent engaging with customers and other women in her direct selling community, the greater the impact empowerment felt by the woman entrepreneur. Again, this might

be a recursive and circular relationship in which doing well in one feeds the success of the other and vice-versa.

With respect to the third control variable, age, the data from these South African women suggested that older women were less likely to feel empowered in terms of goal internalization and perceived control. These two forms of empowerment focus on inspiration/enthusiasm and independence/authority. It may be that older women are cognizant of the attention that direct selling companies are directing toward the younger generation (e.g., Millennials) both in terms of the next generation of independent contractors and customers, leaving them feeling as though they are not important to the future of the company. While the younger woman might be looking toward longevity with the firm as a long-term career path, the older woman might see herself having less energy to devote to the company and its generally ever-expanding product offerings. Additionally, longitudinal studies have shown that perceived control increases as one enters young adulthood but begins to decline after a period of stability during middle age (Vitelli, 2013). Thus, there might be some feelings of pessimism toward the control that a woman might actually have in crafting a business around products distributed by a large, global company.

The woman entrepreneur who makes plans, does not give up, and keeps trying until the job is done will continue to strengthen her skill set and work ethic which will likely lead to positive rewards both economically and socially.

Rather than being a drain on a nation's economy, an underserved community offers increased sales opportunities, a qualified workforce, marketable innovations, reduced costs, and increased quality.

PRACTICAL IMPLICATIONS

In addition to understanding the benefits accorded women through the use of ICT, the results of this study offer several implications for direct selling companies. Knowledge gained with respect to women's use of ICT for greater empowerment is likely applicable to other emerging economies as well as underserved communities in other countries and regions of the world. According to Weiser, Kahane, Rochlin, and Landis (2006), underserved communities tend to be misunderstood in the marketplace. Rather than being a drain on a nation's economy, an underserved community offers increased sales opportunities, a qualified workforce, marketable innovations, reduced costs, and increased quality. This description sounds very conducive to the job opportunities created by the direct selling industry and the resulting social value added by such opportunities available in direct selling as evidenced by this data from South Africa.

Additionally, the results of the research might provide a launching point for international market entry for direct selling companies thinking about entering the emerging and frontier marketplaces. There is publicly-available data that will offer insight into the general adoption and use of ICT around the world. Entering new markets that have readily available technological infrastructure will help ensure a company's ability to tap into ICT for both economic and social gain.

Importantly, the significance of ICT both economically and socially suggests that direct selling companies should include ICT training for its independent contractors. While there might be the assumption that a countrywide technological infrastructure infers ICT use by the independent sales force, it behooves the direct selling company to provide encouragement and training to these women in the use of applicable tools and platforms. Additionally, understanding the use of ICT in the independent contractor's business can also indicate to the direct selling company which types of turnkey material and communications should be made available to the sales person.

STUDY LIMITATIONS AND FUTURE RESEARCH

As with any research project, there are limitations to the current study. Some limitations often offer several avenues for future research, while others are inherent in the nature of the study design and ensuing methodology. Because the current study was centralized in one geographic area, there is the opportunity to expand this research to other emerging markets to capture possible country differences in the role of ICT for empowering women. Additionally, since the context here was direct selling, there is the opportunity to broaden the study to include women entrepreneurs engaged in direct selling in a wider number of direct selling firms than the six companies that were represented in the current data. To this end, the current research shows that the intermediary on survey distribution (the contact at the direct selling company) with a central drop site for survey completion (via the URL distributed in the email sent to the women) works well to reach independent contractors for direct selling firms. Additionally, the excitement of the company executives and the women entrepreneurs included in the pre-test group shows that the direct selling context is ripe for continued exploration of ICT and women empowerment. This context is particularly timely given the worldwide

focus on the sharing economy and the suggested importance of technology in direct selling companies (Harrison & Hair, 2017). In summary, expanding the research to more emerging economies and including women entrepreneurs in the direct selling context offers fruitful avenues for development.

