Social Entrepreneurship Review
2022, Vol. 1

10.15678/SER.2022.1.02

Constructing Change: The Influence of Education on Female Social Entrepreneurs

Cecile Nieuwenhuizen, Thea Tselepis

Abstract: **Background:** Female entrepreneurs often take on a role as "social change agents", and yield innovative solutions to the social problems in the communities where they live and/or work. Entrepreneurial women in developing contexts are often challenged with limited resources when they attempt to solve these social problems in their communities. The paper focuses on the role education plays (if any) in women's ability to solve complex problems and create social value.
Research objectives: The primary aim of this paper is thus to explore the influence that education has on social entrepreneurial women in Africa's social value creation.
Research design and methods: For this study, we followed a quantitative research method. The population consists of all female social entrepreneurs (FSEs) from Africa that are Ashoka Fellows (142 persons). Data were analysed in the SPSS). We made use of descriptive statistics and correlation analysis.
Results: This insight enables us to make recommendations for the social entrepreneurial realm in terms of the importance of education and training programmes for social entrepreneurs but in addition make recommendations based on the good practice of social entrepreneurs.
Conclusions: We argue such social entrepreneurial women have to apply their knowledge in innovative ways in an attempt to solve complex problems in communities in order to create social value.
Keywords: women entrepreneurship, social entrepreneurship, education
JEL Codes: L26, L31, I21

Suggested citation:
Nieuwenhuizen, C., Tselepis, T., (2022). Constructing change: the influence of education on female social entrepreneurs. *Social Entrepreneurship Review*, 1, https://doi.org/10.15678/SER.2022.1.02

1. Introduction

Any entrepreneurial behaviour contains elements of innovation and an ability to manage resources to enhance value (Grabara et al., 2020). In this regard, the Schumpeterian view of change agents applies because Schumpeter (1934) views the entrepreneur as a person who can change an existing situation into an improved one by managing resources in innovative ways. In line with this view are the views of Jilinskaya-Pandey & Wade (2019) and Kickul & Lyons (2020) that social entrepreneurs can create this change and innovative social value. Social entrepreneurs, therefore, innovate social value to yield positive change.

How exactly this positive change or value is yielded in the social entrepreneurial realm is under-researched, especially in the developing context (Chandra, 2018). Moreover, female entrepreneurs who often take on a role as "social change agents", yield innovative solutions

to the social problems in the communities where they live and/or work (Yunis et al., 2018). Moreover, entrepreneurial women in developing contexts are often challenged with limited resources when they attempt to solve these social problems in their communities (Rosca, et al., 2020). We argue in this paper that such social entrepreneurial women therefore have to apply their knowledge in innovative ways in an attempt to solve complex problems in communities to create social value.

However, a question is what role education plays (if any) in these women's ability to solve complex problems and create social value? The primary aim of this paper is thus to explore the influence that education has on social entrepreneurial women in Africa's social value creation. This insight enables us to make recommendations for the social entrepreneurial realm in terms of the importance of education and training programmes for social entrepreneurs but in addition, make recommendations based on the good practice of social entrepreneurs. The objectives of the paper are to determine the value creation of the FSEs in the study and the the influence of education on the social value sharing of the FSEs in the study.

The paper commences with a literature review on the social entrepreneurial process of value creation and the role of knowledge construction within this process. The methods and materials are then provided, followed by the results and discussions. The conclusions with their implications are offered to end the paper.

2. Literature review

The literature review provides an overview of social entrepreneurship as a process of problem-solving and value creation. It then provides a discussion on the role of knowledge creation in social value creation.

2.1 Social entrepreneurship as a process for problem-solving and social value creation

Social entrepreneurship has no distinct definition, but most scholars agree that social entrepreneurship involves: innovation (Jilinskaya-Pandey & Wade, 2019), pursuing opportunity (usually connected to a social context) (Dees, 2018), that change is brought about (Chandra, 2018), and that social needs are met through the social entrepreneurial process (Mair & Marti, 2006). Mair and Marti (2006, p. 3) define social entrepreneurship as: 'a process involving innovative use and combination of resources to pursue opportunities to catalyse social change and/or address social needs.' However, another important aspect that we believe is critical in the social entrepreneurial realm, beyond addressing social needs, is social value creation. In this regard, Gandhi and Raina (2018) are of the opinion that the essence of social entrepreneurship is mainly motivated by social value creation. Other scholars such as Mair and Marti (2006) as well as Spieth et al. (2019) concur that this social value creation, as a primary goal is what distinguishes social entrepreneurship from commercial entrepreneurship.

Bearing in mind the above, one may argue that the social value is yielded also to address social needs and may be viewed as solving problems because meeting needs implies that there is a current situation that needs to be improved (changed). In addition, we acknowledge that value can be created in this problem-solving process beyond meeting needs only and that social value is perhaps more than meeting needs.

