



Exploring the Role of Refugee Entrepreneurs in South Africa: A Quantitative Study on Networks, Bulk Buying, and Profitability

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Abstract

This study explores the contribution of refugee entrepreneurship (RE) to South Africa's economy, a topic that remains under-researched despite the critical role these entrepreneurs play in job creation and employment. Employing a quantitative research approach, data were collected from 197 purposively selected participants through self-administered questionnaires. The data was analysed using SPSS and AMOS statistical software. The findings reveal that networks significantly contribute to business success by providing access to crucial resources, such as financing and market information. Refugee entrepreneurs leverage these networks to overcome business challenges, receive financial support, and expand their entrepreneurial ventures. Additionally, bulk buying strategies reduce operational costs and enhance profitability. The study's results also highlight the role of refugee businesses in filling gaps in underserved markets, as well as fostering collaboration with South African businesses, leading to the creation of jobs for local citizens. This research underscores the economic dynamism, job creation, and market diversification that refugee entrepreneurs contribute to South Africa's economy, emphasising their role as an essential driver of inclusive growth and economic stability in host countries.

Keywords: refugee entrepreneurship, South Africa's economy, bulk buying strategies, use of networks and job creation

1. Introduction

Refugees have long been recognised as dynamic contributors to the economies of host nations, often leveraging their entrepreneurial activities to not only secure livelihoods but also generate broader economic benefits (Opote et al., 2021). In South Africa, where high unemployment and economic inequality persist, refugee entrepreneurs play a critical role in addressing gaps within the informal and formal economy. Despite challenges such as xenophobia, limited access to capital, and restrictive regulatory environments, these entrepreneurs employ innovative strategies to sustain and grow their businesses (Tengeh, 2013). Among these strategies, the use of networks, collective and bulk buying power, and pricing strategies have emerged as key mechanisms for enhancing profitability in refugee entrepreneurial ventures.

The use of networks is pivotal in the success of refugee entrepreneurs (Abidin, 2023). These networks, often built within ethnic, cultural, or community groups, provide access to critical resources such as financing, market information, and supply chain support (Udimal et al., 2021; Musara & Nieuwenhuizen, 2021). Research has shown that social capital derived from these networks enables refugee entrepreneurs to overcome institutional barriers and build resilient businesses (Wauters & Lambrecht, 2008). By relying on trust-based relationships, refugee entrepreneurs can establish sustainable trade partnerships and gain market credibility.

Similarly, the use of collective and bulk buying power enhances profitability by reducing operational costs. Group purchasing arrangements allow refugee entrepreneurs to negotiate lower prices for goods and services, thus achieving economies of scale. Studies on immigrant entrepreneurs in various contexts highlight the cost-saving advantages of collective procurement strategies, which also provide a buffer against market volatility (Raijman, 2001). In South Africa, such practices are especially important in informal trading environments, where competition is fierce, and profit margins are narrow.

Another critical strategy is the adoption of pricing strategies tailored to market demands. Refugee entrepreneurs often demonstrate a nuanced understanding of local consumer behaviour, enabling them to set competitive prices that attract and retain customers while maintaining profitability. Pricing strategies, such as value-based pricing and dynamic pricing, help these entrepreneurs navigate the challenges of operating in price-sensitive markets. Evidence from studies

on refugee entrepreneurial ventures underscores the importance of pricing flexibility in ensuring the survival and growth of businesses in uncertain economic environments (Kloosterman & Rath, 2001).

This study seeks to examine how refugee entrepreneurs in South Africa use these strategies, networks, collective buying power, and pricing mechanisms to enhance their profitability. By exploring these dimensions, the research aims to contribute to a deeper understanding of refugees' economic integration and their potential to drive inclusive growth in the South African context.

Given the above, two guiding questions underpinned this article as follows: (1) How do refugee-owned entrepreneurial ventures in South Africa utilise networks, collective buying power, and pricing strategies to enhance the profitability of their entrepreneurial ventures? (2) How do refugee-owned entrepreneurial ventures contribute to the South African economy?

2. Literature Review

2.1. The Need for Achievement (NAT) Theory

This theory was formulated by McClelland in 1961. The term 'need for achievement' refers to an individual's motivation for significant success (Radebe & Vezi-Magigaba, 2021). It also denotes a tendency to choose and persist in endeavours that possess a moderate probability of success, providing the highest potential for personal fulfilment. Wilson et al. (2020) assert that this theory pertains to the aspirations and the necessity for achievement in humans. Identifying psychological factors influencing individuals' entrepreneurial mindset is the fundamental aspect of this theory's development.