An inherent limitation of the study is that the sample is cross-sectional in nature and, thus, does not allow causality from the findings. Cross-sectional data limits the results to reflect a single point in time, and future studies could examine the various impacts of ICT use over time via longitudinal study. Furthermore, the current study used self-reported measures and the data were

collected via survey design. As such, there was the possibility of common method bias.

However, appropriate tests, as described in the methods section, concluded that this bias was not a significant concern in the study.

Lastly, the mediation effect of usefulness on the relationship between ease of use and ICT use was examined. Both direct and indirect effects were found to be significant in the same direction. This could be a cue that another mediator (such as availability of technology in South Africa) whose indirect path has the same direction as the direct effect might have been omitted from the study (Hair et al., 2016).



CONCLUSION

Understanding how women entrepreneurs use technology to build and bridge their social capital and how that use in turn impacts empowerment is essential in today's technology-driven economy. Technology use in direct selling is, in fact, helping women entrepreneurs improve their goal internalization by inspiring them toward the direct selling organization's objectives. It is also improving the women's feelings of authority and control over the way they run their businesses, while having a positive impact on how effectively they feel they do their work and their sense of impact

and influence on their direct selling businesses. Considering the benefits of information communication technology on direct selling channel growth through mobile and social apps, it appears favorable for direct selling companies to encourage the use of technology among their independent contractors. ICT use can expand and enhance these women's network ties and lead to greater empowerment. In doing so, not only is work performance likely to improve, the longer-term social, economic, educational, and political impact will have far-reaching gains in emerging markets.



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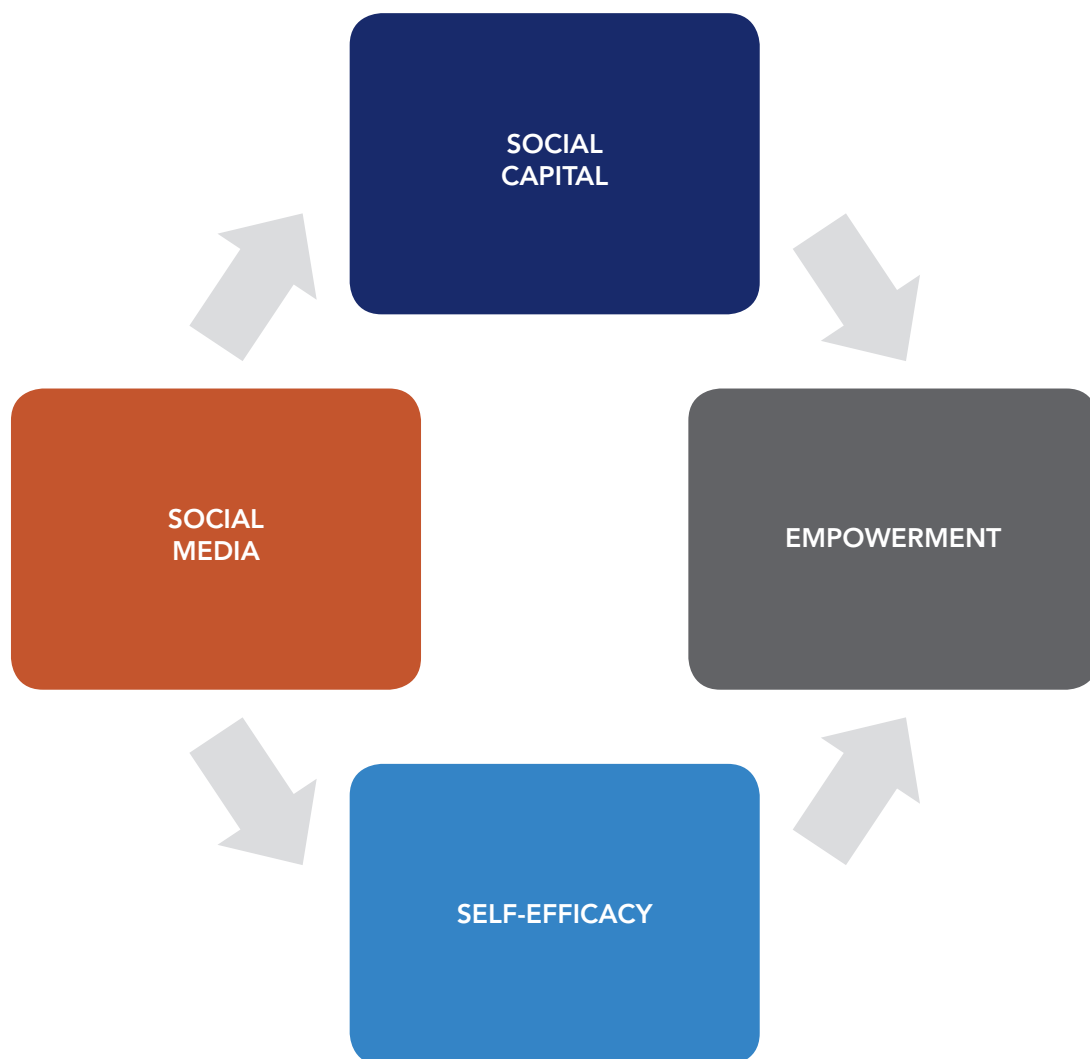
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FIGURE 1

