Global University Entrepreneurial Spirit Students' Survey: South African Report 2011

Entrepreneurial Intentions and Behaviour of South African University Students

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EXECUTIVE SUMMARY

The primary objective of the 2011 Global University Entrepreneurial Spirit Students' Survey (GUESSS) was to investigate the intentions and behaviour of students worldwide in their decision to start entrepreneurial ventures. This national report was compiled as part of the international 2011 GUESS Survey that compared entrepreneurial intentions and behaviour of South African students with that of their international counterparts.

The GUESS Survey was initiated in 2003 by the Swiss Research Institute of Small Business and Entrepreneurship at the University of St. Gallen in conjunction with the European Business School in Germany. The survey has since expanded to cover 19 countries, with South Africa joining the survey in 2008. In 2011, a total of 93 265 students from 26 countries participated in the survey. The participating countries were Argentina, Austria, Belgium, Brazil, Chile, China, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Japan, Liechtenstein, Luxembourg, Mexico, the Netherlands, Pakistan, Portugal, Romania, Russia, Singapore, South Africa, Switzerland and the United Kingdom.

The South African survey was coordinated by Dr S Viviers, Mr G Solomon and Ms C Venter of the Department of Business Management at Stellenbosch University. A total of 697 students at 15 higher education institutions throughout South Africa participated.

Since the same questions, scales, methods and constructs were used across countries and universities, a valid comparison of tendencies and trends could be made. A few new questions, including two country-specific questions, were added to the 2011 questionnaire.

The findings of this survey indicate that South African students exhibit a keen interest in entrepreneurship as a career choice. However, the adverse consequences of the global financial crisis on small business survival rates and profitability contributed to students being more critical of employment options, including that of setting up their own businesses. Fewer South African students, compared to the 2008/9 GUESS Survey intended to establish a new venture either directly after graduation or five years after graduation. These intentions were substantially higher among South African students than students in the international sample. This finding may be attributed in part by the composition of the South African sample, where more than half of the respondents were enrolled for qualifications in the fields of Business and Economics. As in the 2008/9 survey, access to capital was perceived as a major stumbling block in establishing a business.

Several students in the South African sample had been exposed to the dynamics of a family business. However, only a small portion of these students were enthusiastic about taking over the family business, claiming that it would limit their career choices.

A fairly large percentage of students in the South African sample were interested in establishing a business with a social and/or environmental mission. Students suggested a number of innovative business ideas to address the socio-economic and environmental challenges facing the country. In contrast to students in the international sample, South African students placed more emphasis on social missions, such as creating jobs and offering educational programmes, than on protecting the natural environment.

Compared to the 2008/9 survey, South African students have become more aware of entrepreneurship courses and service offerings at their universities and made more use of these offerings. Despite many students contemplating the establishment of their own businesses, very few actually took concrete actions in turning their intentions into reality. Higher education institutions can assist intentional business founders by creating greater awareness of entrepreneurship courses and service offerings, and by providing more practical exposure and support.

For the first time in the existence of the GUESS Survey, an entrepreneurship index was calculated for all the countries that participated in the research. This index compares the extent to which students have thought of founding a business to the actions they have taken to turn their intentions into actions. Given a large gap between South African students' intentions and actions, the South African entrepreneurship index value was slightly lower than the international benchmark.

The findings of this report call for a more comprehensive and integrated strategy among higher education institutions, government and industry to further stimulate entrepreneurship in South Africa. It is recommended that higher education institutions adopt a 'sensitise, act, support' approach, continually review and realign the content of their entrepreneurship offerings, prepare students to gain access to the labour market, and increase awareness of entrepreneurship with a social and/or environmental focus.

The full report of the 2011 GUESS Survey is available on: http://www.guesssurvey.org.

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- Stellenbosch University
- Stellenbosch University Business School
- Community and Individual Development Association (CIDA) City Campus
- University of the Free State
- University of the Western Cape
- University of Venda

Without their support this survey would not have been possible.

We would also like to thank our main sponsor, Pearson Education Southern Africa as well as our secondary sponsors, the Braxton Group and the Department of Business Management at Stellenbosch University for financial support.

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The Department of Business Management is one of eight departments in the Faculty of Economic and Management Sciences at Stellenbosch University. Five focus areas exist within the Department, namely Investment Management, Financial Management, Financial Planning, Marketing Management and Entrepreneurship and Innovation Management. For more details on the Department visit: http://academic.sun.ac.za/business/eng/index.html

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1. INTRODUCTION

In this section a brief background to entrepreneurship and entrepreneurship education in South Africa is sketched, followed by the research objectives of the 2011 GUESS Survey.

1.1 ENTREPRENEURSHIP AND ENTREPREURSHIP EDUCATION IN SOUTH AFRICA

Entrepreneurship, a process driven by innovation that results in the production of new goods and/or services, has the potential to open new markets and create new industries. The promotion of entrepreneurship is thus critical in stimulating economic growth, job creation and innovation (Van Aardt, Van Aardt, Bezuidenhout & Mumba, 2008: 4). Despite the South African government's efforts to increase support to entrepreneurs, a recent survey has shown that the government's initiatives have not had the intended impact (FinScope South Africa Small Business Survey 2010, 2010: 1).

To understand the small, medium and micro enterprise (SMME) sector in South Africa, the specific challenges entrepreneurs face, and the capacity they have to deal with these challenges, a comprehensive survey of the sector was conducted by the Finmark Trusts in 2010. This report revealed that:

- one in six individuals, aged 16 and older, generated an income through small business activity in South Africa;
- two in three business owners operated their own businesses and did not have any employees;
- the majority of entrepreneurs did not complete their secondary education;
- the challenges faced by small business owners mainly centered around financial and strategy-related matters as well as infrastructure and equipment;
- females were more likely to own a business, but were less likely to access finance than their male counterparts;
- although small business owners faced a number of risks, the majority of them were not insured, opting to use their savings and to sell some of their assets in the event of a loss;
- small business owners claimed not to borrow for business purposes, citing reasons such as a lack of belief in borrowing and regarding borrowing as too risky; and
- small business owners were generally not aware of support organisations they could approach for finance and advice.

These findings confirm research by the Global Economic Monitor (GEM) which indicates that South Africa has one of the lowest entrepreneurial activity rates among developing countries (Von Broembsen, Wood & Herrington, 2005). In 2008, only five to eight out of every 100 adult South Africans owned a business or were in the process of starting a business (Herrington, Kew & Kew, 2009: 5).

Apart from the fact that very few South Africans consider starting and/or managing a small business, the quality of entrepreneurship in the country is also poor (Herrington, *et al*., 2009; Von Broembsen, *et al*., 2005). According to the entrepreneurship literature, new ventures that are started with an *opportunity focus* tend to create more jobs, enjoy more differentiation and therefore experience less competition (Venter, Urban & Rwigema, 2008: 9). On the other hand, businesses that are started out of *necessity* tend to create very few jobs, operate in markets of intense competition and are vulnerable to adverse economic conditions.

Based on the 2010 FinScope report and GEM reports over the past number of years, too few opportunity-focussed businesses exist in South Africa. This is attributed to, among other reasons, low levels of education (especially in mathematics and science), social and cultural factors that inhibit entrepreneurship as a chosen career path, lack of access to finance, and a restrictive regulatory environment (Herrington, *et al*., 2009: 15).

Both internationally and locally the GEM reports provide evidence that owner-managers who have a tertiary education are more likely to start opportunity-based enterprises compared to owner-managers with a secondary or lower level of education. High quality entrepreneurship education at higher education institutions is thus urgently needed to increase the level and quality of entrepreneurship in South Africa (Von Broembsen *et al.,* 2005). Isaacs, Visser, Friedrich and Brijlal (2007: 613) argue that the contribution of the SMME sector to the South African economy and labour market can be even higher if entrepreneurship education is introduced to younger learners. North (2002: 24) claims that the education system in South Africa is addressing this matter to some degree as entrepreneurial skills development is one of the stated outcomes of primary, secondary and tertiary education.

Serious deficiencies, however, exist in the current entrepreneurship offerings at South African higher educational institutions (Ladzani & Van Vuuren, 2002: 154). Nieman (2001: 445), for example, expresses concern for the lack of coherency of what entrepreneurship education is all about, and further claims that confusion exists between entrepreneurship training and small business training. In the 2008/9 GUESS Survey, it was found that South African students highly valued entrepreneurship offerings, especially the provision of contacts for general questions, start-up coaching and start-up financing. Many students were however not aware that these offerings existed at their universities (Scheepers, Solomon & De Vries, 2009: 38).

Mitchell and Co (2004: 589) found that while entrepreneurship education in South Africa is still in its developmental stage, there is a growing interest among higher education institutions to increase their entrepreneurship offerings by means of research and outreach. Educational programs should therefore be structured in such a manner that entrepreneurial intentions are turned into actions once students leave the university.

With regard to career expectations, the 2008/9 survey revealed that most South African students wanted to enter the labour market directly after graduating However, a large percentage of students

(61.3%) envisioned establishing their own businesses within five years after graduating. Most respondents claimed that they first wanted to gain experience and knowledge in their chosen industry and establish support networks before taking on the risks associated with self-employment. Since the publication of the 2008/9 survey, the global economic climate has changed considerably. SMMEs have been particularly hard hit by the global financial crisis, with most of the job losses in the global economy occurring in this sector (The impact of the global crisis on SME and entrepreneurship financing and policy responses, 2009). It will thus be interesting to see whether a similarly large percentage of South African students would again be interested in establishing their own businesses.

More work is needed to promote entrepreneurship in different contexts, for example in the corporate, non-profit and public sectors, in education and technology, and in the marginalised segments of society. Higher education institutions have an important role to play in this regard, because these institutions are strongly associated with the creation of opportunity-based enterprises (Autio, 2005).

1.2 OBJECTIVES OF THE 2011 GUESS SURVEY

The GUESS Survey is an entrepreneurship research platform which aims to investigate students' entrepreneurial intentions and behaviour every three years. The objectives of the 2011 national survey were to:

- investigate students' knowledge of entrepreneurship offerings at higher education institutions in South Africa, their demand for and utilisation of these offerings, and their level of satisfaction with these offerings;
- explore the career choice intentions of students giving particular attention to changes that might have occurred as a result of the global financial crisis;
- examine the entrepreneurial behaviour of South African students;
- determine the role that exposure to a family business has on entrepreneurial intentions and behaviour of South African students;
- understand students' views on establishing a social enterprise in South Africa; and
- calculate South Africa's entrepreneurial index value relative to the international benchmark.

The uniqueness of this survey lies in its ability to compare the entrepreneurial intentions and behaviour of tertiary students from different countries, thereby enabling the researchers to identify and share best practices with regard to entrepreneurial education. Furthermore, the results from South Africa can be benchmarked with other countries worldwide. The findings of this survey may contribute to improved policy measures and curriculum changes necessary to further stimulate entrepreneurship in South Africa.

2. RESEARCH DESIGN AND METHODOLOGY

2.1 INTRODUCTION

This section presents the research design and methodology of the survey, more specifically the questionnaire design, sample selection, data collection and analysis as well as the sample description. To better understand the context of the research design and methodology, the phenomena of 'entrepreneurial intent' and 'planned behaviour' are also discussed, and the theoretical model used in the research, explained.

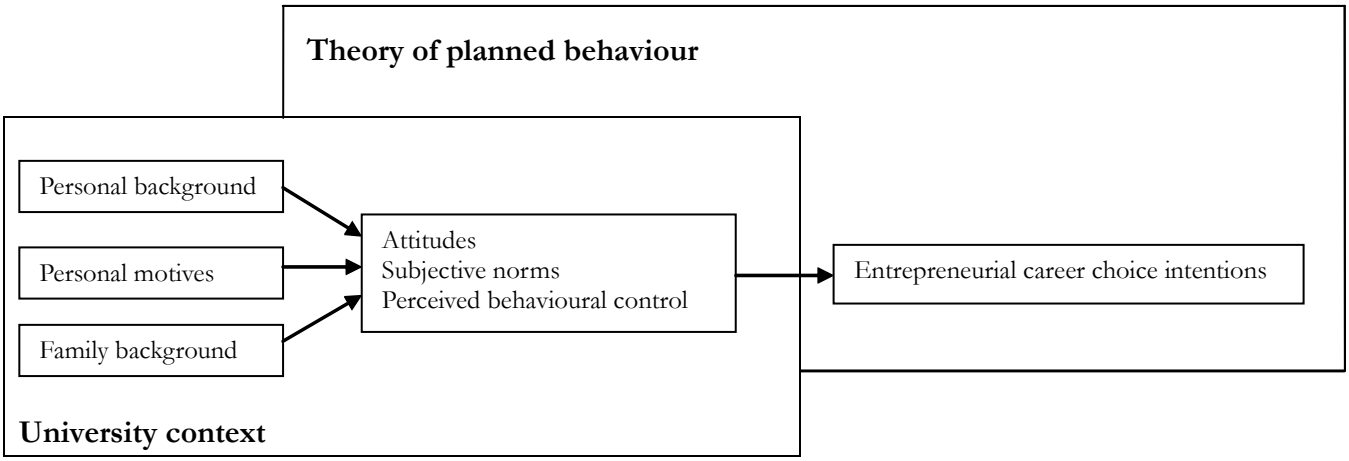
2.2 QUESTIONNAIRE DESIGN

In 2003 researchers at the Swiss Research Institute of Small Business and Entrepreneurship at the University of St. Gallen and the KfW Endowed Chair for Entrepreneurship at the European Business School in Germany designed the first GUESSS questionnaire. A set of 15 questions have since been developed to measure entrepreneurial intentions and behaviour among university students.

Entrepreneurial intent is seen as a key construct in predicting entrepreneurial behavior. According to Thompson (2009: 676), 'entrepreneurial intent' is a "self-acknowledged conviction by a person who intends to set up a new business venture and consciously plans to do so at some point in the future". Krueger, Reilly and Casrund (2000: 427) and Kuehn (2008: 87) agree with this definition and add that by understanding intentions, we can gain insight into the ideas, behaviour and driving forces behind the creation of a new business.

Two intention-based models, Ajzen's theory of planned behavior (1991) and Shapero and Sokol's entrepreneurial event model (1982), are often used in entrepreneurship research. According to the theory of planned behaviour, a conscious decision or intention to act in a certain way precedes the action itself. This dynamic process is illustrated in Figure 2.1 which also outlines the theoretical model used in this research.

Figure 2.1: The theoretical model



Source: Adapted from Ajzen (1991) and Shapero and Sokol (1982)

This research is not only based on the premise that entrepreneurial intentions precede entrepreneurial behaviour, it also postulates that entrepreneurial intentions are influenced by personal background and motives, family background, and exposure to entrepreneurship education at university level.

By using the same questions, scales, methods and constructs across countries and universities, tangible comparisons of tendencies and trends have been made. Two country-specific questions were added to the South African questionnaire, the first dealing with home language, and the second with the intention to establish an enterprise with a social and/or environmental mission.

2.3 SAMPLE SELECTION

Each of the 26 countries participating in the survey had a representative who was responsible for contacting students in that country (See Appendix A for a list of country representatives). The representatives were asked to inform as many students as possible of the survey, encouraging them to complete the questionnaire. As shown in Table 2.1, the final international sample consisted of 93 265 students, with South Africa being one of the smaller contributors.

Table 2.1: The international sample

Country[(a)]	N	%
Brazil*	29 186	31.3
The Netherlands*	13 121	14.1
Germany	12 469	13.4
Switzerland	8 115	8.7
Hungary	5 677	6.1
Austria	4 553	4.9
Russia*	2 882	3.1
Estonia	1 874	2.0
Singapore	2 391	2.6
Argentina*	1 660	1.8
France	1 498	1.6
Finland	1 437	1.5
Chile*	1 244	1.3
Portugal	1 020	1.1
China*	868	0.9
Romania*	849	0.9
South Africa	697	0.7
The United Kingdom*	648	0.7
Japan*	561	0.6
Mexico	556	0.6
Luxembourg	444	0.5
Greece	454	0.5
Ireland	332	0.4
Pakistan*	321	0.3
Liechtenstein	220	0.2
Belgium	188	0.2
Total	**93 265**	**100**

(a) The ten new countries that joined the survey in 2011 are highlighted with an asterisk (*). Australia, New Zealand and Indonesia that participated in the 2008/9 survey did not participate in the 2011 survey.

The South African sample was drawn from 15 higher education institutions located in seven provinces. Academics and administrative personnel at these institutions distributed the 2011 survey by making announcements in lectures, placing advertisements on websites, sending emails to students, and displaying posters on university campuses. Lucky draw prizes, sponsored by Pearson Education Southern Africa and the Braxton Group, were used as an incentive to encourage participation in the survey.

The survey was marketed to about 13 800 South African students of whom approximately five per cent responded. As indicated in Table 2.2, responses from the participating institutions ranged from 0.4 per cent to 43.9 per cent, with the majority of these coming from four institutions: Stellenbosch University, North-West University, the University of Pretoria and the Nelson Mandela Metropolitan University.

Table 2.2: The South African sample

University	Province	n	%
Stellenbosch University	Western Cape	306	43.9
North-West University	North-West	101	14.5
University of Pretoria	Gauteng	75	10.8
Nelson Mandela Metropolitan University	Eastern Cape	68	9.8
Rhodes University	Eastern Cape	28	4.0
University of Johannesburg	Gauteng	14	4.0
University of Cape Town	Western Cape	23	3.3
University of Kwa-Zulu Natal	Kwa-Zulu Natal	15	2.2
University of the Western Cape	Western Cape	13	1.9
University of Venda	Limpopo	10	1.4
Cape Peninsula University of Technology	Western Cape	8	1.1
University of the Free State	Free State	8	1.1
University of Stellenbosch Business School	Western Cape	6	0.9
Nelson Mandela Metropolitan University Business School	Eastern Cape	5	0.7
Community and Individual Development Association (CIDA) City Campus	Western Cape	3	0.4
Other	-	14	2.0
Total		**697**	**100**

Although the researchers are aware of the fact that the sample might not be entirely representative of the overall student population in South Africa, it provides a good reference point. The 697 responses were lower than that of the 2008/9 survey when 2 203 students completed the questionnaire. The lower response rate in 2011 can be explained by two factors. Firstly, the 2011 survey was done according to the international specified time frames which were scheduled during the months of April and May, two months during which students were preparing for and writing examinations. Secondly, a series of public holidays occurred during this period at which time many students might have taken extended leave.

The sample included responses from a number of exchange students from universities abroad, explaining the two per cent indicated in the category ‘other higher education institutions’.

2.4 DATA COLLECTION AND ANALYSIS

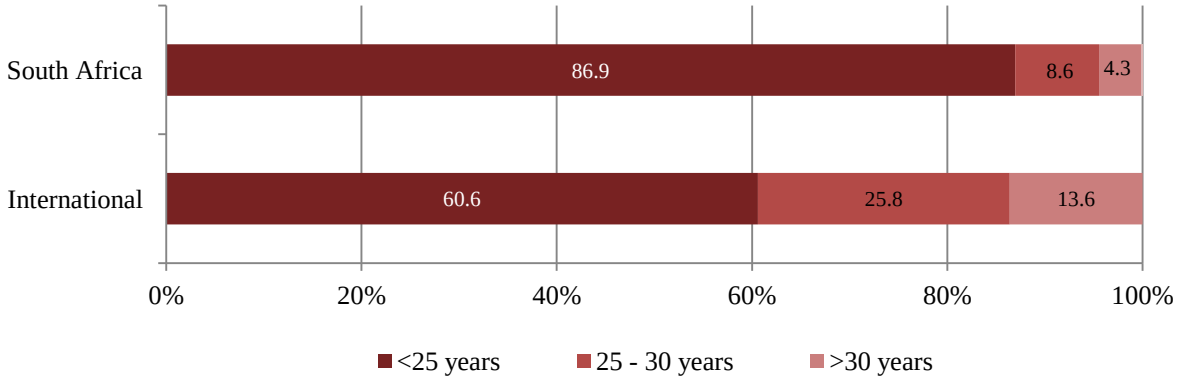
The survey was administered by means of a web-based questionnaire. On completion of the survey, all data were processed by the international project coordinators in Switzerland, and the datasets were then distributed to the national representatives in each country. Descriptive statistics were computed using Microsoft Excel and the SPSS statistical programme.

2.5 SAMPLE DESCRIPTION

2.5.1 Age

An age profile of the respondents in both the South African and international sample was compiled and is presented in Figure 2.2.

Figure 2.2: Age profile of South African and international students



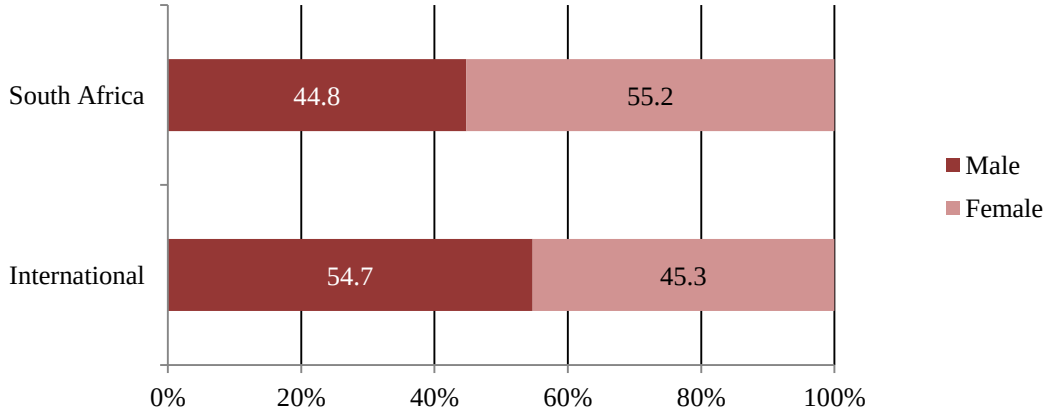
The age profile was divided in three categories, namely students younger than 25 years of age, students aged from 25 to 30 and students older than 30 years of age. The majority of the South African sample (86.9%) fell in the under 25 years of age category, while only 4.3 per cent of students were older than 30 years of age. This is not an unlikely distribution since the vast majority of students are usually under 25 years of age and enrolled in undergraduate programmes. The South African age profile of students in the 2011 survey was very similar to that of the 2008/9 survey.

In the international sample only 60.6 per cent of students fell in the under 25 years of age category, whereas a much higher percentage of students (13.6%) were over 30 years of age. This implies that students in the international sample were more mature than those in the South African sample and might have had more exposure to entrepreneurship education and activities.

2.5.2 Gender

As shown in Figure 2.3, approximately 10 per cent more males participated in the South African survey compared to females, while the opposite was true in the international sample. Not much can be attributed to this difference; it could merely be that more male students saw the invitation to participate in the survey in South Africa compared to females. However, it is clear that there was a relative gender balance in universities across all the participating countries. Once again, the South African gender profile was very similar to the 2008/9 survey, where males and females were 53.4 per cent and 46.6 per cent respectively.

Figure 2.3: Gender profile of South African and international students



2.5.3 Marital status

Table 2.3 shows that the vast majority of both South African and international students were still unmarried (95.8%) at the time of the survey. This finding can be expected as most students are still quite young and do not have the financial means yet to support a partner and/or family.

Table 2.3: The marital status of South African and international students

Marital status	South African students		International students	
	n	%	n	%
Single	668	95.8	80 720	86.6
Married	25	3.6	11 198	12.0
Divorced	4	0.6	1 347	1.4
Total	**697**	**100**	**93 962**	**100**

2.5.4 Number of older siblings

A sibling profile of the respondents is presented in Table 2.4. The findings show that more than a third of the South African students were the eldest child, whereas a quarter of the students (27.8%) had one older sibling. Less than five per cent of South African students (4.9%) had more than three older siblings.

