




# The impact of trust on social and financial capital acquisition: A resource integration perspective in minority-owned entrepreneurial organisations

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## Abstract

Although effective resource integration is a critical requisite for entrepreneurial success, the literature suggests there are crucial gaps for minority entrepreneurs. We examine how interracial distrust (ID), an indicator of the extent to which minority entrepreneurs distrust other races, is related to internal and social capital. We examine the relationships of such capitals on the willingness to borrow from banks and friends, and explore the link with firm performance. Using a sample of 276 primarily African American entrepreneurs, we find support for most of our hypotheses. We find that ID is negatively associated with external social capital and a willingness to borrow from banks. Surprisingly, we found that ID had a negative effect on internal social capital and a willingness to borrow from friends. We also found that internal and external social capital was positively related to firm performance. We discuss the implications of some of these surprising research findings as well as the policy implications.

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## Keywords

minorities, social capital, financial capital, banks, trust, resource integration, entrepreneurship, firm performance, structural equation modelling, African American

## Introduction

Whilst the entrepreneurship literature has been clear that financial and social capital are critical for firm success (Fraser et al., 2015; Newman et al., 2017; Shahriar et al., 2016; Zhang, 2010), minority entrepreneurs are disadvantaged with regards to both, leading to poorer firm performance compared to their white counterparts (Bates et al., 2018). Closing this performance gap is a subject of public interest based on the overall economic benefits for communities with strong participation in business ownership (Bates et al., 2018; Conley and Bilimoria, 2021; Carter et al., 2015). Despite this need, relatively little research has examined why minorities have less developed social and financial capital than white individuals (Gutierrez and D'mello, 2019; Jackson, 2021). Within this article we address this need by critically evaluating how interracial distrust (ID) influences access to social and financial capital by African American entrepreneurs and how this access affects firm performance.

Access to financial capital by minority entrepreneurs is often compromised because of distrust related to inequity in bank lending (Bewaji et al., 2015; Bone et al., 2014; Kim, 2011). In this study, we focused on ID, which describes the level of trust between those of different ethnic backgrounds (Rudolph and Popp, 2010). As a result of this distrust, minority entrepreneurs are more likely to be discouraged borrowers (Fairlie and Robb, 2010), best described as those in need of money but unwilling to apply for loans from banks. Whilst the reasons to forego bank funding appear to be based on African American entrepreneur expectations that they will receive less favourable treatment from lenders (Fraser et al., 2009), little empirical research appears to exist on the antecedents to discouraged borrowing (Bates et al., 2018). Research examining ways to understand and encourage minorities to access needed financial capital from banks is needed (Bates et al., 2021).

We also argue that ID may have damaging effects on a minority entrepreneur's social capital, or 'the sum of actual and potential resources embedded within, available through, and derived from the network possessed by individuals' (Nahapiet and Ghoshal, 1998: 243). An expansive range of social capital has been shown to improve business performance by reducing the transaction costs of attracting funding (Florin et al., 2003). Social capital is important for any framework involving minority firm performance because minority entrepreneurs have been shown to be locked out of the knowledge resources acquired from business networks (Kwon et al., 2013), leading to an over-reliance on personal sources of financial capital (Casey, 2012). To date, the extant literature has paid little attention to research investigating how levels of trust affect personal and business networks, funding choice, discouraged borrowing and firm performance (Bates et al., 2018; Neville et al., 2018).

Whilst acknowledging the significant difficulties faced by ethnic minorities on a global basis, we focus on primarily African American entrepreneurs and present findings investigating the structural interrelationships between ID, internal and external social capital and the willingness to borrow from banks and family or friends on firm performance. We frame level of trust using four important theoretical constructs these include: general trust theory, ID, network trust and institutional trust (Blount et al., 2013; Delhey et al., 2011; Sulkowska and Kryvysh, 2019; Zaheer et al., 1998). Our findings contribute to the literature in a number of ways. First, we investigated the impact that ID has on the acquisition of social capital captured from internal (personal) and external (business

networks) sources, this is a novel contribution to the literature (Tasavori et al., 2018). Second, we studied how ID and social capital influence minority entrepreneurs' choice of financial resources, an important gap in the literature (Bates et al., 2021; Neville et al., 2018). We found that increasing the willingness of African American entrepreneurs to borrow from banks may help reduce the performance gap relative to white entrepreneurs. Accordingly, we extend the entrepreneurship literature by showing how the acquisition of social capital affects financial acquisition sources and in turn, the success of African American-owned entrepreneurial ventures (Gutierrez and D'mello, 2019). Whilst we readily acknowledge the need for research across varied ethnic groups and countries (Bates et al., 2021), our research provides an important starting point for this discussion.

## Theoretical framework: Trust

We utilise trust theory in general, and ID theory specifically, to drive our model and hypotheses. We rely on these theoretical approaches to argue that the levels of ID influence how minority entrepreneurs access social networks and how they fund their businesses. In the following sections, we review four types of trust relevant to our hypotheses, including (a) general trust, (b) ID, (c) network trust and (d) institutional trust.

