An investigation of the entrepreneurial orientation, context and entrepreneurial performance of inner-city Johannesburg street traders

C. Callaghan & R. Venter

ABSTRACT
Increasingly, attention is being paid to the entrepreneurial potential of the informal sector, which participants perceive to be rich in opportunity. Yet, little has been done to investigate the entrepreneurial orientation, and indeed, the contribution of entrepreneurial orientation to the entrepreneurial performance of informal traders. Entrepreneurial orientation (EO) is particularly useful because it contributes to a fundamental understanding of what entrepreneurship is. The focus of this study is an examination of the EO of inner city traders in the City of Johannesburg, South Africa. Data relating to EO, contextual factors and entrepreneurial performance were collected from 308 street traders and analysed to investigate, firstly, the factors that shape EO, and secondly, the potential contribution of EO to entrepreneurial performance. The findings indicate that EO is associated with certain contextual and learning factors, suggesting that the provision of entrepreneurial training might contribute to the empowerment of informal entrepreneurs. At the same time, higher levels of proactiveness and competitive aggressiveness were found to be positively associated with continuance satisfaction.

Key words: entrepreneurial orientation, entrepreneurial performance, informal sector

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Introduction

Informal sector participation has been described as a trap associated with impoverishment (Cassim 1982) and as the survivalist responses of marginalised persons with no alternatives (Habib 2005). This ‘marginalist’ perspective prescribes an identity to informal sector participants, with little consideration given to individual potential and individual action as a means to escape impoverishment and a survivalist condition. Of late, however, the structuralist perspective has prevailed, with increasing attention being paid to the informal sector as an entrepreneurial space (see Debrah 2007; Snyder 2004; Williams 2007; Webb, Tihanyi, Ireland & Sirmon 2009). Here, the informal sector is seen to be a dynamic and vibrant source of entrepreneurial activity, and of a ‘hidden’ enterprise culture that needs to be harnessed and graduated into the formal sector.

One particular way to reflect on the entrepreneurial potential of the informal sector is through the notion of ‘entrepreneurial orientation’ (EO), which is taken to consist of a number of dimensions, namely, innovativeness, competitive aggressiveness, risk-taking propensity, autonomy and proactiveness. The associations of these dimensions with entrepreneurial performance and the effects of certain contextual factors are tested in this study. Entrepreneurial performance is defined in this context as a construct comprising earnings and continuance satisfaction. In terms of entrepreneurial performance, the contention of Lumpkin and Dess (1996) that an entrepreneurial orientation is associated with learning – the how of entrepreneurship, or the learnable process conception of Stevenson and Jarillo (1990) – is also tested by investigating contextual factors and how they shape an entrepreneurial orientation. In so doing, the purpose of this paper is therefore to ultimately contest assumptions that prescribe a theoretically permanent and immutable survivalist orientation to certain informal participants. More specifically, the aim of the empirical research was to:

- Investigate factors that might contribute to shaping an entrepreneurial orientation in the Johannesburg informal sector context
- Investigate the potential contribution of entrepreneurial orientation dimensions to entrepreneurial performance.

This paper will begin with a reflection on the theory of EO before an overview of the context is presented. The research methods used in this research will be described before the results are presented and discussed.
Understanding entrepreneurial orientation

According to Cahill (1996), a state of fragmentation exists in entrepreneurship research. Some theorists believe that the unique values and attitudes of individuals drive entrepreneurial behaviour (Cunningham & Lischeron 1991), and different perspectives exist in terms of the development of entrepreneurial theory. An entrepreneur has been primarily conceived as a bearer of risk (Carland, Hoy & Carland 1988), yet primarily as a combiner of resources and an innovator (Schumpeter 2002). However, according to Gartner (1988), the focus of entrepreneurship should be the creation of a venture. The use of the entrepreneurial orientation construct provides a conceptual framework that ‘pulls together’ these different conceptions and allows for the operationalisation of entrepreneurship in entrepreneurship research, in that it considers entrepreneurship as entrepreneurial behaviour.

For Miller (1983: 770), entrepreneurship is “the process by which organisations renew themselves and their markets by pioneering, innovation and risk taking”, and it is this conception that Lumpkin and Dess (1996) develop into the larger construct through the inclusion of autonomy and competitive aggressiveness. Entrepreneurial orientation, or certain of its dimensions, have been associated with positive effects related to performance (Chow 2006; Coulthard 2007; De Clerq & Ruis 2007; Jantunen, Puimalainen, Saarenketo & Kylaheiko 2005) or with negative relationships (Naldi, Nordqvist, Sjöberg & Wiklund 2007).

The five component dimensions of EO – namely, innovativeness, autonomy, proactiveness, competitive aggressiveness and risk-taking propensity, as suggested by Lumpkin and Dess (1996) – are briefly discussed.