EMPOWERING WOMEN ENTREPRENEURS IN EMERGING
ECONOMIES CONCEPTUAL MODEL



Source: Ajjan et al. (2014)

FIGURE 2

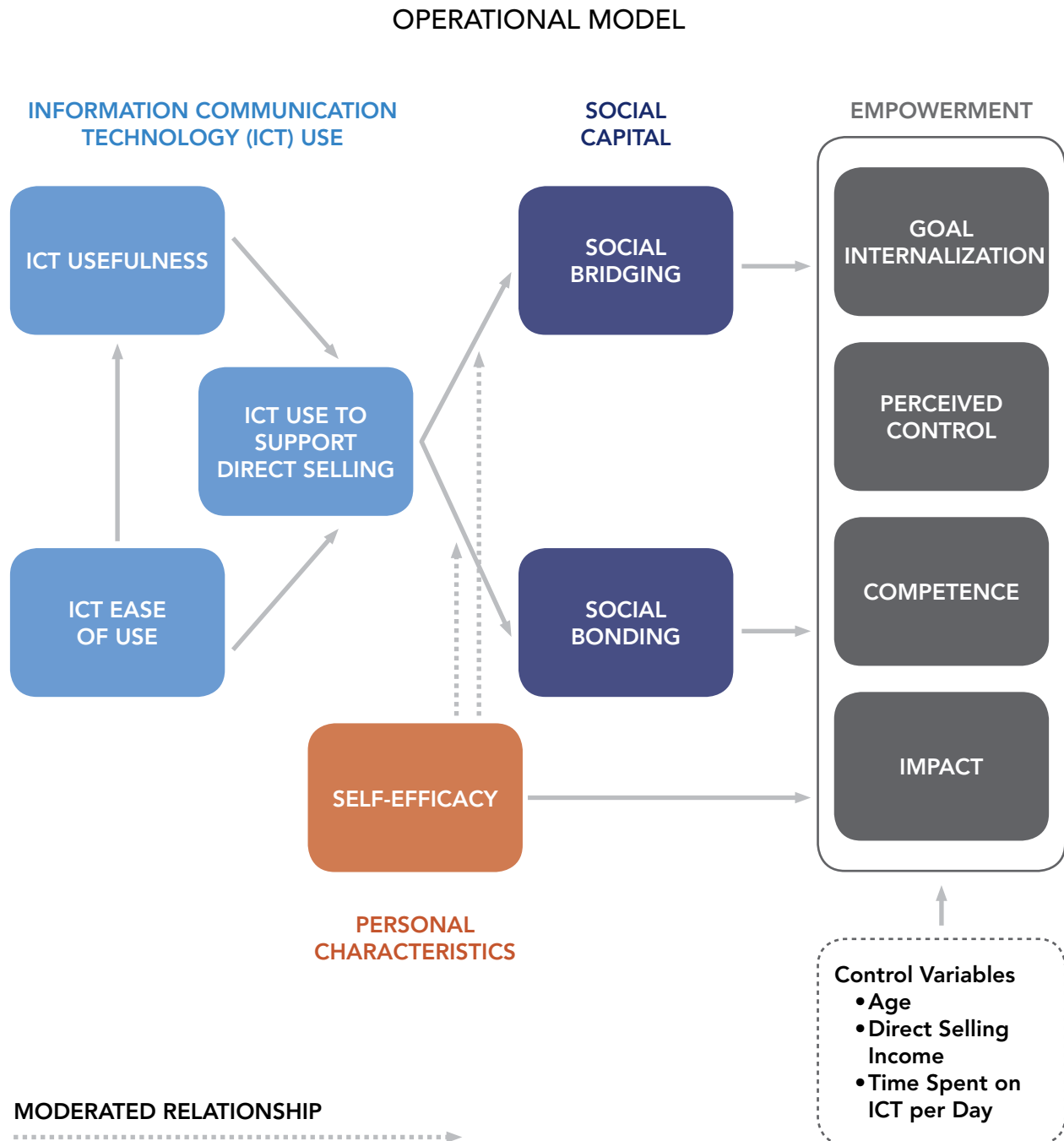
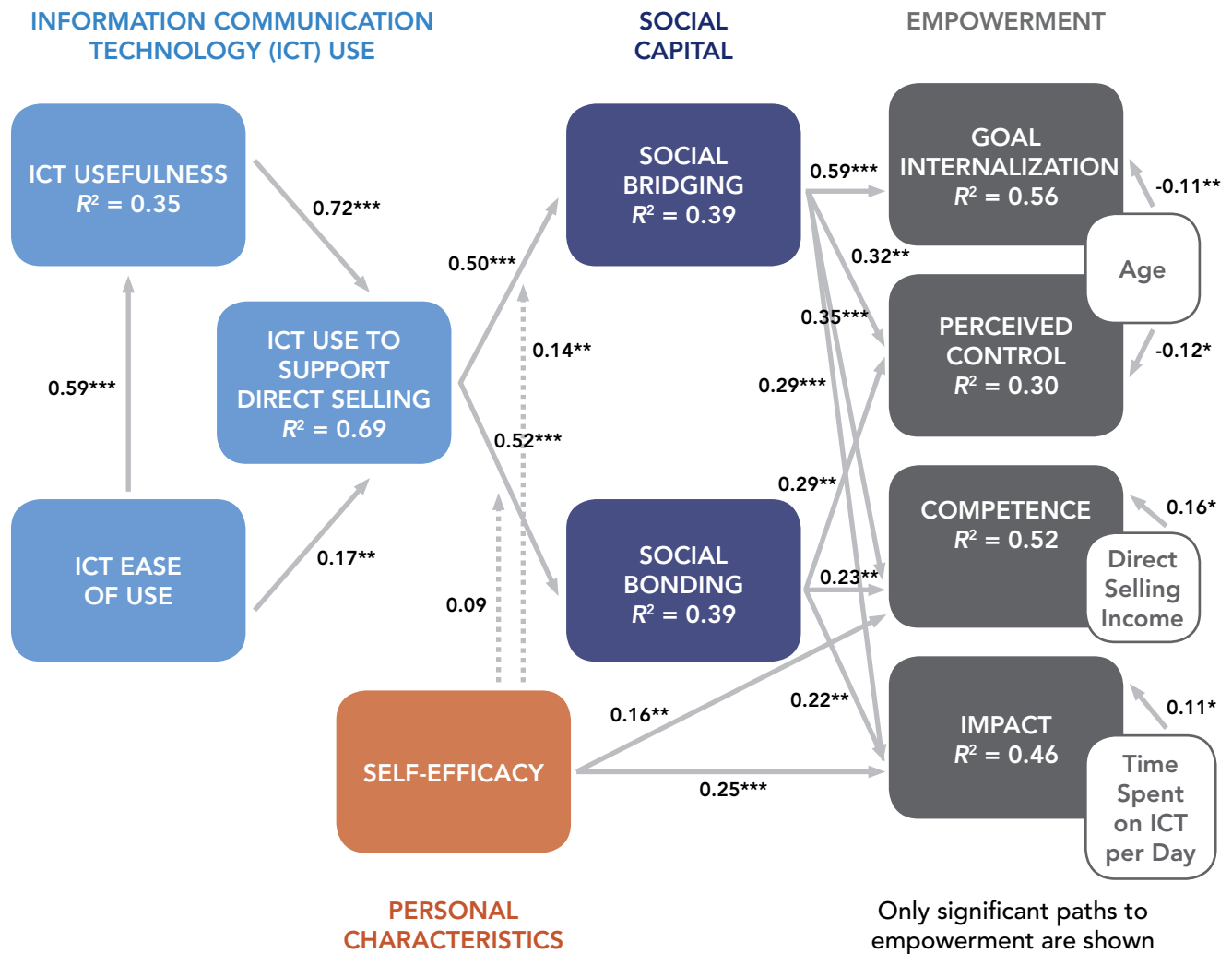