### *General trust theory*

Trust has been conceptualised in the literature in various ways, including a belief in persons and organisations sufficient to discourage opportunistic behaviour between actors (Zaheer et al., 1998), an organising principle by which information exchange is coordinated, shared and processed within and between groups (McEvily et al., 2003) and the willingness to make oneself vulnerable because of the expectation of benevolence (Earle, 2009). Trust in business-to-business relationships exists when there is confidence that others intend to act in ways to preserve the relationship (Cuevas et al., 2015). Interdisciplinary research suggests that trust influences attitudes and behaviours of involved parties by encouraging collaborative decision making (Connelly et al., 2018), leading to positive outcomes for all participants (Panda et al., 2020). Relational partners establish trustworthiness through their commitment, fairness and the sharing of information (Zacharakis and Shepherd, 2001).

Trust has been shown to be an important relationship-building construct within the entrepreneurship literature (Welter and Smallbone, 2006) and has been conceptualised as a '... dynamic and relational form of social capital... with benefits of reducing uncertainty for firms' (Shi et al., 2015: 816). Trust research within entrepreneurship has primarily focused on the interplay between entrepreneurs and investors, sellers and buyers (Caliendo et al., 2012). High levels of trust have been shown to benefit entrepreneurs in a myriad of ways, including overcoming liabilities of newness for entrepreneurs (Welter, 2012), fostering an environment for idea-sharing for revenue creation (Zahra et al., 2006) and contributing to overall venture creation (Scarborough et al., 2013). Conversely, a lack of trust can lead individual actors restricting themselves to limited networks with the penalty of missed opportunities (Reiersen, 2017) and greater pressure to exit relationships (Panda et al., 2020). Specific to our model, trust drives social and financial capital, which are essential for collaboration between communities and entrepreneurs (Anderson and Jack, 2002; Kwon et al., 2013).

### *Interracial distrust*

The trust literature has suggested that trust creation is more challenging when it is to be extended to someone outside of one's group, leading to higher levels of inter-group distrust (Delhey et al., 2011).

Lewicki et al. (1998) defined distrust as confident negative expectations regarding another's behaviours. Inter-group distrust has been shown to hamper strategic planning (Lee and Pai, 2003), growth of organisations (Lind, 2007) and knowledge transfer (Nakauchi et al., 2017). Inter-group distrust appears sensitive to heterogeneity between groups as well, as group competition will intensify and become more volatile as inter-group heterogeneity increases (Fallucchi et al., 2021).

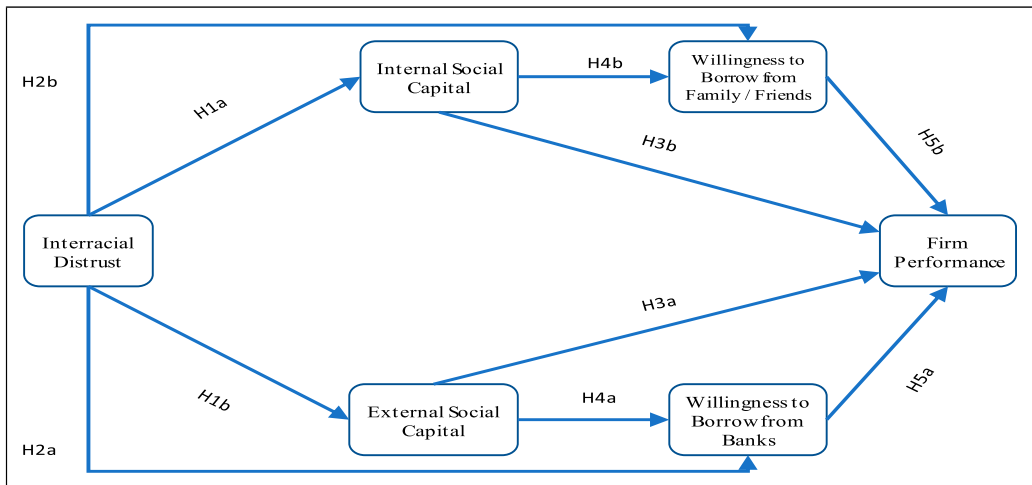
In the context of the current study, inter-group distrust takes the form of ID. The concept of ID is a predisposition not to form emotionally supportive relationships with people from outside one's own ethnic and/or cultural groups (Ibarra, 1995). This study was undertaken in the United States, which has a highly diverse population, where minority status is often studied in terms of 'whites' constituting the majority group, whilst those who identify as African Americans are in the minority (Bates et al., 2021; Neville et al., 2018). We frame ID from the perspective of African Americans in the United States, who have long distrusted the motives and behaviours of white individuals, manifesting in less trusting relationships with white businesspeople (Kung et al., 2018). Such distrust is not too surprising given that minority entrepreneurs often face racism (Ishaq et al., 2010), affecting market access, growth and access to financing (Carter et al., 2015). Furthermore, ID seems to also persist into adulthood based on minority perceptions of white individual's implicit behaviours (Dovidio et al., 2002). The concept of ID has been found to have a negative impact upon minority entrepreneurs in general, and African American entrepreneurs specifically, in terms of greater difficulty closing financial transactions with white individuals (Smith, 2010), white individuals negotiating more aggressively with minority entrepreneurs (Oore et al., 2013), exclusion from key industry segments (Shelton, 2010), fewer interracial partnerships (Stanley et al., 2011), a lack of mentorship opportunities (Ibarra, 1995), self-segregation in business settings (Mollica et al., 2003) and fewer professionally supportive relationships (Bacharach et al., 2005).