Table 2.4: Older sibling profile of South African and international students

Number of older siblings	South African students		International students	
	n	%	n	%
No older siblings	266	38.2	37 960	40.7
One older sibling	194	27.8	31 160	33.4
Two older siblings	148	21.2	15 098	16.2
Three older siblings	55	7.9	4 895	5.2
More than three older siblings	34	4.9	4 144	4.5
Total	**697**	**100**	**93 257**	**100**

Slightly more international students (40.7%) were the eldest child and even fewer students (4.5%) had more than three older siblings compared to their South African counterparts.

2.5.5 Nationality

Students participating in the South African survey were requested to indicate their nationality. The results are shown in Table 2.5.

Table 2.5: Nationality of South African students

Nationality	n	%
South African	615	88.2
Southern African Development Community (SADC) country	59	8.5
African country (outside SADC)	3	0.4
Chinese / Taiwanese / Korean	4	0.6
Other	16	2.3
Total	**697**	**100**

The bulk of the South African respondents (88.2%) were South African citizens, whereas 8.5 per cent were from countries in the Southern African Development Community (SADC), indicating a strong regional representation.

2.5.6 Home language

The South African students were asked to indicate their home language from a list of options to ascertain whether the sample reflected the language diversity in the country. Only those language groups with more than four respondents are reported in Table 2.6.

Table 2.6: Home language profile of South African students

Language	n	%
English	280	40.2
Afrikaans	270	38.7
isiXhosa	32	4.6
isiZulu	22	3.2
Sotho	21	3.0
Venda	9	1.3
Setswana	15	2.2
Shona	10	1.4
Other	19	2.7
Missing	19	2.7
Total	**697**	**100**

A more or less equal percentage of students indicated that their home language was either English (40.2%) or Afrikaans (38.7%), with very few students reporting any other home languages.

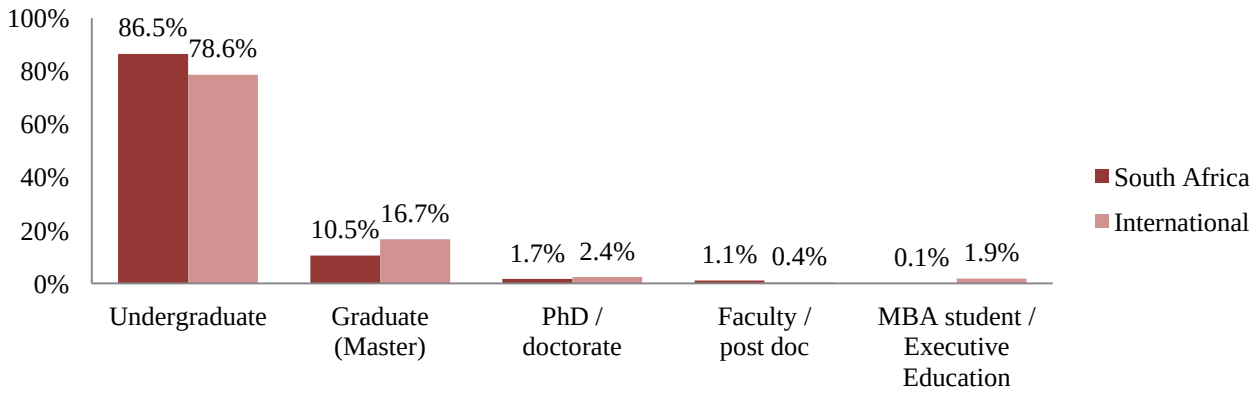
2.6 STUDIES

To gain further insight into the composition of the student samples, a number of questions regarding their studies were posed.

2.6.1 Current level of studies

As illustrated in Figure 2.4, the South African and international samples were compared in terms of five study levels, namely undergraduate, graduate or Master's, PhD or doctorate, Faculty / post doc and MBA or executive education.

Figure 2.4: Study level profile of South African and international students



At the time of the survey, the majority of South African students (86.5%) were busy with their undergraduate studies, while fewer international students (78.6%) were doing the same. More students in the international sample were undertaking graduate or postgraduate studies than their South African counterparts, which could explain the average age in the international sample being slightly higher than in the South African one. The profile reported in the 2011 survey closely resembles the 2008/9 one.

2.6.2 Periods of study and study period at present university

To determine the level of mobility between universities, students were asked to indicate how long they had been studying in total and at their present university. Their responses are outlined in Table 2.7.

Table 2.7: Duration of studies and time spent at current university

Total number of years students have been studying	South African students				International students			
	In total		At current university		In total		At current university	
	n	%	n	%	n	%	n	%
1st academic year	142	20.4	226	32.4	11 439	12.3	27 768	29.8
2nd academic year	147	21.1	182	26.1	12 817	13.7	22 852	24.5
3rd academic year	120	17.2	126	18.1	11 406	12.2	15 683	16.8
4th academic year	105	15.1	86	12.3	14 301	15.3	13 237	14.2
5th and further academic year	183	26.3	77	11.0	43 045	46.3	13 651	14.6
Total	**697**	**100**	**697**	**100**	**93 265**	**100**	**93 265**	**100**

On the question of how many years students have been studying in total, a fifth of the South African respondents (20.4%) indicated that 2011 had been their first year of studying. Similar percentages of students were in their second and fifth years of studying (21.1% and 26.3% respectively). The statistics in Table 2.7 also show that many students shifted between universities during their academic careers. This is evident from the fact that the number of years of study at their current university was less than the total number of years they had been studying. The shift between universities was particularly evident for students who had been studying for five or more years and could be explained by students' desire to complete their postgraduate studies at a different university than their undergraduate studies.

Internationally, a much larger group of students had been studying for five or more years, most of them switching universities after their undergraduate studies.

2.6.3 Field of study

Students were requested to indicate their field of study in one of five categories. These are listed in Table 2.8 in decreasing order for the South African sample.

Table 2.8: Field of study of South African and international students

Field of study	South African students		International students	
	n	%	n	%
Business and Economics	389	55.8	27 335	29.3
Sport Sciences and other fields of study	142	20.4	15 873	17.0
Natural Sciences	120	17.3	30 679	32.9
Social Sciences	28	4.0	13 125	14.1
Arts and Law	18	2.6	6 253	6.7
Total	**697**	**100**	**93 265**	**100**

The majority of South African students in the 2011 survey (55.8%) were enrolled for qualifications in the fields of Business and Economics. This is considerably more than the 38 per cent of Commerce students who participated in the 2008/9 survey. This finding is not surprising, given Commerce students' interest in the topic of entrepreneurship. For the international sample the responses differed slightly with the majority of students enrolled for qualifications in the Natural Sciences (32.9%). Studies in Business and Economics came a close second with 29.3 per cent of the responses.

2.7 SUMMARY

The South African and international samples were similar in some respects and differed in others. As for the average age of students, the South African sample consisted of more students younger than 25, whereas the international sample had a higher representation of students older than 25 years of age. This finding suggests that the international sample consisted of more mature students, who might have had more exposure to entrepreneurship education and activities than the average South African student.

The majority of respondents in the South African sample were males, unmarried and the eldest child in the family. Slightly more females participated in the international sample, and the majority of respondents in this sample were also unmarried and the first-born in the family.

In terms of the current level of studies, the profiles for the South African and international samples were relatively similar. The international sample had a higher representation of postgraduate students and they were more inclined to change their place of study than South African students. More South African students were enrolled for qualifications in the fields of Business and Economics (55.8%) than was the case in the international sample (29.3%).

In terms of nationality, the South African sample consisted primarily of South African citizens with a few students from neighbouring states, and a small number of exchange students. With respect to home language, the majority of students were English or Afrikaans speaking.

3. ENTREPRENEURSHIP COURSES AND SERVICE OFFERINGS AT HIGHER EDUCATION INSTITUTIONS IN SOUTH AFRICA

3.1 INTRODUCTION

According to Van Aardt *et al*. (2008: 4), the South African population have not been socialized for entrepreneurship - on the contrary, they were rather groomed as job seekers in the labour market. Subsequent to the transition of South Africa as a democracy, the National Qualifications Framework (NQF) was enacted into legislation and represents an important initiative to address the lack of entrepreneurial and business skills in the country (Louw, Van Eeden, Bosch & Venter, 2003: 5) and it is against this background that higher education institutions could make a significant contribution. Higher education institutions can enhance the propensity for entrepreneurship and business venture formation by developing students and providing support for entrepreneurs (Brijlal, 2011: 818).

By understanding the ambitions of students, universities can better manage the balance between what universities offer and what students need.

In the next section, students' perceptions regarding entrepreneurship offerings at higher education institutions are investigated. These offerings are classified into three categories, namely lectures and seminars, workshops and coaching opportunities, and the provision of resources for founders/entrepreneurs.

3.2 THE EXISTENCE OF UNIVERSITY OFFERINGS

Students were requested to indicate which entrepreneurship offerings they knew existed at their respective universities. The findings in Table 3.1 are ranked from the most well-known to the least well-known offerings per category.

Table 3.1: Students' knowledge of existing university offerings

Type of offering	Item	South African students (N = 697)			International students (N = 93 265)		
		% Yes	% No	% Do not know	% Yes	% No	% Do not know
Lectures and seminars	Entrepreneurship in general	80.8	4.7	14.5	61.0	9.8	29.2
	Business planning	79.5	4.6	15.9	53.8	9.9	36.3
	Entrepreneurial marketing	72.2	5.9	22.0	41.4	13.5	45.2
	Innovation and idea generation	66.4	6.6	27.0	47.7	11.9	40.4
	Financing entrepreneurial ventures	60.5	8.3	31.1	32.2	18.8	49.1
	Social entrepreneurship	51.9	8.6	39.5	34.4	15.5	50.0
	Technology entrepreneurship	47.5	10.5	42.0	30.8	18.5	50.7
	Family businesses	22.2	17.1	60.7	14.9	29.2	55.9
Workshops and coaching opportunities	Networking with experienced entrepreneurs	48.4	14.1	37.6	45.7	15.8	38.5
	Mentoring and coaching programmes for entrepreneurs	48.1	12.5	39.5	25.5	19.3	55.2
	Business plan contests/workshops	47.6	14.3	38.0	39.1	17.1	43.9
	Contact point for entrepreneurial issues	43.8	11.8	44.5	32.0	16.8	51.2
	Contact platforms with potential investors	34.7	16.6	48.6	22.7	22.9	54.4
Provision of resources	Technology and research resources (library, web)	92.7	1.6	5.7	74.3	5.2	20.4
	Seed funding/financial support	56.0	10.2	33.9	19.4	23.6	57.0

Without exception, South Africa students were more aware of entrepreneurship offerings at their universities, compared to the students in the international sample. This might be as a result of a large percentage of Commerce students participating in the South African survey. As indicated earlier, the majority of respondents in the international sample studied in the field of Natural Sciences.

3.2.1 The existence of lectures and seminars on entrepreneurship topics

The South African students' responses in Table 3.1 imply that they were aware of several entrepreneurship lectures and seminars on a variety of topics. The results show a slightly higher level of awareness of entrepreneurship lectures and seminars among South African students, compared to students in the international sample. The results could suggest that a greater emphasis is placed on entrepreneurship education in South Africa compared to other countries; that local universities promote their offerings more rigorously, or it could simply be as a result of the sample profile. The findings could also be as a consequence of the priority that small business development and entrepreneurship enjoy on the South African government's agenda (The New Growth Path, 2011). Students were the most aware of lectures and seminars on topics relating to entrepreneurship in general (80.8%) and business planning (79.5%). There was a relatively low level of awareness of lectures and seminars on social entrepreneurship (51.9%), technology entrepreneurship (47.5%) and family businesses (22.2%) in South Africa.

While fewer international students were aware of lectures and seminars on entrepreneurship at their universities, the same topics were viewed as important.

3.2.2 The existence of workshops and coaching opportunities

Although more South African students were aware of practical entrepreneurship activities such as workshops and coaching opportunities than their international counterparts, a large proportion of the students still reported that they did not know of the existence of such offerings. The difference between the levels of awareness between the South African and international sample was particularly obvious in the case of mentoring and coaching programmes (48.1% versus 25.5%).

The highest levels of awareness of offerings in this category in the South African sample dealt with networking opportunities with experienced entrepreneurs (48.4%), the existence of mentoring and coaching programs for entrepreneurs (48.1%), and business plan contests or workshops (47.6%). Networking with experienced entrepreneurs was also the most visible offering identified by students in the international sample (45.7%).

3.2.3 The provision of resources for founders/entrepreneurs

The results in Table 3.1 show that there was a very high level of awareness among students in both samples of the technological and research resources available to founders and entrepreneurs at the students' respective universities (92.7% awareness in the South African sample and 74.3% in the international sample). This result can be expected since higher education institutions generally provide students with state-of-the-art research support and access to library and Internet resources. Half of the respondents were aware of seed funding and/or financial support offered by their university (56% and 57% for the South African and international samples respectively). In the 2008/9 survey, there was a relatively low awareness and utilisation of start-up financing (15.9% awareness and 11.2% utilisation respectively). The marked increase in awareness and utilisation reported from the previous survey is rather encouraging. Unfortunately, there were no data on the provision of technological resources in the 2008/9 report for comparative purposes.

3.3 THE DEMAND FOR UNIVERSITY OFFERINGS

In this section students were asked whether they would like or whether they needed specific entrepreneurship offerings which they indicated did not exist at their university, or that they do not know of. The findings in Table 3.2 are ranked from the offerings most in demand to the least in demand in the South African sample. Understanding the demand for entrepreneurship offerings is important to facilitate the optimal utilisation of university resources.

Table 3.2: The demand for university offerings (not currently offered)

Type of offering	Item	South African students			International students		
		Valid n	Would like %	Do not need %	Valid n	Would like %	Do not need %
Lectures and seminars	Business planning	143	87.4	12.6	43 107	65.6	34.4
	Innovation and idea generation	234	85.9	14.1	48 753	69.5	30.5
	Financing entrepreneurial ventures	275	84.4	15.6	63 257	65.3	34.7
	Entrepreneurship in general	134	82.8	17.2	36 338	64.0	36.0
	Entrepreneurial marketing	194	80.4	19.6	54 666	52.7	47.3
	Technology entrepreneurship	366	73.2	26.8	64 525	49.5	50.5
	Social entrepreneurship	335	69.3	30.7	61 146	54.3	45.7
	Family businesses	542	47.0	53.0	79 353	42.4	57.6
Workshops and coaching opportunities	Networking with experienced entrepreneurs	360	86.4	13.6	50 654	70.7	29.3
	Contact platforms with potential investors	455	84.8	15.2	72 064	66.1	33.9
	Mentoring and coaching programs for entrepreneurs	362	83.7	16.3	69 487	64.2	35.8
	Business plan contests/workshops	365	80.5	19.5	56 834	59.5	40.5
	Contact point for entrepreneurial issues	392	79.3	20.7	63 416	67.1	32.9
Provision of resources	Seed funding/financial support	307	80.8	19.2	75 158	70.6	29.4
	Technology and research resources (library, web)	51	74.5	25.5	23 910	62.0	38.0

The demand for *all* the entrepreneurship offerings listed in Table 3.2 was relatively higher among the South African sample compared to the international sample, suggesting a keen interest in entrepreneurship among South African students who participated in the survey.

3.3.1 The demand for lectures and seminars on entrepreneurship topics

The strong demand for entrepreneurship lectures and seminars highlights an enthusiastic response among students to understand the theoretical underpinnings of the discipline, particularly as far as business planning, innovation and idea creation are concerned. However, students were not aware of lectures and seminars on technology entrepreneurship, social entrepreneurship and family businesses (Table 3.1), and very few students seemed interested in learning more about these topics.

3.3.2 The demand for workshops and coaching opportunities

Table 3.2 shows a relatively high demand among students for entrepreneurship workshops and coaching opportunities. These activities were more applied and experiential of nature and would usually appeal to persons having an active interest in entrepreneurship. The offerings that seemed to be in highest demand were mentoring and coaching programmes for entrepreneurs, contact platforms with potential investors, business plan contests/workshops and contact points for entrepreneurial matters.

Overall the South African sample revealed a bigger demand for these activities than did the international sample. This demand represents an opportunity for South African universities to review their offerings as well as their marketing strategies. It could be that students' demands are indeed addressed, but students are simply not aware of the different offerings available.

3.3.3 The provision of resources for founders/entrepreneurs

As universities are usually well-equipped with state-of-the-art library and research facilities, the need for more resources among were quite low. On the other hand, seed funding and financial support were in high command.

To analyse the demand for entrepreneurship offerings, the study further examined the utilisation of existing offerings.

3.4 UTILISATION OF UNIVERSITY OFFERINGS

Any offering, be it a lecture or mentoring programme, requires an investment of scarce resources, which - if not optimally utilised - could be deployed elsewhere. It is therefore necessary for universities to track students' usage of and satisfaction with entrepreneurship offerings, to better understand any shortcomings with respect to quality that may exist. Details on the entrepreneurship offerings utlised by students are presented in Table 3.3, ranked from the most utilised to the least utilised, based on the South African sample.

Table 3.3: Utilisation of offerings

Type of offering	Item	South African students			International students		
		Valid n	% Yes	% No	Valid n	% Yes	% No
Lectures and seminars	Entrepreneurship in general	563	71.9	28.1	56 915	55.4	44.6
	Business planning	554	68.6	31.4	50 146	53.1	46.1
	Innovation and idea generation	463	67.2	32.8	44 501	53.9	46.9
	Entrepreneurial marketing	503	61.9	38.4	38 591	48.0	52.0
	Family businesses	155	58.1	41.9	13 905	43.9	56.1
	Social entrepreneurship	362	58.0	42.0	32 107	45.8	54.2
	Financing entrepreneurial ventures	422	57.3	42.7	29 997	39.2	60.8
	Technology entrepreneurship	331	55.9	44.1	28 730	39.5	60.5
Workshops and coaching opportunities	Networking with experienced entrepreneurs	337	59.3	40.7	42 601	44.1	55.9
	Mentoring and coaching programmes for entrepreneurs	335	51.9	48.1	23 768	30.1	69.9
	Contact point for entrepreneurial issues	305	51.1	48.9	29 841	37.8	62.2
	Contact platforms with potential investors	242	44.2	55.8	21 192	32.9	67.1
	Business plan contests /workshops	332	43.7	56.3	36 425	34.4	65.6
Provision of resources	Technology and research resources (library, web)	646	86.5	13.5	69 341	74.6	25.4
	Seed funding/financial support	390	46.2	53.8	18 101	41.8	58.2

As can be seen in Tables 3.1 and 3.2, South African students were not only more aware of entrepreneurship offerings at their universities, but also demanded more offerings and utilised more offerings than their international counterparts did (Table 3.3).

3.4.1 Utilisation of lectures and seminars on entrepreneurship topics

At the time of the survey, more South African students attended lectures and seminars on entrepreneurship topics compared to students in the international sample. Similar topics were, however, favoured, namely entrepreneurship in general, business planning, entrepreneurial marketing, and innovation and idea generation.

3.4.2 Utilisation of workshops and coaching opportunities

South African students were also making relatively more use of the practical and experiential entrepreneurship activities like workshops and coaching opportunities than their international counterparts did. Offerings which were the most frequently utilised in both samples, included networking opportunities with experienced entrepreneurs as well as mentoring and coaching programmes. Entrepreneurship offerings that were not utilised by a large number of students were contact platforms with potential investors and business plan contests/workshops. This is rather unfortunate as students can gain valuable insights into the realities of being an entreprenuer by participating in these activities.

3.4.3 Utilisation of resources provided to founders/entrepreneurs

Table 3.3 indicates that technological and research resources were well utilised by students at higher education institutions in South Africa and abroad. This is not surprising, as tertiary students are expected to actively engage in research using a variety of technological and other resources. More students in South Africa made use of seed funding and financial support provided by their universities than international students did. This is very encouraging as access to finance is an often cited stumbling block to new business creation (see Section 5.2.9 in this regard).

Table 3.3 shows the offerings which were mostly utilised by students, namely entrepreneurship in general, business planning, innovation and idea generation, entrepreneurial marketing, networking with experienced entrepreneurs, mentoring and coaching programmes for entrepreneurs as well as technology and research resources. As in the 2008/9 report, entrepreneurship in general and contact with entrepreneurs for advice on general questions were the mostly used offerings.

3.5 STUDENTS' EVALUATION OF OFFERINGS

Although the utilisation of an offering provides a reliable indication of whether students are satisfied with the quality of it, a formal feedback system should preferably be established. The following section presents details on how satisfied students were with the entrepreneurship offerings they made use of at their respective universities.

3.5.1 Satisfaction with lectures and seminars on entrepreneurship topics

Table 3.4 and Figure 3.1 illustrate how satisfied students were with entrepreneurship lectures and seminars presented at their universities. The responses of the students were captured on a five-point Likert-scale with 1 representing 'not at all satisfied' and 5 representing 'very much satisfied'. The statements are ranked in descending order, based on the mean scores of the South African sample.

Table 3.4: Students' level of satisfaction with entrepreneurship lectures and seminars

Students' level of satisfaction with lectures and seminars about	South African students			Frequency distribution (%)					International students		
	Valid n	Mean	S.D.	1 Not at all satisfied	2 Rather unsatisfied	3 Equal	4 Rather satisfied	5 Very much satisfied	Valid n	Mean	S.D.
Business planning	380	3.92	0.89	1.3	4.7	22.6	43.4	27.9	26 643	3.74	0.99
Innovation and idea generation	311	3.89	0.92	0.6	7.1	23.2	41.2	28.0	24 005	3.77	0.99
Entrepreneurial marketing	310	3.84	0.91	1.3	7.4	20.3	47.7	23.2	18 506	3.77	0.96
Entrepreneurship in general	405	3.83	0.8	1.0	5.4	24.7	46.9	22.0	31 527	3.72	0.95
Social entrepreneurship	210	3.74	0.97	1.9	8.6	25.7	41.4	22.4	14 709	3.71	0.97
Technology entrepreneurship	185	3.66	0.93	1.1	9.2	31.4	38.9	19.5	11 348	3.68	0.97
Family firms	90	3.64	0.93	1.1	10.0	30.0	41.1	17.8	6 100	3.63	1.01
Financing entrepreneurial ventures	242	3.60	0.94	1.7	9.9	32.6	38.4	17.4	11 745	3.61	0.99

Figure 3.1: Mean scores of students' level of satisfaction with entrepreneurship lectures and seminars

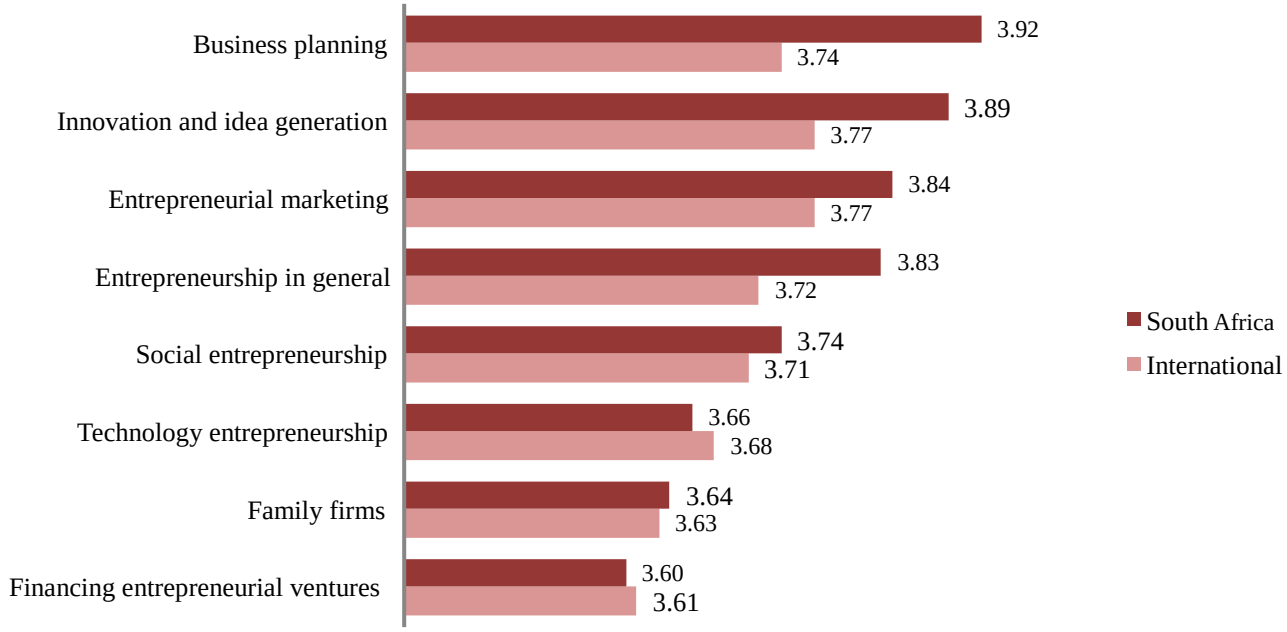


Figure 3.1 shows that the mean scores for all entrepreneurship offerings relating to lectures and seminars ranged from 3.30 to 3.92, implying that students in both samples were reasonably satisfied with this type of entrepreneurship offering. Furthermore, it is noted that the mean scores for the South African students were higher for all offerings except for technology entrepreneurship and financing entrepreneurial ventures. The 2011 findings closely resemble those of the 2008/9 report.