FIGURE 3

OPERATIONAL MODEL RESULTS



MODERATED RELATIONSHIP

* $p < .1$; ** $p < .05$; *** $p < .01$

TABLE 1

RELIABILITY AND VALIDITY INDICES FOR THE MEASUREMENT MODEL

MEASUREMENT ITEMS	OUTER LOADINGS (OUTER WEIGHTS)	T-VALUE FOR LOADING (T-VALUE FOR OUTER WEIGHT)	CA	CR	AVE
Ease of Use (Hess et al., 2014; Davis, 1989)			0.79	0.87	0.62
My interaction with ICT to support my direct selling business is clear and understandable.	0.88	37.72			
I feel comfortable using ICT to support my direct selling business.	0.85	20.65			
It would be easy for me to become more skillful at using ICT sites to support my direct selling business.	0.74	12.23			
Overall, I find ICT sites easy to use to support my direct selling business.	0.66	9.43			
Perceived Usefulness (Klein 2007, Venkatesh et al. 2003)			0.86	0.91	0.78
I depend on ICT to support my direct selling business.	0.87	31.02			
ICT is part of my everyday direct selling activities.	0.92	45.11			
I find ICT useful in supporting my direct selling business.	0.85	23.36			
ICT Use to Support Direct Selling (Beninger et al., 2016)					
I use ICT to communicate about business-related issues with my direct selling community.	0.71 (0.02)	10.41 (0.25)			
I use ICT to communicate with other sales people in my organization.	(0.27)	11.97 (3.65)			
I use ICT to communicate with my direct selling customers/clients.	0.75 (0.15)	8.54 (1.41)			
I use ICT to be socially connected with my direct selling community	(0.34)	19.25 (3.47)			
I use ICT to learn about ways to improve my direct selling business.	(0.33)	17.51 (4.24)			

MEASUREMENT ITEMS	OUTER LOADINGS (OUTER WEIGHTS)	T-VALUE FOR LOADING (T-VALUE FOR OUTER WEIGHT)	CA	CR	AVE
I use ICT to provide information to my current and potential customers about my direct selling products.	0.76 (0.14)	9.36 (1.38)			
Social Capital Bridging (Ellison et al., 2007)			0.91	0.93	0.64
I feel I am part of the broader community of direct sellers.	0.80	32.22			
I am interested in what goes on in direct selling.	0.80	21.77			
Interacting with other female direct sellers makes me want to be creative in my business.	0.82	28.73			
Interacting with people in direct selling makes me feel like a part of a larger community.	0.86	22.96			
I am willing to spend time to support direct selling activities.	0.81	23.75			
I come into contact with new people all the time in my direct selling activities.	0.73	17.11			
Interacting with others in direct selling reminds me that everyone in the world is connected.	0.79	20.49			
Social Capital Bonding (Ellison et al., 2007)			0.75	0.86	0.67
There are several people in my direct selling community whom I trust to help solve my problems.	0.87	33.44			
There is someone in my direct selling community I can turn to for advice about making very important decisions.	0.78	17.51			
The people I interact with in my direct selling community would be good referrals for me.	0.80	23.86			
Self-Efficacy (Sherer et al., 1982)			0.79	0.85	0.54
If I make plans, I am certain I can make them succeed.	0.74	16.05			
I give up easily. (R)	0.73	16.38			
Failure just makes me try harder.	0.78	19.37			
When I decide to do something, I go right to work on it.	0.70	12.29			
If I cannot do a task the first time, I keep trying until I can.	0.72	12.53			