Aslam et al. (2022) assert that individuals driven by a profound aspiration for achievement often exhibit this through the successful completion of challenging tasks while maintaining consistently elevated standards. A strong desire for success is a fundamental trait of successful entrepreneurs, serving as the cornerstone for the long-term sustainability of businesses; thus, challenging and demanding business environments often inspire individuals with a pronounced ambition for achievement (Sohu et al., 2022). Consequently, this theory posits that the success of entrepreneurs is evaluated based on their drive for achievement (Ospina et al., 2020). This theory is relevant to the current investigation, as it will enhance the success of refugee entrepreneurs in their vision, mission, and operations.

2.2. The Use of Networks to Enhance Profits in Refugee Entrepreneurial Ventures

The application of networking skills is increasingly acknowledged as a crucial element in improving business profitability across diverse sectors. Networking characterised as the establishment and cultivation of relationships with individuals and organisations. Functions as a medium for resource sharing, knowledge exchange, and collaboration. ultimately resulting in enhanced business outcomes. The importance of networking in enhancing profits can be comprehended through multiple aspects, such as the cultivation of social capital, access to market opportunities, and the promotion of knowledge transfer.

Studies demonstrate that proficient networking can markedly improve the performance of small and medium enterprises (SMEs). Tiwasing and Sawang (2021) discovered that affiliation with local Chambers of Commerce networks is positively associated with the performance indicators of rural SMEs, such as turnover and profitability. This indicates that companies participating in networking activities are more adept at utilising shared resources and insights, resulting in enhanced financial performance. Klyver and Arenius (2020) similarly emphasise that nascent entrepreneurs who engage in networking demonstrate improved social skills and interpersonal connections, essential for initiating successful ventures. Their findings highlight the significance of social capital in promoting business expansion and profitability.

Furthermore, networking is essential for promoting innovation and adaptability within organisations. Olokundun et al. (2022) underscore the significance of digital transformation, especially via 5G technology, in facilitating enhanced connectivity and collaboration among SMEs. This technological advancement enhances communication and creates new opportunities for market engagement, thus contributing to profitability. The incorporation of digital tools in networking practices enables businesses to optimise operations, minimise expenses, and improve customer engagement, all of which are essential for maintaining competitive advantage in the current dynamic market landscape.

Besides direct financial advantages, networking fosters the enhancement of managerial competencies vital for business success. Kokkonen and Koponen (2020) assert that interpersonal communication competence is essential for entrepreneurs, especially in small economies that depend significantly on export activities. The capacity to establish and sustain networks can result in improved negotiation results, enhanced market access, and, ultimately, greater profitability. A study by Alaka (2023) substantiates this idea by showing that entrepreneurial orientation and managerial skills significantly affect SME performance, emphasising the relationship between networking and managerial efficacy in achieving business success.

Networking is essential for the acquisition and dissemination of knowledge, which are vital for innovation and growth. Hinton's (2020) research indicates that businesses must alter their profit relationship to encourage sustainable practices, attainable through collaborative networks that facilitate knowledge exchange. Through collaboration with other enterprises, entrepreneurs can acquire insights into optimal practices, market dynamics, and consumer

preferences, thereby informing strategic decisions and augmenting profitability. This cooperative strategy is especially advantageous in sectors marked by swift transformation and unpredictability, where flexibility and reactivity are essential for survival.

Networking is also crucial in the domain of financial management. Batista et al. (2022) emphasise that enhanced financial management practices, including proficient networking with financial institutions, can result in greater profitability for micro-entrepreneurs. Networking provides business owners with access to financial resources and expertise, enabling them to make informed decisions about investments, operational efficiency, and growth strategies. This financial acumen, combined with robust networking skills, enables businesses to address challenges and seize opportunities in the market.

The significance of networking in augmenting profitability is especially evident within the realm of international business. Rijal's (2024) research demonstrates that entrepreneurial orientation substantially affects the development of business networks, subsequently influencing the marketing performance of SMEs involved in export-import operations. This discovery highlights the imperative for enterprises to develop global networks that enable market entry and expansion, thereby enhancing profitability.

Thus, incorporating networking skills into business strategies is crucial for improving profitability across diverse sectors. The diverse advantages of networking, such as resource access, knowledge exchange, and the enhancement of managerial skills, highlight its essential function in fostering business success. As enterprises navigate a progressively intricate and competitive environment, the capacity to network effectively will remain a crucial factor in their financial performance and long-term viability.

2.3. The Use of Collective and Bulk Buying Power to Enhance Profits in Refugee Entrepreneurial Ventures

Utilising collective and bulk purchasing power has emerged as an essential strategy for enhancing profitability across various sectors. This approach leverages the collective purchasing power of groups or consortia to obtain better pricing, improve supply chain efficiencies, and ultimately increase profitability. The dynamics of collective purchasing power are evident in consumer behaviour, organisational procurement strategies, and market segmentation.

A primary advantage of collective purchasing power is the ability to negotiate lower prices through economies of scale. When consumers or organisations unite to make bulk purchases, they often secure discounts that are inaccessible to individual buyers. Purchasing consortia have proven effective in enhancing competitiveness in supply chain operations by facilitating collaboration among organisations with similar attributes in their procurement activities (Chebet, 2024). This collaborative approach not only reduces costs but also fosters stronger relationships with suppliers, who are incentivised to offer better terms to larger, more reliable buyers.

