

# The influencing role of social capital in the formation of entrepreneurial intention

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## ABSTRACT

This paper investigated the relationship between social capital and entrepreneurial intention using the theory of planned behaviour (TPB). The study was carried out by means of a cross-sectional survey and included 329 final-year commerce students at a rural university in the Limpopo province. A structured questionnaire was used to collect the data. The results show that social capital is significantly related to entrepreneurial intention, the attitude towards becoming an entrepreneur and perceived behavioural control. The findings indicate that the TPB is a valuable model for understanding the relationship between social capital and entrepreneurial intention. The results indicate that individuals are more likely to form intentions to start a business when they think that their decision to do so would be approved of by those close to them, when entrepreneurial activity is positively valued in the society, when they know other people who are entrepreneurs and successful entrepreneurs, and believe that they would be supported by those close to them when starting a business. This study contributes to the body of knowledge by shedding light on the role of social capital in the formation of entrepreneurial intention in a South African context.

**Key words:** social valuation of entrepreneurship, social support, entrepreneurial role models, rural entrepreneurship development, Limpopo, South Africa

Entrepreneurial activity is considered as a social process that is embedded in networks of interpersonal relationships (McKeever, Anderson & Jack 2014; Stephan & Uhlaner 2010). These social networks promote entrepreneurial activity by facilitating the efforts of entrepreneurs in starting new ventures (Hampton, Cooper & McGowan 2009; Klyver 2007; Cruickshank & Rolland 2006; Davidsson & Honig

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2003) and enhancing the performance of their ventures (Stam, Arzlanian & Elfring 2014; Kickul, Gundry & Sampson 2007), which play an important role in economic growth and development of countries (Herrington, Kew & Kew 2015). Researchers indicate that the creation of new ventures occurs as a result of the intentions of entrepreneurs (Kautonen, Van Gelderen & Fink 2013; Rauch & Hulsink 2015). Hence entrepreneurial activity is considered to be an intentionally planned behaviour (Krueger, Reilly & Carsrud 2000). The formation of entrepreneurial intention depends on the social circumstances to which individuals are exposed (Klyver & Schøtt 2008). In addition, entrepreneurial activity can be facilitated or hindered by certain socio-cultural practices, values and norms prevailing in the environment (Krueger, Liñán & Nabi 2013; Stephan & Uhlaner 2010). As a result, research on entrepreneurial intention (Krueger et al. 2000) and social capital (Liao & Welsch 2005) is vital in understanding how new ventures emerge and grow.

Research on social capital recognises the role of the social context in which new ventures are created (Liao & Welsch 2005) and the effect of social and cultural factors in shaping entrepreneurs (Anderson & Miller 2003; McKeever et al. 2014). While the concept of social capital has been researched for many decades (Neergaard, Shaw & Carter 2005), there seems to be a lack of agreement among researchers concerning its definition (Adler & Kwon 2002; Inkpen & Tsang 2005). Most researchers define social capital based on its relationship with social networks (Neergaard et al. 2005). The argument is that social networks are vital in building social capital (Cruickshank & Rolland 2006; Lin 2005), and social capital is therefore an outcome of social relationships that is created and maintained through social interactions (McKeever et al. 2014; Anderson, Park & Jack 2007). According to De Carolis, Litzky & Eddleston (2009:530), social capital is “the goodwill and resources that emanate from an individual’s network of social relationships”. Social capital involves among others the information sharing among the members of the network, influence, solidarity benefits and relations to other actors (Kwon & Adler 2014); shared norms and values, and strength of ties (Li, Wang, Huang & Bai 2013; Granovetter 2005); actual and potential resources that an individual may derive from social relationships (Nahapiet & Goshal 1998); size, density and diversity of networks (Stam et al. 2014); formal and informal networks (Kickul et al. 2007); and knowing or having contact with entrepreneurs (Klyver & Schøtt 2008; Tartako 2013; Liñán & Santos 2007).