MEASUREMENT ITEMS	OUTER LOADINGS (OUTER WEIGHTS)	T-VALUE FOR LOADING (T-VALUE FOR OUTER WEIGHT)	CA	CR	AVE
Empowerment (Menon, 1999; Spreitzer, 1995)					
<i>Competence</i>			0.75	0.85	0.66
I have the competence to work effectively in direct selling.	0.85	24.61			
I have the skills and abilities to do my direct selling tasks well.	0.78	20.38			
I believe I could sponsor/mentor other women who might be interested in direct selling.	0.81	25.07			
<i>Perceived Control</i>			0.65	0.85	0.74
I have the authority to engage in direct selling the way I see best.	0.89	29.85			
I have the freedom to determine how I run my direct selling business.	0.83	16.28			
<i>Goal Internalization</i>			0.76	0.86	0.68
I am inspired by the goals of the direct selling organization I am affiliated with.	0.79	17.51			
I am enthusiastic about working toward my direct selling organization's objectives.	0.90	69.18			
I am inspired by what others in direct selling are trying to accomplish.	0.77	13.28			
<i>Impact</i>			0.65	0.80	0.58
The impact I have on my direct selling business is large.	0.78	17.70			
I can influence the way other women engage in direct selling.	0.83	32.90			
I have a great deal of control over what happens in my direct selling business.	0.67	10.41			

TABLE 2

ICT USE OF THE RESPONDENTS BY APPLICATION AND DEVICE

TECHNOLOGY APPLICATION	% USING
WhatsApp	91.5%
Email	87.4%
Text Messaging	72.9%
Facebook	61.8%
LinkedIn	15.1%
Instagram	14.6%
Twitter	12.1%
YouTube	9.5%
Pinterest	6.0%

ICT DEVICE	% USING
Mobile Phone	96.5%
Laptop Computer	72.9%
Tablet	42.2%
Desktop Computer	38.2%

TABLE 3

DEMOGRAPHIC INFORMATION OF THE RESPONDENTS

DESCRIPTION	FREQUENCY	PERCENT
Which product category best describes the product(s) you sell?		
Wellness	72	36.2
Cosmetic and personal care	87	43.7
Household goods and durables	14	7
Clothing and accessories	1	0.5
Financial services	1	0.5
Home care	4	2
Food and beverages	1	0.5
Insurance	4	2
Missing	15	7.5
Please indicate your age:		
20-29	20	10.1
30-39	47	23.6
40-49	47	23.6
50-59	56	28.1
60-69	15	7.5
70 or older	4	2
Missing	10	5
Please give the range which best describes your DIRECT SALES AVERAGE MONTHLY INCOME:		
R1-R500	27	13.6
R501-R1000	27	13.6
R1001-R2000	30	15.1
R2001-R5000	37	18.6
R5001-R10,000	23	11.6
R10,001-R20,000	18	9
Greater than R20,000	21	10.5
Missing	16	8

DESCRIPTION	FREQUENCY	PERCENT
Which race/ethnicity best describes you?		
Black	30	15.1
Coloured	18	9
Indian / Asian	10	5
White	127	63.8
Missing	14	7
What is the highest level of education you have completed?		
Some high school	5	2.5
Matric (Grade 12)	31	15.6
Some university work completed	51	25.6
University degree completed	100	50.3
Missing	12	6
What is your current marital status?		
Single	30	15.1
Married or Living together	139	69.8
Divorced	17	8.5
Widowed	2	1
Separated	1	0.5
Missing	10	5
Are you the person who contributes most to the household income?		
Yes	83	41.7
No	106	53.3
Missing	10	5
Do you work outside your home in addition to running your direct selling business?		
Yes	135	67.8
No	54	27.1
Missing	10	5