The effectiveness of collective purchasing power is improved by the strategic use of pricing methods that accurately reflect the intrinsic value of products. Research indicates that companies can enhance sales and profits by aligning their pricing strategies with consumer purchasing power and preferences (Singh et al., 2021). This alignment is particularly crucial in markets marked by significant price sensitivity, as consumers generally respond positively to perceived value, especially when purchasing in large quantities.

Cultural factors significantly influence purchasing behaviour when analysing collective buying power. In collectivist societies, purchasing decisions are often influenced by familial and communal factors, leading to an increased emphasis on group buying strategies (Zakaria et al., 2020). This cultural context can enhance the effectiveness of collective purchasing initiatives, as individuals are more predisposed to engage in buying behaviours that reflect communal values and shared interests.

In the case of refugee entrepreneurship, the commitment of refugee entrepreneurs to collective purchasing strategies is crucial for enhancing competitive advantage (Tarigan et al., 2020). By fostering a culture of collaboration and collective decision-making, refugee entrepreneurs can more efficiently leverage their purchasing power to negotiate favourable terms and conditions with suppliers.

Furthermore, stakeholder influences substantially affect corporate procurement strategies. Companies are increasingly recognising the imperative to meet stakeholder expectations regarding sustainability and ethical sourcing. This recognition has led to the adoption of collective purchasing strategies that enhance profitability (Wang et al., 2020). By addressing stakeholder concerns through collective purchasing initiatives, refugee entrepreneurs can enhance their market position and improve their reputation among consumers.

The importance of technology in augmenting collective purchasing power is indisputable. The rise of e-commerce and digital platforms has enhanced consumer connectivity and collaboration in bulk purchases. Online marketplaces and group purchasing platforms have emerged as effective means for aggregating demand and obtaining better pricing (Hermes et al., 2022). This technological advancement has democratised access to collective purchasing opportunities, allowing even small consumers to benefit from bulk buying strategies.

Thus, utilising collective and bulk purchasing power presents a robust approach for enhancing profits across various sectors. Refugee entrepreneurs can significantly increase their profitability by leveraging economies of scale, aligning pricing strategies with consumer preferences, and fostering collaborative purchasing behaviours. The integration of cultural elements, stakeholder impacts, and technological advancements markedly enhances the effectiveness of collective purchasing efforts. The continuous transformation of consumer behaviour requires the strategic

implementation of collective purchasing strategies as a crucial factor for improving profitability and sustainability in the market.

2.4. The Use of Pricing Strategies to Enhance Profits in Refugee Entrepreneurial Ventures

The environment for refugee entrepreneurship in South Africa presents considerable opportunities alongside significant challenges. Pricing strategies serve as essential instruments that refugee entrepreneurs can utilise to manoeuvre through this intricate landscape. Harmonising pricing strategies with the distinct socio-economic dynamics and cohesive business environments of South Africa can enhance integration and sustainability for enterprises owned by refugees. Furthermore, comprehending the obstacles encountered by refugee entrepreneurs can facilitate the precise customisation of these strategies.

Refugee entrepreneurs frequently face distinct challenges, such as limited access to financial resources, discrimination, and unfamiliarity with local markets (Khademi et al., 2024; Reis et al., 2024).

Financial obstacles faced by refugee entrepreneurs can be partially mitigated through innovative pricing strategies that enable competitive positioning of their products in the market (Schmich & Mitra, 2023). This requires comprehension of the local business environment and a strategic pricing approach that considers consumer preferences and cost structures (Bigambo et al., 2023). When pricing is aligned with consumer expectations and local economic conditions, it can enhance the competitiveness of refugee enterprises, promoting their survival and growth (Al-Hamad et al., 2024).

An essential component of an effective pricing strategy is performing market research to comprehend the purchasing power and preferences of consumers in South Africa. Refugee entrepreneurs employing agentic strategies as proactive measures that allow them to affect their market positioning can bolster their resilience against economic displacement (Mousa & Abdelgaffar, 2023). Comprehensive market research facilitates improved pricing strategies and enables refugee entrepreneurs to generate value that corresponds with customer expectations. Strategies that integrate customer insights markedly enhance business performance and sustainability (Gama et al., 2023).

Moreover, pricing strategies for refugee entrepreneurs may leverage community solidarity. Engaging with local communities can establish a support network that mitigates certain intense challenges encountered by refugee enterprises (Eslami et al., 2023). By establishing distinctive pricing models that embody community values, such as cooperative pricing discounts, refugee entrepreneurs can foster a devoted customer base while advancing inclusive economic development. Encouraging community involvement via pricing strategies cultivates consumer trust and improves market penetration, which is especially beneficial in a diverse and competitive market such as South Africa (Tasli-Karabulut & Sancak, 2024).