Innovativeness

For Schumpeter (2002: 299), the “purest type of entrepreneur genus” is “the entrepreneur who confines himself most strictly to the characteristic entrepreneurial function, the carrying out of new combinations”, in a word: ‘innovation’. According to Lumpkin and Dess (1996: 142), innovativeness reflects a tendency for an enterprise “to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or technological processes”. Innovation is an important means of pursuing opportunities and so is an important component of an entrepreneurial orientation (Lumpkin & Dess 1996).
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Autonomy
Lumpkin and Dess (1996: 140) believe that an “independent spirit” is necessary for entrepreneurship, and autonomy refers to independent action in terms of “bringing forth an idea or a vision and carrying it through to completion”, including the concept of free and independent action and decisions taken. “A tendency toward independent and autonomous action” is a key component of an entrepreneurial orientation, since intentionality must be exercised.

Proactiveness
Proactiveness is related to initiative and first-mover advantages, and to “taking initiative by anticipating and pursuing new opportunities” (Lumpkin & Dess 1996: 146). Proactiveness is associated with leadership, and with not following, as a proactive enterprise “has the will and foresight to seize new opportunities, even if it is not always the first to do so”, according to Lumpkin and Dess (1996: 147). Proactiveness is considered to differ from competitive aggressiveness, relating to market opportunity in entrepreneurship by “seizing initiative and acting opportunistically in order to shape the environment” (Lumpkin & Dess 1996: 147). The creation of demand, and growth willingness, is therefore considered a measure in this study for proactiveness.

Competitive aggressiveness
Competitive aggressiveness, for Lumpkin and Dess (1996: 148), “refers to a firm’s propensity to directly and intensely challenge its competitors to achieve entry or improve position” and is characterised by responsiveness in terms of confrontation or reactive action. In contrast to proactiveness, which relates to market opportunities, competitive aggressiveness (Lumpkin & Dess 1996: 147) refers to how enterprises “relate to competitors” and “respond to trends and demand that already exist in the marketplace”.

Risk-taking propensity
Methods or styles of management associated with risk-taking are an indication of an entrepreneurial orientation; however, in terms of different contexts, the effects of the dimensions of entrepreneurial orientation, including risk-taking propensity, were expected to differ in terms of their effect on performance according to the specific context (Lumpkin & Dess 1996). According to Lumpkin and Dess (1996), risk-taking
propensity is a behavioural dimension of an entrepreneurial orientation along which opportunity is pursued.

Having discussed the different dimensions of EO, it is necessary to reflect on the notion of entrepreneurial performance and, indeed, how EO is taken as an indicator of entrepreneurial performance.

**Entrepreneurial performance**

The concept of entrepreneurial performance was developed from the conception of Lumpkin and Dess (1996) as having more dimensions than just the financial. Lumpkin and Dess also developed the five dimensions of an entrepreneurial orientation (EO), which, they argue, contribute to performance differently according to context. EP is used in this study in order to achieve congruence with the derived intent offered by Lumpkin and Dess. Entrepreneurial performance is defined in this work as a construct comprising earnings and satisfaction taken from the broader framework of a conceptualisation of entrepreneurial performance as offered by Lumpkin and Dess. The informal context is now briefly discussed.

**An overview of South Africa’s informal sector**

According to Levesque and Minniti (2006: 178), research on new firm creation shows that “entrepreneurial behaviour is, to a large extent, an embedded phenomenon and that most of its triggering factors and their relative importance depend on contextual circumstances and may vary very significantly in intensity across locations”. This would imply that context is fundamentally important in terms of entrepreneurship research.

South Africa has experienced “significant political, social and economic change” over the past 20 years (Peberdy & Rogerson 2003: 79), a theme echoed by Nasser, Du Preez and Herrmann (2003) and Padayachee (2005). One causal factor was the lifting, from 1986 onwards, of restrictions or state-based constraints on urban residence, entrepreneurship and migration (Morris & Pitt 1995). Migrants from other areas of the country and the former homelands were joined by an influx of immigrants (Peberdy & Rogerson 2003), many of whom turned to the informal sector for a livelihood. In this context, the informal sector is defined as generally unregulated and unregistered activities falling outside the formally regulated sector of the economy.

The informal sector forms a vibrant and important part of the South African economy. It is said to contribute to 25 per cent of total employment, and 5–6 per cent
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of total GDP (Gauteng Provincial Government n.d.; Ligthelm 2006). Embracing an emerging ‘enterprise culture’ in the informal sector is therefore considered a potential solution to some of South Africa’s economic problems (Nasser et al. 2003; Williams 2007). Zulu (1991: 116) suggests that engagement in the informal economy “has not only promoted a lively and highly successful alternative trade”, but has greatly enhanced the marketing and entrepreneurial capacity of a multitude of informal practitioners.