### *Trust in networks: Social capital*

Successful entrepreneurial organisations are socially embedded in networks (Anderson and Jack, 2002). The relationship one has with others in embedded networks has a rich history of study within the entrepreneurship literature (Adler and Kwon, 2002; Coleman, 1988). Social capital '... functions as an intermediary between the webs of relationship and the recognition of opportunities, financing of ventures, innovative discoveries, or new market prospect' (Gedajlovic et al., 2013: 458). Developing extensive social capital is often problematic for minority entrepreneurs in that they place greater trust in, and preference for, co-ethnic over inter-group networks (Blount et al., 2013). Minority entrepreneurs unwilling or unable to network successfully within white-dominated industry groups and segments may find themselves locked out of valuable opportunities (Shelton, 2010) and may have fewer opportunities for venture recognition (Singh and Gibbs, 2013). The tendency for minority entrepreneurs to focus on co-ethnic networking and customers in response to these factors often comes at a performance penalty (Bates and Robb, 2014, 2016) as continued success and innovation typically require external connections (Molina-Morales and Martinez-Fernandez, 2009; Peltier and Naidu, 2012; Wang and Altinay, 2010). Trust with white business partners is thus essential for the minority entrepreneur's ability to form effective social capital and access equitable resources. Trust drives social capital that is the glue for collaboration between communities and entrepreneurs (Anderson and Jack, 2002; Kwon et al., 2013).

### *Institutional trust: Willingness to borrow from banks*

Fair borrowing outcomes from banks are essential to institutional trust building (Berggren and Jordahl, 2006; Sulowska and Kryvych, 2019). Institutional trust wanes when there is variation in



**Figure 1.** Conceptual model.

the perceived amount of control over outcomes for different groups (Nooteboom, 2007). Research has shown that minority entrepreneurs have lower levels of institutional trust, specifically with respect to a banking system that they believe to be unfair before even applying for a loan (Neville et al., 2018). This lack of institutional trust has been attributed to the systematic racism facing minority entrepreneurs (Bates and Robb, 2016; Fraser et al., 2009; Ishaq et al., 2010). As a consequence, minority entrepreneurs tend to have higher levels of discouraged borrowing compared to white entrepreneurs (Fairlie and Robb, 2010). This higher level of discouraged borrowing is not surprising given that inter-group trust is necessary to achieve trust in institutions (Alesina and Giuliano, 2015; Newton and Zmerli, 2011). Based on these four trust dimensions, our conceptual model is shown in Figure 1.

## Model development and hypotheses

### *Interracial distrust and social capital*

A robust social capital base is dependent on strong relationships and networks (Rooks et al., 2016). The entrepreneurship literature has recognised that social capital can be characterised by both internal (family and friends) and external (business) ties (Payne et al., 2011). Both types of social capital require trust between groups (Bacharach et al., 2005; Rooks et al., 2016). Higher levels of trust have been found to facilitate the acquisition of information from inter- and intra-relational networks (Domurath and Patzelt, 2016). Extending the complementary trust literature, higher levels of ID between minority individuals and white individuals are expected to degrade the motivation of the minority entrepreneur to network widely to build social capital (Shelton, 2010). Extant research has shown that minority entrepreneurs are less likely to be engaged in external business networks and instead rely on close and trusted internal networks consisting of personal connections and people who look and think very much like themselves (Casey, 2012). Thus we argue that high levels of ID will be related positively to internal social capital. In the face of discriminatory practices enabled by external ties, minority entrepreneurs are expected to build social relations with those they trust, specifically family and friends (Sanders and Nee, 1996; Siqueira, 2007).

**Hypothesis 1a:** Minority entrepreneurs with higher levels of ID will have less external-community (business connections) social capital.

**Hypothesis 1b:** Minority entrepreneurs with higher levels of ID will have more internal-community (family and friends) social capital.

### *Interracial distrust and financial capital*

Research has shown that minority-owned businesses ‘... have considerably less access to bank financing than white-owned firms possessing comparable traits and risk profiles’ (Bates et al., 2018: 417). The sociological literature on trust has posited that interpersonal trust between groups in a cultural context also extends to trust between groups and institutions, and this trust has been shown to be lower in poor institutional environments (Buriak et al., 2019). Evidence indicates evidence that the institutional environment for bank lending to minorities in the United States has traditionally been poor (Fairlie and Robb, 2010). As such, in the presence of high levels of ID, it is unlikely that minority entrepreneurs will approach banks for funding as they are likely to fear being turned down (Howell, 2019). Despite the difficulties of obtaining bank loans, minority entrepreneurs are still dependent on debt funding to survive, and a lower level of institutional trust may lead to greater leveraging of their internal communities. Therefore, we argue that higher levels of ID will be positively associated with internal forms of financing. Our arguments are supported by research suggesting that ethnic minority businesses tend to have stronger ties and in-group solidarity with family relative to majority-owned businesses (Wang and Altinay, 2010).

**Hypothesis 2a:** Minority entrepreneurs with higher levels of ID will be less likely to borrow from banks.

**Hypothesis 2b:** Minority entrepreneurs with higher levels of ID will be more likely to borrow from family and friends.

### *Social capital and funding or firm performance*

The literature on social capital and firm performance argues that this relationship depends on the nature of the social capital (Gedajlovic et al., 2013). The more externally connected a minority entrepreneur, the more likely the entrepreneur is to be informed of critical opportunities in the markets and will receive crucial advice from banks and other entities represented by the external ties (Wang and Altinay, 2010). In contrast, minority entrepreneurs who only have internal social capital are more likely to see a negative relationship with firm performance (Köllinger and Minniti, 2006). In some cases, minority entrepreneurs with solely internal social capital may only serve their immediate geographic markets with a performance penalty (Bates and Robb, 2014) and funding challenges (Lucas and Davis, 2005). The reliance on internal ties may encourage minority entrepreneurs to be more myopic, thereby constraining the ‘... range of opportunities that may be effectively discovered and pursued’ (Gedajlovic et al., 2013: 461).