Social value can be conceptualised from various perspectives, but the "value" in social value is often aligned with some dimensions from the management sciences (Peredo & McLean, 2006; Hlady-Rispal & Servantie, 2018). Hlady-Rispal and Servantie (2018) have surveyed

the construct and unpack social value in terms of some influencing factors that also relate to commercial entrepreneurship, namely: 1) values and skills of the (social) entrepreneur in value creation, 2) the use and distribution of resources by the social entrepreneur when innovating (value capturing) and 3) value sharing (including interaction with others in a social system for example). Therefore, dimensions of the management sciences, therefore, seem applicable to describe relevant aspects of social value.

What is clear from several studies is that value creation in the entrepreneurial realm (including social value) through the problem-solving process may require innovative thinking. For this reason, design thinking is often associated with social entrepreneurship and creating value in social contexts or social change (Chou, 2018; Kickul & Lyons, 2020). In this regard, the work of design thinking philosopher Richard Buchanan may apply to the creation of social value (in this case by social entrepreneurial women).

Buchanan (2019) offers four principles of design thinking that may relate to any context that requires a human-centred perspective to create social change. Therefore, this study considers the four principles appropriate for creating/designing social value. These four principles are: 1) Create to meet needs (this entails meeting social, physical or psychological needs), 2) Create the useful (this entails creating products, services or systems that support people in accomplishing their goals), 3) Create for good (this entails that the creator affirms the proper place of human beings in the world in terms of their natural or spiritual order), 4) Create for just (this entails that an equitable and ethical relationship amongst humans is supported through the creation).

Keeping in mind these four principles that can be applied in social entrepreneurial contexts, we argue that social value may also be aligned to these principles when complex problems are solved. Moreover, it may well be that female social entrepreneurs apply their feminine "power" to create social value. Such feminine power according to Ubalijoro (2018), involves and ability to yield transformation in communities. In this regard, transformation may involve both transforming problem situations into better situations by taking care of the needs of people, and creating useful products, services or systems.

It would be important, however, to acknowledge that a social entrepreneur can create social value and apply the provided principles only if they are able to construct knowledge during their problem-solving processes because these principles link to higher-order thinking. The following section elaborates on such knowledge construction.

2.2 The role of knowledge construction in creating social value

Education plays an important role in creating what Pryor et al. (2016) refer to as cognitive schema, and mental shortcuts are referred to as mental Simply put, a mental schema can be viewed as a mental file in a person's mind and is used as a frame of reference when the mind is expanded with new knowledge (Wendland, 2010). Mental scripts are more specific than schema with the exact order of events in a certain context developed by an individual's experience, including their educational experience, and it is strengthened by social experiences (Posen & Chen, 2013). The role that education plays to enable the growth of the mind by contributing to scripts, and thus eventual schemas should thus not be underestimated.

Mental schemas enable entrepreneurs (in this study, the female social entrepreneur) to form new beliefs about opportunities or imaginative solutions to problems (Pryor et al., 2016). Imaginative problem solving is equated to innovation in the entrepreneurial context because it is an act that requires the application of creativity for supporting, conceiving and consider-

ing various new alternatives/possibilities (Felin & Zenger, 2009). One may therefore argue that the more advanced the mental scripts of social entrepreneurs, the better they are equipped to acquire new information, which may enable them to create even more useful innovative solutions to problems and perhaps grow their ventures in such a way. This phenomenon of "growth" in mind (and consequently of ventures) through adding new knowledge to existing scripts to construct new knowledge, is an approach to thinking and can be viewed as a constructivist approach.

A constructivist approach may be viewed as an individual's approach to sense-making or synthesising new knowledge from existing knowledge as new experiences occur (Mesgari & Okoli, 2019; Vaghely & Julien, 2010). The relevance of existing knowledge, as well as the ability to construct knowledge are thus important in sense-making. Existing knowledge and an ability to construct knowledge (or a constructivist approach to problem-solving) is therefore not possible without an ability to learn. Again, education may play an important role in a person's (in this case the female social entrepreneur's) ability to learn or how they make sense of problems and their solutions in order to create social value. An ability to learn may therefore also be relevant in order to create social value if a complex problem with various iterations during the problem-solving process is applied.

The above conjecture compiled and argued from the literature review is summarised in a conceptual framework for this study.