The informal sector in Johannesburg is at once dynamic and vibrant, reflecting the general tenor of the city. Johannesburg is the economic powerhouse of the African continent and has romantically been referred to as Africa’s New York. While Johannesburg has been criticised for being slow in inculcating and supporting ‘pro poor’ enterprise culture (Rogerson 2004), there have nonetheless been several studies that have contributed to an understanding of Johannesburg’s informal sector as entrepreneurial (see Peberdy 2000; Peberdy & Rogerson 2003).

While size estimations of the informal sector are particularly difficult to make given churn between the informal and formal sectors, as well as ever-shifting levels of unemployment, it is conservatively estimated that there are between 5 000 and 8 000 traders in and around Johannesburg (O’Reilly 2004; Van Rooyen & Antonites 2007). Moreover, given Johannesburg’s exalted status as the African continent’s economic powerhouse, it is a natural destination for asylum seekers, migrants and refugees entering the country from the rest of the continent (Landau 2004). Many of these turn to the informal sector to make a living, making it a culturally diverse environment (Rogerson 2004; Van Rooyen & Antonites 2007).

Having given context to the study, the attention will now turn to the research methods used.

Research methods

A quantitative study was undertaken of some 308 informal street traders in the Johannesburg city centre. The population of street traders was identified as those operating on the street-sides of a central Johannesburg range of approximately 224 city blocks. This allowed for the estimation of the population size by developing a grid of street blocks and assigning each block a number. Random number tables were used to select 23 blocks, and street traders operating on the street-sides of these blocks were accordingly counted. There were a total of 532 street traders operating on these identified city blocks, on the basis of which an estimation of the total number of city street traders within the demarcated city centre was made. It was estimated that there were some 5 181 street traders. From this population, a sample of 308 respondents
was drawn for the study, using convenience sampling. The sample of 308 respondents in this study was an estimated 5.9 per cent of this delimited population.

A sample size calculation was performed in order to establish whether the sample size would suffice. This was calculated according to the minimum difference that was needed to establish associations between variables. According to the sample size calculation, a sample size of about 99 respondents was needed to pick up a R20 difference in daily earnings at the 10 per cent significance level. This was considered a minimum threshold of earnings needed in terms of a minimum necessary level of tested effect. The sample size of 308 respondents was then taken to be adequate.

A structured questionnaire was administered to the respondents in the study. The various dimensions of EO were measured using a five-point Likert scale. Scales were adapted to take account of specific contextual issues, most notably language barriers. The Cronbach’s alphas for the dimensions of entrepreneurial orientation were as follows: continuance satisfaction (0.742049), innovativeness (0.757845), competitive aggressiveness (0.70647), autonomy (0.966018), risk-taking propensity (0.61648) and proactiveness (0.715051).

Contextual factors, as independent variables, were tested as potential predictors of the entrepreneurial orientation dimensions, and entrepreneurial orientation dimensions were tested as predictors of the two components of entrepreneurial performance, namely earnings (gross earnings) and continuance satisfaction, using multiple linear regression analysis. Contextual factors include the following: gender, age, years in Johannesburg, hours worked per day, days worked per week, initial investment, total education, tertiary education, experience, Johannesburg origin and country origin. Total education, tertiary education and the entrepreneurial training course variable were included as learning-related factors. The latter variable was a measure of the effect of an entrepreneurial training course run over a half-year period specifically tailored to the needs of street traders. The programme, called ‘Grow your Business’, was run by the City of Johannesburg and the University of the Witwatersrand, and offered at no cost to street traders in Johannesburg. This variable was included in order to ascertain the effect of specific human capital (Becker 1975; Davidsson & Hoenig 2003) and its potential effect on EO. Entrepreneurial performance was tested by testing its components (earnings and continuance satisfaction) as dependent variables against the dimensions of entrepreneurial orientation: innovativeness, proactiveness, competitive aggressiveness, autonomy and risk-taking propensity.
Results and discussion

The street-trading sample is associated with various dimensions. The gender composition of the sector reveals an imbalance between male and female street traders, with female traders making up 33.44 per cent of the trading population, and males 66.56 per cent. The average age of the respondents is 31.42 (Table 1). The descriptive statistics of the sample are illustrated in Table 1. These statistics include the mean, the standard deviation, the lower quartile and the upper quartile.