3.5.2 Satisfaction with workshops and coaching opportunities

Students' level of satisfaction with workshops and coaching opportunities are reflected in Table 3.5 and Figure 3.2. Responses were also captured on a five-point Likert-scale with 1 representing 'not at all satisfied' and 5 representing 'very much satisfied'.

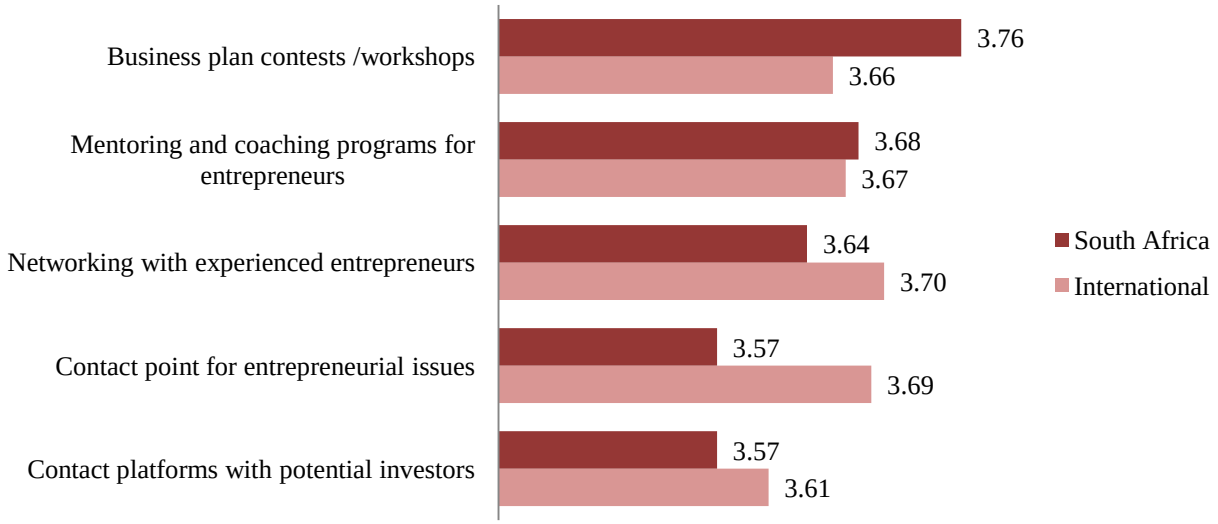
Table 3.5: Students' level of satisfaction with workshops and coaching opportunities

Students' level of satisfaction with workshops and coaching offerings about	South African students			Frequency distribution (%)					International students		
	Valid n	Mean	S.D.	1 Not at all satisfied	2 Rather unsatisfied	3 Equal	4 Rather satisfied	5 Very much satisfied	Valid n	Mean	S.D.
Business plan contests / workshops	145	3.76	0.96	2.1	6.9	27.6	40.0	23.4	12 543	3.66	1.01
Mentoring and coaching programs for entrepreneurs	174	3.68	0.97	2.3	6.9	33.3	35.6	21.8	7 165	3.67	1.01
Networking with experienced entrepreneurs	200	3.64	0.98	1.5	10.0	34.0	32.5	22.0	18 768	3.70	0.99
Contact platforms with potential investors	107	3.57	0.98	2.8	7.5	39.3	30.8	19.6	6 969	3.61	1.03
Contact point for entrepreneurial issues	156	3.57	0.99	4.5	5.8	35.9	35.9	17.9	11 271	3.69	1.04

Table 3.6: Students' level of satisfaction with the provision of resources to founders/entrepreneurs

Students' level of satisfaction with university offerings	South African students			Frequency distribution (%)					International students		
	Valid n	Mean	S.D.	1 Not at all satisfied	2 Rather unsatisfied	3 Equal	4 Rather satisfied	5 Very much satisfied	Valid n	Mean	S.D.
Technology and research resources (library, web)	559	4.24	0.83	2.5	7.7	25.1	36.5	28.2	51 702	3.80	1.01
Seed funding / financial support	180	3.83	1.03	4.0	9.8	31.1	29.2	26.0	7 569	3.63	1.09

Figure 3.2: Means scores of students' level of satisfaction with workshops and coaching opportunities

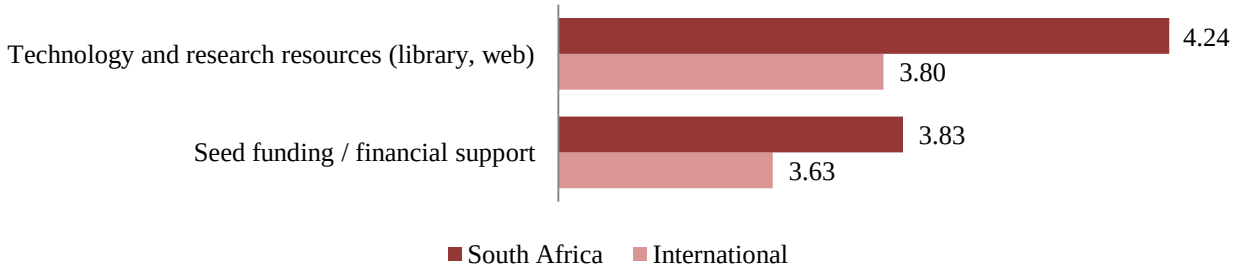


The mean scores in this category ranged from 3.57 to 3.76, suggesting that students were reasonably satisfied with all the offerings. The South African students showed slightly higher levels of satisfaction for business plan contests, and mentoring and coaching programmes.

3.5.3 Satisfaction with the resources provided to founders/entrepreneurs

As shown in Table 3.6 and Figure 3.3, South African students were generally more satisfied with the provision of resources to founders and entrepreneurs than their international counterparts.

Figure 3.3: Mean scores of students' level of satisfaction with the provision of resources to founders/entrepreneurs



The South African students' mean scores were 4.24 for technology and research resources and 3.83 for seed funding and financial support implying that the South African students were reasonably satisfied with the financial resources, and highly satisfied with the technology and research resources offerings.

Overall the South African students showed a higher level of satisfaction than the international students. It can be interpreted that the South African students expressed a higher need for entrepreneurship offerings owing to the higher levels of utilisation and demand. Compared to the almost absence of awareness noted in the 2008/9 report, a possible reason for the increase in awareness reported in the 2011 survey is that South African universities may have increased and/or improved their entrepreneurship offerings and the marketing thereof.

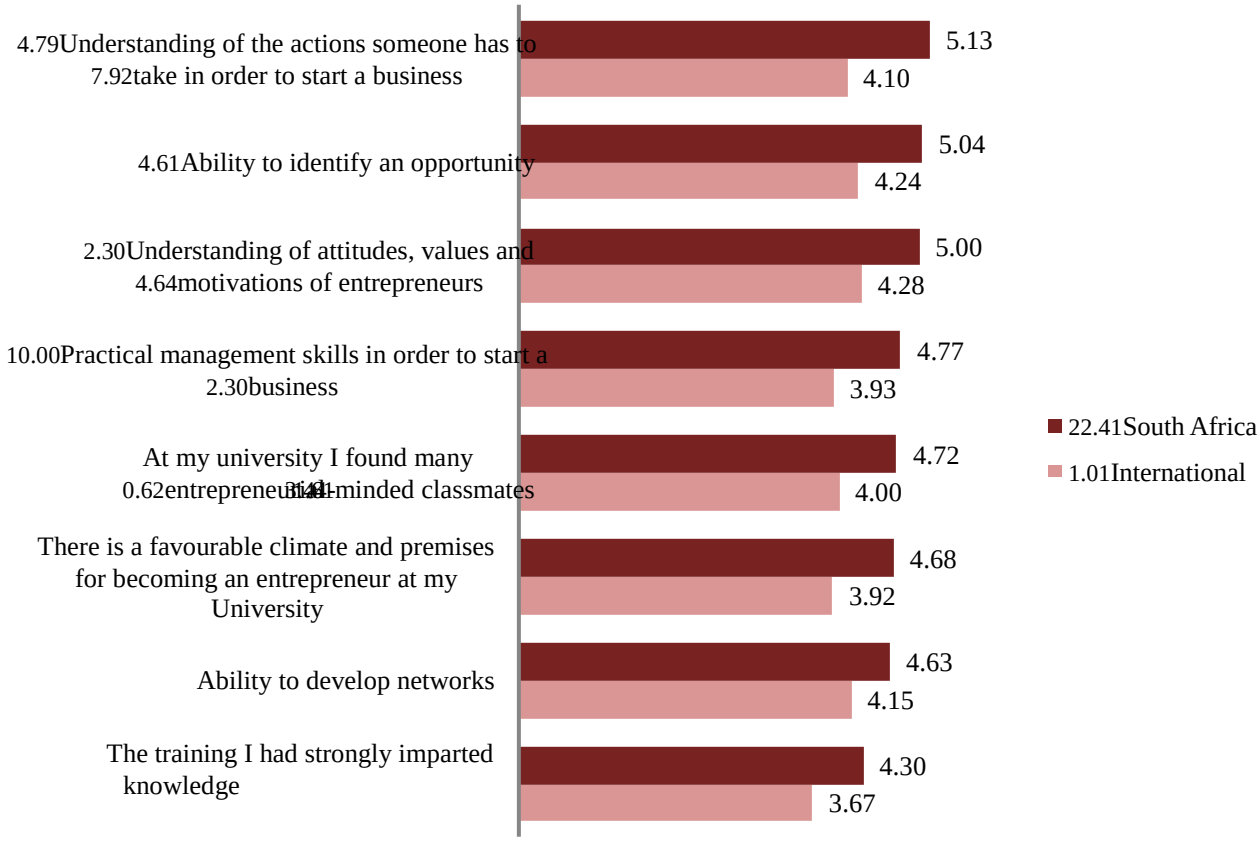
3.5.4 The university context

Students were asked to specify their level of agreement with the statements listed in Table 3.7 with regard to the influence that the university context had on their entrepreneurial intentions and behaviour. Their responses were captured on a seven-point Likert-scale, with 1 representing ‘strongly disagree’ and 7 representing ‘strongly agree’. The findings are ranked from the highest to the lowest mean score and are illustrated in Figure 3.4.

Table 3.7: Students' level of agreement with the influence of the university context on their entrepreneurial intentions and behaviour

University offerings attended increased or enhanced my…	South African students			Frequency distribution (%)							International students		
	Valid n	Mean	S.D.	1 Strongly disagree	2 Pretty disagree	3 Rather disagree	4 Equal	5 Rather agree	6 Pretty agree	7 Strongly agree	Valid n	Mean	S.D.
Understanding of the actions someone has to take in order to start a business	686	5.13	1.47	2.6	3.2	7.1	17.9	22.4	28.4	18.2	91 096	4.10	1.81
Ability to identify an opportunity	678	5.04	1.49	2.8	3.4	8.0	19.8	22.6	25.5	18.0	90 055	4.24	1.74
Understanding of attitudes, values and motivations of entrepreneurs	686	5.00	1.43	2.9	2.8	7.0	19.8	30.0	21.6	15.9	91 272	4.28	1.71
Practical management skills in order to start a business	683	4.77	1.55	3.4	4.7	11.9	21.7	23.0	21.1	14.3	90 868	3.93	1.79
At my university I found many entrepreneurial-minded classmates	685	4.72	1.65	4.5	6.6	10.7	21.3	19.7	21.6	15.6	90 675	4.00	1.82
There is a favourable climate and premises for becoming an entrepreneur at my University	684	4.68	1.57	3.7	5.7	12.9	21.1	23.7	19.6	13.5	90 653	3.92	1.75
Ability to develop networks	683	4.63	1.56	3.7	5.6	13.9	22.8	22.4	18.7	12.9	90 532	4.15	1.72
The training I had strongly imparted knowledge	686	4.30	1.78	10.2	6.9	13.1	23.0	19.5	14.3	13.0	9 0641	3.67	1.84

Figure 3.4: Mean scores of students' level of agreement with the influence of the university context on their entrepreneurial intentions and behaviour



For the South African students the mean scores ranged from 4.30 to 5.13, suggesting that the South African students were more positively disposed towards their university environment and that it had a positive effect on their inclination to become entrepreneurs. More specifically, the three most significant influences reported by the South African students were: understanding the actions someone has to take in order to start a business (5.13), identifying an opportunity (5.04), and understanding the attitudes, values and motivations of entrepreneurs (5.00). It is probably not inappropriate to assume that students will be more interested in what they yearn for, and a quick analysis of the three dimensions suggests that they were seeking entrepreneurial qualities (Frese & De Kruif, 2000: 18). This conclusion is in line with earlier observations of the keen interest in entrepreneurship shown by the South African sample of students.

For the international students the mean scores ranged from 3.67 to 4.28, with the highest frequency of items centrally located, suggesting that the international students were fairly indifferent about the influence the university environment had on their entrepreneurial intentions and behaviour.

3.6 SUMMARY

Universities are able to offer a variety of entrepreneurship courses and services to enhance a culture of entrepreneurship among students. The survey revealed that many students were, however, not aware of entrepreneurship offerings which imply that universities should promote their offerings more aggressively, especially those relating to workshops and coaching opportunities.

South African students were more informed of lectures and seminars on entrepreneurship topics, attended more, demanded more and were generally more satisfied with this type of offering. The same applied to workshops and coaching opportunities as well as resources made available by universities to founders and entrepreneurs.

Entrepreneurship offerings were used with different intensities by respondents in both samples, but they were reasonably satisfied with these. Lecture and seminar topics that were favoured by both samples included general entrepreneurship, business planning, innovation and idea generation. A stronger demand was, however, expressed by students, both locally and internationally, for networking and coaching opportunities than for lectures and seminars. This could imply that many students have progressed past the awareness stage to get involved in more practical activities.

The international students seemed indifferent about the influence of the university environment on their entrepreneurship inclination, whereas the South African students seemed to be positively influenced by the university context towards entrepreneurship.

4. CAREER CHOICE INTENTIONS IN THE SOUTH AFRICAN CONTEXT

4.1 INTRODUCTION

Students' career expectations can be quite high and diverse and may change over time as they become more familiar with and gain experience in the labour market. The labour market has also changed significantly over the last few decades due to, amongst other, rapid advancements in technology. Changing jobs, for instance, has become a more frequent occurrence in peoples' lives today than it was ever before. According to Barringer and Ireland (2008: 15), students enter the labour market immediately after graduation to gain experience and knowledge of their chosen industry and to develop social capital before they pursue longer-term career aspirations. Since the transition to a new democracy in South Africa in 1994, the tendency has been to enter a professional career. This tendency is indicative of a culture that places a high premium on so-called "top class jobs" and where practitioners in the fields of law, engineering, finance, education and health care are regarded as noble professions. Research in South Africa has also identified a shift towards the employment in the knowledge economy (Jolliffe, 2006).

The respondents were asked which career path they intended to pursue directly after their studies and five years after completion of their studies. Students could only select one answer for each question: one question pertained to intended career choice directly after their studies, and the other question pertained to intended career choice five years after their studies. Students were given thirteen choices, grouped into four categories.

The motivation for their choices is also discussed.

4.2 CAREER CHOICE DIRECTLY AFTER GRADUATION

Students' responses for career choices directly after graduation are indicated in Figure 4.1 in descending order, based on the South African responses.

Figure 4.1: Career choice intentions: Directly after studies (in percentages)

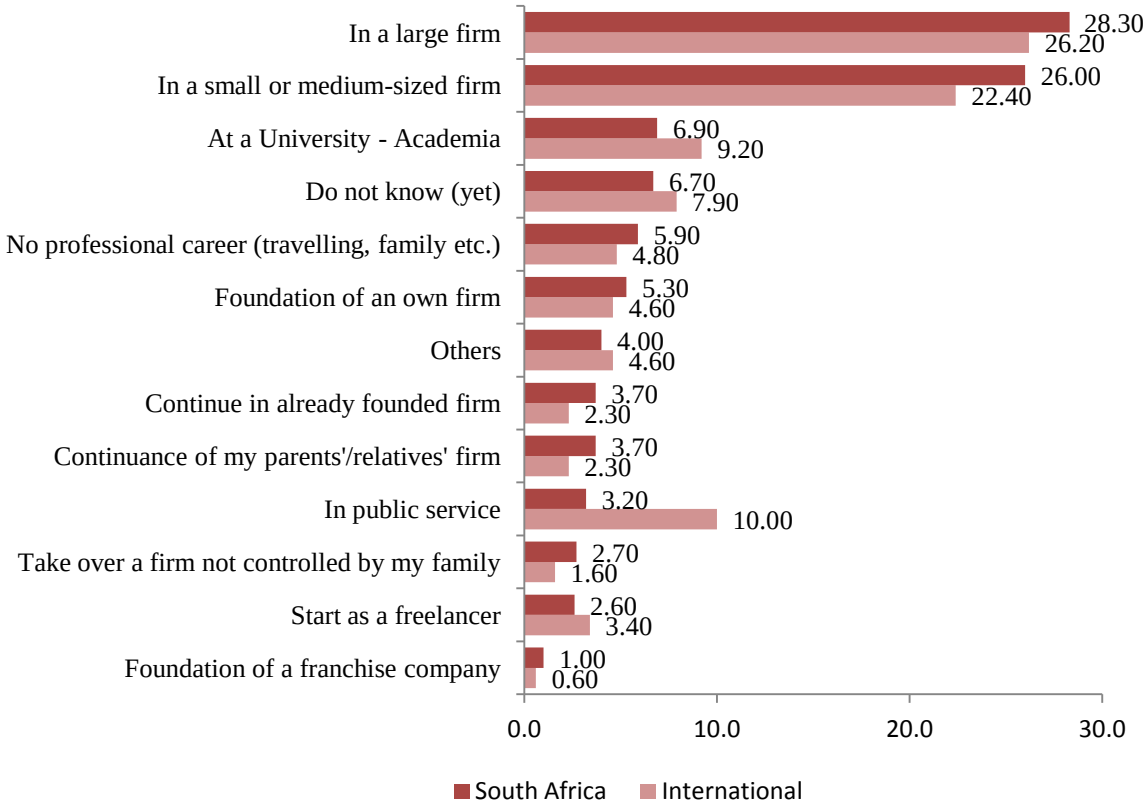


Figure 4.1 shows that the top three choices for South African students entering the labour market directly after graduation were: working in a large firm (28.3%), working in a small or medium-sized firm (26.0%) and working in academia (6.9%). This finding suggests that most graduates sought formal employment directly after leaving the university.

Very similar choices were reflected by the international students who intended to work in a large firm (26.2%), a small or medium-sized firm (22.4%) or academia (9.2%). The international students regarded the civil service to be a more likely career option (10%) compared to the South African students (3.2%). This might well be as a result of the South African preferential recruitment policy in pursuit of a more representative public work force. For example women and disabled people enjoy priority in work places where they are under-represented. Internationally, students viewed starting up a business immediately after graduating as less important than did South African students. These results are very similar to those reported in the 2008/9 survey (taking into consideration that in the 2011 survey, the small and medium-sized firm option was integrated into a single choice).

At the time of the survey, more South African students (26% in 2011 compared to 18% in 2008/9) were interested in working in a small and medium-sized business directly after graduation, whereas fewer students wanted to start their own businesses (5.3% in 2011 compared to 8% in 2008/9).

4.3 CAREER CHOICE AFTER FIVE YEARS

The responses for career choices five years after graduation are presented in Figure 4.2. The statements are also listed in descending order, based on the South African responses.