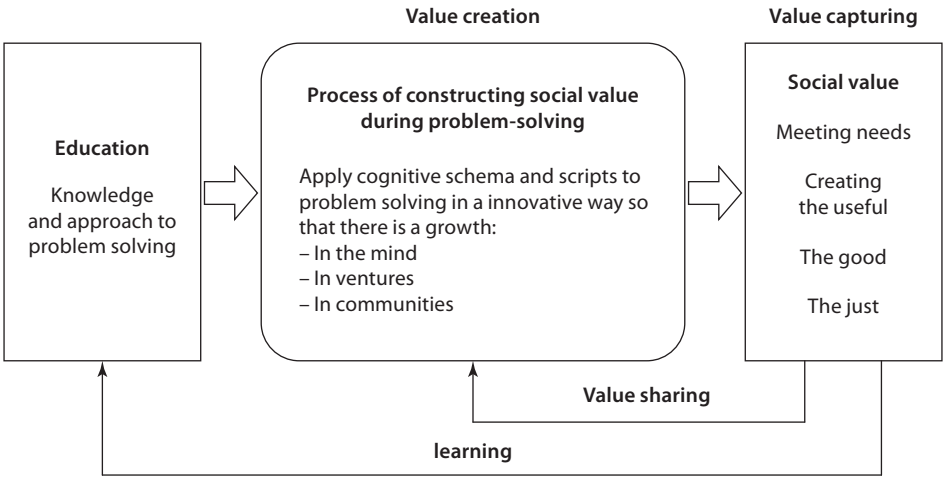

Figure 1. Conceptual framework for the study

Source: own elaboration

In Figure 1 the relevance of education in the growth of mind and ventures is illustrated in the context of social entrepreneurship. The process of constructing social value during problem-solving can be viewed as value creation, while the value capturing is the actual labels provided to the social value that results from the creation process. Value is shared between the creation process and the capturing thereof implying there is communication between social entrepreneurs and the communities they serve.

3. Material and Methods

For this study, we followed a quantitative research method. The population consists of all female social entrepreneurs (FSEs) from Africa that are Ashoka Fellows. Ashoka Fellows are social entrepreneurs who are innovative and contribute to the social good. Internationally there are 3500 Ashoka Fellows on the Ashoka web page (Ashoka Southern Africa, 2020). For this study we identified all the female Social Entrepreneurs (FSE) from Africa of which there were a total of 142, from the global Ashoka database of 3500. The 142 FSE from Africa is the sample of this study. Based on the detailed profiles of the 142 Ashoka Fellows we completed a comprehensive questionnaire for each of the FSEs. Additional information was obtained from those FSEs who have web pages for their businesses. The questionnaires were completed by a research assistant and finalised and verified by the researchers.

The questionnaire was developed based on the objectives (see Table 1) and reviewed the literature to collect information on:

- The highest level of qualification of the FSE.
- Business categories, i.e. business; economic development, education and training; employment; gender, health and social issues.
- Whether the business is growing or merely sustaining.
- Whether the business has a website or not.
- The type and level of innovation.

The questions relevant to the objective of this study were coded and statistically analysed for descriptive analysis and to determine correlations.

For this paper three objectives were set and operationalised as follows in Table 1.

Data were analysed in the Statistical Package for the Social Sciences (SPSS) version 25. We made use of descriptive statistics and correlation analysis. In the correlation analysis, cross-tabulations were done to determine the significance of correlations between different variables with Fisher's Exact test for two-by-two tables, and to determine the strength of the correlation used Phi for the effect size. Pearson Chi-Square test was used to test the significance of correlations for larger than two-by-two tables and Cramer's V to determine the effect size and strength of the correlation. The variables tested for correlations included level of education, growth or sustaining of the business, the type and level of education and whether the businesses have websites or not.

Table 1: Operationalisation of objectives

Objective	Dimensions (with possible indicators) to measure objectives	Rationale	Link to main argument
1. To determine the influence of education on the social value capturing of the FSEs in the study	Value capturing (Level of education) (Growth)	Growth was seen as an outcome of value creation and therefore operationalised under value capturing in the findings Also growth is often how the education seemed to be manifested or seemed evident	Knowledge construction and learning probably have relevance to all objectives (thus learning is implied)

Objective	Dimensions (with possible indicators) to measure objectives	Rationale	Link to main argument
2. To determine the value creation of the FSEs in the study	Value creation (Level of innovation) (Focus of business)	The level of innovation (in terms of type of problems that are solved as well as the focus of businesses) was believed to provide a narrative on the value creation and this data could be extracted from the secondary data set	Knowledge construction and learning probably have relevance to all objectives (thus learning is implied)
3. To determine the influence of education on social value sharing of the FSEs in the study	Value sharing (Websites) (Growth)	The information at hand from the secondary data set was websites and had some statistical significance in relation to growth	

Source: Own elaboration.

Ethical considerations were also kept in mind. The data set for this study was compiled from information that was in the public domain. The requirement from Ashoka indicates that we should keep social entrepreneurs anonymous. An Ethical Clearance application to conduct the study was submitted to the College of Business and Economics Research Ethics Committee, University of Johannesburg, South Africa, and permission to do so was granted on 31 March 2020 with the Ethical Clearance Code 20SOM04.