Table 1: Descriptive statistics for the sample of tested respondents

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Lower quartile</th>
<th>Upper quartile</th>
</tr>
</thead>
<tbody>
<tr>
<td>'Grow your Business' training programme</td>
<td>0.175325</td>
<td>0.380863</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other training courses</td>
<td>0.074675</td>
<td>0.366702</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rental stand</td>
<td>0.496753</td>
<td>0.500803</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Gender</td>
<td>0.665584</td>
<td>0.472554</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Age</td>
<td>31.42208</td>
<td>9.291713</td>
<td>25</td>
<td>36</td>
</tr>
<tr>
<td>Years in Johannesburg</td>
<td>9.272727</td>
<td>9.855485</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>Johannesburg origin</td>
<td>0.142857</td>
<td>0.350497</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>South African origin</td>
<td>0.399351</td>
<td>0.490562</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Hours worked per day</td>
<td>10.46916</td>
<td>2.01457</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>Days worked per week</td>
<td>6.358766</td>
<td>0.960297</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Initial investment</td>
<td>7.899351</td>
<td>6.350224</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Years of total education</td>
<td>9.946429</td>
<td>2.950938</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Tertiary education</td>
<td>0.103896</td>
<td>0.345635</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Experience</td>
<td>5.899351</td>
<td>5.744245</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Earnings</td>
<td>26.21104</td>
<td>16.49077</td>
<td>11</td>
<td>44</td>
</tr>
<tr>
<td>Continuance satisfaction</td>
<td>8.967533</td>
<td>3.409928</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Innovativeness</td>
<td>3.00974</td>
<td>3.621763</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Proactiveness</td>
<td>10.6526</td>
<td>2.487642</td>
<td>10</td>
<td>12</td>
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<tr>
<td>Competitive aggressiveness</td>
<td>6.181818</td>
<td>3.867436</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Autonomy</td>
<td>10.51948</td>
<td>3.501923</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Risk–taking propensity</td>
<td>4.558442</td>
<td>3.580652</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Order of capture</td>
<td>154.5</td>
<td>89.05616</td>
<td>77.5</td>
<td>231.5</td>
</tr>
</tbody>
</table>
Fifty-four of the surveyed respondents had accessed a specific street-trader training programme, or about 18 per cent of the sampled respondents in the Johannesburg city centre. This variable is included in the learning factors tested for their contribution to the potential shaping of EO. About half these respondents operated rental stands. Just over 60 per cent of the street-trading population sampled were of foreign origin, and over 86 per cent of the respondents surveyed were found not to originate from Johannesburg. The research questions and associated hypotheses are considered as follows.

This study sought to address certain research questions from which hypotheses were derived. The testing of these hypotheses allowed for certain significant relationships to be identified and interpreted. Three hypotheses were tested in this research, based on the following two research questions:

• What factors contribute to the shaping of an entrepreneurial orientation in the Johannesburg informal sector context?

• What contribution do entrepreneurial orientation dimensions make to entrepreneurial performance?

Based on these questions, three hypotheses were derived (see Table 2).

**Table 2: Null and alternative hypotheses**

<table>
<thead>
<tr>
<th>Null hypothesis 1: There is no significant association between Total Entrepreneurial Orientation, Entrepreneurial Orientation dimensions, and informal sector contextual factors.</th>
<th>Alternative hypothesis 1: There is a significant association between Total Entrepreneurial Orientation, Entrepreneurial Orientation dimensions, and informal sector contextual factors.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null hypothesis 2: There is no significant association between Total Entrepreneurial Orientation, or Entrepreneurial Orientation dimensions, and Gross Earnings.</td>
<td>Alternative hypothesis 2: There is a significant association between Total Entrepreneurial Orientation or Entrepreneurial Orientation dimensions, and Gross Earnings.</td>
</tr>
<tr>
<td>Null hypothesis 3: There is no significant association between Total Entrepreneurial Orientation or Entrepreneurial Orientation dimensions, and Continuance Satisfaction.</td>
<td>Alternative hypothesis 3: There is a significant association between Total Entrepreneurial Orientation or Entrepreneurial Orientation dimensions, and Continuance Satisfaction.</td>
</tr>
</tbody>
</table>

Hypotheses were tested using multiple regression analysis given the relatively broad range of associations tested. Table 3 illustrates the salient findings.
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Table 3: Significant predictors of entrepreneurial orientation and entrepreneurial performance

<table>
<thead>
<tr>
<th>All tested variables</th>
<th>Innov</th>
<th>Auton</th>
<th>Proact</th>
<th>CA</th>
<th>RTP</th>
<th>Earnings</th>
<th>Satisfaction</th>
<th>Tot EO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial training</td>
<td>0.0322</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.0153</td>
</tr>
<tr>
<td>Other training</td>
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<td></td>
</tr>
<tr>
<td>Rental stand</td>
<td>0.0026</td>
<td>-0.0322</td>
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<td></td>
<td></td>
<td></td>
<td>0.0781</td>
<td>-0.0064</td>
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<tr>
<td>Gender (male)</td>
<td>0.0125</td>
<td></td>
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<tr>
<td>Age</td>
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<tr>
<td>South African origin</td>
<td>0.0433</td>
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<td>Days worked per week</td>
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<td></td>
<td></td>
<td>0.0006</td>
<td>0.065</td>
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<td>Initial investment</td>
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<tr>
<td>Experience</td>
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<td>0.0313</td>
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<tr>
<td>Earnings</td>
<td>-0.0054</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.0015</td>
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<tr>
<td>Satisfaction</td>
<td>0.0005</td>
<td>0.0001</td>
<td>0.0208</td>
<td></td>
<td></td>
<td>0.0019</td>
<td>0.0045</td>
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<td>Innovativeness (Innov)</td>
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<td>Competitive aggressiveness (CA)</td>
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<td></td>
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<tr>
<td>Autonomy (Auton)</td>
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<tr>
<td>Risk-taking propensity (RTP)</td>
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<tr>
<td>Order of capture</td>
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<td>0.0229</td>
<td>0.0117</td>
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<td></td>
<td>0.0006</td>
</tr>
</tbody>
</table>