Figure 4.2: Career choice intentions: Five years after studies (in percentages)

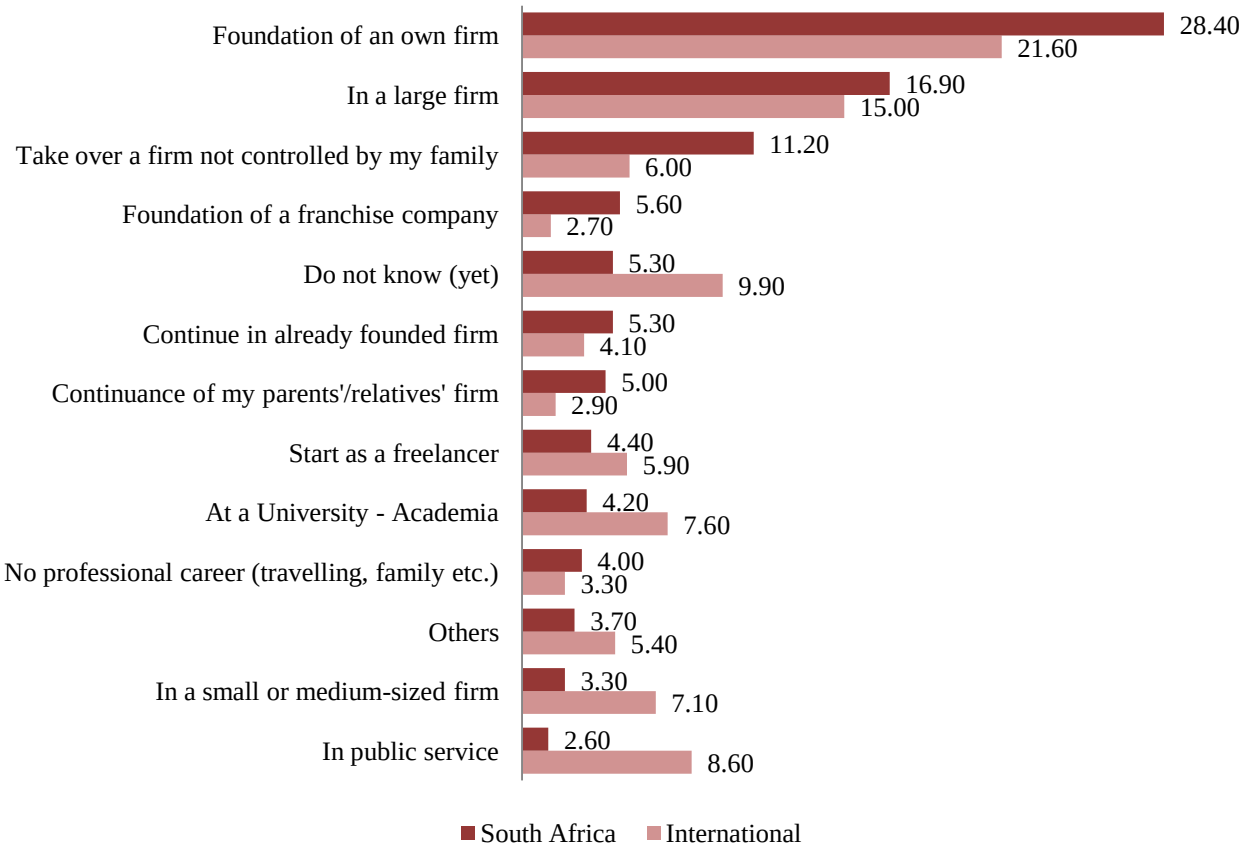
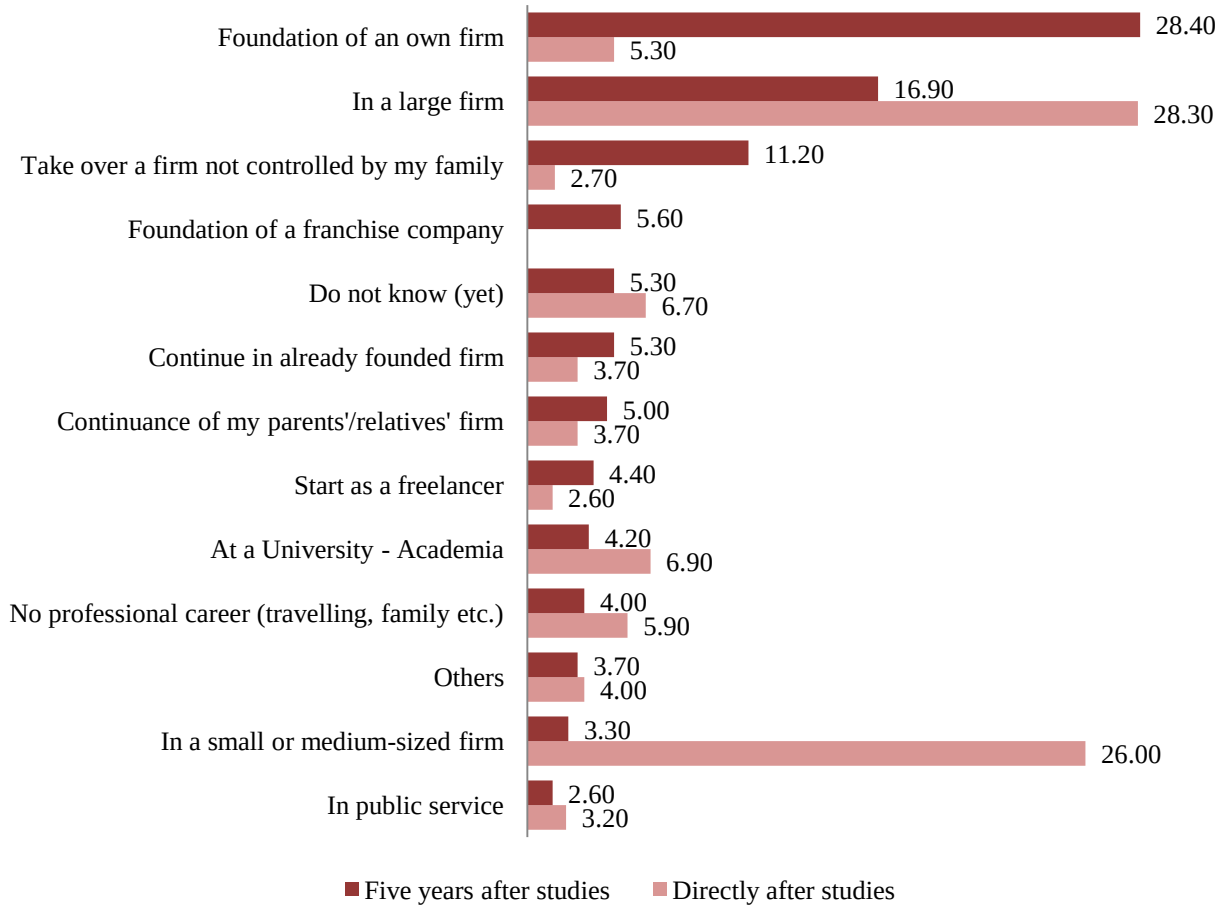


Figure 4.2 shows that the top three career choices five years after graduation for South African students were: founding of an own firm (28.4%), working in a large firm, (16.9%) and taking over a business which was not currently controlled by the family (11.2%). The top two choices, namely founding an own firm (21.6%) and working in a large firm (15.0%) are the same for the international sample respectively. Close to ten per cent of international students (9.9%) did not know what they wanted to do five years after graduation. This could be in response to the rapidly changing conditions in the global labour markets. Once again, the international sample response for working in the public sector five years after graduation (8.6%) is much higher than the South African sample (2.6%).

4.4 A SHIFT IN CAREER CHOICE INTENTIONS OVER TIME

Figure 4.3 reveals a shift in the career choice intentions of South African students, from the period directly after graduation to five years after graduation.

Figure 4.3: A shift in career choice intentions over time: South African students (in percentages)



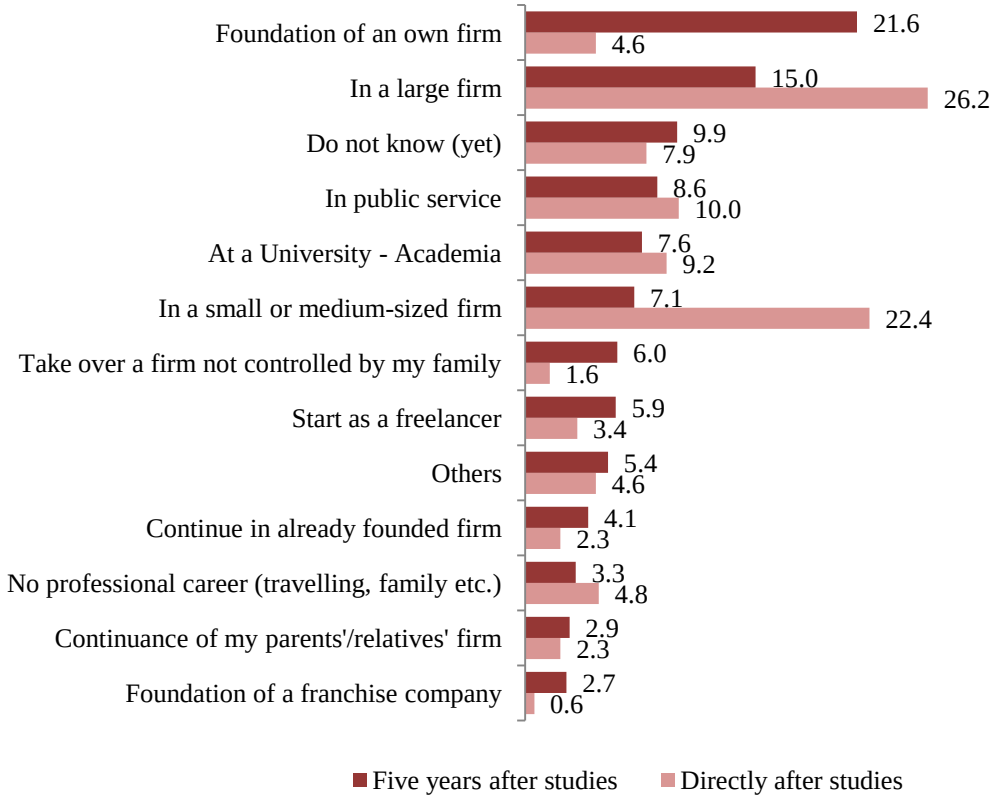
From Figure 4.3 it can be seen that for the South African students, the biggest difference in career choices over time related to: founding an own firm, working in a large firm and working in a small or medium-sized firm. In the first case more students envisaged self-employment after five years, whereas fewer students wished to work in established businesses (particularly in SMMEs). The percentage of South African students who aspired to establish their own businesses five years after graduation was higher than in the 2008/9 survey (28.4% in 2011 compared to 26.4% in 2008/9).

The shift in career choice points to a healthy interest in business activity, either in terms of founding a business or succeeding a parent or relative in the family business. The shift also suggests that students intended to seek experience in established firms before pursuing entrepreneurship as a long-term

career option. The large shift in the small and medium-sized firms suggests that much of the experiences sought by students after graduating came from within this sector.

A similar shift in the career choice intentions of international students are noted in Figure 4.4.

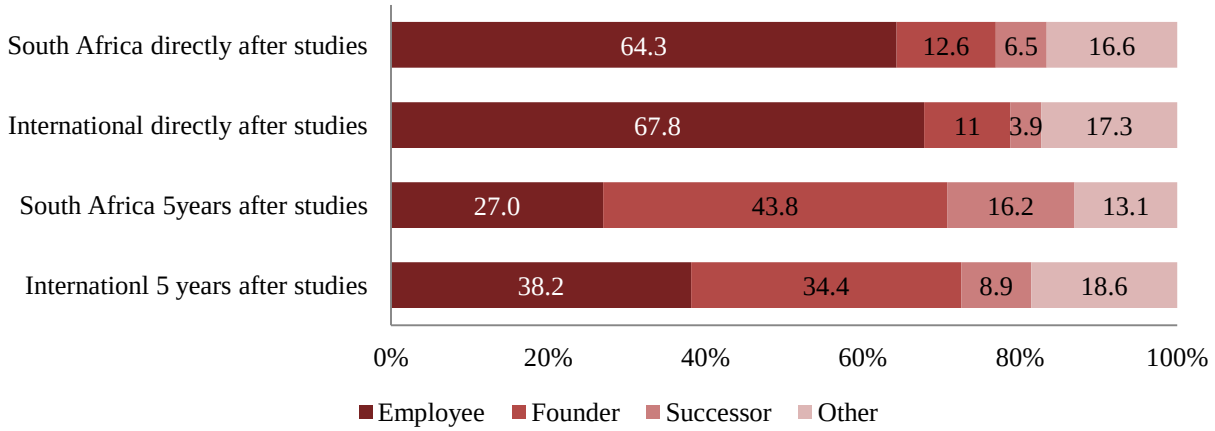
Figure 4.4: A shift in career choice intentions over time: International students (in percentages)



The tendency to engage in entrepreneurial behavior after being exposed to entrepreneurship education and activities are supported by the results, that is, after students gained theoretical understanding of entrepreneurship, they would want to get involved in practical application at some time (Friedrich & Visser, 2005 in Brijlal, 2011: 819). The trend further suggests that the students were indeed aware of their need for experience (Barringer & Ireland, 2008: 15) and calls for more interaction, networking opportunities and entrepreneurship activities to be arranged for South African tertiary students to strengthen their social capital.

The overall intended career choices directly after graduation and five years after graduation are summarised in Figure 4.5.

Figure 4.5: Overall shift in career choice intentions: South African and international students



The shift in career intentions towards becoming an entrepreneur five years after graduation is clearly highlighted in Figure 4.5. The difference between aspirant founders in the South African sample (43.8%) as opposed to the international sample (34.4%) is very apparent and proposes that South African students are more inclined towards entrepreneurship as a career. Through their offerings, universities should thus encourage students to turn their intentions into sustainable, opportunity-based businesses.

4.5 MOTIVATION FOR SELECTED CAREER CHOICE

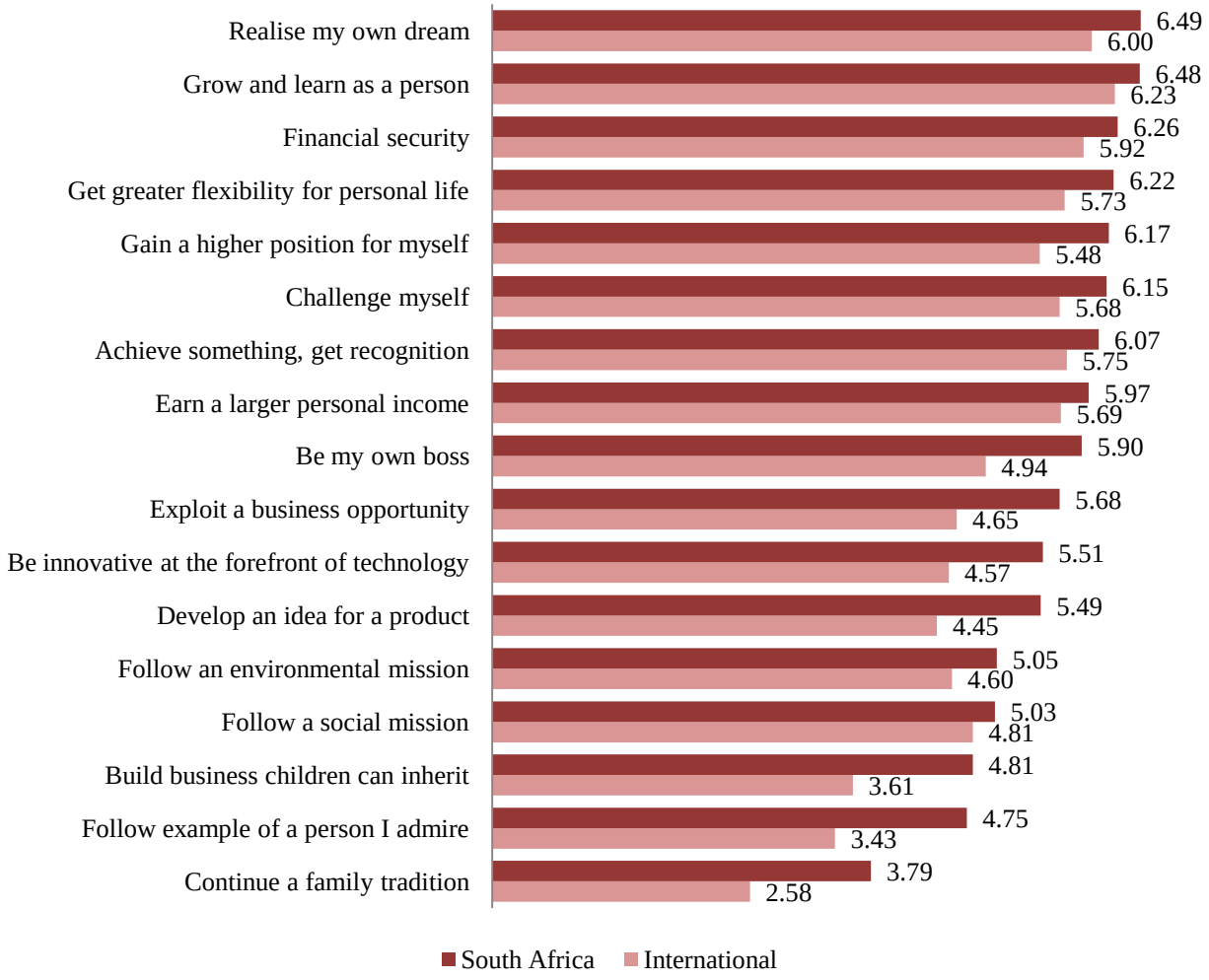
The intentions of students for selecting a particular career may be motivated by a variety of reasons such as the personal and university context within which they find themselves. Furthermore, they may also be influenced by peer groups such as family, friends and associations. To gain insight into these factors, the respondents were asked to indicate, on a seven-point Likert-scale, how important the reasons listed in Table 4.1 were. Statements are ranked in order of importance, based on the South African findings.

Table 4.1: Students' views on the motivation for their selected career choice

Motivation for your selected career	South African students			Frequency distribution (%)							International students		
	Valid n	Mean	S.D.	1 Very unimportant	2 Pretty unimportant	3 Rather unimportant	4 Equal	5 Rather important	6 Pretty important	7 Very important	Valid n	Mean	S.D.
Realise my own dream	693	6.49	0.88	0.4	0.3	0.6	2.2	6.5	24.7	65.4	92 377	6.00	1.26
Grow and learn as a person	690	6.48	0.86	0.4	0.1	0.3	2.0	9.0	23.6	64.5	92 266	6.23	1.07
Financial security	688	6.26	1.08	0.9	0.7	1.0	3.1	13.5	25.0	55.8	91 914	5.92	1.28
Get greater flexibility for personal life	692	6.22	1.06	0.4	0.6	1.3	4.3	14.0	25.9	53.5	92 089	5.73	1.39
Gain a higher position for myself	693	6.17	1.18	1.0	1.2	1.3	4.5	14.1	24.7	53.2	92 066	5.48	1.55
Challenge myself	692	6.15	1.07	0.7	0.6	1.0	4.3	15.5	29.6	48.3	92 388	5.68	1.35
Achieve something, get recognition	692	6.07	1.21	0.7	1.7	1.2	6.8	14.2	26.9	48.6	92 164	5.75	1.38
Earn a larger personal income	692	5.97	1.16	0.4	1.0	1.0	8.2	20.5	25.1	43.6	92 288	5.69	1.38
Be my own boss	691	5.90	1.38	1.2	2.2	2.3	10.6	15.2	20.7	47.9	92 056	4.94	1.83
Exploit a specific business opportunity that I recognised	691	5.68	1.39	1.6	1.7	4.3	10.9	18.5	26.8	36.2	91 941	4.65	1.97
Be innovative at the forefront of technology	690	5.51	1.48	2.3	2.2	6.4	10.4	19.7	27.8	31.2	92 093	4.57	1.93
Develop an idea for a product	693	5.49	1.54	2.7	1.7	7.5	11.5	19.0	23.5	33.9	92 025	4.45	1.98
Follow an environmental mission	693	5.05	1.59	3.0	4.0	9.7	17.3	22.2	21.4	22.4	92 160	4.60	1.89
Follow a social mission	691	5.03	1.58	2.3	5.2	9.3	18.8	21.9	20.3	22.3	92 126	4.81	1.83
Build business children can inherit	692	4.81	1.85	7.4	6.8	8.5	17.6	18.8	16.2	24.7	92 027	3.61	2.12
Follow example of a person I admire	690	4.75	1.83	7.7	6.4	10.7	15.5	18.8	20.0	20.9	91 989	3.43	2.13
Continue a family tradition	687	3.79	1.99	19.7	10.3	13.7	19.2	14.3	10.0	12.8	92 005	2.58	1.89

Figure 4.6 represents a comparison of the mean scores of the South African and international student samples; ranked in descending order, based on the South African responses.

Figure 4.6: Motivation for selected career choice for South African and international students (mean scores)



Students' career choices were firstly motivated by the ability to realise their dreams, secondly to grow and learn as individuals and thirdly, to secure financial stability. These three motivations, albeit in different order, were the most important for both the South African and international students.

In comparison with the 2008/9 survey, the main reasons for choosing a career were very similar. However, in the 2008/9 study financial security did not feature as prominently as it did in the 2011 survey, perhaps because the consequences of the prolonged global financial crisis have not yet fully filtered through the South African economy at that time.

On the other end of the scale, the three motivations ranked as least important by the South African students were: to build a business which the respondents' children could inherit, to follow the example of a role model, and to continue a family tradition. The same motivations, although ranked slightly differently, were also noted as the least important career choice influences in the international sample, in both the 2011 and 2008/9 reports.

From the mean scores in Table 4.1 it seems that several students were motivated by the environmental and social impacts of their choices. This is evident in their responses to select a career in which they could pursue an environmental or social mission (mean scores of 5.05 and 5.03 for South African students; 4.60 and 4.81 for international students respectively). South African students were more likely to pursue a social mission, perhaps due to a greater need for socio-economic and developmental interventions in the country, whereas the pursuit of a 'green' mission is more expected in the international context.

4.6 SUMMARY

Overall, the results show a similarity between the intended career choices of both the South African and international samples. The results highlight a shift in students' career intentions towards self-employment and the founding of an own firm five years after graduation. This shift towards entrepreneurship as a career choice is more prominent in the South African sample than in the international sample. Three of the most significant shifts in career choices for the South African sample (from 2008/9 to 2011) dealt with ownership in business, either their own, or taking over their family business or founding a franchise. This is, however, not the case for the international sample.

The propensity for students seeking entrepreneurial ventures seemed evident over the longer-term, that is five years after the completion of a student's studies. As students were generally aware of the need for experience, they sought participation in practical entrepreneurship activities while still at university, but preferred employment in established businesses directly after their studies. Two issues emerge from this finding, namely the need for more intense exposure of students to workshops and entrepreneurship activities during their academic studies, and a sharpened focus on developing general skills for employability in the short-term.

The results show that career choices are primarily influenced by personal factors such as growth, realising of goals, and financial independence and stability. The intended career choices are reported to be much less influenced by family, reference groups and role models than initially anticipated.

5. ENTREPRENEURIAL BEHAVIOUR

5.1 INTRODUCTION

As indicated in the theoretical model of this survey (depicted in Figure 2.1), entrepreneurial behavior is preceded by entrepreneurial intentions, which in turn are influenced by an individual's personal and family background, motives for becoming an entrepreneur, and exposure to entrepreneurship education. A "push-or-pull" event is cited by Nieman and Nieuwenhuizen (2009: 34) as a requirement for an individual to change course or in this case, establish a new business. Shapero and Sokol (1982) argue that graduation is a triggering event whereby "the person is open to different career options". The same applies for the encouragement and exposure that academics and mentors provide to students in a tertiary education environment.

Table 5.1 indicates that a large number of South African respondents (70.6%) have wishful intentions to establish an own company. This percentage is substantially higher than the percentage of students in the international sample (42.1%).

Table 5.1: Founder types

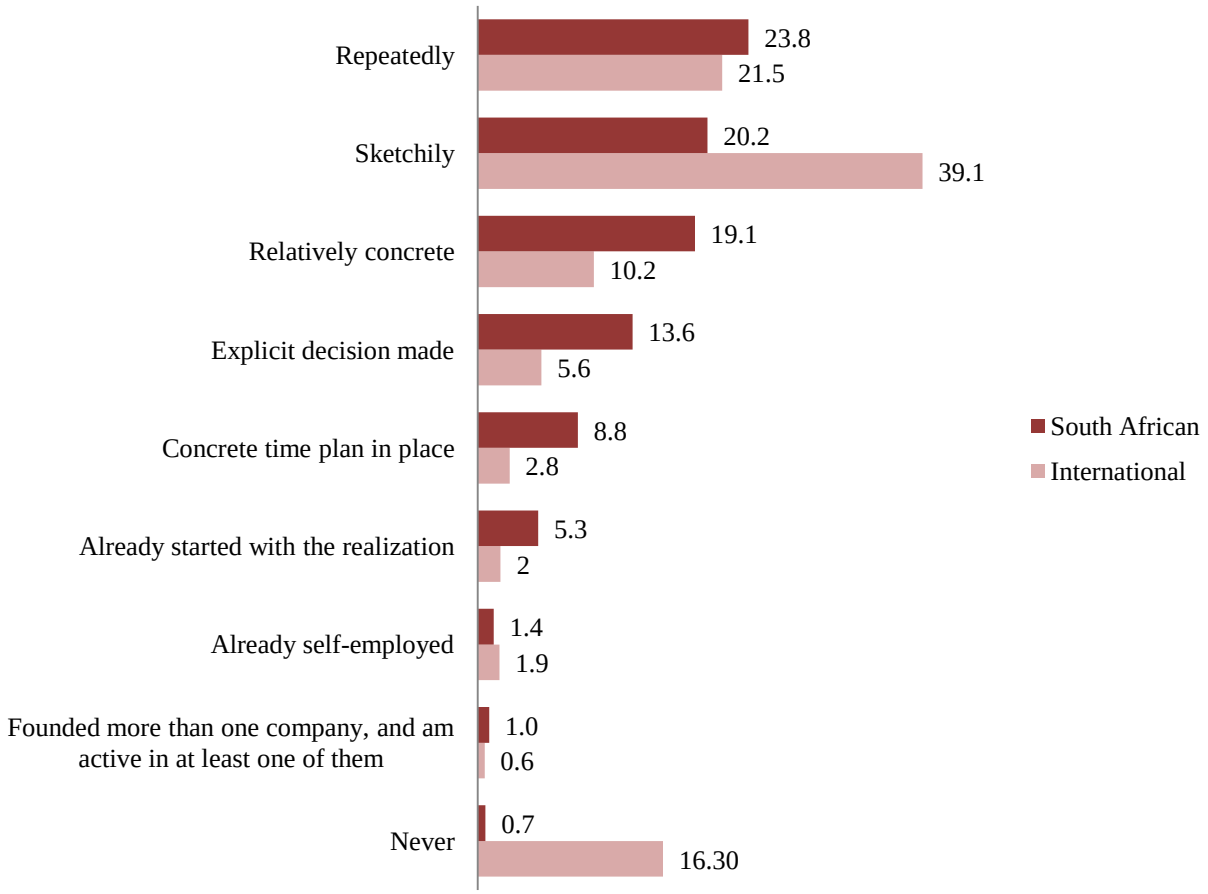
Founding type	South African students		International students	
	n	%	n	%
Non-founders	188	27.0	51 661	55.4
Intentional founders	492	70.6	39 280	42.1
Active founders	17	2.4	2 324	2.5
Total	**697**	**100**	**93 265**	**100**

Given changes in the 2011 questionnaire, a direct comparison could not be made with the 2008/9 sample. More details are now presented on the views of intentional and active founders.