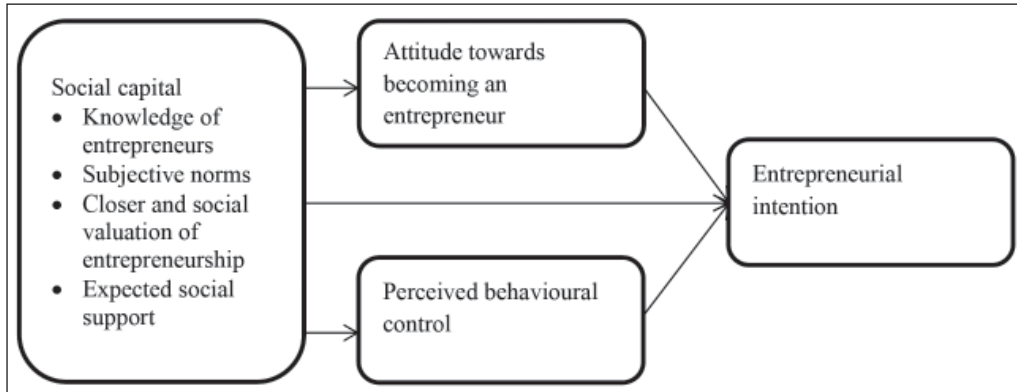
An individual’s social networks and relationships may include people who play different roles such as family members, friends, current or ex-colleagues and business connections (Klyver 2007). These social networks are vital throughout the stages of the venture life-cycle and provide the entrepreneur with various forms of social support and resources from pre-start up to a stage when the venture is fully established

(Hampton et al. 2009; Newbert, Tornikoski & Quigley 2013; Anderson & Miller 2003; Cruickshank & Rolland 2006). Previous research has shown that social capital is positively related to entrepreneurial intention (Tartako 2013; Katono, Heintze & Byabashaija 2010; Klyver & Schøtt 2008) and the determinants of entrepreneurial intention (Buttar 2015; Liñán & Santos 2007). Social capital plays an influential role with regard to an individual's entrepreneurial career choice, especially through exposure to entrepreneurial role models who may be a source of inspiration and learning and may impact on the formation of entrepreneurial intention (Kwon & Adler 2014; De Carolis et al. 2009; Klyver & Schøtt 2008; Dohse & Walter 2012). Entrepreneurial role models also increase the probability of becoming a nascent entrepreneur (Arenius & Minniti 2005). Nascent entrepreneurs are individuals who are engaged in the efforts of organising and assembling resources they need for creating new ventures (Arenius & Minniti 2005; Singer, Amorós & Moska 2015).

South Africa has a low total entrepreneurial activity rate of 7.0%, and 11.8% of individuals have entrepreneurial intentions (Herrington et al. 2015). The country also experiences a high unemployment rate of 25.5% (Statistics South Africa 2015). This study seeks to shed light on the role of social capital in promoting entrepreneurship in the Limpopo province. Since this province has a large number of people who live in rural areas, and these areas have been reported to be experiencing significantly lower entrepreneurial activity rates than their urban counterparts (Herrington, Kew & Kew 2010), this type of research is crucial in guiding the development and implementation of policy interventions that could stimulate rural entrepreneurial activity. The purpose of this study is to investigate the relationship between social capital and entrepreneurial intention among final-year commerce students at a rural university in the Limpopo province using the theory of planned behaviour (TPB). The study is one of the few that have examined the role of social capital in influencing entrepreneurial intention based on the TPB (for example, Tartako 2013; Katono et al. 2010; Liñán & Santos 2007) and therefore it advances the application of the TPB in understanding the relationship between social capital and entrepreneurial intention in a South African context.

## Literature review

Social capital can influence entrepreneurial intention directly or indirectly through the antecedents of entrepreneurial intention (Figure 1). Drawing from the TPB, the main focus of this study is to determine the relationship between social capital and entrepreneurial intention and the antecedents of entrepreneurial intention, namely the attitude towards becoming an entrepreneur and perceived behavioural control.



**Figure 1:** Conceptual framework

Source: Adapted from Ajzen (2005), Liñan & Santos (2007) and Malebana (2012)

## The theory of planned behaviour

According to the TPB, entrepreneurial intentions can be predicted with high accuracy from the attitude towards the behaviour, subjective norms and perceived behavioural control (Ajzen 2005). The attitude towards the behaviour refers to how positively or negatively an individual evaluates the performance of a particular behaviour. The adoption of positive or negative attitudes by individuals depends on how they evaluate the outcomes associated with performing the behaviour. Subjective norms involve the perceived social pressure to perform or not perform the behaviour. Individuals are more likely to perceive the social pressure to perform a particular behaviour when they think their social referents would approve of their decision to perform the behaviour and when these social referents themselves engage in the same behaviour (Ajzen 2005). Social referents are those individuals who have social relationships with a particular person who are more likely to shape that person's behaviour and choices based on their approval or disapproval of that behaviour and choices and a person's motivation to comply with such individuals' expectations.

Perceived behavioural control is an individual's perceived sense of self-efficacy or ability to perform a particular behaviour. Perceived behavioural control can be enhanced by the availability of second-hand information about the behaviour, by observing the consequences of the actions of acquaintances and friends and by the presence of factors that could facilitate the performance of the behaviour (Ajzen 2005). Drawing from this theory, individuals' intentions to start a business depend on how attractive they evaluate the outcomes from running one's own business, their

perceived capability to start a business and whether doing so is approved by one's social referents and these social referents are also running their own businesses.