Ultimately, collaboration and mentorship from seasoned local entrepreneurs can significantly aid refugee entrepreneurs in enhancing their pricing strategies. Refugee entrepreneurs can acquire insights into effective pricing strategies and market positioning by utilising the experiences of established businesses (Huang et al., 2023). This collaborative method can enhance community connections and augment social networks, which are essential for entrepreneurial success.

A well-structured pricing strategy is crucial for refugee entrepreneurs in South Africa to succeed despite the numerous challenges they encounter. Adapting to market demands through strategic pricing, leveraging community networks, utilising technology, and acquiring regulatory insights will improve the sustainability and growth potential of their enterprises. This comprehensive strategy not only aids individual enterprises but also enhances the overall economic environment, promoting integration and empowerment for refugee entrepreneurs.

2.5. Contribution of Refugee Entrepreneurs to the South African Economy

Refugee entrepreneurs play a significant role in contributing to the South African economy, particularly in sectors that are underserved or overlooked by local businesses (Chakabva, Tengeh, Dubihlela, 2020). Their contributions extend beyond mere survival strategies, often driving economic dynamism, fostering social integration, and addressing systemic gaps in employment and services.

2.6. Stimulation of Informal and Formal Markets

Refugee entrepreneurs are active participants in both formal and informal economic sectors. They fill niches in the informal market by providing affordable goods and services, often in areas where local businesses are scarce. In the formal economy, some refugee businesses grow to become integral players in wholesale and retail sectors, contributing to the diversity and resilience of local markets (Dickau et al., 2021). Refugees often operate in sectors neglected by local businesses, such as informal trading, which is a cornerstone of South Africa's economy. Their enterprises help stabilise informal markets and, in some cases, transition into formal businesses, enhancing economic resilience (Peberdy & Rogerson, 2000).

2.7. Tax Revenue

Some refugee entrepreneurs operate formal businesses that are registered and comply with South Africa's tax regulations. By paying taxes such as income tax, Value-added Tax, and business licensing fees, they contribute to the country's fiscal revenues, supporting public services and infrastructure development. These contributions support government programs, adding to the broader fiscal sustainability of the nation (Tengeh, 2016).

2.8. Innovation and Market Diversity

Refugee entrepreneurs often introduce innovative business models, products, and services influenced by their unique cultural and economic perspectives. This diversity enriches the South African market, fostering competition, enhancing consumer choice, and driving market innovation. This diversity enriches South African markets, enhancing competition and consumer choice (Crush et al., 2017).

2.9. Revitalisation of Economically Depressed Areas

In many cases, refugee entrepreneurs establish businesses in economically marginalised or neglected urban and rural areas. Their presence revitalises these communities by attracting foot traffic, increasing economic activity, and fostering a sense of safety and stability in previously declining neighbourhoods. Reviving these areas through increased economic activity, improved access to goods and services, and fostering community stability (Peberdy, 2017).

2.10. Skills Transfer and Knowledge Sharing

Through their business operations, refugee entrepreneurs contribute to the transfer of skills and entrepreneurial knowledge. By mentoring employees or collaborating with local business owners, they disseminate innovative practices and business acumen, which benefits the broader economy. This fosters a culture of entrepreneurship and innovation within host communities, in this case, South Africa (Tengeh, 2016).

2.11. Trade and Economic Linkages

Many refugee entrepreneurs maintain transnational ties with their countries of origin, facilitating cross-border trade and creating supply chain linkages. These activities enhance South Africa's trade networks and integrate its economy into regional and global markets. These linkages not only benefit individual businesses but also enhance South Africa's position in regional markets (Crush et al., 2017).

3. Materials and Methods

3.1. Research Design

The study used a quantitative research approach with a correlation design (Kapingura, 2024). This approach was chosen to attain consistency and reliability of data collected. Further allows findings to be applied to a larger population when using appropriate sampling techniques.

3.2. Research Population, Sampling Technique, and Sample Size

The study targeted refugee entrepreneurs within the Buffalo City Metropolitan Municipality. These prospective participants were selected using a purposive sampling method. The qualifying criteria were that the participants had to be people who have been forced to leave their country to escape either war, persecution, or natural disaster. The second criterion was that the participants are required to be trading entrepreneurs. Each participant was asked to confirm reasons why he/she left his/ her country of origin and whether he/she has a trading business within South Africa. This resulted in the final sample of 197 refugee entrepreneurs. However, this subjective selection method can introduce bias if the criteria are poorly defined or if certain population characteristics are overlooked. Additionally, purposive sampling, by its nature, may result in a sample that does not fully represent the broader population, potentially limiting the generalisability of the findings. The researchers strictly ensured that the sampled refugee entrepreneurs met the established criteria. Despite these limitations, the sample size of 197 refugee entrepreneurs can be considered representative of the target population, as it significantly exceeds the minimum of 30 recommended for quantitative studies (Eichler et al., 2018).