The results are now discussed according to the associated hypothesis.

**Hypothesis 1:** There is a significant association between Entrepreneurial Orientation and informal sector contextual factors

In order to establish hypothesis 1, several sub-hypotheses were tested. These are summarised in Table 4.

The testing of these hypotheses allowed for the following interpretation of the results. The specific local entrepreneurial training course (p<0.0322), years in
Johannesburg (p<0.0746), South African origin (p<0.0433) and initial investment (p<0.0201) were found to potentially positively shape innovativeness. Johannesburg

<table>
<thead>
<tr>
<th>Sub-hypothesis</th>
<th>Summary</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-hypothesis 1</td>
<td>There is a significant association between innovativeness and informal sector contextual factors</td>
<td>Confirmed</td>
</tr>
<tr>
<td>Sub-hypothesis 2</td>
<td>There is a significant association between autonomy and informal sector contextual factors</td>
<td>Confirmed</td>
</tr>
<tr>
<td>Sub-hypothesis 3</td>
<td>There is a significant association between proactiveness and informal sector contextual factors</td>
<td>Confirmed</td>
</tr>
<tr>
<td>Sub-hypothesis 4</td>
<td>There is a significant association between competitive aggressiveness and informal sector contextual factors</td>
<td>Confirmed</td>
</tr>
<tr>
<td>Sub-hypothesis 5</td>
<td>There is a significant association between risk-taking propensity and informal sector contextual factors</td>
<td>Confirmed</td>
</tr>
<tr>
<td>Sub-hypothesis 6</td>
<td>There is a significant association between total Entrepreneurial Orientation and informal sector contextual factors</td>
<td>Confirmed</td>
</tr>
</tbody>
</table>

origin (p<0.0287), experience (p<0.01), earnings (p<0.0054) and continuance satisfaction (p<0.0728) were found to potentially shape innovativeness negatively. The research findings did not support the conception that higher levels of human capital (in terms of total schooling in this instance) may be associated with higher levels of innovation (Aldrich 1990). This was surprising and unexpected. To some extent, however, the association between total schooling and innovativeness might represent general human capital (Becker 1975). The association between specific human capital, tested as the effect of a specific entrepreneurial course attended by Johannesburg inner city traders, was found to be significant as a predictor of innovativeness. This indicates that specific human capital potentially shapes innovativeness in this context. A greater number of years in Johannesburg potentially shapes innovativeness through a cultural effect (Hagan 1962), as the longer a trader has spent in the Johannesburg context, the more innovative they might become, with traders of South African origin being more innovative than traders of foreign origin. The association between innovativeness and national origin supports the theory offered by Basu and Altinay (2002), Portes (1998), Reynolds (1991) and Zhou (2004) that host country entrepreneurs and entrepreneurs of foreign origin may differ in terms of entrepreneurial behaviour. Unexpectedly, although traders of South African origin were found to be more innovative, traders from parts of the country other than Johannesburg itself were found to be more innovative. This might indicate that the more innovative individuals tend to migrate into the city.
The significance of the positive association between innovativeness and foreign origin is taken to be a significant finding for street traders, since just over 60 per cent of all the street traders surveyed were found to be of foreign origin. Only 40 per cent of traders were found to be of local origin. The foreign component might possibly have been higher, in that certain foreign respondents might have claimed to be South African in order to remain obscure (Macmillan & Katz 1992). In terms of the relevance of Johannesburg origin in the informal sector context, only about 14 per cent of traders were found to be of Johannesburg origin.

Initial investment might potentially positively shape innovativeness by providing more options and opportunities for innovative behaviour. The finding that experience potentially shapes innovativeness negatively might indicate that some learning effect may be present in this context. This learning effect reflects that some adaptation to the differential effect of context on entrepreneurial performance (Lumpkin & Dess 1996) might have occurred. The contention of Stevenson and Jarillo (1990) that entrepreneurship behaviour (the ‘how’ of entrepreneurship) can be learned is considered to be supported to the extent that experience was found to potentially shape innovativeness, and to the extent that this relationship could be explained as a learned association.