Forming connections with a larger business community may facilitate funding through private equity or bank–firm relationships (Bates et al., 2018). Minority entrepreneurs who design their social networks around functional holes are more likely to accrue a range of for resources their firms (Zaheer and Bell, 2005), and enhance networking with bankers and investors to obtain funding (Fernando et al., 2010; Grichnik et al., 2014). We contend that minority entrepreneurs connected to external networks are more willing to borrow from banks. In contrast, minority entrepreneurs with stronger internal capital are more likely to borrow from family and friends.

**Hypothesis 3a:** Minority entrepreneurs with higher levels of external-community (business connections) social capital will be associated with higher levels of firm performance.

**Table 1.** Respondent profile.

Profile characteristic	%
Gender	
Male	49.6
Female	50.4
Age	
21–30	19.2
31–40	25.7
41–50	23.9
51–55	7.6
56 and above	23.6
Years of experience	
0–5 years	30.4
6–10 years	27.2
11 years or more	42.4
Education level	
High school graduate	10.9
Some college	25.4
2-year degree	13.8
4-year degree	29.3
Graduate degree	20.7
Age of company	
Less than 1 year	6.5
1–3 years	30.4
4–5 years	17.8
6–10 years	17.8
More than 10 years	27.5
Number of employees	
1–5	57.5
6–10	10.9
11–50	10.5
51–200	10.5
201 or more	10.5
Company's annual revenue	
Less than \$75,000	46.4
\$75,001 to \$199,999	16.3
\$200,000 to \$499,999	13.8
\$500,000 to \$1,000,000	12.3
More than \$1,000,000	10.9

**Hypothesis 3b:** Minority entrepreneurs with higher levels of internal-community (family and friends) social capital will be negatively associated with higher levels of firm performance.

**Hypothesis 4a:** Minority entrepreneurs with higher levels of external-community (business connections) social capital will be more willing to borrow from banks.

**Hypothesis 4b:** Minority entrepreneurs with higher levels of internal-community (family and friends) social capital will be more willing to borrow from family and friends.

## *Financial capital and firm performance*

We argue that minority entrepreneurs who borrow from banks are more likely to see stronger firm performance. Secure relationships between banks and minority entrepreneurs have been shown to increase performance through superior communication and transparency (Kirschenmann, 2016), preferential rates (Tang et al., 2017) and lower transaction costs over the time of the bank–firm relationship (Fairlie and Robb, 2010). In contrast, minority entrepreneurs who seek funding primarily from family and friends are more likely to see negative firm performance. Although many minority entrepreneurs use their own networks for leverage (Chatterji and Seamans, 2012), personal debt has not been shown to be effective at facilitating firm growth in the same way as bank debt (Cole and Sokolyk, 2018). Additionally, reliance on family and friends for funding may also prevent the minority entrepreneur’s business ‘... from exposing itself to new market opportunities, exploring new markets, products or new ways of doing things’ (Wang and Altinay, 2010: 9).

**Hypothesis 5a:** Minority entrepreneurs who are more willing to borrow from banks will be associated with higher levels of firm performance.

**Hypothesis 5b:** Minority entrepreneurs who are more willing to borrow from family and friends will be negatively associated with higher levels of firm performance.

## **Materials and methods**

### *Sample and procedures*

Participants were recruited in the United States using the Qualtrics database of self-identified entrepreneurs; 1296 entrepreneurs agreed to review the survey. However, only 689 were qualified to complete the survey based on ethnic identity (not white) and status as a business owner. The final US-based sample included entrepreneurs who completed the survey, identified themselves as being a current business owner, and had a primary ethnic identity that was not white. To ensure that respondents were actively participating in the survey, three verification questions were included in the survey instrument. Four respondents were removed, resulting in a final sample of 276. This response rate of 40% is in line with previous meta-analyses of web survey response rates (Daikeler et al., 2020). Responses were required, and thus, no missing data existed in the data set. Non-response was deemed to not be an issue given the response rate was high, the completion rate exceeded 95%, and all responses were received from Qualtrics within 1 week.

Table 1 provides the individual and firm demographics of respondents. There was a relatively equal split of female (50.4%) and male (49.6%) entrepreneurs. Other sample demographics included age (55.1 over 40; 44.9% 40 or younger), years in operation (54.7% in business for five years or less), how firms were started (89.5% started the firm), education (50% each with and without a four-year college degree) and firm revenue (53.6% of respondents reported firm revenue of > \$75,000 per year). Finally, 94.2% of the US-based sample identified as African American or black. This bias in ethnic identity was intentional as the literature has tended to show the starkest outcomes between black and white entrepreneurs.