3.3. Data Collection and Analysis

The researchers ensured that respondents met the predetermined selection criteria to minimise data collection bias. Subsequently, 197 interviewer-administered questionnaires were distributed to the selected sample, all of which were

fully completed and returned for analysis. Data was analysed using SPSS and AMOS Statistics software. The results were presented in the form of descriptive statistics.

3.4. Reliability and validity of the results

The reliability of the survey results was assessed using Cronbach's Alpha. As noted by Osman et al. (2022), data reliability entails collecting sufficient, comprehensive, and accurate data to effectively measure the intended concept. Therefore, Cronbach's Alpha was applied to evaluate the degree to which different variables in the questionnaire measured the same construct. The survey instrument in this study achieved an internal consistency reliability of 0.80, or 80%. Table 1 shows the results of the reliability test.

Table 1 Cronbach's Alpha values for the reliability test

Constructs	Cronbach's Alpha	Cronbach's Alpha based on standardised items
UON	0.871	0.872
CBP	0.865	0.867
CSAE	0.857	0.862

NOTE: UON = Use of Networks; CBP = Collective and Bulk Buying Power; CSAE = Contribution to the South African Economy

According to Osman et al. (2022), reliability test results of 0.70 or higher indicate an acceptable level of reliability and are considered dependable. In this study, the lowest recorded Cronbach's Alpha value was 0.862 for the CSAE construct. Based on these values, it was concluded that the data were reliable.

4. Results and Discussion

Table 2: Use of Networks, Collective and Bulk Buying Power and Contribution to the South African Economy

	1	2	3	4	5	Total agreement
The use of networks provide access to resources such as financing and market information	2%	6%	5%	6%	82%	88%
The use of networks is useful in helping you resolve business challenges	1%	2%	3%	6%	88%	94%
Entrepreneurs receive financial support from network to start or grow your business	2%	5%	3%	7%	83%	90%
The bulk buying reduces operational costs	10%	5%	3%	32%	49%	81%
Bulk buying in increasing your profitability	6%	3%	1%	39%	51%	90%
To what extent do you agree that your business fills gaps in underserved markets	2%	4%	7%	44%	42%	87%
Refugee entrepreneurs collaborate with South African businesses	3%	5%	8%	39%	46%	84%
Refugee entrepreneurs create jobs for South Africans	4%	5%	5%	52%	34%	86%

Of the respondents, 88% alluded to the notion that the use of networks provide access to resources such as financing and market information, 94% indicated that the use of networks is useful in resolving business challenges, 90% indicated that entrepreneurs receive financial support from network to start or grow their business, 81% indicated that bulk buying reduces operational costs, 90% indicated that bulk buying in increasing your profitability, 87% indicated that the refugee businesses fills gaps in underserved markets, 84% indicated that refugee entrepreneurs collaborate with South African businesses and 86% agreed that the Refugee entrepreneurs create jobs for South Africans.

4.1.1. Correlation Analysis

A correlation analysis was performed to assess the validity of the survey results. Pearson correlation (r) was utilised as the statistical tool to examine the relationships within the data and determine the significance of the associations between variables. The initial constructs analysed included UON, CBP, and CSAE (Table 3).

Table 3: Inter-item correlation analysis – UON, CBP and CSAE

	Means	SDV	UON	CBP	CSAE
UON	4.91	0.508	1		

CBP	4.86	0.575	0.767**	1	
CSAE	4.78	0.631	0.769**	0.686**	1

****.** The correlation is significant at the 0.01 level (2-tailed).

NOTE: UON = Use of Networks; CBP = Collective and Bulk Buying Power; CSAE = Contribution to the South African Economy

An inter-item correlation analysis was performed for each construct to determine the relationships among them. The results revealed a strong, positive correlation at a 95% significance level ($p = 0.01$). The inter-item correlation analysis for UON, CBP and CSAE is detailed in Table 3.

4.1.2. Factor analysis

Yong and Pearce (2013) explain that factor analysis is based on the idea that measurable and observable variables can be reduced to a smaller set of factors, which share a common but unobservable variance. From this perspective, it can be concluded that factor analysis allows for the simplification of large datasets containing multiple items by grouping them into descriptive categories. In this study, Principal Component Analysis (PCA) with orthogonal Varimax rotation and Kaiser Normalisation was used for the factor analysis, following the approach of Dubihlela and Chauke (2017). PCA was employed to extract the key factors that met the minimum criteria (≥ 1) (see Table 4: Total Variance Explained). The Varimax with Kaiser Normalisation rotation method was applied to extract factors that met the cutoff criterion of 0.40 (extraction method).