Continuance satisfaction appears to shape innovativeness negatively in that the more dissatisfied traders are more inclined to be more innovative. The results associated with the testing of autonomy indicated that autonomy was found to be positively shaped by continuance satisfaction (p<0.0005), thus suggesting that more satisfied traders are more autonomous. To the extent that autonomy is associated with the satisfaction of needs (Maslow 1987; Khanka 2009), satisfaction may enable autonomy in this context. Conversely, dissatisfied traders are less inclined to be autonomous, and prefer to be less entrepreneurial. The conceptions offered by theorists – such as Gagne and Deci (2005) together with Bussing, Bissels, Fuchs and Perrar (1999) – that predict an association between autonomy and continuance satisfaction were supported, to the extent that continuance satisfaction was found to be a predictor of autonomy. Unexpectedly, however, autonomy was not found to be a predictor of continuance satisfaction. Autonomy was also found to be positively associated with order of capture (p<0.0001). The order of capture variable was introduced in order to pick up variance introduced according to the order of the sampling of respondents in the survey process. This variable might also have picked up variance introduced by the differences in city blocks sampled before or after others in the overall sequence of the roll out of the process. This finding might indicate that individuals sampled later in the process reflected an underlying difference in the structure of trade associated with the city blocks sampled later.
The results relating to the testing of proactiveness found that it was shaped positively by: access to a rental stand (p<0.0026), being male (p<0.0125) and continuance satisfaction (p<0.0001). Proactiveness was measured as growth willingness, and the failure to identify any association between proactiveness and education in this context was not found to support the theory of Davidsson (1989) that increased levels of education would be associated with proactiveness.

The differential association of proactiveness with gender was found to support research by Burke, FitzRoy and Nolan (2002), De Clerq and Ruis (2007), Gatewood, Shaver and Gartner (1995) and Mueller (2008: 4) that identified differences in entrepreneurial behaviour according to differences between the genders. However, no difference between the genders was found with regard to entrepreneurial performance: no unequal effects were found for street traders along the dimensions of earnings or continuance satisfaction.

The results suggested that competitive aggressiveness was found to potentially be positively shaped by experience (p<0.0313) and continuance satisfaction (p<0.0208), and negatively shaped by the number of years a trader had been living in Johannesburg (p<0.0160). The association between competitive aggressiveness and experience might reflect an adaptive process whereby traders become more competitively aggressive due to exposure to the street-trading context and its multiple influences over time. However, years spent in Johannesburg were found to be negatively associated with competitive aggressiveness. The time that a trader has been exposed to the context of the city of Johannesburg might be time in which they have been exposed to the influence of the city in terms of its effect on shaping competitive aggressiveness. It is possible that the context of the city itself and of the street-trading experience might have different effects. In this case, the negative association between years spent living in Johannesburg and competitive aggressiveness was more significant than the positive effect of years spent involved in street trading. The more satisfied traders were found to be more competitively aggressive. This might indicate that satisfaction could contribute to enabling entrepreneurial behaviour to the extent that this finding might be construed as reflecting a net effect captured between competitive aggressiveness and satisfaction. Perhaps further research might indicate whether satisfaction might moderate or mediate the effects of entrepreneurial orientation on earnings. Order of capture (p<0.0229) was found to be positively associated with competitive aggressiveness. This might indicate that later-sampled traders were associated with higher levels of competitive aggressiveness. This might reflect an underlying difference in the structure of city blocks with respect to differences in competitive aggressiveness between areas of the city.
Covin and Covin (1990) argue that a passive competitive orientation might place lower levels of constraint upon resources than an aggressive competitive orientation in certain contexts. It was concluded that if this was the case in the informal sector street-trading context, and if the associations with experience were evidence of the results of adaptive learning, then the positive association between competitive aggressiveness and experience might have represented evidence of a learning effect. The shaping of an entrepreneurial orientation by experience might therefore represent a learned effect. Street traders might ‘learn’ in an adaptive manner to be more competitively aggressive, in that intrinsic or other rewards might have a stronger impact on incentivising learning than the possible consequences of having higher constraints on resources represented by a higher level of competitive aggressiveness, according to the conception of Covin and Covin (1990). However, it is also possible that in this context, a competitive aggressive orientation does not in fact place a higher constraint upon resources than a passive competitive orientation.

If the positive association between competitive aggressiveness and experience is evidence of a learned effect, this would support the conception that entrepreneurship can be learned, along a ‘how’ dimension (the conception of Stevenson and Jarillo [1990]), supporting one of the arguments of this work, namely that earnings-related upliftment is possible through learning-related factors in this context.

It is possible that the ethos of competitiveness associated with high levels of competitive aggressiveness might conflict with the values of certain street traders. To the extent that more recent arrivals in Johannesburg were found to be more competitively aggressive, this finding might support the conception that entrepreneurship behaviour differs between groups due to cultural or other factors (Hagan 1962; Shapero & Sokol 1982).