While the direct effects of the attitude towards the behaviour and perceived behavioural control on entrepreneurial intention were supported in most studies, the results for the effect of subjective norms on entrepreneurial intention appeared to be mixed (for example, Liñán & Chen 2009; Krueger et al. 2000; Malebana & Swanepoel 2015). Prior research has shown that subjective norms have a positive impact on the attitude towards becoming an entrepreneur and perceived behavioural control (Guerrero, Lavín & Álvarez 2009; Do Paço, Ferreira, Raposo, Rodrigues & Dinis 2010; Liñán, Nabi & Krueger 2013; Liñán, Urbano & Guerrero 2011). Consequently, Liñán and Santos (2007) suggest that there is a need to include different constructs representing social relationships of an individual (not only social norms) in order to improve the explanatory power of intention-based models. They propose that subjective norms should be included in the concept of social capital. This is in line with Krueger et al. (2000), who indicate that the entrepreneurial intention of an individual could be influenced by the social norms of network members. Social capital in the form of norms may indicate what is valued and considered worthwhile (Anderson et al. 2007) and therefore can contribute towards the formation of different values and beliefs regarding a particular behaviour, including entrepreneurship. Hence the values and norms held by people in the closer environment and the society in general can have a positive or negative influence on the antecedents of entrepreneurial intention (Liñán et al. 2011; Sahinidis, Giovanis & Sdrolias 2012) and the choice among the behaviours that an individual may consider to be appropriate or inappropriate (Li et al. 2013; Light & Dana 2013).

### **Dimensions of social capital and entrepreneurial intention**

Entrepreneurial intention and its determinants can be influenced by social capital aspects that include the value attached to the entrepreneurial activity in one's closer environment and the society in general (Kibler, Kautonen & Fink 2014; Liñán et al. 2013; Katono et al. 2010), the presence of entrepreneurial role models (Carr & Sequeira 2007; Dohse & Walter 2012; Uygun & Kasimoglu 2013), approval of the decision to start a business in one's immediate environment (Liñán & Santos 2007) and social support from strong and weak ties (Dohse & Walter 2012; Malebana 2012; Oruoch 2006; Sequeira, Mueller & McGee 2007). Researchers indicate that entrepreneurs access more resources and support for starting new ventures from their close ties (Bhagavatula, Elfring, Van Tilburg & Van de Bunt 2010; Cruickshank & Rolland 2006; Hampton et al. 2009; Klyver 2007). Individuals' beliefs that they

can rely on their social ties for resources and support when starting a business increase the likelihood of transition from intention to nascent behaviour (Sequeira et al. 2007) and start-up (De Carolis et al. 2009; Zanakis, Renko & Bullough 2012). Individuals are also more likely to recognise good business opportunities for starting a business when they know other people who are entrepreneurs (Ramos-Rodríguez, Medina-Garrido, Lorenzo-Gómez & Ruiz-Navarro 2010). Social capital facilitates the acquisition of human capital (Anderson & Miller 2003; Coleman 1988; Salvato, Valentini & Dawson 2007) and the identification of opportunities (Anderson et al. 2007; Puhakka 2002; Ramezanpour, Amiriyan & Shirazi 2014).

Based on the foregoing discussion, it can therefore be argued that the dimensions of social capital have a positive effect on the formation of entrepreneurial intentions. Social capital is a multidimensional concept that can be described in terms of three dimensions that include structural, relational and cognitive dimensions (Liao & Welsch 2005; De Carolis & Saporito 2006; Inkpen & Tsang 2005; Nahapiet & Ghoshal 1998; Puhakka 2002). Researchers have indicated that the structural social capital is the foundation for cognitive social capital and relational social capital and that a positive relationship exists between cognitive social capital and relational social capital (Liao & Welsch 2002; Liao & Welsch 2005). These dimensions are discussed in the next sections.