TABLE 4

SUMMARY OF DISCRIMINANT VALIDITY (HTMT) IN FINAL MEASUREMENT MODEL

	1	2	3	4	5	6	7	8	9
Bonding Social Capital									
Bridging Social Capital	0.87								
Ease of ICT Use	0.55	0.41							
Empower-Competence	0.78	0.77	0.46						
Empower-Goal Internalization	0.77	0.87	0.34	0.73					
Empower-Perceived Control	0.68	0.64	0.47	0.70	0.73				
Empower-Impact	0.78	0.75	0.39	0.81	0.90	0.83			
ICT Usefulness	0.56	0.47	0.70	0.57	0.35	0.49	0.50		
Self-Efficacy	0.49	0.49	0.35	0.60	0.46	0.25	0.64	0.34	

TABLE 5

RELIABILITY AND VALIDITY INDICES FOR THE MEASUREMENT MODEL

HYPOTHESIS	PATH RELATIONSHIP	PATH COEFFICIENT	t-VALUE	p-VALUE	RESULT
Hypothesis 1a	ICT ease of use > ICT usefulness	0.59	8.47	0	Accepted
Hypothesis 1b	ICT usefulness > ICT use to support direct selling	0.72	12.65	0	Accepted
Hypothesis 1c	ICT ease of use > ICT use to support direct selling	0.17	1.99	0.04	Accepted
Hypothesis 2a	ICT use to support direct selling > Social bridging (moderated by Self-efficacy)	0.14	2.27	0.02	Accepted
	ICT use to support direct selling > Social bonding (moderated by Self-efficacy)	0.09	1.26	0.21	Rejected
	Social bridging > Empowerment (goal internalization)	0.59	6.91	0	Accepted
	Social bridging > Empowerment (perceived control)	0.32	2.46	0.01	Accepted
	Social bridging > Empowerment (competence)	0.35	3.40	0	Accepted
	Social bridging > Empowerment (impact)	0.29	2.63	0.01	Accepted
Hypothesis 3b	Social bonding > Empowerment (goal internalization)	0.12	1.45	0.12	Rejected
	Social bonding > Empowerment (perceived control)	0.29	2.57	0.02	Accepted
	Social bonding > Empowerment (competence)	0.23	2.47	0.01	Accepted
	Social bonding > Empowerment (impact)	0.23	2.11	0.04	Accepted
Hypothesis 4	Self-efficacy > Empowerment (goal internalization)	0.07	0.94	0.35	Rejected
	Self-efficacy > Empowerment (perceived control)	-0.05	0.66	0.51	Rejected
	Self-efficacy > Empowerment (competence)	0.16	2.17	0.03	Accepted
	Self-efficacy > Empowerment (impact)	0.25	3.27	0.00	Accepted

TABLE 6

EXPLANATORY POWER OF THE PLS-SEM MODEL

ENDOGENOUS CONSTRUCTS	R^2
ICT Usefulness	0.35
ICT Use to Support Direct Selling	0.69
Bridge Social Capital	0.39
Bond Social Capital	0.39
Empower-Goal Internalization	0.56
Empower-Self Determination	0.30
Empower-Competence	0.52
Empower-Impact	0/46



APPENDIX A

Dear xxx,

ACADEMIC RESEARCH PROJECT IN SOUTH AFRICA:

“DIRECT SELLING IN EMERGING AND FRONTIER MARKETS: AN UNDERSTANDING OF WOMEN ENTREPRENEURS AND SOCIAL MEDIA/DIGITAL MARKETING”

Thank you again to [company name] for participating in this important research study. The pre-test phase in November saw groups of direct sellers providing excellent input with regard to the research questionnaire. [The researchers] who were with us in November for the pre-test interviews, have finalised the required adjustments to the questionnaire.

The purpose of this email is to connect you to [the researchers] as they will lead the process from here. I have copied them on this email and they will contact you directly to explain the next steps.