4. Results and Discussion

Results and discussions are offered with their relevance to the objectives.

Objective 1: To determine the influence of education on the social value capturing of the FSEs in the study

The education of the FSEs in the study is firstly provided. Table 2 reflects the highest level of education of the FSE in the study. At 46,5% (Baccalaureates) + 21,1% (Master and Doctor) = = 67,6% the majority of FSEs are graduates. At 21,1% graduates with Master and Doctorates represent 31,6% of graduates. These are indications that the education level of FSEs is high.

Table 2. Level of education of FSEs

Highest level of education	Frequency	Percent	Valid Percent	Cumulative Percent
School & Post Matric	46	32,4	32,4	32,4
Baccalaureate	66	46,5	46,5	78,9
Master & Doctor	30	21,1	21,1	100,0
Total	142	100,0	100,0	

Source: Own elaboration.

The next aspect reported in Table 3, is whether businesses of FSEs were growing or merely sustained. At 58,5 % the majority are growth businesses as opposed to businesses that are merely sustained.

Table 3. Businesses sustaining or growing

Assessment of business development	Frequency	Percent	Valid Percent	Cumulative Percent
Growth	83	58,5	58,5	58,5
Sustaining	59	41,5	41,5	100,0
Total	142	100,0	100,0	

Source: Own elaboration.

Cross tabulation was done to determine whether there is a correlation between the level of education and the growth or sustaining of the business. Table 4 shows that the majority of businesses owned by graduates grow, namely 63,6% owned by Baccalaureates and 76,7% owned by Master and Doctorates, whereas the majority (60,9%) of businesses with owners having school and some post matric education remained sustainable.

Table 4. Cross tabulation of the highest level of education with growth or sustaining of business

			Q2		Total
			Growth	Sustaining	
Q1	School & Post Matric	Count	18	28	46
		% within Q1	39,1%	60,9%	100,0%
	Baccalaureate	Count	42	24	66
		% within Q1	63,6%	36,4%	100,0%
	Master & Doctor	Count	23	7	30
		% within Q1	76,7%	23,3%	100,0%
Total		Count	83	59	142
		% within Q1	58,5%	41,5%	100,0%

Source: Own elaboration.

To test the significance of the difference between the groups a Pearson Chi-square test was done (Table 5).

At 0,003 the alpha level is less than the 0,05 cut off point indicating a significant relation between education and the growth of FEAs in the study's businesses.

The level of significance was determined with Cramer's V and the effect size. At 0,289 the Cramer's V effect size is less than 0,3 indicating a low effect. Thus, although there is a statistically significant correlation between level of education and growth the effect is small.

Table 5. significance of the difference between the groups in terms of education and growth of businesses

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11.900*	2	**0,003**
Likelihood Ratio	12,080	2	0,002
Linear-by-Linear Association	11,351	1	0,001
N of Valid Cases	142		

* 0 cells (0.0%) have expected count less than 5. The minimum expected count is 12,46.

Source: Own elaboration.

Table 6. Cramer's V and the effect size (symmetric measures)

		Value	Approximate Significance
Nominal by Nominal	Phi	0,289	0,003
	Cramer's V	0,289	0,003
N of Valid Cases		142	

Source: Own elaboration.

These results from the inferential statistics confirm the notion of Pryor et al. (2016) and Posen and Chen (2013), that the level of education has an impact on the level of growth of a business. Thus, confirmation of the importance of education in the proposed framework (Figure 1). The type of education is not as important as the notion that some sort of education enables FSEs to construct knowledge in order to grow businesses, probably due to an ability to solve problems as discussed in the literature.

Table 7 provides a summary of the social value capturing of the FSEs in this study. The form of the social value of most FSEs in this study is opening a new market (54,2%) which means that these FSEs are creating social value by meeting needs according to Buchanan's (2019) principles as well as Introduction of a new product or service (30,3%%) which can also be translated to Buchanan's (2019) meeting needs. Very small percentages are yet to be seen under creating "the good" or "the just" and one might argue that the dire circumstances in Africa still call for more basic forms of social value creation, as opposed to the more abstract levels of social value creation.

Table 7. Social Value capturing

Indicator	Dimension	Frequency	Percent	Valid Percent	Cumulative Percent
Introduction of new product or service	Meeting needs	43	30,3	30,3	30,3
Introduction of new method of production (or operation)	Creating useful	7	4,9	4,9	35,2
Opening a new market	Meeting needs	77	54,2	54,2	89,4
Utilisation of new resources of supply for raw materials or intermediate goods	Creating useful	9	6,3	6,3	95,8

Indicator	Dimension	Frequency	Percent	Valid Percent	Cumulative Percent
Carrying out some new organisational form of the industry	The good and/ or the just	6	4,2	4,2	100,0
Total		142	100,0	100,0	

Source: Own elaboration.