Results pertaining to risk-taking propensity found that operating a rental stand was a negative and significant predictor of risk-taking propensity (p<0.0322). Order of capture was found to be positively associated with risk-taking propensity (p<0.0117).

Entrepreneurs might have a different perception of risk than distanced others that take a rational perspective on scenarios (Baron 1999; Shapero 1975), but in the street-trading context, this conception was not found to be supported, in that individuals in this sector might not typically represent entrepreneurs that have necessarily chosen an entrepreneurial path.

The association between risk-taking propensity and order of capture might indicate that, as in the case of autonomy and competitive aggressiveness, later-sampled traders might be more risk taking. The proximity to large taxi ranks might have characterised certain of these city blocks within the demarcated area to a lesser or greater extent. It is expected that the proximity to large taxi ranks would have
some effect, in that certain differences might have surfaced based upon this factor. It is suggested that further research explore the possible differences between street-trader dimensions according to their relative proximity to taxi ranks. There were no other significant associations between risk-taking propensity other than between order of capture and the rental stand variable.

The negative relationship found between age and entrepreneurship by theorists such as Levesque and Minniti (2006) was not supported, to the extent that age was not found to be negatively associated with risk-taking propensity or any other dimension of entrepreneurial orientation.

While Jantunen et al. (2005) suggested that entrepreneurial orientation should not be tested as an aggregated construct, the overall aggregated construct was nonetheless tested to gain further insight in terms of net effects. Total education \((p<0.0555)\) and continuance satisfaction \((p<0.0045)\) were found to be positively associated with total entrepreneurial orientation. The association between total years of education and net total entrepreneurial orientation might represent the effect of human capital (Becker 1975) in terms of its potential to enable entrepreneurial behaviour. Rental stand \((p<0.0064)\) as a variable was found to be negatively and significantly associated with total entrepreneurial orientation, which might indicate that more entrepreneurial individuals may prefer the space advantages of pavement sales, or perhaps some dimension of freedom of movement.

**Hypothesis 2: There is a significant association between Total Entrepreneurial Orientation, or Entrepreneurial Orientation Dimensions, and Gross Earnings.**

EO dimensions were found not to influence earnings in this context. This might indicate that if a certain 'critical mass' of contextual enablement were needed before entrepreneurial orientation dimensions could contribute to earnings along some dimension, then this particular context might represent a situation in which these dimensions may not represent behaviour resulting in an advantage for the street trader.

Continuance satisfaction \((p<0.0019)\) was found to be positively and significantly associated with earnings for the entire tested sample of respondents. This finding suggests that the more satisfied street traders are to continue with street trading, the more earnings they make. The results relating to continuance satisfaction are considered in the next section.
Hypothesis 3: There is a significant association between Total Entrepreneurial Orientation, Entrepreneurial Orientation dimensions or informal sector contextual factors and Continuance Satisfaction.

The study discovered that higher levels of proactiveness (p<0.0001) and competitive aggressiveness (p<0.0843) were positively associated with continuance satisfaction. Innovativeness (0.0777), however, was found to be negatively associated with continuance satisfaction.

The fact that proactiveness and competitive aggressiveness were both found to be positively associated with continuance satisfaction might indicate a return on these dimensions in the informal context, albeit an intrinsic return. Proactive behaviour might be related to satisfaction in that there may be payoffs in the sector for proactive behaviour beyond monetary rewards. The street-trading context might therefore offer a situational payoff for proactive and competitively aggressive behaviour. These dimensions both refer to market-increasing behaviour (Lumpkin & Dess 1996). That is, proactiveness is associated with creating new demand and competitive aggressiveness with competing for existing demand. It is possible that individuals seeking growth in this context (by either of these two means) are more resistant to dissatisfaction and perhaps more resistant to the effect of frustration that might exist, as proactive and competitively aggressive behaviour is not rewarded extrinsically (in other words, not through direct association with earnings). Proactive and competitively aggressive street traders might experience the sector as satisfying, despite not earning more from proactive or competitively aggressive behaviour.

However, innovative traders were found to be more dissatisfied. This might indicate that innovative traders might face a degree of frustration in that the context did not reward innovativeness directly in terms of higher earnings. This might indicate that the intrinsic rewards of innovative behaviour are either generally non-existent in this sector, or that the net effect of frustration associated with a lack of an extrinsic reward might be larger than the contribution of any intrinsic satisfaction. This might also indicate increased sensitivity on the part of innovative individuals to the financial or extrinsic component of the potential rewards for informal sector participation.