### *Design and measures*

A multi-stage process was used to develop the survey measures including an extensive review of the literature and consultation with an advisory committee. Previously validated measures were drawn



**Table 2.** Constructs and measures.

Construct and measurement item		Standardised coefficient
Interracial distrust (ID) $\alpha = 0.83$ ; CR = 0.80; AVE = 0.506		
ID1	I trust white business partners to have my best interests in mind	0.603
ID2	I trust white business partners to be fair with me	0.520
ID3	I prefer working with white business partners more than partners of other ethnicities	0.822
ID4	I trust white business partners more than partners of other ethnicities	0.845
External social capital (ESC) $\alpha = 0.89$ ; CR = 0.89; AVE = 0.667		
ESC1	My business networks play a large role in my business decisions	0.860
ESC2	My business networks are an important part of my business success	0.790
ESC3	I spend a lot of time networking with my business colleagues	0.804
ESC4	I seek input from my business networks to make decisions	0.811
Internal social capital (ISC) $\alpha = 0.87$ ; CR = 0.85; AVE = 0.593		
ISC1	My family/friends play a large role in my business decisions	0.759
ISC2	My family/friends are an important part of my business success	0.806
ISC3	I spend a lot of time networking with my family/friends	0.788
ISC4	I seek input from my family/friends to make decisions	0.726
Willingness to borrow from banks (WBB) $\alpha = 0.85$ ; CR = 0.84; AVE = 0.573 agree)		
WBB1	I will use bank financing the next time I need a loan	0.863
WBB2	When I need financing, I often turn to bank loans	0.728
WBB3	I prefer bank loans over borrowing from family and friends	0.719
WBB4	Bank loans are a more effective form of financing than borrowing from family and friends	0.708
Willingness to borrow from family/friends (WFF) $\alpha = 0.92$ ; CR = 0.92; AVE = 0.739		
WFF1	The next time I need financing, I will consider a loan from family/friends	0.894
WFF2	When I need financing, I often turn to family/friends	0.850
WFF3	I prefer borrowing from family/friends than banks	0.864
WFF4	Borrowing from family/friends is a more effective form of financing than borrowing from banks	0.829
Firm performance (FP) $\alpha = 0.928$ ; CR = 0.934; AVE = 0.779		
FP1	Sales growth	0.864
FP2	Profit growth	0.946
FP3	Market share growth	0.879
FP4	Overall success	0.837

CR = composite reliability; AVE = average variance extracted.  $N = 276$  respondents.  $\chi^2 = 290.871$ ,  $df = 235$ , chi-square (CMIN)/ $df = 1.238$ ,  $p = 0.008$ ; goodness of fit index = 0.923; comparative fit index = 0.986; normed fit index = 0.933; Tucker-Lewis index = 0.984; root mean square error of approximation = 0.029 [0.016–0.040]

from the literature and adapted for this study. Table 2 contains the items used to measure each construct, including the source for each of the constructs.

### Dependent variables

The variable of firm performance was adapted from a study on minority social identity by Peltier and Naidu (2012). This scale used four indicators, including growth in sales, growth in profit, growth in

market share and overall success. All items were measured using a 5-point relative to competition Likert scale (1 = *Inferior to Competition* to 5 = *Superior to Competition*).

The variables used to measure willingness to borrow from banks and willingness to borrow from family and friends were adapted from Makpotche et al. (2015). Items were similar in each dimension, with the primary difference being banks (e.g. I prefer bank loans over borrowing from family and friends) or family and friends (e.g. I prefer borrowing from family/friends rather than banks) as target funding sources. The adapted scale for willingness to borrow from banks included four items to measure the desirability of bank funding sources and used a 5-point Likert scale (1 = *Strongly Disagree* to 5 = *Strongly Agree*). The adapted scale for willingness to borrow from family or friends also included four items to measure the desirability of personal funding sources and used a 5-point Likert scale (1 = *Strongly Disagree* to 5 = *Strongly Agree*).

### *Independent variables*

We measured ID by adapting from Boyas and Sharpe (2010), and specifically in terms of the level of trust for specific groups. The scale used four items to assess trust and preference for working with members of a different ethnic group (e.g. I trust white business partners more than partners of other ethnicities). All items were measured on a 5-point Likert scale and were reverse-scored to detect underlying distrust (5 = *Strongly Disagree* to 1 = *Strongly Agree*). The questions were also rewritten slightly to focus on ID in business relationships.

External social capital and internal social capital were adapted from Peltier and Naidu (2012) and reworded for applicability. Items were similar in each dimension, with the primary difference being a focus on external networks (e.g. my business networks play a large role in my business decisions) or family and friend networks (e.g. my family and friend networks play a large role in my business decisions). The adapted scale for external social capital included four items to measure how strongly the respondents valued business connections and used a 5-point Likert scale (1 = *Strongly Disagree* to 5 = *Strongly Agree*). The adapted scale for internal social capital included four items to measure how strongly the respondents valued connections to family and friends and used a 5-point Likert scale (1 = *Strongly Disagree* to 5 = *Strongly Agree*).

### *Control variables*

Past studies have shown that age, education, firm size and revenue may affect entrepreneurial attitudes, behaviour and firm performance (Peltier et al., 2009, 2012). All model paths used the following as moderators: age (1 = 21 to 30, 2 = 31 to 40, 3 = 41 to 50, 4 = 51 to 55, 5 = 56 and above), years of experience (continuous), education (1 = High School Graduate, 2 = Some College, 3 = 2-Year Degree, 4 = 4-Year Degree, 5 = Graduate Degree), number of employees (1 = 1–5, 2 = 6–10, 3 = 11–50, 4 = 51–100, 5 = 101 and more), annual firm revenue (1 = Less than \$75,000, 2 = \$75,001–\$199,999, 3 = \$200,000–\$499,999, 4 = \$500,000–\$1,000,000, 5 = More than \$1,000,000) and gender (1 = female, 0 = male),

Table 3 shows provides the descriptive statistics and correlations of the variables.