To answer objective 1: the influence of education on the social value capturing of the FSEs in this study therefore suggests that it firstly enables them at least to some degree, to grow their ventures and secondly seems to enable the majority of them to meet needs by opening new markets or introducing new services or products.

Objective 2: To determine the value creation of the FSEs in the study

In order to answer objective 2, the levels of innovation, as well as the focus of the businesses, were explored. The Level of Innovation (Table 8) shows Product and service innovation (78,2%) as the level of the vast majority of FSEs. These levels of innovation can be viewed in the context of the former results on the dimensions of social value creation. It is in line with the meeting needs of communities and therefore would make sense that the majority of the level of innovation is still products and services that meet needs of communities where the FSE's are involved.

Table 8. Level of Innovation (during value creation)

Level of Innovation	Frequency	Percent	Valid Percent	Cumulative Percent
Operational innovation	9	6,3	6,3	6,3
Product service innovation	111	78,2	78,2	84,5
Business model innovation	18	12,7	12,7	97,2
Architectural & Management innovation	4	2,8	2,8	100,0
Total	142	100,0	100,0	

Source: Own elaboration.

Table 9 illustrates the focus of FSEs. In Table 9 it is apparent that the focus of most FSE's businesses are Economic and Environmental change (which includes Business & Social Enterprise, Development & Prosperity and Environmental Sustainability) (33,8%) and Children & Youth and Education & Learning (28,9%). Bearing in mind the developing context where resources often present challenges (Rosca, et al., 2020), these focus areas of the businesses are not surprising.

Considering objective 2: the focus of the business is also considered with reference to the social value creation in objective 1 even when one only looks at the descriptive statistics. What is interesting is the dimensions of "the good" and "just" in terms of social value that actually emerges when one considers the strong focus on" Children & Youth" and "Education & Learning" from the second objective. Unfortunately, no further data was available to provide more detail on this occurrence (focus on "the good" and "just", yet the innovation and social value seem to be on meeting needs still). This occurrence may indicate either: 1) that the focus of the business is ill-defined or 2) that the FSEs might aim for a higher level of engagement with these

Table 9. Focus of Business

Focus of Business	Frequency	Percent	Valid Percent	Cumulative Percent
Children & Youth and Education & Learning	41	28,9	28,9	28,9
Economic and Environmental change	48	33,8	33,8	62,7
Civic Engagement and Citizen & Community Participation	12	8,5	8,5	71,1
Human Rights and Equality	16	11,3	11,3	82,4
Health and Fitness	21	14,8	14,8	97,2
Peace & Harmonious Relations	4	2,8	2,8	100,0
Total	142	100,0	100,0	

Source: Own elaboration.

communities yet, are forced by circumstances to meet the urgent needs of the people first. Such needs may be more concrete in the areas of "Children & Youth" and "Education & Learning" (for example meeting basic needs such as food before social justice). This occurrence may look very different in a developed context where the focus of the social entrepreneurial venture may well be on higher levels due to the governmental support for meeting basic needs. What can be deduced is that the FSEs in this study at least focus on the meeting needs of Children and Youth as well as in the area of Education and Learning implying that they are able to apply their own minds to solve problems in these areas. In this regard, it is also noted that the social value creation in terms of transformative power/energy of the women in this study is applied to meet the needs of the younger generation. Not surprisingly, this is in line with the findings of Veras (2015) who found that female entrepreneurs are more prone to address societal needs that yield social improvement.

Objective 3: To determine the influence of education on the value sharing of FSEs in the study

Value sharing in this study could be indicated with websites as the Ashoka fellows (social entrepreneurs) make use of a general website, but in addition, then have an option to create their own websites.

Table 10 indicates whether the business has a website or not. At a narrow majority of 52,7% most businesses do have a website.

Table 10. Business has a website or not

Having website?	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	74	52,1	52,1	52,1
No	68	47,9	47,9	100,0
Total	142	100,0	100,0	

Source: Own elaboration.

Cross tabulation was done to determine whether there is a correlation between the level of education and whether the business had its own website (or not). Table 11 shows at 70%, the vast majority of FSEs with Master of Doctor degrees have websites, 53% of Baccalaureates have a website and the minority (39,1%) of School and Post Matrics have websites. One may there-

fore deduce that the higher the qualification the more probable the chance of the FSE having a website. This has implications for her ability to communicate their value sharing to others.

Table 11. Level of qualification and website (crosstab)

			Q3		Total
			Yes	No	
rQ1	School & Post Matric	Count	18	28	46
		% within rQ1	39,1%	60,9%	100,0%
	Baccalaureate	Count	35	31	66
		% within rQ1	53,0%	47,0%	100,0%
	Master & Doctor	Count	21	9	30
		% within rQ1	70,0%	30,0%	100,0%
Total		Count	74	68	142
		% within rQ1	52,1%	47,9%	100,0%

Source: Own elaboration.