5.2 INTENTIONAL FOUNDERS

This section provides an overview of the entrepreneurial intentions of students by looking at the industry in which they are considering establishing a business, their ideas on partnering and capital, anticipated barriers to setting up a business, and the steps they had already undertaken to turn their entrepreneurial intentions into reality. As one of the objectives of this section was to determine where students were on the spectrum of non-founders, intentional founders and active founders, respondents were asked whether they ever seriously thought about setting up their own business. Their responses are summarised in Figure 5.1 and compared with the international sample.

Figure 5.1: Students' thoughts on starting their own business (in percentages)



(Intentional founders South African N = 492; Intentional founders international N = 39 280)

Figure 5.1 indicates that a large number of South African respondents thought of establishing their own businesses. Although many students were considering self-employment, only 2.4 per cent actually started one or more businesses or actively participated in at least one of them. The global financial crisis and resultant difficulties in securing finance to start a business might have led to higher levels of risk-aversion among students. Although not directly comparable to the 2008/9 report, fewer students in the current survey were considering establishing a business or have already started a new venture.

Although the international sample followed almost the same trend, a much smaller percentage of students (42.1%) perceived themselves as intentional founders, and only 2.5 per cent already started their own businesses. These results indicate that, although there were some intentions among students to start their own businesses, very little action was taken. This might be attributed to a strain on finances while studying, and entrepreneurial ventures not being a priority while still at university. Universities could assist students in translating their aspirations into actions by providing them with the necessary resources and coaching opportunities.

The next section provides insight into the determination of these students by linking their intention to start a business to certain founding steps accomplished.

5.2.1 Steps in founding a business

In this section respondents had to distinguish between steps to founding a business ranging from non-activity and tentative steps, to the more concrete actions such as developing a business plan and deciding on a date for establishing the business. Students were given the option of selecting more than one step.

Table 5.2: Steps taken towards setting up a business

Steps taken	South African intentional founders (N = 492)		International intentional founders (N = 39 280)	
	n	%	n	%
No steps taken	105	21.3	10 592	27.0
Thinking through initial business ideas	334	67.9	25 395	64.7
Developed a business plan	89	18.1	7 330	18.7
Identified a market opportunity	233	47.4	13 353	34.0
Looked for potential partners	164	33.3	10 862	27.7
Purchased equipment	13	2.6	2 152	5.5
Worked on product development	46	9.3	3 731	9.5
Discussed with potential customers	67	13.6	5 225	13.3
Requested funding from institutions	8	1.6	1 165	3.0
Decided on date of foundation	18	3.7	1 416	3.6

As shown in Table 5.2, the majority of the South African students who intended to start their own business had not taken any steps to turn their intention into action (21.3%). At the time of the survey, two thirds of the intentional founders (67.9%) were still considering possible business ideas. This kind of inactivity is echoed in the international sample with 27 per cent of students having done nothing, and 64.7 per cent only thinking about the prospects of setting up a business. Close to a fifth (18.1%) of intentional founders in the South African sample have already compiled a business plan. Considering that a business plan is viewed as the roadmap to guide a business through its inception, it is alarming that some students started looking for potential business partners without having a clearly defined business plan. Only a handful of students in the South African sample (3.7%) decided on a foundation date, which solidifies the previous finding that there was a perceived passivity among students who view themselves as intentional founders. A greater emphasis needs to be placed on the value of a business plan – not only in the start-up of a business, but also in the subsequent phases of business development and growth.

When comparing the abovementioned results with those of the 2008/9 survey it seems that the number of seemingly passive intentional founders in South Africa is decreasing. It is, however, unfortunate to see that students paid little attention to the formulation of business plans, with the percentage of respondents doing so dropping from 19.3 per cent in 2008/9 to 18.1 per cent in 2011. Another

interesting observation is the sharp decline in students requesting funding (14.9% to 1.6%). Although students expressed a keen interest in entrepreneurship in the long-term, the evidence does not show concretization of their interest in the short-term.

5.2.2 Anticipated founding date

In order to determine the urgency among students to start their own businesses, respondents were asked to indicate the anticipated time (in years) that it would take until they actually established their own business. They were also requested to select the industry in which they planned to do so.

Only 3.7 per cent of intentional founders in South Africa and only 3.4 per cent of the international sample answered this question, supporting the notion that the physical start-up is often seen as a vague, futuristic action. On the other hand, the low response rate might be an indication of the perception students have of the complexity of starting one's own business, along with the underlying feeling that one should first obtain relevant business experience before opting for an own venture. The latter explanation ties in with the findings in Section 4.4 where most students preferred to work (and gain experience) for a few years before establishing their own businesses.

With regard to the anticipated number of years prior to founding, there was an even spread noted for the short, medium and longer terms in South Africa (Table 5.3). The majority of the international sample, however, anticipated founding their businesses in the shorter to medium term. These findings should nevertheless be viewed with caution, given the small number of students responding to the question.

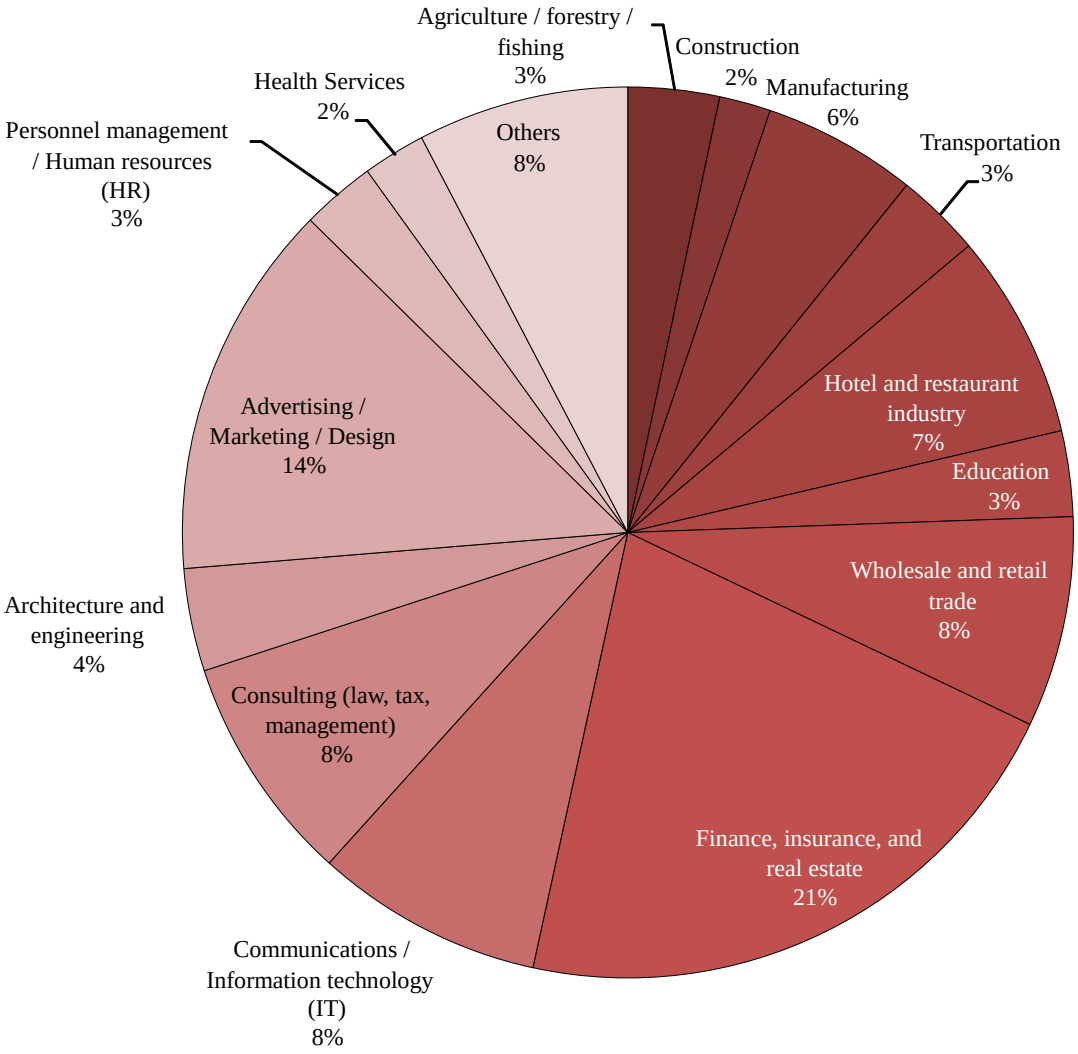
Table 5.3: Anticipated years until business start-up by intentional founders

Amount of years to founding	South African intentional founders		International intentional founders	
	n	%	n	%
Less than or equal to 1 year	6	1.2	657	1.7
Between 2 and 5 years	5	1.0	510	1.3
Between 6 and 10 years	6	1.2	142	0.4
More than 10 years	1	0.2	26	0.1
Missing	474	96.3	37 945	96.6
Total	**492**	**100**	**39 280**	**100**

5.2.3 Anticipated industry

As depicted in Figure 5.2, the industry in which most South African students aimed to start their businesses was the finance industry. Close to one-fifth of respondents (21%) indicated that their businesses would provide products or services in this sector, namely in the field of accounting, insurance, banking, financial consulting, trading, financial analysis, investments and real estate.

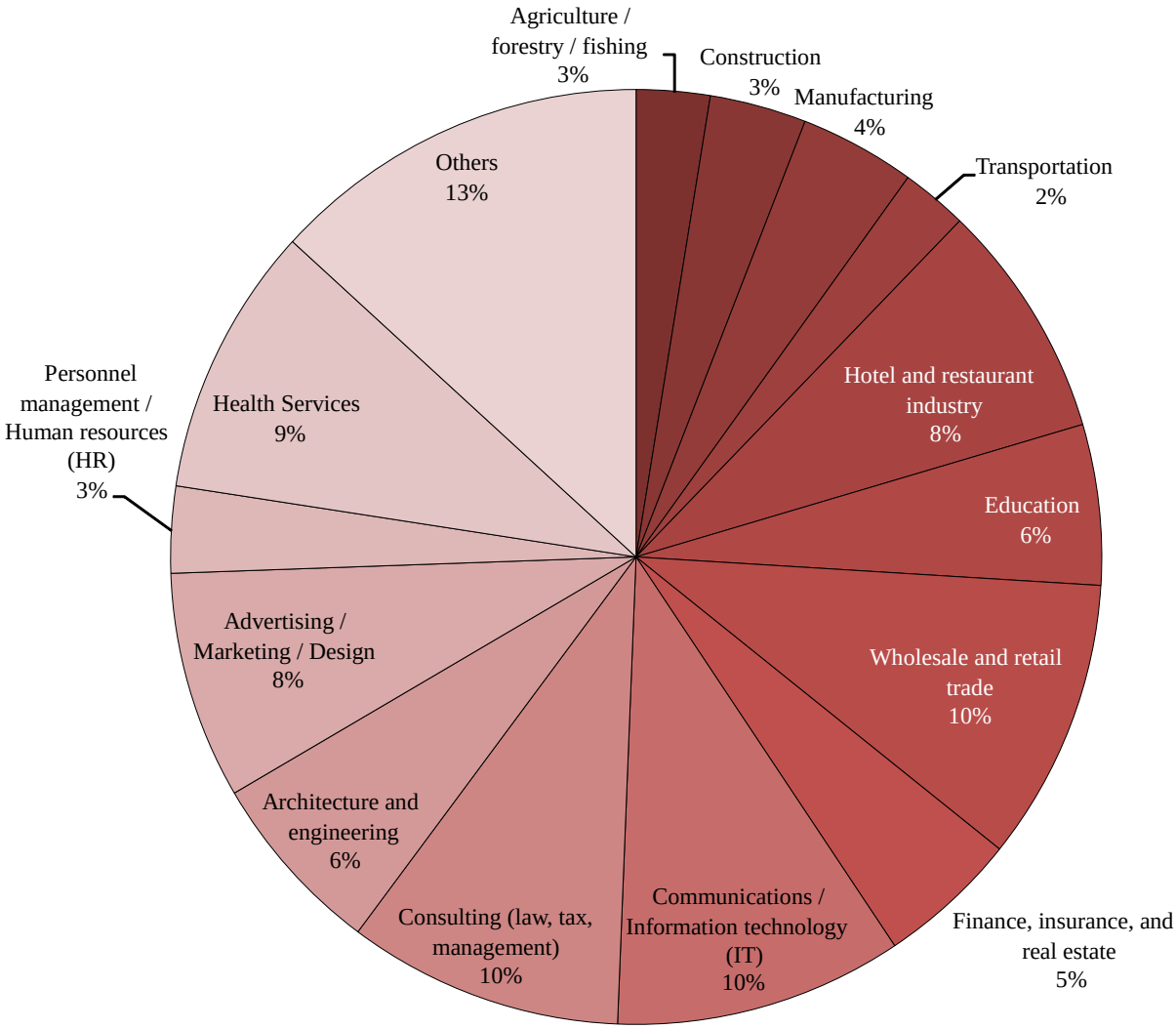
Figure 5.2: Most attractive industries: South African students (Intentional founders N = 492)



The advertising, marketing and design industries in South Africa seemed to provide promising opportunities to students as 14 per cent of respondents opted for these industries. There is also a notable focus in the hospitality, professional consulting, information technology (IT) and retail industries, whilst the construction industry was viewed as the least attractive industry by prospective entrepreneurs.

When examining the international data, it seems that international students were most interested in joining the advertising, marketing and design, communications, IT, law, tax and consulting industries. Notably, there was also a higher inclination among international students (9% compared to 2% in the South African sample) to venture into the health services industry. Complete details on the preferred industries in the international samples are provided in Figure 5.3.

Figure 5.3: Most attractive industries: International students (Intentional founders N = 39 280)



5.2.4 Formulation of founding idea

Business idea generation can, in most cases, be attributed to a certain source and has captivated researchers for decades (Barringer & Ireland, 2008: 30-31). Respondents were allowed to select more than one source for the idea of starting their own businesses. The main source of ideas for the South African respondents originated from their hobbies or recreational pastimes (42.7%), followed by their university studies (40.2%). With the increase in social networking, it is interesting to note that friends outside university had the lowest contribution to new business ideas, although this might be explained by the purely social nature of the relationship and limited contact. Family members as a source of new business ideas should be explored in more detail as close to a third (29.3%) of the South African respondents indicated that family members were the source of their founding ideas.

When comparing the two samples shown in Table 5.4, the international students placed a much stronger emphasis on university studies as a source of idea generation (45.3%) and their current or former work activities (26.9%) than did their South African counterparts. Students were given the option of selecting more than one source.

Table 5.4: Source of founding idea

Source	South African intentional founders (N = 492)		International intentional founders (N = 39 280)	
	n	%	n	%
Hobby or recreational pastime	210	42.7	12 223	31.1
University studies	198	40.2	17 805	45.3
Idea from self or fellow students	151	30.7	11 787	30.0
Family members	144	29.3	7 152	18.2
Academic, scientific or applied research	78	15.9	4 513	11.5
Current or former work activity	71	14.4	10 552	26.9
Friends outside University	50	10.2	4 325	11.0

The next section expands on work experience and will attempt to further elaborate on the differences between South African and international students in this regard.

5.2.5 Professional work experience

Respondents in the South African intentional founder sub-sample were asked to specify if they had any professional work experience that was relevant to the business they intended to start. Table 5.5 summarises and compares the results of the South African and international students.

Table 5.5: Students having done professional work relevant to the company they want to found

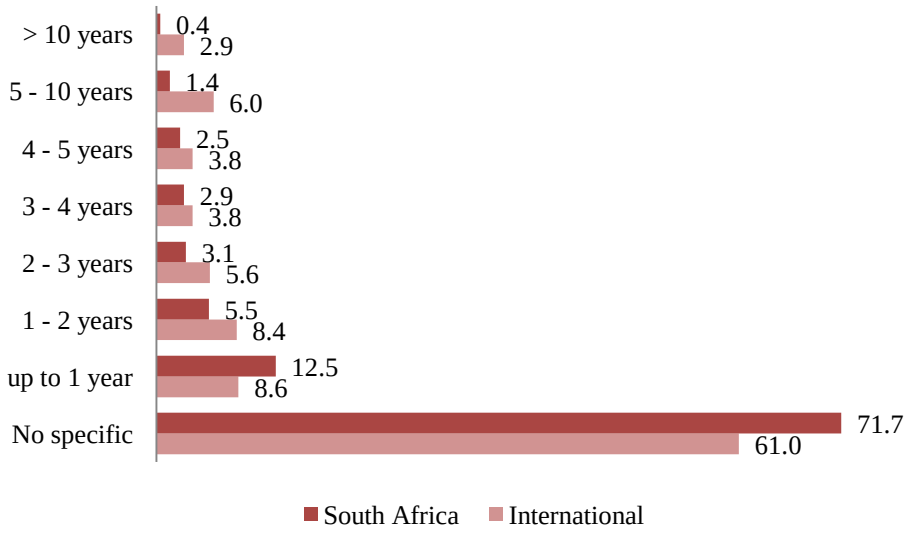
Relevant experience	South African students		International students	
	n	%	n	%
None	288	71.1	24 704	59.0
Some	204	28.9	14 576	41.0
Total	**492**	**100**	**39 280**	**100**

It comes as no surprise that most of the South African respondents (71.1%) did not have professional work experience, as South African university programmes normally do not make provision for work experiences (such as internships) in their curricula. Universities in other countries, on the other hand, are much more focused on arranging such activities, with many universities expecting students to complete internships before their degrees could be awarded.

In an attempt to obtain specific details on work experience, students were asked to elaborate on the periods they had worked and the relevance it had on the new business they planned to start. A total of 488 South African students answered this question, and of those, the majority could not specify a time

period. A small group (12.5%) had up to one year of relevant professional work experience. The international students had more professional work experience than their South African counterparts. This finding concurs with the fact that international students were on average slightly older than the South African students. More details on the responses with regard to professional work experience are shown in Figure 5.4.

Figure 5.4: Years of professional work experience relevant to the business to be founded (in percentages)



(Intentional founders South African N = 492; Intentional founders international N = 39 280)

5.2.6 Partnering

Intentional founders were asked if they planned to found their business with partners and if so, how many. The findings are displayed in Table 5.6 and indicate that almost a third of the South African intentional founders (31.7%) planned to be sole business owners, while the resulting respondents seemed to be more inclined towards only having one or at the most two partners. Only 10.8 per cent of respondents planned to have more than two partners. This could be attributed to reluctance on the part of the intentional founders to share the control, management and profits of their new venture with others.

Table 5.6: Number of anticipated founding partners

Number of partners	South African intentional founders		International intentional founders	
	n	%	n	%
None	156	31.7	13 808	35.2
One partner	173	35.2	15 656	39.9
Two partners	110	22.4	7 038	17.9
Three partners	29	5.9	1 514	3.9
Four or more partners	24	4.9	1 264	3.2
Total	**492**	**100**	**39 280**	**100**

South African respondents who intended to start their business with one or more partners were then asked to elaborate on where they planned to recruit these partners from. Multiple answers were permitted and the results reveal that most of the respondents perceived the relationships built at university as the most beneficial way to recruit suitable partners. It is not surprising to note that only 8.5 per cent of South African students planned to partner with their spouse as most students only get married after completing their studies (Section 2.5.3). The international sample yielded similar results, as can be seen in Table 5.7.

Table 5.7: Planned sources of recruitment of partners

Partners recruited from	South African intentional founders (N = 492)		International intentional founders (N = 39 280)	
	n	%	n	%
University	212	43.1	12 627	32.1
Circle of friends outside University	176	35.8	14 066	35.8
Relatives / family circle (parents, siblings)	105	21.3	7 049	17.9
Spouse	42	8.5	4 718	12.0

5.2.7 Capital

Two-thirds of the intentional founders (66.3%) had no idea of the amount of capital they would need to found their business. This finding is comparable to the international statistics presented in Table 5.8, and leads to the conclusion that the intended business ventures only remained an idea and no actions were actually taken to realise its formation. A link can also be drawn from the results explained in Section 5.2.1 where very few South African respondents had taken some steps in founding their business.

These findings emphasize the need for a stronger focus on entrepreneurship offerings dealing with the financial aspects of new venture creation.

Table 5.8: Amount of capital required to found own company

Amount of capital required	South African intentional founders		International intentional founders	
	n	%	n	%
Do not know	326	66.3	25 921	66.0
Know	111	22.6	10 972	27.9
Missing	55	11.2	2 387	6.1
Total	**492**	**100**	**39 280**	**100**

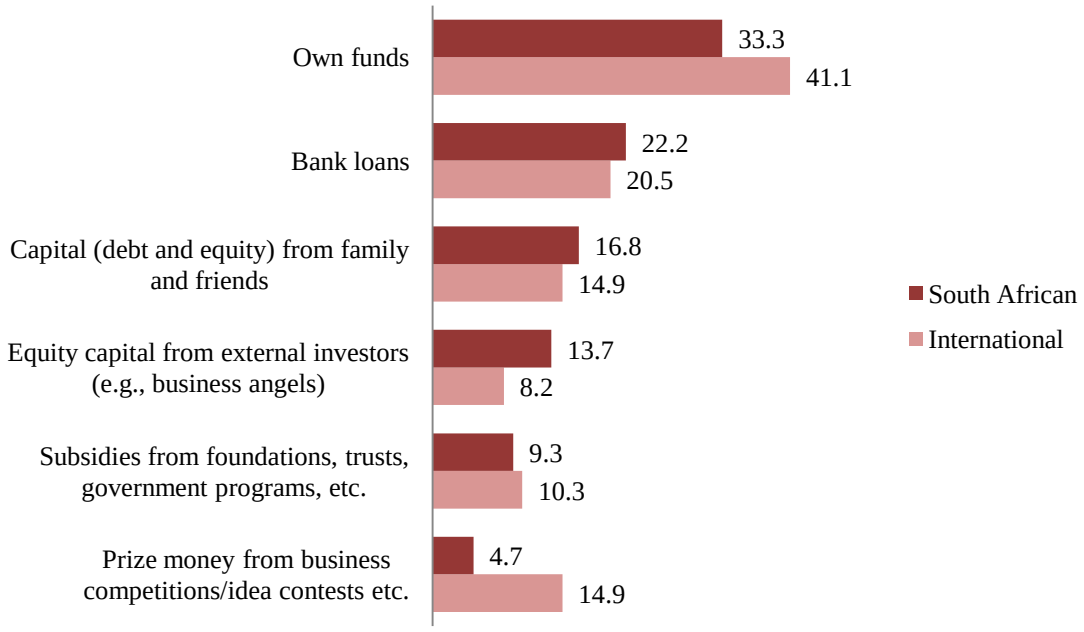
To support the evidence for the previous findings, the intentional founders were also asked if they knew where their finances would come from. The results for both the South African and international samples are shown in Table 5.9.