### *Measurement model*

An exploratory factor analysis (EFA) was conducted to determine the underlying dimensionality of the constructs and to assess the reliability of these scales. All items loaded on their expected dimensions. Based on the EFA and theory, a confirmatory factor analysis (CFA) using AMOS

**Table 3.** Descriptive statistics.

Variables	Mean	SD	1	2	3	4	5	6
1. Interracial distrust	3.20	0.98	0.711					
2. External social capital	3.77	1.04	-0.212**	0.817				
3. Internal social capital	3.44	1.12	-0.110	0.630**	0.770			
4. Willingness to borrow from banks	3.28	1.09	-0.305**	0.251**	0.203*	0.757		
5. Willingness to borrow from family/ friends	2.78	1.30	-0.243**	0.283**	0.494**	-0.097*	0.860	
6. Firm performance	3.23	0.95	-0.072	0.372**	0.396**	0.232**	0.168**	0.882

The diagonal represents the square roots of the average variance extracted values.

\*Significant at 0.05 level; \*\*significant at 0.01 level.

version 26 was then conducted to estimate our measurement model. The model fit statistics exceeded thresholds recommended by [Hair et al. \(2006\)](#) and [Hu and Bentler \(1999\)](#), indicating an excellent overall fit of the data ( $\chi^2 = 290.875$ ,  $df = 235$ , chi-square [CMIN]/ $df = 1.2$ ,  $p = 0.01$ ; goodness of fit index [GFI] = 0.92; comparative fit index [CFI] = 0.98; normed fit index [NFI] = 0.93; Tucker–Lewis index [TLI] = 0.98; root mean square error of approximation [RMSEA] = 0.03). [Table 2](#) presents the final measurement items, the standardised loading coefficients and the scale reliability and validity statistics. Two tests were implemented to evaluate convergent validity. First, all indicator items loaded on their anticipated latent factor at  $p < 0.001$ , with the standardised regression loadings ranging from 0.52 to 0.95, with all but two exceeding 0.7 ([Mathwick and Rigdon, 2004](#)). Second, the average variance extracted (AVE) value for each construct exceeded [Fornell and Larcker \(1981\)](#) threshold criterion of 0.5. Both these findings indicate that convergent validity was established. We assessed discriminant validity using two recognised techniques. First, the maximum shared variance and average shared variance were both less than the AVE for each construct ([Hair et al., 2010](#)). Second, as recommended by [Fornell and Larcker \(1981\)](#), the square root of the AVE exceeded all paired correlations shown in the diagonal of the correlation matrix in [Table 3](#). Lastly, the Cronbach's alpha and composite reliability scores all exceeded 0.8.

Three post-measurement procedures were implemented to ascertain any common method variance. Harman's single factor test indicated that the total percentage of the variance explained was only 27.9%, far below the cutoff of 50% established by [Podsakoff et al. \(2003\)](#). Following [Fuller et al. \(2016\)](#), the low 27.9% single factor result and the construct reliabilities found in the current study limit the likelihood of inflated relationships. A common latent factor method test was then conducted; absolute values of all the deltas of the standardised regression weights were below the standard cutoff of 0.2 ([Podsakoff et al., 2003](#)). Lastly, three different marker variable tests were conducted, with common variance ranging from just 1–2%. Combined, common method bias was thus, not deemed a problem ([Jacobsen and Jensen, 2015](#); [Podsakoff et al., 2012](#)).

## Results

The structural model included ten hypothesised relationships and was evaluated using structural equation modelling path analysis in AMOS 26. The model fit statistics exceeded thresholds recommended by [Hu and Bentler \(1999\)](#) and [Hair et al. \(2006\)](#), indicating an excellent overall fit of the data ( $\chi^2 = 292.200$ ,  $df = 237$ , GFI = 0.92, CFI = 0.99, NFI = 0.93, TLI = 0.98, RMSEA = 0.03). Overall, six of the ten hypothesised relationships were statistically significant and in the predicted

**Table 4.** Tests of structural equation modelling paths by hypothesis.

Hypotheses and paths	Coefficient	Critical ratio	p	Expected direction	Supported
$H_{1a}$ : Higher ID →less external social capital	-0.237	-3.097	0.002	Yes	Yes
$H_{1b}$ : Higher ID →more internal social capital	-.136	-1.765	0.078	No	No
$H_{2a}$ : Higher ID →less willingness to borrow from banks	-0.299	-3.624	<0.001	Yes	Yes
$H_{2a}$ : Higher ID →more willingness to borrow from family/friends	-0.190	-2.775	0.006	No	No
$H_{3a}$ : Higher external social capital →higher firm performance	0.176	2.088	0.037	Yes	Yes
$H_{3b}$ : Higher internal social capital →lower firm performance	0.259	2.752	0.006	No	No
$H_{4a}$ : Higher external social capital →more willingness to borrow from banks	0.169	2.452	0.014	Yes	Yes
$H_{4b}$ : Higher internal social capital →more willingness to borrow from family/friends	0.469	7.264	<0.001	Yes	Yes
$H_{5a}$ : More willingness to borrow from banks →higher firm performance	0.136	2.067	0.039	Yes	Yes
$H_{5b}$ : More willingness to borrow from family/friends →lower firm performance	0.004	0.052	0.959	No	No