Table 12. Pearson Chi-square test

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6.975*	2	0,031
Likelihood Ratio	7,117	2	0,028
Linear-by-Linear Association	6,894	1	0,009
N of Valid Cases	142		

* 0 cells (0.0%) have an expected count of less than 5. The minimum expected count is 14,37.

Source: Own elaboration.

Table 13: Cramer's V for the effect size (symmetric measures)

		Value	Approximate Significance
Nominal by Nominal	Phi	0,222	0,031
	Cramer's V	0,222	0,031
N of Valid Cases		142	

Source: Own elaboration.

Summarising: Table 11 shows at 70% the vast majority of FSEs with Master or Doctor degrees have websites, 53% of Baccalaureates have a website and the minority (39,1%) of School and Post Matrics have websites. To test the significance of the difference between the groups (those with websites and without websites) a Pearson Chi-square test was done (Table 12). At 0,031 the alpha level is less than the 0,05 cut off point, indicating a significant relation between education and growth. In Table 13 the level of significance was determined with Cramer's V and the effect size. At 0.222 the Cramer's V effect size is less than 0,3 indicating a low effect. Thus, although there is a statistically significant correlation between the level of education and a website the effect is small.

These results indicate that social entrepreneurs with a higher level of education are more inclined to share value with a website. Through their websites, they communicate and share value not only with their communities but also with other relevant stakeholders that can contribute to the growth and impact of their businesses. This result can be linked to the following results that show the importance of a website to the growth of a business.

Table 14. Growth and website

			Q3		Total
			Yes	No	
Q2	Growth	Count	64	19	83
		% within Q2	77,1%	22,9%	100,0%
	Sustaining	Count	10	49	59
		% within Q2	16,9%	83,1%	100,0%
Total		Count	74	68	142
		% within Q2	52,1%	47,9%	100,0%

Source: Own elaboration.

Table 15: Pearson Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	50.013*	1	0,000	
Continuity Correction**	47,631	1	0,000	
Likelihood Ratio	53,599	1	0,000	
Fisher's Exact Test				0,000
Linear-by-Linear Association	49,661	1	0,000	
N of Valid Cases	142			

* 0 cells (0.0%) have an expected count of less than 5. The minimum expected count is 28.25.
** Computed only for a 2 × 2 table

Source: Own elaboration

Table 16: Cramer's V (symmetric Measures)

		Value	Approximate Significance
Nominal by Nominal	**Phi**	**0,593**	0,000
	Cramer's V	0,593	0,000
N of Valid Cases		142	

Source: Own elaboration.

Cross tabulation was done to determine whether there is a correlation between the growth or **sustaining** of FSEs in this study's businesses and whether the business had a website or not. The results in Table 14 show that the majority of businesses that grew have websites (77,1%) whereas only 16,9% of sustainable businesses have websites. To test the significance of the

difference between the groups a Pearson Chi-square test was done (Table 15). At 0,000 the alpha level is less than the 0.05 cut off point indicating a significant relation between **growth and a website**. In table 15 the level of significance was determined with Cramer's V and the effect size. At 0,593 the Cramer's V is larger than 0,5 meaning that the effect of a website on the growth of a business is large.

Regarding objective 3: there is a correlation between the level of education and the presence of a website, namely that social entrepreneurs with a higher level of education are more inclined to have web pages for their businesses, with 70% of those with Post graduate qualifications that have websites. Website content development and maintenance is a creative process that requires creativity, skill and experience (Louw & Nieuwenhuizen, 2020; Hisrich & Soltanifar, 2021). These results show the importance of websites in the growth of a business and confirm the importance of innovative thinking (Dyduch, 2019; Agarwal & Mulunga, 2022) and design thinking (Buchanan, 2019) to create social value that in turn enables positive change.

5. Conclusions

Social value creation in this study happens in innovative ways as it is predominantly new services and products and new markets that is created to meet the needs of communities. Although this study has limitations in terms of only reporting on levels of education of FSEs, there is a difference between graduates' and no-graduates' ability to grow their business. Having noted this, we do not have the information on what kind of education the FSE's had and make the conclusion that it is ultimately about an ability to be innovative and construct new knowledge in order to solve the problems that they are faced with. This is evident when one views the FSE's ability to yield social value by meeting the needs mainly in the areas of education and learning and the meeting needs of youth and children. There is something to be said for this theme of future-forward thinking and in this regard, (Murphy & Gash, 2020) note that a constructivist ultimately has a growth mindset. Similarly, we note FSE's ability to create social value through innovation and in this regard their creativity is confirmed. New products and services and new markets are created. One may argue that the word "created" in this particular context can also be equated to "constructed". In this regard, social value is constructed. The implications are that knowledge construction goes hand in hand with the construction of solutions that meet needs of communities and training that allows new knowledge creation should not be underestimated.