Table 4: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.384	31.280	31.280	9.384	31.280	31.280	6.895	22.982	22.982
2	2.203	7.345	52.016	2.203	7.345	52.016	3.002	10.007	44.867
3	1.642	5.474	64.264	1.642	5.474	64.264	2.030	6.766	61.092

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalisation.

a. Rotation converged in 10 iterations

As a result of the analysis, three factors with eigenvalues ≥ 1 were identified (Table 4). The "Percentage of Variance" column indicates the proportion of total variability explained by each of the components. For example, component 1 explains 23% of the variability across all five variables, and together, the components account for 61% of the total variance in the data, which is considered statistically significant.

4.1.3. Factor loadings and extraction

Yong and Pearce (2013) state that factor loading is another factor analysis tool that helps to test how strong the relationship of factors is. Accordingly, Table demonstrates the number of significant factors that were established, extracted, and only those rotated values that were meaningful for interpretation. While the extractions in this study are based on commonalities, all eigenvalue values that were less than 1 were eliminated. The extraction of rotation for the sums of squared loadings that demonstrated eigenvalues, and variance was done after rotation. The PCA was used in providing interpretation, whereas the matrix of loadings was rotated to obtain Varimax rotation that was used to suppress small coefficients.

After all the above techniques were done, only 3 items were subjected for further analysis as displayed in Table 5. The primary goal for conducting such analysis was to identify item loadings > 0.40 that are meaningful for interpretations. Furthermore, the components with items two and less have been eliminated since such components indicate a lack of correlation pattern.

After removing the specified components, the analysis resulted in a seven-component factor solution with a simple structure (factor loadings > 0.40), as shown in Table 5. The next section outlines the content of the questions/statements that loaded onto each factor. This was done to identify the factors that most strongly correlate with each variable as common themes, which ultimately help in defining the construct.

Table 5: Rotated Component Matrix^a

Factor	1	2	3
The use of networks provides access to resources such as financing and market information	0.863		
The use of networks is useful in helping you resolve business challenges	0.852		
Entrepreneurs receive financial support from network to start or grow your business	0.829		
The bulk buying reduces operational costs		0.838	
Bulk buying in increasing your profitability		0.769	
To what extent do you agree that your business fills gaps in underserved markets			0.891
Refugee entrepreneurs collaborate with South African businesses			0.877
Refugee entrepreneurs create jobs for South Africans			0.860

The rotated component matrix converged in 10 iterations resulting in a pattern of factor loadings as shown in Table 5. The factor loadings display a three-item solution. The results on this table indicate that three items loaded onto component 1 (The use of networks provides access to resources such as financing and market information=.86, The use of networks is useful in helping you resolve business challenges=.85, ICU Entrepreneurs receive financial support from the network to start or grow their business=.83, relates to the use of networks, hence labeled “The Use of Networks to Enhance Profits in Refugee Entrepreneurial Ventures”.

Two items have loaded into component 2 (The bulk buying reduces operational costs =.84, Bulk buying in increasing your profitability =.77, relates to collective and bulk buying power, hence labelled “the Use of Collective and Bulk Buying Power to Enhance Profits in Refugee Entrepreneurial Ventures”

Three items have loaded into component 3 (To what extent do you agree that your business fills gaps in underserved markets =.89, Refugee entrepreneurs collaborate with South African businesses=.88 and Refugee entrepreneurs create jobs for South Africans =.86) associated with contribution to South African Economy, hence labeled “Contribution of Refugee Entrepreneurs to the South African Economy”.

4.1.4. Structural Equation Modeling (SEM)

Wang, Cheah, Wong, and Ramayah, (2024) defines Structural Equation Modeling (SEM) as an extension of the General Linear Model (GLM) that allows for the simultaneous evaluation of multiple regression equations. In this study, SEM was employed to analyse relationships between endogenous and exogenous variables, typically representing dependent and independent variables, respectively. Furthermore, SEM was utilised to assess models and examine complex relationships, including Confirmatory Factor Analysis (CFA). Additionally, SEM provides a graphical representation of structural linkages, facilitating a clearer understanding of the framework being developed.

Shadfar and Malekmohammadi (2013:582) highlight that one of the key advantages of Structural Equation Modeling (SEM) is its ability to assess an entire model in a single analysis. In this study, AMOS software was utilised to analyse the data and enhance the effectiveness of SEM. According to Holte (2024), SEM is generally applied to large samples, making it essential to evaluate whether a model is suitable by comparing it to the collected data (Gao, Shi & Maydeu-Olivares, 2019:1). SEM integrates partial least squares, pathway modeling, and factor analysis (Chen et al., 2014:253). Lastly, Shadfar and Malekmohammadi (2013:585) emphasise that specific fit statistics must be assessed and validated before SEM can be employed. Table 4 presents a summary of the SEM statistical fit.

4.1.5. Fit index for the IA effectiveness model

Over time, several fit indices have been developed, leading to potential variations in their interpretation (Hox & Bechger, 1995). According to Hair et al. (2010), it is recommended to use at least three fit indices for evaluating the structural model. The following fit indices were derived for UON and CBP within the provincial governance systems model.