### *Structural dimension*

The structural dimension of social capital refers to the structure of the social network and involves aspects such as the number of relationships an individual has and the frequency of interaction among the members in the social network, the strength of ties, the density of relationships and connectivity of social ties (Nahapiet & Ghoshal 1998; Pearson, Carr & Shaw 2008; Puhakka 2002). The structural dimension consists of ties that can be strong or weak (Granovetter 2005), which differ in terms of the types and quality of social resources that they provide to an entrepreneur throughout the venture life-cycle (Cruickshank & Rolland 2006; Hampton et al. 2009; Klyver 2007; Kickul et al. 2007). Strong ties, which include parents, close friends and neighbours who are in business, and encouragement by the family and close friends, constitute bonding social capital, whereas weak ties, which include membership in organisations, contacts with community agencies, business networks and friendships with other business persons, are part of bridging social capital (Davidsson & Honig 2003). Strong ties are characterised by high reciprocity and intense interactions (Lin 2005), which lead to dense networks that create closure (Granovetter 1973). However, weak ties result in sparse networks with structural

holes and comprise loose relationships between dissimilar individuals who spend less time with one another (Burt 2000; Granovetter 2005; Granovetter 1973; Lin 2005; Davidsson & Honig 2003; Liao & Welsch 2005).

Closure in a social network creates shared norms that regulate the behaviour of members and contributes to the development of trust, which forms the basis for obligations and expectations (Coleman 1988). A closed network consisting of strong ties increases access to more resources and support to start a business (Cruickshank & Rolland 2006; Klyver 2007; Sequeira et al. 2007) and enhances perceived behavioural control (Tartako 2013), while a high number of structural holes in an individual's network can facilitate opportunity recognition (Bhagavatula et al. 2010). The formation of entrepreneurial intention requires an individual to be part of both dense and low density social networks, because low density social networks and having many business contacts are positively associated with entrepreneurial intention (Klyver & Schøtt 2008). In addition, social support from one's strong ties impacts positively on entrepreneurial intention and nascent entrepreneurial behaviour (Sequeira et al. 2007). The structural dimension of social capital can impact on entrepreneurial intention and its antecedents through ties with entrepreneurial role models who may be categorised as close or distant role models (Gibson 2004).

#### *Relational dimension*

The relational dimension of social capital focuses on the nature of relationships that have developed among the network members (Nahapiet & Goshal 1998), which may manifest in strong or weak ties (De Carolis & Saporito 2006). Strong ties based on affectionate relationships that have developed over time are more likely to create a sense of identification that each network member has with other members of the network (Nahapiet & Goshal 1998). Individuals with high relational social capital can easily exchange confidential and tacit information among themselves (Liao & Welsch 2005). Through the relational dimension, network members are able to access one another to exchange and combine resources, to anticipate value in doing so, and to develop the motivation to engage in knowledge creation through these exchanges and combinations (Nahapiet & Goshal 1998).

#### *Cognitive dimension*

The cognitive dimension of social capital refers to “those resources providing shared representations, interpretations, and systems of meaning among parties” (Nahapiet & Goshal 1998: 244). It involves shared language and vocabulary and shared narratives (Nahapiet & Goshal 1998); shared goals, shared culture and shared vision

and purpose that facilitate shared meaning and understanding among network members (Inkpen & Tsang 2005; Pearson et al. 2008). Shared values and norms create shared understandings and ways of doing things in a particular society, which influence individuals' choices and practices (McKeever et al. 2014). The willingness to engage in a two-way interaction and the likelihood of exchanging information, learning and knowledge creation among network members increase when they share similar systems of meanings and language (De Carolis & Saporito 2006; Liao & Welsch 2005).

According to Li et al. (2013), shared language and interests can bond people by increasing interpersonal attraction, the frequency of communication and mutual intimacy. Shared cognition contributes to the formation of strong ties and trusting relationships among network members (Li et al. 2013). This supports the relationships reported by Liao & Welsch (2002; 2005), which in this case suggests that the formation of relational social capital is dependent on cognitive social capital. This occurs primarily because individuals have a tendency to establish relations with others who share similar values, norms and beliefs. Cognitive social capital can also be in the form of cognitive networks, which individuals create in their minds as thoughts, desires and ghost ties in the absence of actual ties. These ghost ties generate social capital in the form of influence on an individual's career intentions (Kwon & Adler 2014).

The creation of a new venture and its growth requires entrepreneurs to engage in various forms of behaviour that can be carried out effectively through the support of both strong and weak ties (Klyver 2007; Davidsson & Honig 2003; Newbert et al. 2013). As a result, entrepreneurs and potential entrepreneurs should have social competence in order to build relationships that will help them to access resources inherent in their social networks and be successful in their ventures (Baron & Markman 2003; Baron & Tang 2009). Developing and maintaining relationships with heterogeneous networks not only increases knowledge acquisition (Puhakka 2002), access to high quantities of resources, quality of information and opportunities (Bhagavatula et al. 2010; Newbert et al. 2013), but can enhance the perceived attractiveness of the entrepreneurial career and capability for starting a business (Xiao & Fan 2014).