Finally, it is important that social value is also shared. Unfortunately, a limitation of a secondary data set is that researchers are limited to the data available. In terms of value sharing, the role of digital technologies and specifically the role of a website could be extracted from the original data set. It has to be acknowledged that this is not the only way of sharing social value, but proves to be a powerful tool in our study as it has an influence on the growth of the business. In this regard, education seems to play a role again and the creativity and skill to share value through digital technologies such as a website in this study is acknowledged.

Further studies may consider looking into the types of qualifications that female social entrepreneurs have in relation to the fields where they create social value. It would be useful to see qualitative studies that describe the projects and endeavours that female social entrepreneurs take on when they create social value. Moreover, studies that attempt to understand the role of gender within the value creation can be done by comparing the social value creation of female and male entrepreneurs.

We conclude and concur with Rieckmann (2018) that skill, knowledge and attitude (in this case that is required from a social entrepreneur) is what enable competency. Competency is needed for value creation, value capturing and value sharing which lead to positive social change and in this particular study seems to be supported at least to some extent by education. The implications are that any further training on awareness of the types of value creation, the types of innovation, construction of knowledge in the process of innovation, creative problem solving and the sharing of value creation might enhance the competency of social entrepreneurs to construct positive change in communities.

To conclude this paper we honour the social entrepreneurial women who construct the solutions to problems in Africa, yielding positive change in communities. This paper confirms that knowledge is power!

References

Agarwal M.K. &Mulunga S.N. (2022). Disruptive thinking in social entrepreneurship: Challenges and effectiveness. African Journal of Business Management, 16(4): 82-89. https://doi.org/10.5897/AJBM2021.9251

Ashoka Southern Africa (2020), https://www.ashoka.org/en-za/our-network

Buchanan R. (2019). Systems thinking and design thinking: The search for principles in the world we are making. She Ji: The Journal of Design, Economics, and Innovation, 5(2): 85–104. https://doi.org/10.1016/j.sheji.2019.04.001

Chandra Y. (2018). New narratives of development work? Making sense of social entrepreneurs' development narratives across time and economies. World Development, 107: 306–326. https://doi.org/10.1016/j.worlddev.2018.02.033

Chou D.C. (2018). Applying design thinking method to social entrepreneurship project. Computer Standards & Interfaces, 55: 73–79. https://doi.org/10.1016/j.csi.2017.05.001

Dees J.G. (2018). "The meaning of social entrepreneurship". In Case Studies in Social Entrepreneurship and Sustainability (22–30). Routledge.

Dyduch W. (2019). Entrepreneurial strategy stimulating value creation: Conceptual findings and some empirical tests. Entrepreneurial Business and Economics Review, 7(3): 65–82. https://doi.org/10.15678/EBER.2019.070304

Felin T. & Zenger T.R. (2009). Entrepreneurs as theorists: on the origins of collective beliefs and novel strategies. Strategic Entrepreneurship Journal, 3(2): 127-146. https://doi.org/10.1002/sej.67

Felin T. Gambardella A. Stern S. & Zenger T. (2019). Lean startup and the business model: Experimentation revisited. Forthcoming in Long Range Planning. https://ssrn.com/abstract=3427084

Gandhi, T., & Raina, R. (2018). Social entrepreneurship: the need, relevance, facets and constraints. Journal of Global Entrepreneurship Research, 8(1), 1–13. https://doi.org/10.1186/s40497-018-0094-6

Grabara J. Hussain H.I. & Szajt M. (2020). Sustainable university development through sustainable human resources and corporate entrepreneurship: The role of sustainable innovation and work environment. Amfiteatru Economic, 22(54): 480–495. https://doi.org/10.24818/EA/2020/54/480

Hisrich R.D. & Soltanifar, M. (2021). "Unleashing the creativity of entrepreneurs with digital technologies". In Digital Entrepreneurship (23–49). Springer, Cham.

Hlady-Rispal M. & Servantie V. (2018). Deconstructing the way in which value is created in the context of social entrepreneurship. International Journal of Management Reviews, 20(1): 62–80. https://doi.org/10.1111/ijmr.12113

Jilinskaya-Pandey M. & Wade J. (2019). Social entrepreneur quotient: An international perspective on social entrepreneur personalities. Journal of Social Entrepreneurship 10(3):265–287. https://doi.org/10.1080/19420676.2018.1541013

Kickul J. & Lyons, T.S. (2020). Understanding social entrepreneurship: The relentless pursuit of mission in an ever changing world. Routledge. https://doi.org/10.4324/9780429270406