Lumpkin and Dess (1996: 163) contend that “the idea that the dimensions of EO may vary independently is consistent with the work of prior entrepreneurship scholars, who have proposed different typologies to characterise entrepreneurship”. They suggest that future research might demonstrate that “risk taking and autonomy are needed for all types of new entry, but that innovativeness, proactiveness, and competitive aggressiveness are present only under certain conditions”. However, contrary to this expected relationship, proactiveness, competitive aggressiveness and
innovativeness were the only dimensions found to be associated with entrepreneurial performance, and only along the specific dimension of satisfaction: the former two positively and the latter negatively. The informal sector might represent a fruitful context in which theoretically predicted relationships between entrepreneurial orientation and other individual, enterprise and contextual factors could be further explored. A possible dimension of dysfunctional entrepreneurial behaviour might exist in this sector, in that research in most entrepreneurial contexts may represent research into enterprises that have survived beyond a certain level of income. Such enterprises might be considered to have been successfully shaped by an entrepreneurial context, whereas the street-trading entrepreneurial context might offer further opportunities for entrepreneurship scholars to investigate the effects of entrepreneurial orientation in a context that might truly represent ‘new’ venture creation – an entrepreneurial genesis of sorts.

Total entrepreneurial orientation was found to be positively associated with continuance satisfaction (p<0.0006). This might indicate that more entrepreneurial individuals might be more satisfied with the street-trading context and that a certain degree of intrinsic satisfaction is associated with entrepreneurial individuals, even in a context in which entrepreneurial behaviour might not necessarily be extrinsically rewarded. This suggests that entrepreneurial individuals might be associated with a different motivational orientation than less entrepreneurial individuals trading within the informal Johannesburg street-trading context.

The optimum specific entrepreneurial typology for a street trader according to continuance satisfaction was therefore found to be an individual that was less innovative, yet more proactive and competitively aggressive.

Conclusion

This study has demonstrated that the context of entrepreneurship has a significant effect on entrepreneurial orientation in the informal street-trading context. Levesque and Minniti’s (2006: 178) argument, and related conceptions offered by other reviewed theorists who argue that context has a significant effect on entrepreneurial behaviour, were found to be supported. The contention of Lumpkin and Dess (1996) that entrepreneurial orientation dimensions can vary independently of one another within a specific context was also found to be supported.

At the same time, factors associated with learning, such as the effect of a learning programme tailored to street traders, and total years of education, were found to be significantly associated with innovativeness and total entrepreneurial orientation, respectively. This supports a core argument of this study that learning-related factors
and human capital do have an effect in shaping entrepreneurial orientation in the informal street-trading context. Furthermore, the potential for upliftment, according to the predictions of Becker (1975), might also exist in this sector, along this dimension. This indicates that, according to the conception of a more comprehensive notion of entrepreneurial performance (including satisfaction, an intrinsically oriented measure of performance as well as an extrinsic measure), innovativeness contributes to the dissatisfaction of street traders in this context. It is concluded that the results of the contribution of EO dimensions to entrepreneurial performance are mixed in this particular context, their influence being along the intrinsic dimension of entrepreneurial performance measured by satisfaction, rather than the extrinsic dimension of entrepreneurial performance measured by earnings.

The implications of this research are multiple. This study found, in the first instance, that EO was not necessarily homogeneous in this tested context. The research findings support the conclusion that an increase in EO is possible through individual behaviour associated with learning. A derived policy implication is that practitioners in local or national government, and others that have an interest in the upliftment of those involved in street trading, might be able to increase the EO of street traders by increased provision of training courses and educational opportunities.

Moreover, this research contributed to the development of theory regarding entrepreneurship, by focusing more on continued entrepreneurship and on degrees of entrepreneurship (Davidsson 1991). In keeping with this, the research focused on continuance satisfaction and determined degrees of entrepreneurship according to the entrepreneurial orientation measure contributed by Lumpkin and Dess (1996). The identification and measurement of entrepreneurial orientation and its associated relationships provided evidence that certain informal street traders display an entrepreneurial orientation.

In a context where street traders have been in the sector for an average of 5.9 years, it was found that the nature of the sector did not necessarily represent a sector into which all individuals are permanently absorbed. This suggests that higher levels of entrepreneurial orientation or increased earnings might perhaps enable traders to ‘grow up and out’ of street trading, giving support to De Soto’s (1989) notion that the informal sector acts as a training ground for potential entrepreneurs.

In as much as this sector might have positive potentialities, unequal gender effects were found with regard to the shaping of proactiveness in this context. This might indicate that gender differences may still exist in this context.

Finally, to the extent that street trading operates at the margins of economic activity, this work is intended to contribute to the development and upliftment of informal traders in terms of applicable insights relating to entrepreneurship. Further
research might extend this investigation into the more fine-grained differences in the effects of EO in contexts within the broader South African or southern African entrepreneurial environment.

References


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Entrepreneurial orientation, context and entrepreneurial performance of street traders