Table 6: Model fit indices (Sources: IBM, SPSS, AMOS, SEM)

Fit Index	Recommended Value	Observed Value
Cmin		243.833

Df		290
p-value	As close to 1.0	0.977
RMSEA	<0.05 (Hox & Bechger, 1995)	0.000
NFI	0.0–1.0 (Iacobucci, 2010)	0.786
NNFI	≥0.95 (Hox & Bechger, 1995)	1.098
CFI	0.0–1.0 (Iacobucci, 2010)	1.000
IFI	≥0.90 (Hox & Bechger, 1995)	1.054
RFI	>0.9	0.679
GFI	≥0.90 (Hox & Bechger, 1995)	0.937
Cmin/DF	≤3.0 (Schreiber et al., 2006)	0.841

Table 6 presents the overall fit indices for the CFA model, with the recommended standard being at least three fit indices (Hair et al., 2010). CFA is a statistical method that accounts for variations among related factors to identify a smaller number of unobserved variables (Chen et al., 2014:253). This is usually followed by hypothesising a model, which is then compared to the covariance matrix (Schreiber et al., 2006). The Comparative Fit Index (CFI), with an ideal value of 1.000, assesses how well the hypothesised model performs compared to a simpler model. The CFA evaluates the model's fit with the data (Iacobucci, 2010) for the model being analysed.

In agreement with Hair et al. (2010), at least five indices met the required fit criteria, including the normed fit index (NFI) at 0.786, the non-normed fit index (NNFI) at 1.098, the incremental fit index (IFI) at 1.054, the root mean square error of approximation (RMSEA) at 0.000, and the goodness-of-fit index (GFI) at 0.937. The regression weight results for the independent and dependent variables are presented in Table 7.

Table 7: Regression weights of the independent and dependent variables

Path	Estimate	S.E	C.R.	P	Significance level
CSAE <--- CBP	0.319	0.066	4.819	***	Accepted at p <0.001
CSAE <--- UON	0.073	0.025	2.908	0.004	Accepted at p <0.05

UON = Use of Networks; CBP = Collective and Bulk Buying Power; CSAE = Contribution to the South African Economy. *, p < 0.001

The norm value of p must be less than 0.05. The p-value below .0001 is expressed by ***, confirming the relationship between CBP and CSAE and UON and CSAE. Figure 1 depicts the UON, CBP and CSAE models.

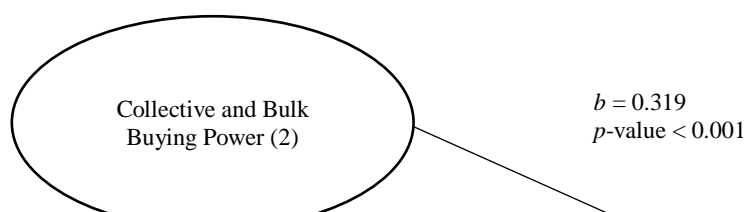


Figure 1. SEM Sketch

Figure 1 illustrates the SEM for IAF effectiveness within the provincial governance systems; three primary variables were identified and subdivided: UON, CBP and CSAE models, with estimated values of 0.319, 0.073, and 1.00, respectively.

4.1.6. Findings

The results indicated that refugee entrepreneurs use networks to access resources such as financing and market information, which helps to resolve business challenges. Entrepreneurs receive financial support from the network to start or grow a business. Bulk buying reduces their operational costs. Bulk buying increases profitability and refugee business fills gaps in underserved markets. Refugee entrepreneurs collaborate with South African businesses, and refugee entrepreneurs create jobs for South Africans.

4.1.7. Research Implication

The Need for Achievement (N-Ach) Theory, developed by David McClelland, suggests that individuals are motivated by a strong desire to achieve goals, take responsibility for problem-solving, and excel in their endeavours. People with a high need for achievement tend to set challenging but attainable goals, seek feedback, and prefer situations where they have personal control over outcomes.

Linking N-Ach Theory to the Findings in the Study, aligns with N-Ach Theory in several ways:

Entrepreneurial Drive and Achievement

- Refugee entrepreneurs demonstrate a high need for achievement by actively seeking opportunities, overcoming obstacles, and expanding their businesses despite challenges.
- Their ability to leverage networks for financing and market information reflects their proactive and goal-oriented behaviour, which is a key trait of individuals with high achievement motivation.

Overcoming Business Challenges

- N-Ach Theory suggests that individuals with a strong need for achievement are resilient and persistent.
- Refugee entrepreneurs utilise social networks to navigate barriers such as limited financial resources and market access, showcasing their determination to succeed.

Strategic Business Practices

- The use of bulk buying strategies to reduce costs and increase profitability demonstrates calculated risk-taking, a characteristic of achievement-driven individuals.
- This aligns with McClelland's argument that high achievers prefer moderate risks—ones where success depends on effort and skill rather than luck.