Kickul J. Gundry L. Mitra, P. & Berçot L. (2018). Designing with purpose: advocating innovation, impact, sustainability, and scale in social entrepreneurship education. Entrepreneurship Education and Pedagogy, 1(2): 205–221. https://doi.org/10.1177%2F2515127418772177

Kimmitt, J. & Muñoz, P. (2018). Sensemaking the 'social' in social entrepreneurship. International

Louw C. & Nieuwenhuizen C. (2020). Digitalization strategies for SMEs: A cost vs. skill approach for website development. African Journal of Science, Technology, Innovation and Development, 12(2): 195–202. https://doi.org/10.1080/20421338.2019.1625591

Mair J. & Marti I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. Journal of world business, 41(1): 36–44. https://doi.org/10.1016/j.jwb.2005.09.002

Mesgari M. & Okoli C. (2019). Critical review of organisation-technology sensemaking:

Murphy F. & Gash H. (2020). I can't yet and growth mindset. Constructivist Foundations, 15(2): 083–094. https://constructivist.info/15/2/095

Peredo A.M. & McLean M. (2006) 'Social entrepreneurship: a critical review of the concept', Journal of World Business, 41: 56–65. https://doi.org/10.1016/j.jwb.2005.10.007

Posen H.E & Chen J.S. 2013. An advantage of newness: vicarious learning despite limited absorptive capacity. Organization Science, 24: 1701–1716. https://doi.org/10.1287/orsc.1120.0815

Pryor C. Webb, J.W. Ireland D. & Ketchen D.J. (2016). Toward An Integration of the Behavioral and Cognitive Influences on the Entrepreneurship Process, Strategic Entrepreneurship Journal, 10: 21–42. https://doi.org/10.1002/sej.1204

Rieckmann, M. (2018). Learning to transform the world: Key competencies in Education for Sustainable Development. Issues and trends in education for sustainable development, 39:39–59.

Rosca E. Agarwal N. & Brem A. (2020). Women entrepreneurs as agents of change: A comparative analysis of social entrepreneurship processes in emerging markets. Technological Forecasting and Social Change, 157: 120067. https://doi.org/10.1016/j.techfore.2020.120067

Schumpeter J.A. (1934). The Theory of Economic Development. Cambridge, MA: Harvard University Press. https://doi.org/10.1007/0-306-48082-4_3.

Small Business Journal, 36(8): 859–886. https://doi.org/10.1177%2F0266242618789230

Spieth P. Schneider S. Clauß T. & Eichenberg D. (2019). Value drivers of social businesses: A business model perspective. Long Range Planning, 52(3): 427–444. https://doi.org/10.1016/j.lrp.2018.04.004

Systems, 28(2): 205-232. https://doi.org/10.1080/0960085X.2018.1524420

Towards technology materiality, discovery, and action. European Journal of Information

Ubalijoro, E. (2018). "Transforming Community through Feminine Leadership. Leadership and Power in International Development." In Building Leadership Bridges 1 (1): 83–97. Bingley: Emerald Publishing. doi: https://doi-org.ujlink.uj.ac.za/10.1108/S2058-880120180000006009.

Vaghely I.P. & Julien P.A. (2010). Are opportunities recognized or constructed?: An information perspective on entrepreneurial opportunity identification. Journal of business venturing, 25(1): 73–86. https://doi.org/10.1016/j.jbusvent.2008.06.004

Veras, E.Z. (2015) Female Entrepreneurship: from Women's Empowerment to Shared Value Creation. Journal on Innovation and Sustainability, 6(2): 109–123. https://doi.org/10.24212/2179-3565.2015v6i2p109-123

Wendland E.R. (2010). Framing the frames: A theoretical framework for the cognitive notion of "frames of reference." Journal of translation, 6(1): 27–50.

Yunis M.S. Hashim H. & Anderson A.R. (2018). Enablers and constraints of female entrepreneurship in Khyber Pukhtunkhawa, Pakistan: Institutional and feminist perspectives. Sustainability, 11(1): 27–39. https://doi.org/10.3390/su11010027

About Author/s

Cecile Nieuwenhuizen, prof.
College of Business and Economics
University of Johannesburg
JBS Towers, Cnr Barry Hertzog and Empire Roads, Milpark, Johannesburg
e-mail: cecilen@uj.ac.za
ORCID: 0000-0003-4925-3212

Thea Tselepis*, prof.
College of Business and Economics
University of Johannesburg
JBS Towers, Cnr Barry Hertzog and Empire Roads, Milpark, Johannesburg
e-mail: theat@uj.ac.za
ORCID: 0000-0001-5990-4571
* Corresponding author.

Acknowledgements and Financial Disclosure

The authors would like to acknowledge the Department of Higher Education in South Africa as well as the South African Research Chair Initiative: Entrepreneurship Education for the funding made available for research assistants during the project.

Published by Cracow University of Economics – Krakow, Poland