Each participating company will have its own link to the survey which can be emailed to their female direct sellers. There is no restriction to the number of online survey questionnaire participants per company. We used the criteria below in the November pre-testing to ensure a broad reach of direct sellers (other than geographic location as all pre-test interviews were held in Johannesburg), but [they] will confirm if there are any changes/additions to this list.

The online survey questionnaire is for WOMEN ONLY and should include a mix of age groups, ethnic groups and geographic locations as well as a mix as follows:

1. Women earning a higher income from direct selling
2. Women earning a regular but lower income from direct selling
3. Those involved in direct selling full time
4. Those involved in direct selling part time
5. High level sales leaders/business owners
6. Those that have been involved with the industry for more than two years
7. Those that have been involved for less than two years (but more than six months)

DATA CONFIDENTIALITY

To confirm: the data will be managed in a way that maintains confidentiality of the respondents and the companies. No data will be attributable to any particular company. The researchers will be looking for relationships within the data itself (for example, maybe a high income seller spends more/less time on social media or someone who uses social media in her business has greater self-efficacy than those who use less social media); they will not be tying data to a company. It will only be [researcher's name] (a co-author with [researchers] for some of the early work in this area) who will be working with [the researchers] to analyze the data. No person at the DSA SA sees the data. The aggregate report is all that will be sent to the DSA SA and participating companies. Don't hesitate to contact me should you have any queries.



APPENDIX B

Dear xxx,

We are excited to begin the rollout of the survey, and we have crafted an email that we hope you will distribute to your female direct sellers. As Caroline noted, there is no restriction on the number of online survey questionnaire participants per company. Aside from meeting the criteria of being a female who is at least 18 years of age and engaged in direct selling for your company for at least six months, there are no boundaries on who can respond to the survey. Naturally, we would like to get a broad mix of respondents (e.g., low-high income, part-time and full-time, high-level sales leaders/business owners), but there are no expectations as far as you needing to sort your sales people in any way. From our perspective, you can send the survey request to all women engaged in direct selling for [Company].

To facilitate your sending out the request, we have taken the liberty of crafting the wording for an email invitation to potential participants as we would like to make this process as easy as possible for you and anyone else at [Company]. Our goal is to begin the survey process as soon as possible, and the system is ready to accept responses. Please let me know if you are fine with sending out the email below to the female salespeople at [Company] and when you think the email/survey link will be distributed. Importantly, we certainly appreciate your participation in this research project.

BELOW EMAIL FOR DISTRIBUTION TO FEMALE SALESPEOPLE

Direct Selling in Emerging and Frontier Markets: An Understanding of Women Entrepreneurs and Social Media/Digital Marketing

The goal of the research, for which we are asking you to participate, is to better understand factors leading to women empowerment in a direct selling environment. Although Africa represents a small percentage of global retail sales, direct selling in South Africa recorded positive growth in 2015. Such positive growth leads us to believe that economic opportunities for more women, via entrepreneurial activities such as those supported by the direct selling industry, have far-reaching societal ramifications.

It was very exciting to meet several of you during our visit to South Africa in November of 2016. Those of you who participated in the pre-test of an early draft of the questionnaire provided invaluable assistance in helping us create a stronger survey instrument. Now, we are at the stage of gaining responses from a much larger group of women engaged in direct selling. To help us better understand how women engaged in sales activities at [Company] can become more empowered, we hope you will complete the survey, in its entirety, that can be reached by clicking on the following link: [survey link].

As you will see on the first page of the survey, we are extremely conscious of the need for anonymity in this survey. As such, we want to confirm that your individual responses will be managed in a way that maintains both your personal anonymity and that of [Company]. We will only be looking for relationships within the data itself; we will not be tying the data to a particular person or company. Importantly, no one in your company or the DSA SA will see your responses or the data overall. An aggregate report will be provided to the DSA SA and [Company].

We certainly hope you will take some time to complete the survey found at [survey link] as we believe strongly that our study will have significant contributions related to women entrepreneurs, such as you, in South Africa. The higher standard of living enabled by both stronger physical and financial wellbeing among women entrepreneurs can lead to healthier worldwide economic conditions.



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