Table 5.9: Planned sources of finance

Planned sources of finance	South African students		International students	
	n	%		%
Do not know	212	43.1	18 813	47.9
Know	280	56.9	20 467	52.1
Total	**492**	**100**	**39 280**	**100**

Figure 5.5 illustrates the intended sources of finance for both the South African and international samples.

Figure 5.5: Planned sources of finance (in percentages)



(Intentional founders South African N = 492; Intentional founders international N = 39 280)

Less than half (45.2%) of the South African sample answered this question. The results show that both the South African and the international sample groups had a good idea from where they would obtain the capital needed to found their business. The findings further suggest that they planned to use their own financing first, rather than considering external financing. The order in which financing was planned to be obtained was firstly the use of own funds, secondly debt, followed by convertible debt and preference shares, while the issuing of equity shares in their business was the last resort to obtain financing (Myers, 1984: 581).

5.2.8 Equity capital

When asked what South African intentional founders' approximate share of total equity would be in the new business, the majority (80.2%) stated that they did not have any idea. The international findings (as depicted in Figure 5.7) are consistent with the South African results (Figure 5.6).

Figure 5.6: Approximate share of total equity: South African students

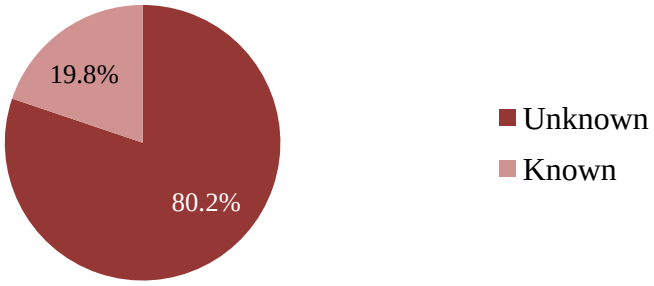
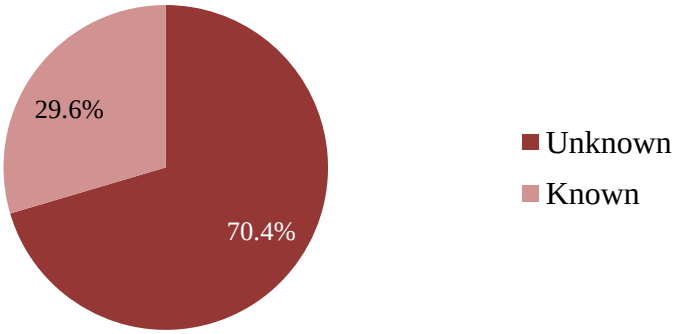


Figure 5.7: Approximate share of total equity: International students



A subsequent question to establish the founder's intended control over ownership revealed that the majority of founders (60% South African and 62.5% international) leaned towards staying in control of their own businesses.

5.2.9 Barriers to founding a business

Although students seemed keen on establishing their own businesses, many realised that this was not an easy endeavour. Their perceptions on the barriers to founding a business were gauged on a seven-point Lickert scale with 1 representing 'not applicable at all' to 7 representing 'very applicable'. The barriers to founding an own business are ranked in Table 5.10 from the highest to the lowest mean scores for the South African sample.

The most notable barrier to founding an own business, both in South Africa and other countries participating in the survey, was access to capital. A quarter of the respondents indicated that access to capital was "pretty much" or "very much" applicable. The second most important barrier, which related very closely to the first, also leaned towards the financial implications of starting one's own business. Considering the volatile economic environment being experienced worldwide, it is not surprising to note that general economic conditions ranked as the third biggest obstacle to new venture creation. However, it is encouraging to see that the lack of having "the right" business idea was not perceived as standing in the way of South African respondents to start their own businesses.

Table 5.10: Barriers to founding an own business

Statement	South African students			Frequency distribution (%)							International students		
	Valid n	Mean	S.D.	1 Apply not at all	2 Pretty not apply	3 Rather not apply	4 Equal	5 Rather apply	6 Pretty apply	7 Apply very much	Valid n	Mean	S.D.
Access to financial capital (debt and equity capital)	488	5.10	1.61	3.1	4.5	9.8	15.2	19.5	25.4	22.5	38 652	4.89	1.80
Bearing financial risk	486	4.45	1.73	7.2	8.0	14.0	17.1	23.5	17.5	12.8	38 501	4.42	1.77
General economic environment	484	4.21	1.60	6.4	8.1	18.0	23.6	21.7	14.3	8.1	38 520	4.15	1.75
Lack of contact to clients / customers	489	3.98	1.73	9.6	12.3	17.0	22.9	16.4	13.3	8.6	38 468	3.99	1.82
Having relevant technical know-how	486	3.68	1.80	11.5	19.8	18.7	15.8	15.0	11.3	7.8	38 419	3.54	1.86
High workload of an entrepreneur	488	3.65	1.81	15.2	15.6	18.2	16.8	15.0	12.9	6.4	38 406	3.37	1.86
State laws (rules and regulations)	487	3.50	1.76	16.6	17.0	16.2	20.1	15.2	9.4	5.3	38 511	3.89	1.83
Having the necessary skills and capabilities	485	3.49	1.86	16.3	21.4	16.7	13.6	14.0	10.7	7.2	38 467	3.47	1.87
Lack of the right business idea	486	3.41	1.76	18.7	18.3	16.5	16.9	14.4	10.3	4.9	38 476	3.40	1.93

5.3 ACTIVE FOUNDERS

As illustrated in Table 5.1, 2.4 per cent of the total South African sample already started one or more businesses, and/or were active participants in at least one of them. This is a rather small percentage, and calls for closer examination. Student entrepreneurs were thus further probed to obtain details on the founding, growth and performance of their existing ventures as well as their impressions of the barriers they faced when establishing their businesses.

5.3.1 Founding partners

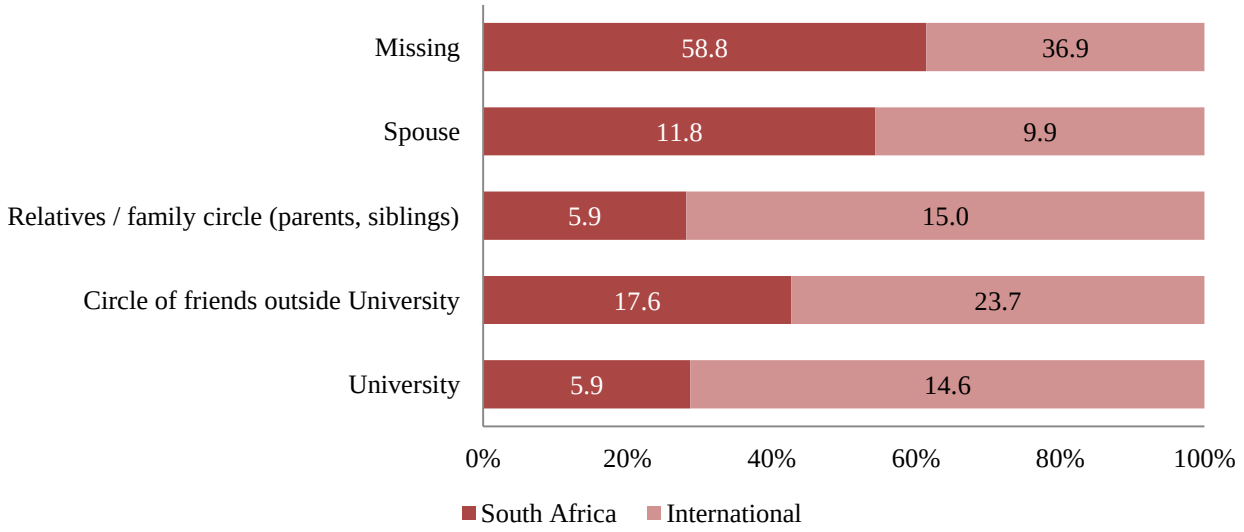
Of the 17 South African student responses outlined in Table 5.11, more than half (52.9%) founded businesses on their own. It seems that when they established their businesses, the trend was to not involve more than two partners. Unfortunately, no data were available for the international sample.

Table 5.11: Number of partners the business was founded with

Number of founding partners	South African students	
	n	%
None	1	5.9
Alone	9	52.9
One	3	17.6
Two	2	11.8
Three	1	5.9
More than three	1	5.9
Total	**17**	**100**

The students were further prompted to provide detail on where they recruited their founding partners from, and only seven South African students answered this question. The results of both the South African and the international sample are displayed in Figure 5.8. Although students did not plan to partner with their spouses when starting their own business, almost a third ended up doing so. Figure 5.8 compares the different sources of founding partners and shows that both the South African and international respondents indicated that their friends outside university proved the best source of founding partners.

Figure 5.8: Source of founding partners



5.3.2 Industry

In this section of the questionnaire, students specified in which industry their businesses were mainly active in. Table 5.12 shows the responses of both the South African and international samples.

Table 5.12: Industry the business was started in

Industry	South African active founders (N = 17)		International active founders (N = 2 324)	
	n	%	n	%
Communications / IT	3	17.6	348	15.0
Wholesale and retail trade	3	17.6	247	10.6
Others	2	11.8	473	20.4
Finance, insurance and real estate	2	11.8	95	4.1
Construction	2	11.8	102	4.4
Transportation	1	5.9	50	2.2
Advertising / Marketing / Design	1	5.9	220	9.5
Personnel management / Human resources (HR)	1	5.9	31	1.3
Hotel and restaurant industry	0	0.0	60	2.6
Education	0	0.0	118	5.1
Manufacturing	0	0.0	69	3.0
Agriculture / forestry / fishing	0	0.0	48	2.1
Consulting (law, tax, management)	0	0.0	179	7.7
Architecture and engineering	0	0.0	89	3.8
Health Services	0	0.0	106	4.6
Missing	2	11.8	89	3.8
Total	**17**	**100**	**2324**	**100**

Consistent with the findings in the intentional founders' industry section, the highest percentage of respondents in both samples indicated that they were doing business in the communications / IT industry. Another high-scorer in South Africa was the construction industry which was not the case internationally.

5.3.3 Idea generation

Only seventeen South African students answered the question of where the idea for their business originated from. The results for the South African and international respondents are displayed in Table 5.13. Universities were still perceived as an important breeding ground for new business ideas, as confirmed by most South African students. In line with the intentional founder section, most international students indicated that their "Current or former work activity" provided the best breeding ground for new business ideas. Multiple options were permitted.

Table 5.13: Origin of business idea

Origin of business idea	South African students (Active founders N = 17)		International students (Active founders N = 2 324)	
	n	%	n	%
Idea from self or fellow students	5	29.4	490	21.1
Current or former work activity	4	23.5	1 011	43.5
University studies	4	23.5	529	22.8
Family members	3	17.6	502	21.6
Hobby or recreational pastime	3	17.6	681	29.3
Friends outside University	2	11.8	281	12.1
Academic, scientific or applied research	0	0.0	143	6.2

5.3.4 Professional work experience

In order to assess the impact of professional work experience on the number of businesses started, South African respondents who started their own businesses were asked whether they had any relevant experiences before founding their business. The majority (70.6%) did not have relevant professional work experience before starting their own business, and of the five respondents that did, the extent of the experience seemed to be almost evenly spread between less than one year to 10 years. Students in the international sample had notably more experience than their South African counterparts, with five to ten years' of experience being reported.

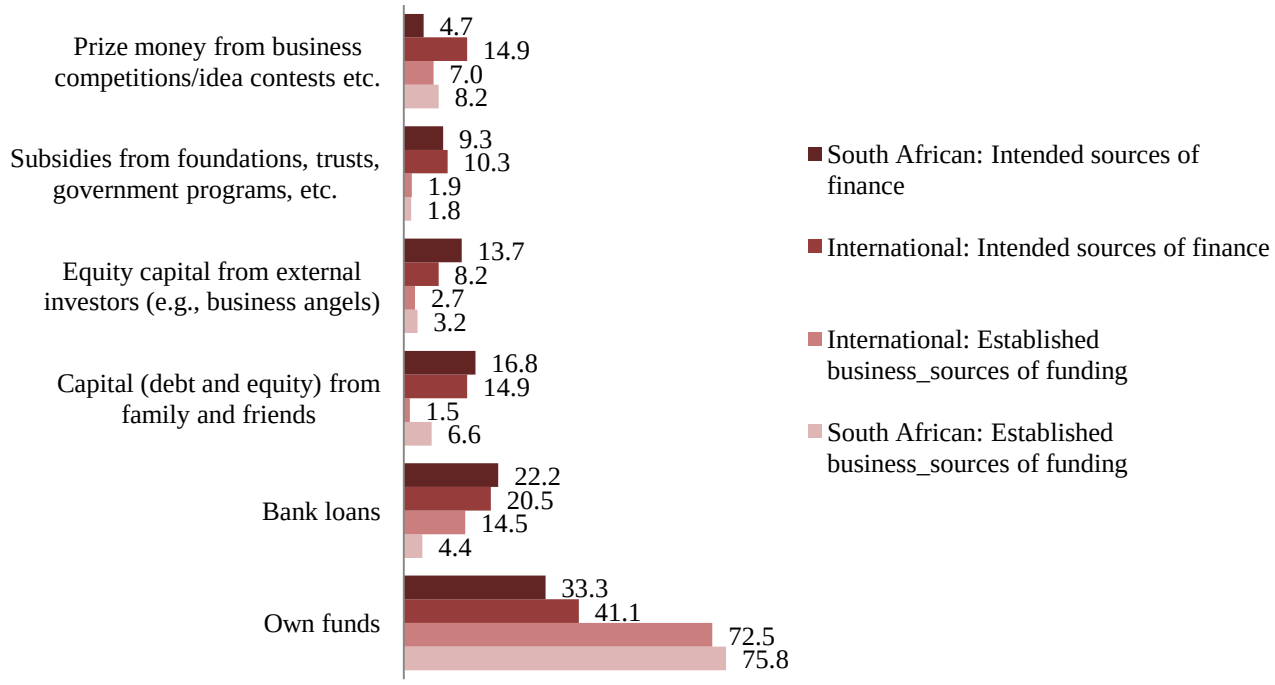
Table 5.14: Professional work experience gained before starting own business

Years of experience	South African students		International students	
	n	%	n	%
No specific experience	12	70.6	804	34.6
Up to 1 year	1	5.9	103	4.4
1 – 2 years	0		184	7.9
2 - 3 years	0		151	6.5
3 - 4 years	0		94	4.0
4 - 5 years	1	5.9	136	5.9
5 - 10 years	1	5.9	243	10.5
More than 10 years	2	11.8	172	7.4
Missing	0	0.0	437	18.8
Total	**17**	**100**	**2 324**	**100**

5.3.5 Sources of finance

Figure 5.9 illustrates the sources of finance used to start an own business compared to the intended sources. The results indicate that the most common source of finance used was that of own funds. Although this result is consistent with the responses from the intentional founders, it is interesting to note that although bank loans were still ranked second, bank loans did not feature as prominently as one's own finances. This indicates that students who founded their businesses tried to obtain finance from banks, but might have failed to do so and then returned to alternative sources.

Figure 5.9: Comparison between intended and utilised sources of finance (in percentages)

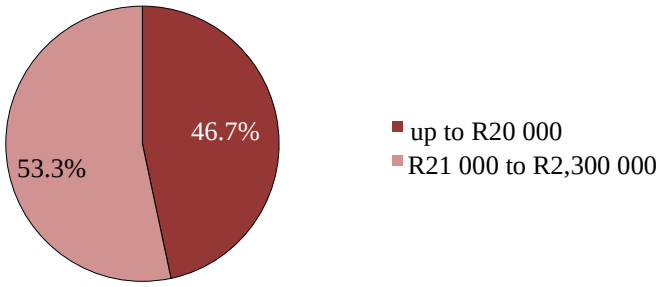


(Active founders South Africa N = 17; Active founders international N = 2 324)

5.3.6 Investment in the business so far

The data from 15 South African respondents are displayed in Figure 5.10. The majority of founders (53.3%) invested between R21 000 and R2 300 000 in starting and growing their own businesses.

Figure 5.10: Total amount of money invested in the business (National currency: Rand)



Respondents were asked to indicate what their share of the total equity in their business was. As reflected in Table 5.15, 16 out of the potential 17 South African active founders responded to this question with most of them owning the total share of the business, while the majority owned more than half of the business. The international sample showed comparable percentages to those reported in the South African sample.

Table 5.15: Share of total equity

% share:	South African students		International students	
	n	%	n	%
0	1	5.9	60	2.6
15	1	5.9	70	3.0
25	2	11.8	110	4.7
50	5	29.4	817	35.2
70	1	5.9	77	3.3
100	6	35.3	1 074	46.2
Missing	1	5.9	116	5.0
Total	**17**	**100**	**2 324**	**100**

5.3.7 Number of employees in established businesses (current and planned)

Considering the state of active businesses at the time of the survey, a quarter of South African respondents (26.7%) had no employees, a third employed only one or two employees and the resulting third was evenly spread out between employing three to 25 employees. Table 5.16 provides details of the number of employees the business owners planned to employ in five years' time. Almost a third of the South African respondents planned to employ at least 50 employees in five years' time - a

substantial increase compared to the 25 employees they had at the time of the survey. The international findings revealed that almost half of the established businesses had no employees (48.6%) - a percentage that would decrease considerably when looking five years into the future. Based on the findings of both samples, a definite focus on business growth in the short to medium term was observed.

Table 5.16: Number of employees in established businesses (current)

Number of employees	South African students		International students	
	Current	Planned	Current	Planned
	n = 15	n = 15	n = 2 228	n = 2 213
	Per cent (%)			
0	26.7	20.0	48.6	23.9
1	20.0	13.3	15.3	34.4
2	13.3		10.5	
3	6.7		5.9	
4	6.7	6.7	4.2	
5	6.7		3.0	
12	6.7	13.4	7	16.8
18	6.7		2.2	3.5
25	6.7	13.4	1.3	8.0
50	0	33.4	1.3	7.7
100	0	0	0.2	5.1
Total percentage	**100**	**100**	**100**	**100**

5.3.8 Annual sales in established businesses (current and planned)

Of the 14 South African students who provided information about their annual sales figures, 14.3 per cent specified that their business made no sales in the previous year. Just over 60 per cent generated sales up to R1 million, with the resulting 21.4 per cent reaching sales between R2 million and R12 million. The results changed considerably when the same students were asked how many sales they planned to generate in five years' time, as more than half (57%), planned to have sales over R12 million. Interestingly, one respondent indicated that the business did not plan to generate sales, even in five years' time. It might be that the student misunderstood the question or that the business was run as a non-profit organisation.

Table 5.17: Annual sales of South African established businesses

Sales (local currency: Rand)	Current (n = 14)	Planned (n = 14)
	%	%
0	14.3	7.1
100	7.1	0
200	7.1	0
20 000	7.1	7.1
250 000	7.1	0
363 000	7.1	0
400 000	7.1	0
500 000	7.1	14.3
1 000 000	14.3	0
2 000 000	14.3	14.2
12 000 000	7.1	0
up to 15 000 000	0	35.6
20 000 000	0	7.1
30 000 000	0	14.3
Total percentage	**100**	**100**

5.3.9 Business performance since establishment

The performance since the establishment of the business for both the South African and international samples is shown in Table 5.18, ranked from the highest to the lowest mean scores, based on the South African sample.

Table 5.18: Business performance since establishment

Statement	South African students			Frequency distribution (%)							International students		
	Valid n	Mean	S.D.	1 Worse	2 Pretty bad	3 Rather bad	4 Equal	5 Rather good	6 Better	7 Best	Valid n	Mean	S.D.
Development of profit	17	4.71	1.21	0.0	0.0	11.8	41.2	23.5	11.8	11.8	2 258	4.37	1.64
Development of sales	17	4.47	1.23	0.0	5.9	11.8	35.3	29.4	11.8	5.9	2 272	4.38	1.67
Development of market share	17	4.35	1.58	0.0	17.6	11.8	23.5	17.6	23.5	5.9	2 254	4.11	1.66
Creation of jobs	17	3.35	1.50	17.6	5.9	23.5	35.3	11.8	5.9	0.0	2 255	3.38	1.82

The findings for both the South African and international samples reveal that sales, market share and the creation of jobs developed steadily, or as expected, since the business was started. The development in market share also demonstrated a good performance in the South African sample, and considering that market share is a leading indicator of business success, the outlook for these businesses seems positive.

5.3.10 Foundation process

The principles for the foundation processes for both samples are listed in Table 5.19, ranked from the highest to the lowest mean scores, and based on the South African sample. The respondents' level of agreement with a number of founding principles was gauged on a seven-point Lickert scale.

Table 5.19: Foundation process principles

Statement	South African students			Frequency distribution (%)							International students		
	Valid n	Mean	S.D.	1 Strongly disagree	2 Pretty disagree	3 Rather disagree	4 Equal	5 Rather agree	6 Pretty agree	7 Strongly agree	Valid n	Mean	S.D.
I was careful not to commit more resources than I could afford to lose	17	5.65	1.37	0.0	0.0	11.8	5.9	23.5	23.5	35.3	2 245	5.04	1.89
I allowed the business to evolve as opportunities emerged	17	5.53	1.07	0.0	0.0	0.0	23.5	17.6	41.2	17.6	2 250	5.37	1.52
I was flexible and took advantage of opportunities as they arose	17	5.41	0.80	0.0	0.0	0.0	5.9	58.8	23.5	11.8	2 244	5.69	1.32
I used a substantial number of agreements with customers, suppliers and other organisations and people to reduce the amount of uncertainty.	17	5.41	1.23	0.0	0.0	5.9	17.6	29.4	23.5	23.5	2 251	4.42	1.89
I adapted what I was doing to the resources we had.	17	5.35	1.10	0.0	0.0	5.9	5.9	52.9	17.6	17.6	2 241	5.43	1.50
I used pre-commitments from customers and suppliers as often as possible.	17	5.29	0.92	0.0	0.0	0.0	17.6	47.1	23.5	11.8	2 247	4.42	1.98
I analysed long run opportunities and selected what I thought would provide the best returns.	17	5.24	1.39	0.0	0.0	11.8	17.6	35.3	5.9	29.4	2 261	4.25	2.02
I designed and planned business strategies.	17	5.06	1.64	0.0	5.9	17.6	11.8	17.6	23.5	23.5	2 256	4.50	1.88
I tried a number of different approaches until I found a business model that worked.	16	5.06	1.73	0.0	18.8	0.0	6.3	25.0	31.3	18.8	2 246	3.48	2.04
I avoided courses of action that restricted our flexibility and adaptability.	17	5.00	1.28	0.0	0.0	17.6	11.8	35.3	23.5	11.8	2 250	4.93	1.64
I organised and implemented control processes to make sure we meet objectives.	17	5.00	1.32	0.0	5.9	5.9	17.6	35.3	23.5	11.8	2 251	4.18	1.93
The product/service that I now provide is essentially the same as originally conceptualized.	17	5.00	1.32	0.0	5.9	5.9	17.6	35.3	23.5	11.8	2 247	4.92	1.80
I researched and selected target markets and did meaningful competitive analysis.	17	5.00	1.54	0.0	5.9	11.8	17.6	29.4	11.8	23.5	2 256	4.28	1.96
I was careful not to risk more money than I was willing to lose with my initial idea.	17	5.00	1.77	0.0	5.9	23.5	11.8	11.8	17.6	29.4	2 241	4.94	1.92
I was careful not to risk so much money that the business would be in real trouble financially if things did not work out.	17	4.88	1.83	0.0	11.8	17.6	11.8	17.6	11.8	29.4	2 248	5.08	1.90
I experimented with different products and/or business models.	17	4.59	1.70	11.8	0.0	5.9	17.6	41.2	11.8	11.8	2 244	3.86	2.04
I designed and planned production and marketing efforts.	17	4.41	1.46	0.0	11.8	11.8	29.4	29.4	5.9	11.8	2 243	4.26	1.94
The product/service that I now provide is substantially different than I first imagined.	17	4.29	1.96	5.9	23.5	5.9	11.8	17.6	23.5	11.8	2 252	3.23	2.10

As is evident from a closer examination of Table 5.19, similar founding principles seemed to be dominant across the two samples. Active founders felt that there was a balancing act between not overcommitting their resources and remaining flexible enough to integrate new ideas into their business, and turn these ideas into opportunities.