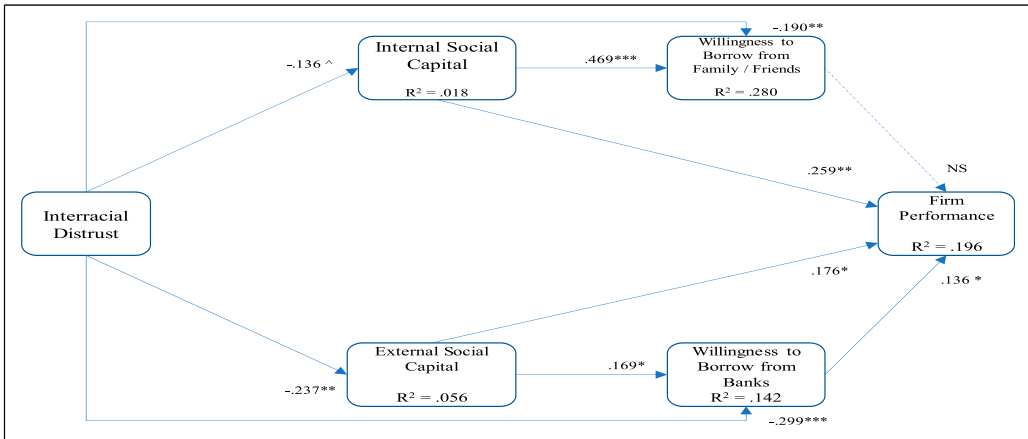
ID = interracial distrust.

direction. One hypothesis was significant but in the reversed direction; one was marginally significant but reversed from expectation. Table 4 shows the parameter estimates, and Figure 2 illustrates the empirical results and model fit statistics. To verify the directional appropriateness of our hypotheses, alternative models were estimated, including omitting individual independent variable constructs and reversing all possible paths. Specifically, we reversed paths for each of our hypotheses, including (a) external social capital to ID and internal social capital to ID, (b) external social capital to willingness to borrow from banks and external social capital to willingness to borrow from family and friends and (c) firm performance to external social capital, firm performance to internal social capital, firm performance to willingness to borrow from banks and firm performance to willingness to borrow from family and friends. In all cases, model fit was degraded relative to the hypothesised model.

### Direct effects of interracial distrust

**Hypothesis 1a:** predicted a negative and significant relationship between a minority entrepreneur's ID and level of external social capital, and the model supported that conclusion ( $\beta = -.237$ ,  $t = 3.1$ ,  $p < .01$ ). Hypothesis 1b predicted a positive and significant relationship between a minority entrepreneur's ID and internal social capital. The model did not support that conclusion and was marginally significant in the reversed direction ( $\beta = -.136$ ,  $t = -3.1$ ,  $p < .07$ ).

**Hypothesis 2a:** predicted a negative and significant relationship between a minority entrepreneur's ID and willingness to borrow from banks, and the model supported that conclusion ( $\beta = -.299$ ,  $t = -3.6$ ,  $p < .001$ ). Hypothesis 2b predicted a positive and significant relationship between a minority entrepreneur's ID and willingness to borrow from family and friends. The model did not



**Figure 2.** Empirical study results.

support that conclusion as the relationship was significant and in the opposite direction than predicted ( $\beta = -.190, t = -2.8, p < .01$ ). Although not hypothesised, an alternative model did test for any direct effects of ID on firm performance but found no significant relationship between the two.

*Direct effects of social capital types*

**Hypothesis 3a:** predicted a positive and significant relationship between a minority entrepreneur’s level of external social capital and firm performance, and the model supported that conclusion ( $\beta = .176, t = 2.1, p < .05$ ). Hypothesis 3b predicted a negative and significant relationship between an entrepreneur’s internal social capital and firm performance. The reverse was found; the relationship was positive and significant ( $\beta = .259, t = 2.8, p < .01$ ).

**Hypothesis 4a:** predicted a positive and significant relationship between a minority entrepreneur’s external social capital and willingness to borrow from banks, and the model supported that conclusion ( $\beta = .169, t = 2.5, p < .05$ ). Hypothesis 4b predicted a positive and significant relationship between a minority entrepreneur’s internal social capital and the willingness to borrow from family and friends; the model supports that conclusion ( $\beta = .469, t = 7.3, p < .001$ ).

*Direct effects of funding choices*

**Hypothesis 5a:** predicted a positive and significant relationship between a minority entrepreneur’s willingness to borrow from banks and firm performance, and the model supported that conclusion ( $\beta = .136, t = 2.1, p < .05$ ). Hypotheses 5b predicted a negative significant relationship between a minority entrepreneur’s willingness to borrow from family and friends and firm performance. The model did not support that conclusion as the relationship was not significant ( $\beta = .136, t = .05, \text{not significant}$ ).

*Moderating influences*

Moderation analyses were conducted based on respondent gender, age, years of experience, education, number of employees and firm revenue. Overall, few significant paths were found (only four of 30 paths had a significant moderation), indicating that the structural results held in nearly all

cases. However, a few noteworthy findings did emerge. First, whilst the path from ID to internal social capital was marginally significant and negative in the overall model, it was negative and significant for non-college graduates (non-college graduate:  $\beta = -0.338, p < 0.01$ ; college graduate  $\beta = -0.249$ , not significant; critical  $z = 3.03, p < 0.01$ ). Second, the path from ID to willingness for borrow from banks had a stronger negative effect for entrepreneurs whose firms had \$75,000 or less in revenue (\$75,000 or less:  $\beta = -0.680, p < 0.01$ ; greater than \$75,000:  $\beta = -0.188, p < 0.05$ ; critical  $z = 2.09, p < 0.05$ ).