## Methodology

### Data collection and measures

The research was conducted using a structured questionnaire that was designed on the basis of validated questionnaires used in previous studies on entrepreneurial



intention (Liñán et al. 2011; Liñán & Chen 2009; Guerrero et al. 2009) and social capital (Klyver & Schøtt 2008; Liñán & Santos 2007; Liao & Welsch 2002, 2005; Malebana 2012). Social capital comprises four components, namely the knowledge of entrepreneurs, subjective norms (approval by the immediate family, friends and colleagues of the decision to start a business), valuation of the entrepreneurial activity in the closer and social environment, and expected social support from close ties. The incorporation of subjective norms into social capital is supported by Coleman (1988); Granovetter (2005); Nahapiet and Goshal (1998) and Anderson et al. (2007), who indicate that norms are part of social capital. The norms and beliefs shared by people in a particular environment influence an individual's value of a given stock of social capital (Adler & Kwon 2002).

Seven-point Likert scale type questions (1=totally disagree, 7=totally agree) were used to collect the data on the dependent variables: entrepreneurial intention (four items), the attitude towards becoming an entrepreneur (five items) and perceived behavioural control (seven items), and the independent variable, social capital (11 items). Biographical data were measured as dummy variables (0=No, 1=Yes; 0=Female, 1=Male). The reliability of the measuring instrument was tested by means of Cronbach's alpha. The Cronbach's alpha values were as follows: 0.750 for entrepreneurial intention, 0.766 for the attitude towards becoming an entrepreneur, 0.762 for perceived behavioural control and 0.769 for social capital. These values suggest that the questionnaire was a reliable instrument for the study (Field 2013).

### Population and sampling method

The population for this study comprised 1000 third-year students who were registered for full-time studies in 2009 for various bachelor's degrees in the School of Management Sciences at a rural university in the Limpopo province. A cross-sectional survey was conducted among these students in September 2009. Although the researcher intended to conduct a census survey that included all 1000 students, only 365 students participated in the study. Of the 365 completed questionnaires, 36 were incomplete and were therefore considered invalid. This resulted in 329 valid questionnaires. The fact that these students were registered for various bachelor's degrees that included specialisation areas in accounting, business management, economics, human resource management and public administration shows that these students had a range of different career choices in mind. These groups of final-year students were considered suitable for studying entrepreneurial intentions as they were facing important career decisions upon completion of their studies, and starting their own business was one of their possible options. Among these groups of

students, only the Bachelor of Commerce in Business Management and the Bachelor of Commerce in Economics students had exposure to a one-year entrepreneurship module. The use of final-year students is common in entrepreneurial intention research (Krueger et al. 2000; Liñán & Chen 2009; Malebana 2012; Malebana & Swanepoel 2015). Questionnaires were distributed to students during their lectures and were completed in the presence of the researcher. Students were informed about the purpose of the research and were asked to participate voluntarily in the study by completing the questionnaire.

### Statistical analysis

Data were analysed by means of SPSS version 23. Prior to testing the relationships among the variables, factor analysis was conducted on the data. The Kaiser-Meyer-Olkin measure of sampling adequacy was 0.905, which was considered to be highly satisfactory according to Field (2013), and Bartlett's test of sphericity was also highly significant ( $p < 0.001$ ). This means that the data were appropriate for factor analysis. Principal component analysis extracted six components with eigenvalues greater than 1, which accounted for over 57% of variance. Box M test results for the dependent variables and the independent variable were highly significant ( $p < 0.001$ ). Hierarchical multiple regression analysis was used to test the relationship between social capital and the dependent variables. Data were also tested for the independence of errors and multicollinearity. The values of the Durbin-Watson statistic ranged from 1.771 to 2.074, which were well within the acceptable range from 1 to 3 as suggested by Field (2013). Therefore, the data did not violate the assumption of independence of errors. The tolerance values ranged from 0.845 to 0.975; since they were larger than 0.2, this means that multicollinearity was not a problem. Variance inflation factors (VIF) were also highly satisfactory below 10, ranging from 1.026 to 1.184.

## Results

### Demographic profile of the respondents

Of the 329 respondents, 58.1% were female and 41.9% were male. In terms of age, 25.8% of the respondents were in the age category between 18 and 21 years, 61.1% were in the age category between 22 and 25 years, 7.6% were in the age category between 26 and 30 years, 2.7% were in the age category between 31 and 35 years, while 2.7% were above 36 years. These statistics mean that over 97% of the respondents

fell into the youth category. In terms of prior exposure to entrepreneurship, 42.9% of the respondents were registered for a one-year entrepreneurship module, 7% were running their own businesses, 32.8% had tried to start a business before, while 28.6% came from families with members who were running businesses. Just over 3% of the respondents were employed at the time of the survey.