5.4 SUMMARY

The majority of South African students participating in this survey (70.6%) thought of starting their own businesses, and although being quite intent on making this a reality, only a few of them (2.4%) made concrete progress toward this goal. Although fewer students in the international sample had similar aspirations than their South African counterparts, a handful actually took any steps to turn their entrepreneurial intentions into actions.

When examining the founding process, international students placed more emphasized on previous work experience as a source of idea generation than South African students. Students in both samples viewed the finance and communications industries as having the most opportunities; and there was a sharp decline in South African students' attempts to request funding as one of the initial steps to start their own business (14.9% in 2008/9 to 1.6% in 2011). This finding is echoed when looking at Table 5.10, where perceived barriers to start one's own business were reported. However, the sharp decline in South African students' attempts to request funding may be as a result of universities offering more seed funding.

There was also a strong desire among intentional founders to remain the majority / sole owners of their business, thus staying in control of decision-making and profits.

Focusing on those students who already started their own businesses (active founders), the trends from the intentional founders' sections were clearly repeating themselves. Most active entrepreneurs were trading as sole owners used their own funds, and held 100 per cent of the equity of their own business. Although the intention was not to partner with a spouse, almost one-third of active entrepreneurs ended up doing so. In the cases where student business owners employed more than one employee, the goal was to further grow the number of employees in the upcoming five years. It seems that short-term success has prompted ideas of growth and scaling up among active founders.

Reflecting on the business start-up process, the founding principles perceived to be the most prominent were that it remained a balancing act between not overcommitting one's resources and still remaining flexible enough to adopt new ideas and to turn them into opportunities to ensure growth.

6. THE FAMILY BUSINESS

6.1 INTRODUCTION

Research shows that children who grow up in a family where one or both parents are entrepreneurs would be more likely to start their own businesses as well (Katz & Green, 2009:40; Dyer & Handler, 1994: 71; Hoy & Verser, 1994: 9). To determine whether this is indeed the case, some questions on family business exposure, family support, and the perceived barriers to taking over a family, were posed. From the findings in previous sections of this report, the conclusion can be made that very few students (irrespective of their home country) were interested in taking over their parents' or the family's business. This section provides more insight on the possible reasons why.

6.2 EXPOSURE TO A FAMILY BUSINESS

In contrast with the 2008/9 survey, slightly more than half of the respondents' parents in this study were self-employed or held a majority stake in a business. As was the case in the 2008/9 survey, South African students had more exposure to a family business than students in the international sample. In general the students' fathers were more likely to be self-employed than their mothers. Details on the respondents' exposure to a family business are shown in Table 6.1.

Table 6.1: Exposure to a family business

Statement	South African students					International students				
	Valid n	Frequency distribution (%)				Valid n	Frequency distribution (%)			
		No	Yes, my father	Yes, my mother	Yes, both of my parents		No	Yes, my father	Yes, my mother	Yes, both of my parents
Are your parents currently self-employed or hold a majority ownership in a business?	697	48.6	25.0	5.7	20.7	93 265	69.9	16.2	5.0	8.9
Have your parents ever been self-employed?	339	69.9	14.2	9.4	6.5	65 113	78.3	11.3	4.7	5.7

In the South African sample, parents had, on average, sold or given up their own businesses 9.74 years ago which was less than the international average of 10.32 years. The fact that more respondents' parents had experience as entrepreneurs, but were no longer owning a business, could be ascribed to the impact of the global financial crisis. Several SMMEs closed their doors due to limited credit facilities and depressed customer demand (The impact of the global crisis on SME and entrepreneurship financing and policy responses, 2009). This shift away from self-employment by parents could also be as a result of fewer South African students participating in the 2011 survey compared to the 2008/9 survey.

6.3 CHARACTERISTICS OF A FAMILY BUSINESS

Two-thirds of South African respondents' parents (66.2%) held the majority ownership in only one business (most likely their own). This was also the case internationally, where 71 per cent of students' parents held the majority stake of a single business. As illustrated in Table 6.2, most of the businesses in which students' parents held a majority interest were in existence before they became the main shareholders. This finding was applicable to both samples and implies that parents generally bought existing businesses, rather than establishing entirely new businesses.

Table 6.2: Years of existence of the family business

Statement	South African students			International students		
	Valid n	Mean	S.D.	Valid n	Mean	S.D
Years since main business exists	284	18.37 years	20.73 years	21 878	21.38 years	19.46 years
Years since family owns main business	286	15.66 years	17.16 years	21 766	25.77 years	23.44 years

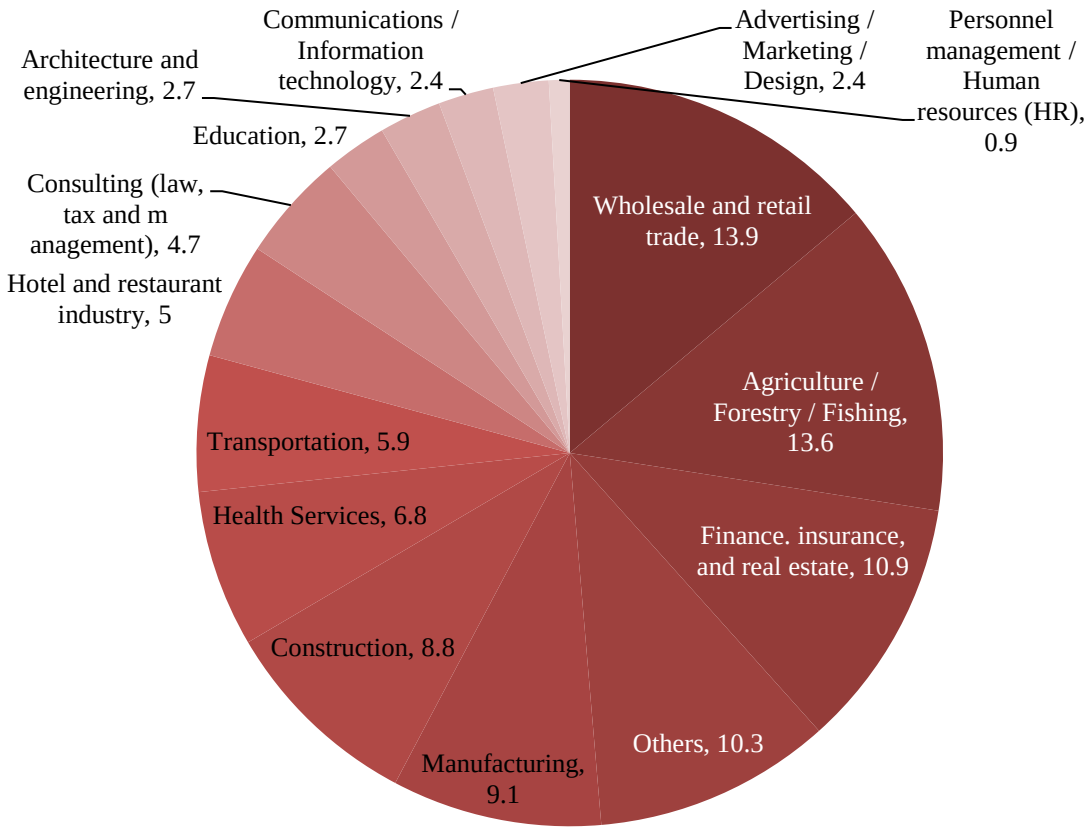
From the statistics in Table 6.3 it is clear that parents and one or two family members were actively involved in the management of the family business (more so in South Africa than internationally).

Table 6.3: Family involvement in the management of the family business

Statement	South African students exposed to a family business (N = 358)		International students exposed to a family business (N = 28 073)	
	n	Percentage YES responses	n	Percentage YES responses
Parents are actively involved in the day-to-day operations of the business	344	96.1	26 486	94.3
One or two family members are working in the family business	337	94.1	25 151	89.6
The majority of supervisory/advisory board members are family members	343	95.8	26 439	94.2
The majority of management board members are family members	344	96.1	26 481	94.3
The CEO is a family member	343	95.8	26 454	94.2
The president of the supervisory board is a family member	339	94.7	26 173	93.2

Most of the family businesses in the South African sample operated in the following industries: wholesale and retail, finance / insurance / real estate, and agriculture / forestry / fishing. The respective percentages are illustrated in Figure 6.1. Internationally, the majority of family businesses also operated in the wholesale and retail industry (14.7%).

Figure 6.1: Industry in which the family business is operating in: South African sample (N = 358)



As indicated in Table 6.4, three quarters of the equity in family businesses (both in South Africa and internationally) were in the hands of the families.

Table 6.4: Characteristics of the family business

Statement	South African students exposed to a family business (N = 358)			International students exposed to a family business (N = 28 073)		
	Valid n	Mean	S.D.	Valid n	Mean	S.D.
The percentage of equity held by the family	313	75.15%	32.05%	23 711	74.93%	36.80%
Total number of employees in full time equivalents	318	34.62 = 35 employees	101.901 = 102 employees	24 327	16.40 = 16 employees	66.67 = 67 employees
Percentage of that turnover is achieved by the largest company that the family controls	253	68.64%	35.72%	19 443	60.97%	41.74%

Given that total turnover generated in the year was indicated in local currency, no meaningful comparison could be made with the international sample.

On average a South African family business employed 35 people - a figure that was considerably higher than the international average of 16 employees. This characteristic might be attributed to lower labour costs in South Africa compared to other (mainly developed) countries in the international sample. As expected, the biggest businesses held by the family (most likely their own) also generated the highest percentage of total turnover.

6.4 PERFORMANCE OF THE FAMILY BUSINESS

Respondents who had exposure to a family business were requested to indicate how the performance of the business changed in the past three years. Performance was gauged on a seven-point Lickert scale where 1 represented 'worse' and 7 represented 'best'. The statements in Table 6.5 are ranked according to the mean scores in the South African sample.

Table 6.5: Performance in the past three years

Statement	South African students				Frequency distribution (%)						International students		
	Valid n	Mean	S.D.	1 Worse	2 Pretty bad	3 Rather bad	4 Equal	5 Rather good	6 Better	7 Best	Valid n	Mean	S.D.
Development of sales	351	5.08	1.45	1.7	2.6	7.7	24.8	20.8	22.2	20.2	26 481	4.50	1.56
Development of profit	349	4.99	1.45	2.0	2.3	10.9	22.3	21.8	23.5	17.2	26 326	4.44	1.57
Development of market share	350	4.80	1.45	7.4	9.2	12.9	27.5	15.2	16.6	11.2	26 339	4.34	1.54
Creation of jobs	349	4.28	1.71	7.4	9.2	12.9	27.5	15.2	16.6	11.2	26 338	3.77	1.64

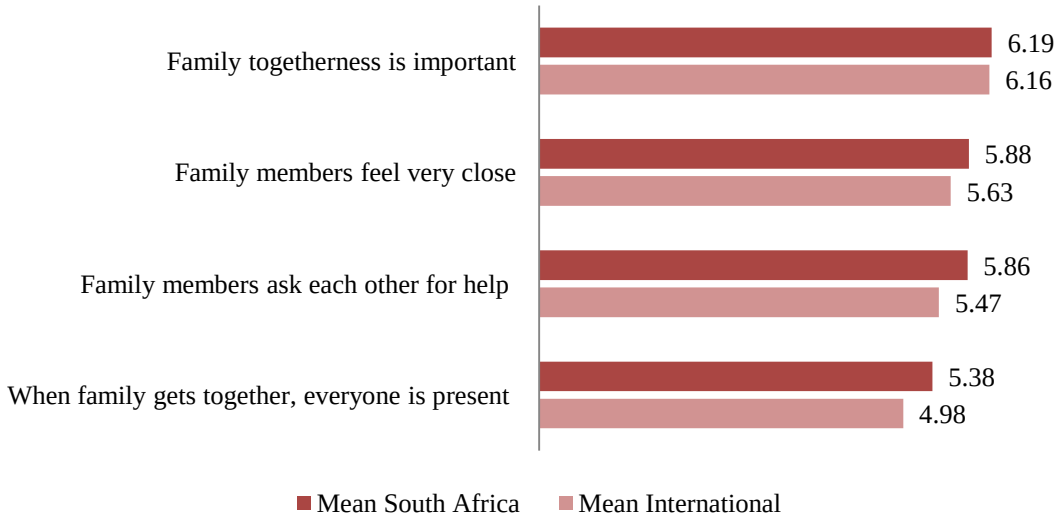
As can be seen in Table 6.5, family businesses in South Africa performed better in terms of sales, profits, market share and job creation over the past three years than their international counterparts did. This might be as a result of the nature of the industries in which South African family businesses operated compared to the international sample. In the international sample, for instance, a relatively large number of family businesses operated in the construction industry, an industry known to be highly sensitive to changes in the economic cycle. The relatively low score for job creation (4.28) is unfortunate given the dire need for new employment opportunities in the country.

As the values of family cohesion and continuing a family tradition might influence students' involvement in and willingness to take over the family business, these two issues were further investigated and are discussed in the next section.

6.5 THE IMPORTANCE OF FAMILY COHESION

From the high mean scores reflected in Table 6.6, it is clear that the South African students attached more value to family togetherness and cohesion than their international counterparts did. The statements were phrased on a seven-point Lickert scale with 1 representing 'strongly disagree' and 7 representing 'strongly agree'. The findings are illustrated in Figure 6.2 and are ranked from the highest to the lowest mean score.

Figure 6.2: Importance of family cohesion (mean scores)



6.6 ORIENTATION TOWARDS THE FAMILY BUSINESS

To investigate students' orientation towards the family business, a number of statements were formulated on a seven-point Lickert scale. These are ranked from the highest to the lowest mean score in Table 6.6.

Table 6.6: Orientation towards the family business

Statement	South African students			Frequency distribution (%)							International students		
	Valid n	Mean	S.D.	1 Strongly disagree	2 Pretty disagree	3 Rather disagree	4 Equal	5 Rather agree	6 Pretty agree	7 Strongly agree	Valid n	Mean	S.D.
I have a good insight into the family firm's (financial) performance	354	4.65	1.82	8.2	7.6	8.8	17.8	19.2	21.2	17.2	27 443	3.68	2.07
I connect mainly positive emotions / feelings with the company	353	4.65	1.58	5.9	5.9	6.5	22.1	28.9	19.5	11.0	27 461	3.87	1.97
This organization has a great deal of personal meaning for me	355	4.41	1.72	9.0	6.8	10.4	22.0	21.4	20.3	10.1	27 524	3.67	2.04
I feel emotionally attached to this organisation	355	4.22	1.71	9.0	9.3	13.2	21.4	22.8	14.9	9.3	27 620	3.59	2.05
We have the overarching goal of keeping the firm in the family's hands in the long term	354	4.04	1.94	15.0	11.6	10.2	20.3	16.1	14.4	12.4	27 455	3.21	2.10
Tradition and history plays a very important role in our family business	353	3.69	1.86	17.8	12.7	14.7	17.6	17.6	13.3	6.2	27 461	3.13	2.00

Having a thorough understanding of the financial performance of the family business and a personal attachment to the business seemed to play an important role in students' orientation towards the family business and an interest in taking it over. This finding corresponds with the motivations to become entrepreneurs provided by students in Table 4.1, namely to realise their own dreams and grow and learn as individuals.

The two lowest scoring statements both dealt with family history and continuation of family tradition and might suggest that the next generation of entrepreneurs will most probably not place as high a premium on these values as their parents or grandparents would. This conclusion is in line with the 2008/9 survey and Section 4.1 of this report which ranks "continuation of a family tradition" as the least important reason for becoming an entrepreneur. This finding is rather unexpected as more than half of the South African sample had entrepreneurial parents. Students in the international sample displayed a similar orientation to family businesses, that is, being more focused on their own needs and ambitions than that of the family.

6.7 INVOLVEMENT IN THE FAMILY BUSINESS

In line with the 2008/9 report, very few South African students (41.1%) worked in the family business. Even fewer students in the international sample (35.3%) worked in their parents' or family's business. This might be due to the fact that students' personal share of the family business was very low at approximately six per cent in both samples. As such, students might not have a personal interest in the business, but it could also be that students simply preferred to spend most of their time studying while still at university.

In both samples, those students who worked in their parents' or family's business, did so for approximately 3.5 years. Although more South African students worked in the family business (compared to the international sample), they spent less time there, compared to their international counterparts (see Table 6.7).

Table 6.7: Time spent working in the family business

Statement	South African students			International students		
	Valid n	Mean	S.D.	Valid n	Mean	S.D.
The number of years that the student has been working in his/her parents' business in total	146	3.48 years	6.39 years	9 883	3.85 years	5.09 years
The number of hours per week have the student has been working in total	145	16.35 hours	19.34 hours	9 873	18.15 hours	20.07 hours

6.8 STEPS IN JOINING THE FAMILY BUSINESS

Students who indicated that their parents were self-employed at the time of the survey or at some stage prior to it, were asked whether they were seriously thinking of taking over their parents'

business. As revealed in Table 6.9 the majority of South African students (66.8%) never contemplated doing so and a quarter only vaguely thought about this option. Less than ten per cent of students who had exposure to a family business have taken any concrete steps to take over this business. This percentage was slightly higher in the international sample.

Table 6.8: The frequency with which students have been thinking about taking over their parents' business

Statement	South African students exposed to a family business		International students exposed to a family business	
	n	%	n	%
Never and sketchily	239	66.8	15 841	56.5
Repeatedly and relatively concrete	86	24.0	9 084	32.4
I have made an explicit decision to be the successor in my parents'/family's business & We have defined concrete steps in how and when I will join the business	30	8.4	2 383	8.5
I already started with the realisation	3	0.8	589	2.1
I have already founded more than one company, and am active in at least one of them	0	0.0	168	0.6
Total	**358**	**100**	**28 037**	**100**

The lack of interest among respondents to become the successor of their parents' or family's business is illustrated in Figures 4.1 to 4.4. Only one-third of students' whose parents were or had been self-employed (33.2%), envisioned themselves as intentional successors.

Not only were very few students interested in joining the family business, but even fewer actually took steps to do so. This is evident from the number of respondents in South Africa (119) and in the international sample (6 336). As indicated in Table 6.9, most students remained at the contemplation and discussion stage. Students could select more than one option.

Table 6.9: Steps in joining the family business

Statement	South African students contemplating taking over the family business (N = 119)		International students contemplating taking over the family business (N = 6 366)	
	n	%	n	%
First general talks with family members	63	52.9	2 890	45.4
Apprenticeship / part-time job in the firm	50	42.0	2 343	36.8
Nothing done so far	26	21.8	1 891	29.7
Discussion of financial issues with regard to joining	19	16.0	987	15.5
Formulated a master plan for how I could join	18	15.1	1 076	16.9
The process of transferring shares has already started	63	3.4	2 890	5.9

In line with previous findings, South African students had only taken tentative steps in becoming entrepreneurs.

6.9 BARRIERS TO TAKING OVER THE FAMILY BUSINESS

The perceived barriers to succession of a family business are ranked from the highest to the lowest mean scores in Table 6.10 and Figure 6.3. The questions were also phrased on a seven-point Lickert scale.

South African students consistently perceived the listed barriers to taking over a family business as more serious than their international counterparts did. The only exception (where South African students had a lower mean score) was in terms of having technical know-how.

Table 6.10: Barriers to taking over the family business

Statement	South African students			Frequency distribution (%)							International students		
	Valid n	Mean	S.D.	1 Apply Not At All	2 Pretty Not Apply	3 Rather Not Apply	4 Equal	5 Rather Apply	6 Pretty Apply	7 Apply Very Much	Valid n	Mean	S.D.
In principle, aside from my personal preferences and obstacles/barriers. I could join the company if I wanted to do so	351	4.73	1.92	9.4	7.7	7.4	17.1	15.4	20.8	22.2	27 149	3.93	2.05
Being limited in my long-term career path	353	4.22	2.01	15.0	10.8	8.2	17.3	15.6	18.4	14.7	27 107	3.95	2.08
Bearing financial risk	354	3.93	1.89	15.5	11.3	11.3	22.6	15.0	14.7	9.6	27 207	3.74	1.99
Being interested in the products and services that we offer	353	3.93	1.90	14.4	13.0	11.9	21.5	15.0	13.0	11.0	27 103	3.85	2.08
Fear of failure	352	3.90	1.96	17.9	11.1	12.2	16.5	16.5	16.2	9.7	27 184	3.41	2.01
Having relevant technical know-how	351	3.84	1.87	14.5	14.5	14.2	17.7	15.1	16.2	7.7	27 187	3.93	2.09
Working daily with my parents/family members	355	3.73	1.97	18.9	14.1	12.4	18.0	13.5	13.0	10.1	27 130	3.36	2.04
Being interested in an entrepreneurial job in general	354	3.71	1.86	16.9	14.4	11.9	21.2	15.8	12.4	7.3	27 134	3.61	2.02
Having the necessary entrepreneurial skills and capabilities	354	3.70	1.89	17.5	15.0	13.0	16.7	18.4	11.6	7.9	27 190	3.63	2.03
Workload of an entrepreneur	354	3.48	1.85	20.9	13.8	15.3	19.2	13.3	12.4	5.1	27 318	3.33	2.04
Responsibility of successfully continuing the family tradition	355	3.46	1.88	22.0	15.5	12.1	16.6	18.0	9.9	5.9	27 241	3.17	1.98

Figure 6.3: Barriers to taking over the family business (mean scores)

The most important barrier in becoming a successor in a family business related to individual choice. Students in both samples were also concerned that joining the family business might limit their long-term career path and many were intimidated by bearing the financial risk associated with one's own venture. These findings support the career choice intentions exhibited by students in Section 4.

6.10 FAMILY SUPPORT AND CONTINUED INVOLVEMENT IN THE BUSINESS

Researchers of this survey were interested to ascertain whether parental and family support and continued involvement in the family business might contribute to students' willingness to join the family business or start a business of their own. Given the fairly low mean scores shown in Tables 6.10 and 6.11, this did not seem to be the case. Furthermore, the findings reveal that South African families generally provided more support (in terms of sharing knowledge and contacts) for upcoming entrepreneurs than families in the international sample did.