## Discussion

Contributing to the literature acknowledging the importance of trust (Welter, 2012), we argue that the construct of ID (Rudolph and Popp, 2010) is an important aspect of minority business success. Consequently, our study of minority entrepreneurs extends recent research (Bates et al., 2021; Neville et al., 2018) by showing that ID has a powerful relationship with many critical success factors such as social capital and sources of financing. We found support for most hypotheses, although rejected hypotheses inform interesting research implications. This article, therefore, makes critical advances in better understanding minority entrepreneurial success, thereby contributing to sustained interest in the area (Bates et al., 2018).

### Theoretical implications

*Interracial distrust, social capital and funding source.* We argued that the lack of interracial trust would discourage minority entrepreneurs from focusing outwards. As expected, we found that higher levels of ID appear to degrade the motivation of a minority entrepreneur to pursue expansive external social capital and their willingness to undertake bank borrowing. However, contrary to our predictions, ID also appears to deter minority entrepreneurs from the development of internal-community social capital networks and personal forms of funding. Despite these surprising findings, there seem to be some reasonable explanations for the general negative effects of ID. Smith (2010) showed that the lack of interracial trust also results in lower generalised trust, that is, the degree to which the incumbent is willing to trust anyone. This suggests that our measurement scale for ID may also have detected broader trust issues for those respondents with higher levels of ID (Achbari et al., 2021). This is especially salient for African American entrepreneurs. Research that investigates how different forms of trust affect the relationships that minority entrepreneurs form, and their choice of financial capital, in more depth merits further conceptual and empirical investigation (Neville et al., 2018). Research examining how ID influences intraracial trust, generalised trust and varied personal (i.e. family, friends, community) and external funding (i.e. venture capital, government, grants) sources may be especially promising (Achbari et al., 2021; Churchill, 2017; Panda et al., 2020).

*Social capital, funding sources and performance.* For minority entrepreneurs, social capital is a key resource to be leveraged for business success (Jackson, 2021). As hypothesised, we found that external social capital leads to a greater willingness to borrow from banks, whilst internal social capital leads to a greater willingness to borrow from family and friends. Although not hypothesised, nor anticipated, no significant relationships were found between external social capital and the willingness to borrow from family and friends, nor between internal social capital and the willingness to borrow from banks. Moreover, although internal and external social capital were both shown to have a positive effect on firm success, only the willingness to borrow from banks had a significant and positive effect on performance. Extending Bates and Robb (2016) and Bates et al. (2018), our findings showed that whilst all forms of social capital formation have strategic value to

minority-owned firms, external social capital offers firm assets directly and indirectly through the willingness to borrow from banks. Given this, research focusing on financial literacy and ways to provide greater access to external funding sources, including banks, government, equity firms and others, offers promise for extending the field (Bates et al., 2021; Liu et al., 2021).

*Interracial distrust as an antecedent, a moderating variable and a criterion variable.* In our study, we viewed ID as an antecedent construct for explaining access to social and financial capital and how these mediated effects on firm performance. In all cases, ID had deleterious effects on African American entrepreneurs. These findings offer a number of interesting theoretical questions. For example, how do ID and other forms of trust influence key entrepreneurship constructs such as opportunity recognition, new product development and international expansion among a host of other important theoretical dimensions in the literature (Mickiewicz and Rebmann, 2020)? The concept of ID may also offer theoretical insights when utilised as a moderator for explaining social capital, funding types and/or performance effects (Howell, 2019; Tasavori et al., 2018). The ability to generalise the negative effects of ID to other explanatory variables will further strengthen the importance of forming trusting relationships (Kwon and Sohn, 2021). Although not addressed in this study, theoretical insights would also accrue through a better understanding of the antecedents of ID. Research investigating how is ID formed and how it may be mitigated is thus warranted.

### Limitations

Despite the robust findings of this study, there are several limitations. First, we focused our study on African American entrepreneurs in the United States, thereby limiting the generalisability of our findings to other ethnic groups. We encourage research that investigate the extent to which our structural equation modelling results converge and diverge across different ethnic groups, countries and cultures. Of particular importance would be research acknowledging that in other countries and contexts, minority status may differ based on population characteristic and where white people may not be in the majority. Second, we treated minority entrepreneurs as a homogenous group. Minority entrepreneurs who are first-generation immigrants to the United States may exhibit different behaviours than those who are second-generation (or later) Americans. It would be interesting to examine trust within these groups and also between these groups and others. Finally, and as discussed, ID was viewed as an antecedent in our model. It would be interesting to examine the antecedents for ID, as the literature has described ID as forming from antagonistic relationships. However, there does not appear to be significant empirical research examining what types of transactions are most instrumental in the formation of ID by minority entrepreneurs. For example, we know that minority entrepreneurs often face additional information-sharing and collateral requirements during the loan application process with banks. Do these negative transactions foster a greater sense of ID than others?

### Conclusion

This article put forth an ambitious psycho-sociological framework as an antecedent to firm performance and discouraged borrowing tendencies for minority entrepreneurs. This represents an important contribution to the literature as although prior work has focused on what is happening to the minority entrepreneur, few have focused upon how the minority entrepreneur views and reacts to these events. We believe this is an important step in the examination of minority entrepreneurship and would encourage others to consider whether studies beyond the empirical may reveal insight into the minority entrepreneur's state of mind.

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