Descriptive statistics and correlations among the variables are shown in Table 1. Social capital had a significant and positive correlation ( $p < .01$  and  $p < .05$ ) with entrepreneurial intention, perceived behavioural control and the attitude towards becoming an entrepreneur. Correlations between social capital, entrepreneurial intention, the attitude towards becoming an entrepreneur and perceived behavioural control ranged from very weak ( $r = 0.112$ ) to weak ( $r = 0.399$ ). The results indicate that the approval of the decision to start a business by the immediate family, friends and colleagues; the value attached to the entrepreneurial activity by the immediate family, friends and the society in general; and the knowledge of other people who are entrepreneurs and successful entrepreneurs have a significant relationship with entrepreneurial intention, the attitude towards becoming an entrepreneur and perceived behavioural control.

### Relationship between social capital and entrepreneurial intention

The regression analysis results (Table 2) show that social capital had a significant but weak relationship with entrepreneurial intention in Model 2 ( $\beta = 0.298$ ,  $p < 0.001$ ). Social capital accounted for 9% of variance in entrepreneurial intention ( $F(1, 327) = 31.91$ ;  $p < 0.001$ ). Social capital had a significant but weak relationship with the attitude towards becoming an entrepreneur in Model 4 ( $\beta = 0.350$ ,  $p < 0.001$ ). Social capital explained over 12% of variance in the attitude towards becoming an entrepreneur ( $F(1, 327) = 45.61$ ;  $p < 0.001$ ). A significant but weak relationship was also found between social capital and perceived behavioural control in Model 6 ( $\beta = 0.291$ ,  $p < 0.001$ ). Social capital accounted for 8.5% of variance in perceived behavioural control ( $F(1, 327) = 30.28$ ;  $p < 0.001$ ). The findings suggest that social capital is vital in generating positive entrepreneurial attitudes, and enhancing perceived capability for starting a business and the formation of entrepreneurial intention. Social capital had a slightly higher impact on the attitude towards becoming an entrepreneur than on perceived behavioural control and entrepreneurial intention.

Of the control variables in Model 1, having done an entrepreneurship module ( $\beta = -0.181$ ,  $p < 0.001$ ), having tried to start a business before ( $\beta = -0.137$ ,  $p < 0.05$ ) and coming from a family in which members run a business ( $\beta = -0.103$ ,  $p < 0.10$ )

**Table 1:** Descriptive statistics and correlations among the variables

|  | Mean | SD   | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     | 12     | 13     | 14 |
|--|------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----|
| Entrepreneurial intention  | 2.22 | .96  | 1      |        |        |        |        |        |        |        |        |        |        |        |        |    |
| Attitude towards becoming an entrepreneur                                      | 2.20 | .95  | .645** | 1      |        |        |        |        |        |        |        |        |        |        |        |    |
| Perceived behavioural control  | 2.10 | .98  | .572** | .546** | 1      |        |        |        |        |        |        |        |        |        |        |    |
| Approval of the decision to start a business by friends                        | 4.75 | 2.22 | .310** | .220** | .324** | 1      |        |        |        |        |        |        |        |        |        |    |
| Approval of the decision to start a business by the immediate family           | 5.33 | 2.01 | .394** | .399** | .386** | .391** | 1      |        |        |        |        |        |        |        |        |    |
| Approval of the decision to start a business by colleagues                     | 4.81 | 2.12 | .250** | .208** | .365** | .393** | .416** | 1      |        |        |        |        |        |        |        |    |
| Immediate family values entrepreneurial activity                               | 4.06 | 2.13 | .213** | .320** | .262** | .211** | .277** | .181** | 1      |        |        |        |        |        |        |    |
| Friends value entrepreneurial activity   | 4.34 | 2.09 | .225** | .268** | .274** | .183** | .239** | .228** | .251** | 1      |        |        |        |        |        |    |
| Colleagues value entrepreneurial activity                                      | 4.33 | 2.14 | .223** | .280** | .240** | .245** | .179** | .185** | .360** | .358** | 1      |        |        |        |        |    |
| Culture is highly favourable towards entrepreneurial activity                  | 4.94 | 2.07 | .225** | .328** | .261** | .224** | .276** | .177** | .416** | .278** | .319** | 1      |        |        |        |    |
| Entrepreneurial activity is considered to be worthwhile, despite the risks     | 4.84 | 2.08 | .246** | .282** | .187** | .209** | .316** | .120** | .267** | .346** | .267** | .255** | 1      |        |        |    |
| Personally knows someone who is an entrepreneur                                | 5.17 | 2.28 | .196** | .228** | .265** | .135*  | .225** | .161** | .145** | .206** | .153** | .217** | .248** | 1      |        |    |
| Knows successful entrepreneurs   | 5.01 | 2.27 | .225** | .286** | .287** | .136*  | .200** | .171** | .179** | .269** | .141*  | .287** | .258** | .537** | 1      |    |
| Easier to receive support from the people that I know than from the government | 4.48 | 2.26 | .126*  | .112*  | .115*  | .144** | .111*  | .141*  | .123*  | .127*  | .151** | .180** | .171** | .215** | .278** | 1  |