Table 6.11: Family support: Founding activities

Statement	South African students			Frequency distribution (%)							International students		
	Valid n	Mean	S.D.	1 Apply not at all	2 Pretty not apply	3 Rather not apply	4 Equal	5 Rather apply	6 Pretty apply	7 Apply very much	Valid n	Mean	S.D.
My parents/family offer me general knowledge about how to run a business	485	4.81	1.93	10.3	5.2	8.5	13.6	17.7	21.2	23.5	38 266	3.52	2.13
Thinking of all possible resources that my family provides me, I am fully independent from them in deciding how to allocate and use these resources	484	4.60	1.85	9.1	7.0	9.1	20.0	16.9	19.6	18.2	38 194	4.03	2.21
My parents/family provide me with contacts of people that might help me with pursuing an entrepreneurial career	486	4.46	1.97	14.6	5.6	7.4	17.1	17.9	21.8	15.6	38 259	3.43	2.12
My parents/family introduce me to business networks and provide contacts of potential business partners and/or customers	483	4.26	1.97	17.0	6.6	8.5	15.3	19.7	19.9	13.0	38 230	3.15	2.08
My parents/family coach/ mentor me in my entrepreneurial activities	484	4.24	2.00	15.1	9.9	9.5	12.6	21.5	16.7	14.7	38 229	3.04	2.03
My parents/family offer me industry-related knowledge how to produce services and products	482	4.17	2.01	17.2	7.3	9.5	18.3	17.2	16.0	14.5	38 232	2.96	2.03
My parents/family provide me with locations/facilities for my entrepreneurial activities	484	3.75	2.04	22.7	9.9	11.6	15.5	15.7	14.5	10.1	38 143	2.86	2.02
My parents/family provide me access to a distribution network for my company	481	3.63	1.97	23.3	10.8	9.8	20.8	14.8	12.1	**0.0**	38 022	2.56	1.89
The capital provided by my parents/family has favorable and flexible conditions (e.g. low interest rates or long pay back periods)	482	3.54	2.12	30.7	7.7	8.3	16.0	14.1	13.9	9.3	38 169	3.01	2.16
My parents/family provide me with equity capital (capital without regular interest payment that may be lost in case the business fails)	484	3.12	2.02	34.9	12.6	9.5	13.4	13.6	9.7	6.2	38 441	2.98	2.08
My parents/family provide me with debt capital (capital that bears regular interest payments and that I have to repay)	485	2.99	2.00	38.8	10.7	10.5	13.4	12.4	8.0	6.2	38 538	2.48	1.87

Table 6.12: Family support: Entrepreneurial activities

Statement	South African students			Frequency distribution (%)							International students		
	Valid n	Mean	S.D.	1 Worse	2 Pretty bad	3 Rather bad	4 Equal	5 Rather good	6 Better	7 Best	Valid n	Mean	S.D.
Thinking of all possible resources that my family provides me, I am independent from them in deciding how to allocate and use these resources	17	4.06	2.19	23.5	0.0	17.6	11.8	17.6	11.8	17.6	2 271	4.84	2.39
My parents/family offer me general knowledge about how to run a business	16	3.63	2.16	25.0	6.3	25.0	6.3	12.5	12.5	12.5	2 272	3.06	2.22
My parents/family provide me with contacts to people that might help me with pursuing an entrepreneurial career	17	3.35	2.18	29.4	5.9	29.4	5.9	11.8	17.6	0.0	2 266	2.84	2.18
The capital provided by my parents/family has favorable and flexible conditions (e.g. low interest rates or long pay back periods)	17	3.29	2.05	35.3	5.9	11.8	5.9	23.5	17.6	0.0	2 258	2.54	2.26
My parents/family provide me with locations/facilities for my entrepreneurial activities	17	3.18	2.10	35.3	5.9	17.6	11.8	17.6	0	11.8	2 269	2.79	2.29
My parents/family introduce me to business networks, providing contacts to potential business partners and/or customers.	17	3.12	1.93	29.4	11.8	23.5	5.9	17.6	5.9	0.0	2 273	2.79	2.16
My parents/family offer me industry-related knowledge how to produce services and products	17	3.00	2.29	41.2	17.6	5.9	0.0	17.6	5.9	11.8	2 271	2.49	2.05
My parents/family coach/ mentor me in my entrepreneurial activities	17	2.94	2.16	41.2	11.8	11.8	5.9	17.6	0	11.8	2 270	2.63	2.06
My parents/family provide me access to a distribution network for my intended company	17	2.88	2.15	41.2	17.6	5.9	5.9	11.8	11.8	5.9	2 259	2.19	1.92
My parents/family provide me with equity capital (capital without regular interest payment that may be lost in case the business fails)	17	2.71	1.76	41.2	5.9	23.5	5.9	17.6	5.9	0.0	2 281	2.31	2.06
My parents/family provide me with debt capital (capital that bears regular interest payments and that I have to repay)	17	2.41	1.80	47.1	17.6	11.8	5.9	5.9	11.8	0.0	2 284	1.99	1.83

Quite a large percentage of South African students (60%) were of the opinion that their parents or relatives would maintain a controlling interest in the business, that is, 51.6 per cent of the equity. The situation was more evident in the international sample where respondents anticipated that their parents or family members would retain up to 72 per cent of the equity of the business. It could, however, not be established whether or not this was indeed a motivating factor for students wishing to join the family business.

6.11 SUMMARY

Although many students participating in the survey had exposure to a family business, few were interested in joining these businesses. Although students valued family cohesion and support, personal preferences and motivations played a more important role in directing their career choices (mostly away from employment in the family business). This is unfortunate as students could learn a great deal from their parents and relatives who are active and seemingly successful entrepreneurs. However, the findings do corroborate the literature in that succession in family businesses is not well supported in South Africa (Nieman & Nieuwenhuizen, 2009: 224).

7. STUDENTS' VIEW ON SOCIAL ENTERPRISES IN SOUTH AFRICA

7.1 INTRODUCTION

Given the importance of social enterprises in addressing the developmental and environmental challenges facing South Africa, students were asked whether they intended to start an enterprise with a social and/or environmental mission. In the context of this survey, a social enterprise is defined as an organisation that is managed according to business principles, but its primary purpose being to address a particular social or environmental challenge, for example unemployment or recycling waste.

7.2 VIEWS ON SOCIAL ENTERPRISES IN SOUTH AFRICA

In line with the findings in Table 4.1, a fairly large percentage of students (42.8%) responded positively to the question whether they would be interested in establishing an enterprise with a social and/or environmental mission. This country-specific question was included in the South African questionnaire as the need for, and number of, social entrepreneurs in South Africa have risen in recent years (Venter, *et al*., 2008: 523).

Students were further asked to specify the social and/or environmental mission that they were likely to pursue. This open-ended question resulted in several suggestions, some of which were quite vague (e.g. creating jobs), whereas others were very detailed (e.g. converting highly radioactive waste to medium / low / non-radioactive waste). As indicated in Table 7.1, more students considered establishing an enterprise to address social and developmental challenges than pursuing environmental ones. This finding corresponds with the ranking of career intentions favoured by South African students (Table 4.1).

Four main environmental missions were identified, namely engaging in so-called 'green' projects and initiatives, providing education and training on environmental issues, developing 'green' technologies, and protecting animals and the natural environment.

With regard to the most prominent 'green' mission, most students envisioned starting an enterprise in the recycling sector. Being entrepreneurially inclined, these students had innovative ideas to transform waste into commercially viable products, which would at the same time improve the standard of living in local communities. Other students saw opportunities to reduce greenhouse gas emissions, particularly in the transportation sector. Despite a growing emphasis on proper water management in South Africa (Adler, Claassen, Godfrey & Turton, 2007: 33; Bohensky & Lynam, 2005:11), only one student identified the need to start a social enterprise aimed at improving the supply and quality of water in the country.

Table 7.1: Environmental and social missions that prospective social entrepreneurs are likely to pursue

Mission	Business ideas	n	Total
Environmental missions	Engaging in 'green' projects and initiatives	35	**60**
	Providing 'green' education and skills training / Consulting on sustainable development issues	9	
	Developing 'green' technologies	5	
	Protecting animals and the natural environment	7	
	Other	4	
Social and/or developmental missions	Providing education and training	43	**122**
	Creating job opportunities	42	
	Engaging in housing projects	8	
	Engaging in projects to improve the welfare of children and adolescents	10	
	Engaging in projects to improve health care	6	
	Providing aid for under-privileged	4	
	Combatting human trafficking	2	
	Developing sport	2	
	Other	5	
Total			**182**

Other than engaging in 'green' projects and initiatives, many students saw opportunities in providing environmental education, training and consultation. This might be as a result of more attention being given to environmental issues at South African universities (James, 2009; Farrar, 2008).

Five students saw opportunities in developing new environmentally-friendly technologies, such as solar or wind power. Given the costs involved in projects of this nature, the question of whether they could be classified as social enterprises becomes important. In the "other environmental missions" category, students were considering starting enterprises in eco-tourism, sustainable agriculture and construction. Several students recognised the interrelationship between 'green' education and training, environmental protection and job creation.

Eight important social missions were identified, the two foremost being job creation and the provision of education and training. From the comments received it was clear that these two aspects were almost inseparable, and that both are seen as important mechanisms to reduce poverty and crime in local communities.

According to the South African Reserve Bank, the official unemployment rate in South Africa equaled 25 per cent in the first quarter of 2011 (SARB Quarterly Bulletin June 2011, 2011: 2). Unofficial figures, however, suggest that unemployment may be as high as 30 per cent, leading to widespread poverty and a range of associated socio-economic problems. It is therefore not surprising that the vast majority of prospective social entrepreneurs wanted to address these challenges. Unfortunately, only two students had concrete ideas on how they wished to achieve this, both only suggesting the recycling of waste products. Despite students' vagueness on how they intended to create job opportunities, many agreed that "job creation should satisfy the needs of the community", specifically

as far as housing and financial stability were concerned. The majority of students who wished to engage in social construction projects mentioned that these projects should be affordable and environmentally-friendly.

Prospective social entrepreneurs identified education and training needs in the areas of life skills, career guidance, personal financial management, technology and innovation as well as the skills required to establish and manage a small business. With regard to the latter, particular opportunities were foreseen in offering education and training in the fields of financial management, IT and the legal environment. Emphasis was placed on developing the skills of young people and the unemployed.

Another social mission that was frequently mentioned, dealt with improving the welfare of children and adolescents. Proposed projects range from providing housing and education to caring for their psychological and emotional needs. This theme ties in with the next one, namely providing aid for the under-privileged. Three students envisioned setting up charities, whereas a fourth student contemplated the establishment of a micro-finance institution offering affordable loans to members of his/her local community.

Although highlighted as a social mission, students were very unclear in terms of how they wished to improve health care conditions in South Africa. Despite South Africa having one of the highest HIV infection rates in the world (UNAIDS Report on the global AIDS epidemic 2010, 2010), only one respondent in this sample, aspired to be a social entrepreneur working in this field. Earlier in the report (Figure 5.4), the health care sectors also featured as one of the least attractive industries in which students envisaged starting a new business.

Some of the less frequently mentioned social missions dealt with combatting human trafficking, sports development, combatting corruption, establishing agri-businesses and food gardens in townships, and assisting homeless people and disabled children.

A common thread running through many of the missions was the students' desire to engage with communities to address their problems. This inclusive approach to social entrepreneurship was highlighted by Nobel prize winner and founder of the Grameen Bank, Muhammad Yunus, who remarked that: "people can change their own lives, provided they have the right kind of institutional support. They are not asking for charity; charity is no solution to poverty" (The Nobel Peace Prize 2006, 2006).

7.3 SUMMARY

From the previous discussions it is clear that South African students were critically aware of the environmental and developmental challenges facing the country. A large number of students contemplated establishing social enterprises to address some of these issues. However, it should be

noted that, despite their willingness to "do good", many students were not able to articulate a specific mission they would like to pursue. Research has indicated that the most successful social entrepreneurs are typically those who are not only passionate, but also have a clearly-defined purpose (Sharir & Lerner, 2006: 6; Paton, 2003: 2). Nevertheless, it is anticipated that the ideas of those students who seemed adamant about facilitating change in society, will be brought to fruition in time to come.

8. ENTREPRENEURSHIP INDEX

The entrepreneurship index weighs to what extent students have thought of founding a business, and to what extent they already are active entrepreneurs. As such, the index is an indication of what can be termed as ‘entrepreneurial power’. South Africa showed a slightly lower entrepreneurship index value in comparison to the overall sample (25.13 compared to 27.22). This relatively low value is not surprising as a crystal-clear gap between entrepreneurial intentions and actions among South African students have been noted in several sections of this report (Sections 4.5, 5.2 and 5.3). In the international sample, Polish students reported the highest overall entrepreneurship index value (68.25), whereas Tunisian students were the least likely to turn their entrepreneurial intentions into actions, with a mean score of 16.

9. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

A summary of the main findings of the 2011 survey, pertinent conclusions and recommendations are presented in this section of the report.

The demographic profile of students in both the South African and international samples was relatively similar in terms of age, gender and study level. Students in the international sample were, however, slightly older than their South African counterparts and had a higher representation of postgraduate students. Whereas more than half of the South African students in the sample were majoring in Business and Economics, most of the international students were completing qualifications in the Natural Sciences. This tendency towards commercially-oriented degrees in the South African sample could explain why South African students exhibited stronger entrepreneurial intentions and behavior compared to their international counterparts.

9.1 UNIVERSITY COURSES AND SERVICE OFFERINGS

The first objective of the 2011 survey was to investigate students' knowledge of entrepreneurship offerings at higher education institutions, their demand for and utilisation of these offerings, and their level of satisfaction with the offerings they used.

Three categories of offerings were evaluated, namely lectures and seminars, workshops and coaching opportunities, and the provision of resources to founders and entrepreneurs. Not only were the South African students more aware of these offerings at their universities, but they also utilised more of the offerings. Students were generally satisfied with the available offerings, but demanded additional practical activities, such as networking opportunities with experienced entrepreneurs, and resources, such as seed funding and financial support.

The university context had a positive influence on South African students' entrepreneurial intentions and behaviour. Contact with likeminded peers and mentors was seen as particularly important in generating business ideas and understanding the theoretical underpinning of the entrepreneurial process. International students' responses were generally indifferent about the impact of the university context on their entrepreneurial intentions and behaviour.

Not only are the contents of university offerings important, but also the access to it. Existing entrepreneurship literature suggests that the level of entrepreneurship in South Africa is low and generally of a poor quality. This despite a fairly high ranking of South Africa in the 2010-2011 global competitiveness report in terms of the standard of scientific research institutions (South Africa was placed 29th out of 139 countries), and the healthy collaboration between higher education institutions and the business sector, where South Africa was ranked 24th (Schwab, 2011). The challenge lies in the fact that only 15 per cent of South Africans have access to tertiary education, placing South Africa in the 99th position in the global ranking. Clearly access to tertiary education should be urgently

addressed to unlock the country's innovation potential. It is further recommended that higher education institutions in South Africa should increase the number of postgraduate students.

9.2 CAREER CHOICE INTENTIONS

The second objective of the survey was to explore the career choice intentions of students, giving particular attention to changes that might have occurred as a result of the global financial crisis.

Compared with the international sample, more students in South Africa were interested in establishing their own businesses, either directly after graduation or five years later. The intention to start a new business, has, however decreased sharply in South Africa compared to the 2008/9 survey (Table 9.1).

Table 9.1: Changes in career intentions over time

Intention to start a new business	South African sample 2011	South African sample 2008/9	Change	International sample 2011	International sample 2008/9	Change
Directly after graduation	12.6%	25.0%	-12.4%	11.0%	15.7%	-4.7
Five years after graduation	43.8%	61.3%	-17.5%	34.4%	42.2%	-7.8

The adverse consequences of the global financial crisis on small business survival rates and profitability might have contributed to students becoming more critical of employment options, including that of setting up their own business. They might have given more thought to the implications of starting a business during a recession (and the high cost of failure than did the students in the 2008/9 survey).

As indicated in Table 9.1, both groups of students were more inclined to start their own ventures after gaining some industry experience and establishing support networks. In line with the 2008/9 report, students' career expectations were driven by the desire to realise a dream, and grow and learn as a person. Financial security as a career motivation featured much more prominently in the 2011 survey than it did in the 2008/9 survey.

The aforementioned discussion is indicative that the global financial crisis might have had an effect on the entrepreneurial spirit of students participating in this sample. Furthermore, the findings revealed that students' intended career choices were much less influenced by family, reference groups and role models than initially anticipated.

9.3 ENTREPRENEURIAL BEHAVIOUR

The third objective of this survey was to examine the entrepreneurial behaviour of South Africa students.

The majority of South African students (70.6%) viewed themselves as intentional founders, as opposed to 42.1 per cent of students in the international sample. A clear pattern of passivity was, however, observed among students in both the samples in that very few realised their intentions to start their own businesses with goal-driven actions.

Access to capital (referred to in this study as the "perceived barrier to obtaining start-up capital") was viewed as a major stumbling block in the initial phases of establishing a business. Although the South African government has increased its support to new businesses, communication around these opportunities is not conveyed in a consistent and clear manner. It seems furthermore that the message does not reach the intended target audience. Government should thus invest in more effective, structured links with higher education institutions to change these perceptions and to reverse the apparent lack of concrete entrepreneurial actions among students. A possible solution could be to assist students in taking small steps towards their goal with an easy, achievable start. Therefore, a number of smaller actions could help potential entrepreneurs to turn their thoughts into actions, and dreams into reality. A stronger emphasis should also be placed on increasing pro-activeness and the value of a business plan as a roadmap – not only in the start-up phases, but also in subsequent phases.

The researchers are of the opinion that increased access to capital might not be the ultimate solution to stimulating entrepreneurship in South Africa. Easier access to funding may even increase the cost of small business failure unless entrepreneurs are empowered with the necessary legislative support and skills.

Notably, the international sample viewed previous work experience as a major source of business ideas and learning opportunities, which was not the case in the South African sample. This might be in part attributed to the fact that there was no formal internship requirement as part of the South African university curriculum. South African universities in particular could focus on extending their theoretical offering to include internships.

In a world where social networking is gaining momentum and the value of informal and formal networks have been established, there was little inclination towards sharing one's own business in terms of ownership, profit and management. Universities could do much more to sensitise students towards the value of such networks.

9.4 THE FAMILY BUSINESS

The role that exposure to a family business has on students' entrepreneurial intentions and behaviour was also investigated in this survey. Slightly more than half of the students in the South African sample had been exposed to the dynamics of a family business. However, only a small portion of these students were enthusiastic about taking over the family business, claiming that it would limit their career choices. Similar views were expressed by students in the international sample, which is unfortunate given that students could learn a considerable amount from their parents and relatives who

are active entrepreneurs. However, the findings do corroborate the literature in that succession in family businesses is not well supported in South Africa (Nieman & Nieuwenhuizen, 2009: 224).

The lack of interest in joining or taking over the family business might be due to students experiencing the pressures of being an entrepreneur such as long hours spent at the business, concerns about the financial sustainability of the business, and conflict with spouses and siblings. It is likely that the unfavourable economic environment of the past three years have exasperated pressures.

Very few students were aware of or attended lectures and seminars on family businesses offered at their universities. Academics could highlight the value and dynamics of family businesses by giving more prominence to these topics in their academic programmes.

9.5 VIEWS ON SOCIAL ENTREPRENEURSHIP

Just as the university context influenced South African students' perceptions of entrepreneurship, so did the social context in which they found themselves. Consequently, a fairly large percentage of students in the South African sample (42.8%) were interested in establishing a business with a social and/or environmental mission. Students suggested a number of innovative business ideas to address the socio-economic and environmental challenges facing the country. In contrast to students in the international sample, South African students placed more emphasis on social missions, such as creating jobs and offering educational programmes, than on protecting the natural environment. Given the positive impact that social entrepreneurs may have on the standard of living in local communities, they need all the support they can get.

9.6 ENTREPRENEURSHIP INDEX

The final objective of this survey was to calculate South Africa's entrepreneurial index value relative to the international benchmark. The significant difference between South African students' intentions to start their own businesses and actually doing so, resulted in an entrepreneurship index value lower than that of the international average.

9.7 IN CLOSING

The overall findings of this survey suggest that a keen interest exists among South African students for entrepreneurship as a future career. Higher education institutions, both locally and internationally, should thus assess the level of awareness, utilisation and satisfaction among students regarding universities' entrepreneurship courses and service offerings. Universities should also investigate the demand for particular activities to further boost entrepreneurial orientation, clarify the entrepreneurship process and enhance business management skills. Furthermore, greater efforts should be taken to improve the marketing of entrepreneurial offerings.

This report may contribute to a better understanding of entrepreneurship offerings at South African universities. To this end it suggests how higher education institutions could strategise and formulate more streamlined education strategies. More specifically, it is recommended that higher education institutions:

- **Adopt** a comprehensive, three-phased approach: 'sensitise, act, support'. Firstly, increase awareness in entrepreneurship (such as lectures and seminars), followed by opportunities for students to gain insight into application of entrepreneurship (such as arranging interactions with experienced entrepreneurs), and thirdly, implement support mechanisms (such as contact points for entrepreneurial issues and/or seed funding);
- Continually **review and realign** the content of their entrepreneurship offerings;
- **Prepare students** to gain access to the labour market;
- **Increase awareness** of entrepreneurship with a social and/or environmental focus among South African students; and finally
- **Enhance cooperation** with decisions-makers and role-players in government and industry to further stimulate entrepreneurship activities across industries and all sectors of society. Ultimately, all South Africans will benefit from strengthened university-industry-government relations.

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APPENDIX A: COUNTRIES PARTICIPATING IN THE 2011 SURVEY

Country	Representative	University
Argentina	Prof. Silvia Carbonell	IAE Business School
Austria	Prof. Dr. Norbert Kailer	Johannes Kepler University Linz
Belgium	Prof. Dr. Hans Crijns	Vlerick Leuven Gent Management School
Brazil	Prof. Edmilson Lima	Universidade Nove de Julho
Chile	Prof. German Echecopar	Universidad Adolfo Ibanez. Santiago
China	Prof. Zheng Han	Tongji University (CDHK). Shanghai
Estonia	Prof. Dr. Urve Venesaar	Tallinn University of Technology
Finland	Prof. Asko Miettinen	Lappeenranta University of Technology
France	Prof. Dr. Alain Fayolle	UPR Stratégie et Organisation. EM Lyon
Germany	Dr. Heiko Bergmann	University of Hohenheim / KMU-HSG
Greece	Prof. Katerina Sarri	University of Western Macedonia
Hungary	Prof. Dr. Laszlo Szerb	University of Pecs. Faculty of Business & Economics
Ireland	Dr. Naomi Birdthistle	University of Limerick
Japan	Prof. Noriko Taji	Hosei University
Liechtenstein	Prof. Dr. Urs Baldegger	Hochschule Liechtenstein
Luxembourg	Prof. Pol Wagner	Institut Universitaire International Luxembourg
Mexico	Prof. Elisa Flores	Tecnologico de Monterrey. Institutio Technologico de Estudios Superiores de Monterrey
The Netherlands	Prof. Roy Thurik	Erasmus University. Rotterdam
Pakistan	Prof. Najaf Khan	GC University. Lahore
Portugal	Joao Leitao and Rui Baptista	Technical University of Lisbon Instituto Superior Tecnico
Romania	Dr. Lilian Ciachir	University of Bucharest
Russia	Prof. Shirokova	St.Petersburg State University
Singapore	Prof. Dr. Wong Poh Kam	National University of Singapore
South Africa	Dr. Suzette Viviers	Stellenbosch University
Switzerland	Philipp Sieger; Prof. Rico Baldegger	University of St.Gallen (KMU-HSG); HEG Fribourg
United Kingdom	Prof. Robert Blackburn	Kingston University. Kingston