Economic Contributions and Collaboration

- Refugee entrepreneurs contribute to filling market gaps and collaborate with local businesses, which in turn fosters job creation for South African citizens.
- This entrepreneurial success and impact on the local economy are consistent with McClelland's view that people with a high need for achievement seek not just personal success but also contribute to broader societal and economic growth.

4.1.8. Practical Implications of the Findings

The findings on refugee entrepreneurs and their success strategies have several practical implications for policymakers, businesses, and support organisations. These implications can be understood in the context of economic development, entrepreneurship support, and social integration.

Entrepreneurship Support Programs

Networking Initiatives: Government agencies and NGOs can develop mentorship and networking programs to connect refugee entrepreneurs with local business communities, financial institutions, and market experts. This will help them access funding, business knowledge, and growth opportunities.

Training and Capacity Building: Entrepreneurship training programs should focus on financial literacy, market research, and bulk buying strategies to enhance business sustainability.

Financial Inclusion and Support

Access to Funding: Financial institutions should recognise the importance of informal networks in refugee businesses and develop microfinance schemes, low-interest loans, or grant programs to support their growth. Encouraging partnerships between banks and community-led financial groups can help bridge funding gaps.

Policy and Regulatory Frameworks

Easing Business Registration and Compliance: Simplifying the legal requirements for refugee entrepreneurs to formalise their businesses can boost economic participation and contribute to job creation. Governments can create special permits or tax incentives for refugee-owned businesses that support local employment.

Economic Development and Local Business Growth

Leveraging Refugee Entrepreneurs for Market Expansion: Policymakers and local businesses can recognise the role of refugee entrepreneurs in filling market gaps in underserved areas. Collaborations between local and refugee-owned businesses can lead to joint ventures, supply chain partnerships, and increased market diversity.

Social Integration and Job Creation

Enhancing Collaboration Between Refugees and Locals: Promoting cross-cultural business partnerships can help reduce tensions and foster mutual economic benefits. Encouraging hiring practices that integrate both refugee and local workers will contribute to job creation and social cohesion.

4.1.9. Government Implications of the Findings

The study highlights the role of refugee entrepreneurs in business success, job creation, and market expansion. For governments, these findings have several policy and regulatory implications, particularly in areas such as economic development, financial inclusion, immigration policies, and social integration.

Policy Reforms for Business Registration and Regulation

Simplifying Business Registration: Governments should streamline the process for refugees to formally register businesses, reducing bureaucratic barriers and legal uncertainties. Introducing special business permits or simplified licensing procedures for refugee entrepreneurs can encourage formal economic participation.

Grants and Incentives for Business Growth: Offering government-backed grants or tax incentives for refugee businesses that contribute to local employment and economic development can promote job creation.

Economic and Market Development

Encouraging Public-Private Partnerships (PPPs): Governments should facilitate partnerships between local businesses, corporate investors, and refugee entrepreneurs to enhance business expansion and job creation.

Market Access and Support Programs: Providing subsidised market spaces, training programs, and supply chain opportunities for refugee entrepreneurs can help integrate them into the formal economy. Supporting initiatives like bulk buying cooperatives can lower operational costs and boost profitability for small businesses.

Social and Labor Market Integration

Job Creation for Local Citizens and Refugees: Governments can promote employment policies that encourage refugee businesses to hire local workers, fostering social and economic integration. Recognising the role of refugees in filling market gaps in underserved communities can help reshape migration policies to be more development focused.

Community Integration Programs: Initiatives that promote cultural and business collaboration between refugees and local entrepreneurs can reduce xenophobia and promote peaceful coexistence.

Immigration and Refugee Economic Policies

Recognition of Refugee Entrepreneurs in Economic Policies: Governments should incorporate refugee entrepreneurship into national economic development strategies to maximise their contributions. Adopting flexible work and residency permits for refugee entrepreneurs can enhance economic inclusion and reduce reliance on aid.

Legal Protections and Rights: Governments must ensure that refugee business owners have legal protections against exploitation, access to dispute resolution mechanisms, and fair treatment in commercial activities.

5. Conclusion

The N-Ach Theory helps explain the entrepreneurial success of refugee business owners. Their reliance on networks, strategic cost management, and contributions to the local economy are driven by an intrinsic motivation to achieve. This theory reinforces the idea that individuals with a high need for achievement are key drivers of business innovation and economic progress. For governments, the findings suggest that proactive policies in business regulation, financial inclusion, and social integration can help maximise the economic contributions of refugee entrepreneurs. By creating a supportive legal and economic framework, governments can turn refugee entrepreneurship into a driver of economic growth, job creation, and local market development. The practical implications suggest that strengthening support systems, improving access to finance, and fostering inclusive policies can enhance the success of refugee entrepreneurs. This, in turn, can drive economic development, job creation, and social integration, benefiting both refugees and the host country.

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