\* P < .05 \*\* P < .01

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were significantly related to entrepreneurial intention. The attitude towards becoming an entrepreneur (Model 3) had a significant relationship with having done an entrepreneurship module ( $\beta = -0.183$ ,  $p < 0.001$ ), having tried to start a business before ( $\beta = -0.134$ ,  $p < 0.05$ ) and coming from a family in which members run a business ( $\beta = -0.106$ ,  $p < 0.10$ ). Perceived behavioural control (Model 5) was significantly related to having done an entrepreneurship module ( $\beta = -0.160$ ,  $p < 0.001$ ) and having tried to start a business before ( $\beta = -0.191$ ,  $p < 0.001$ ). No relationship was found between having an entrepreneurial family background and perceived behavioural control. These findings indicate that demographic factors have a significant effect on the attitude towards becoming an entrepreneur, perceived behavioural control and entrepreneurial intention. However, gender and age did not have a significant relationship with all the dependent variables.

**Table 2:** The relationship between social capital, entrepreneurial intention and the determinants of entrepreneurial intention

|                                  | Dependent variables       |         |   |         |                               |         |
|----------------------------------|---------------------------|---------|---|---------|-------------------------------|---------|
|                                  | Entrepreneurial intention |         | Attitude towards becoming an entrepreneur |         | Perceived behavioural control |         |
|                                  | Model 1                   | Model 2 | Model 3                                   | Model 4 | Model 5                       | Model 6 |
|                                  | $\beta$                   | $\beta$ | $\beta$                                   | $\beta$ | $\beta$                       | $\beta$ |
| <i>Control variables</i>         |                           |         |   |         |                               |         |
| Gender                           | 0.012                     |         | -0.034                                    |         | -0.027                        |         |
| Age                              | -0.035                    |         | -0.046                                    |         | -0.064                        |         |
| Entrepreneurship module          | -0.181**                  |         | -0.183**                                  |         | -0.160**                      |         |
| Currently employed               | -0.009                    |         | 0.004                                     |         | 0.060                         |         |
| Currently runs a business        | 0.006                     |         | 0.010                                     |         | 0.047                         |         |
| Tried to start a business before | -0.137*                   |         | -0.134*                                   |         | -0.191**                      |         |
| Family members run a business    | -0.103†                   |         | -0.106†                                   |         | -0.082                        |         |
| <i>Independent variable</i>      |                           |         |   |         |                               |         |
| Social capital                   |                           | 0.298** |   | 0.350** |                               | 0.291** |
| Multiple R                       | 0.286                     | 0.298   | 0.293                                     | 0.350   | 0.298                         | 0.291   |
| R square (R <sup>2</sup> )       | 0.082                     | 0.089   | 0.086                                     | 0.122   | 0.089                         | 0.085   |
| $\Delta$ Adjusted R <sup>2</sup> | 0.062                     | 0.086   | 0.066                                     | 0.120   | 0.069                         | 0.082   |
| $\Delta$ F-ratio                 | 4.084                     | 31.914  | 4.314                                     | 45.605  | 4.454                         | 30.282  |
| Significance of F                | 0.000**                   | 0.000** | 0.000**                                   | 0.000** | 0.000**                       | 0.000** |

† P < .10 \* P < .05 \*\* P < .01

## Discussion

The purpose of this study was to determine the relationship between social capital and entrepreneurial intention based on the TPB. The findings indicate that social capital is significantly correlated with entrepreneurial intention and its antecedents (attitude towards becoming an entrepreneur and perceived behavioural control). These findings were confirmed by the regression analysis results, which indicate that social capital is significantly related to entrepreneurial intention, the attitude towards becoming an entrepreneur and perceived behavioural control. The findings suggest that individuals are more likely to intend to start their own businesses, develop positive attitudes towards entrepreneurship and feel personally capable of starting their own businesses when they think that they will receive approval of the decision to start a business from their immediate families, friends and colleagues; when entrepreneurial activity is positively valued by those close to them and the society in general; when they know other people who are entrepreneurs and successful entrepreneurs; and when they believe that the people they know will support them in starting a business. However, social capital had a weak explanatory power on the dependent variables. These findings concur with those of Malebana (2012), who reported a weak to very weak relationship between social capital and entrepreneurial intention and the determinants of entrepreneurial intention among 355 final-year commerce students from a comprehensive university in the Eastern Cape and a university of technology in the Limpopo province.

The findings highlight the importance of individuals in the closer environment in terms of their approval of one's decision to start a business, the value attached to the entrepreneurial activity in the close environment and by the society in general, exposure to entrepreneurial role models and perceived social support in the formation of entrepreneurial intention, in stimulating positive entrepreneurial attitudes and enhancing one's perceived capability to start a business. The findings support those of previous research that has shown that the value attached to the entrepreneurial activity (Katono et al. 2010; Kibler et al. 2014; Light & Dana 2013) and subjective norms have a positive impact on perceived behavioural control, the attitude towards becoming an entrepreneur (Liñán & Santos 2007) and entrepreneurial intention (Guerrero et al. 2009; Liñán et al. 2013; Liñán et al. 2011; Malebana 2012; Sahinidis et al. 2012). The findings concur with those of other researchers on the significance of exposure to entrepreneurial role models (Uygun & Kasimoglu 2013; Klyver & Schøtt 2008) and social support from strong and weak ties (Davidsson & Honig 2003; Malebana 2012; Tartako 2013) in stimulating entrepreneurial intention. Therefore, a socially supportive environment that values entrepreneurial activity, celebrates and acknowledges the role of entrepreneurs in the society, provides various kinds of social

support and resources is vital in order to impact positively on entrepreneurial intention and its antecedents. Moreover, this kind of environment could increase the likelihood of starting a business (Zanakis et al. 2012) by impacting on perceived behavioural control (Tartako 2013) and could also have a positive effect on entrepreneurial activity (Stephan & Uhlaner 2010).

The findings also concur with those of Buttar (2015), who reported a positive relationship between social capital, perceived attractiveness of the entrepreneurial career and perceived capability for starting a business. Social capital enhances perceived behavioural control by reducing the effect of personal deficiencies and external obstacles that could impede the successful performance of the behaviour. It also helps in generating positive entrepreneurial attitudes.

## Limitations

The shortcomings of this study lie in its cross-sectional nature and the use of the student sample. It is therefore impossible to infer causal relationships and actual behaviour. Longitudinal research based on a sample of entrepreneurs would provide a better understanding of the role of social capital in promoting successful entrepreneurship in the rural provinces of South Africa. Since the researcher used a convenience sample of final-year students in the Limpopo province, the findings cannot be generalised to all final-year students in the rural provinces of South Africa. Hence more studies on the relationship between social capital and entrepreneurial intention are needed to validate these findings. Similar studies should be conducted in other places in order to test the validity of the TPB. In addition, future research could, for example, examine how social capital of entrepreneurs contributes to the growth intentions as well as actual growth of their businesses.

## Conclusion

Entrepreneurial intentions and social capital are vital for entrepreneurship development. Policymakers involved in the efforts to support entrepreneurship development should not only direct their efforts at providing tangible and intangible support, but should also raise awareness of the importance of entrepreneurship for the society. These efforts should entail publicising the successes of entrepreneurial role models, generating favourable societal attitudes towards entrepreneurship, offering public support for entrepreneurial activities and encouraging entrepreneurship as a viable career option. Increased social support and valuation of entrepreneurship would positively influence the formation of entrepreneurial

intention by impacting on the attitude towards becoming an entrepreneur and perceived behavioural control. More networks should be organised to allow students with entrepreneurial intentions to meet one another. Through these networks, students with entrepreneurial intentions would be able to share ideas on how they could translate their intentions into new ventures and how they could overcome the barriers to translating such intentions into action. The university could also help by creating networks for young alumni who have started businesses and by creating opportunities for these alumni-entrepreneurs and students with entrepreneurial intentions to meet one another.

Entrepreneurship educators could improve the knowledge of entrepreneurs among students by using entrepreneurs as guest speakers in their classrooms and designing educational tasks that provide students with the opportunity to interact with entrepreneurs. In addition to equipping students with the necessary skills to start a business, entrepreneurship educators should build students' social competence so that they are able to develop good relationships and interact effectively with others. Through their social competence, students would be able to establish social networks that would provide access to resources and social support and enhance opportunity identification, which has been found to be associated with nascent entrepreneurship (Arenius & Minniti 2005) and improved entrepreneurial activity rates (Salvato et al. 2007). Similar to Malebana (2012), the study has advanced both the social capital and entrepreneurial intention theories in a South African context in terms of how they can contribute to entrepreneurship development, especially in rural areas.

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