Gender Differences of Decision Making Process

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The behavioural beliefs by female SME directors are represented by themes of Strategy, Future and Long Term Targets (dominant pattern distribution) while male directors divide their behavioural beliefs between themes of Financial Targets, Image and Long Term Targets (average pattern distribution). The normative beliefs by female SME directors are dominant represented by group of Advisors (outside the company, dominant pattern distribution). Female directors are more intend to ask for advice outside the company. Management of the company has by female director in their decision making process a low pattern distribution while male directors divide their normative beliefs between Advisors, Employees and Management (average pattern distribution). The attitude to be a good example for employees in a company is more important for male director (dominant pattern distribution) than for female director (average pattern distribution). The subjective norm has dominant pattern distribution by women and men by concept – own people - the directors more intend to comply with own people in the company than with others (people outside the company). This article outlines the details of an empirical study into the perceptions of 18 Small to Medium-sized Enterprise (SME) Directors regarding the concepts of decision making process: behavioural beliefs, normative beliefs, attitude and subjective norm and gender differences and can be described as an exploratory qualitative study.

Keywords & Phrases: Decision making process, Attitude, Subjective Norm, Behavioural and Normative Beliefs, Female and Male directors in the SME Sector, Gender, Theory of Reasoned Action

Relevance for Professional Practice
This study provides knowledge of and insight into the manner of decision making by female and male directors in the SME sector by the directors themselves by way of analysing depth interview. It provides an empirical contribution to the literature available regarding the subjects of the decision making process. This study also provides knowledge of and insight into the particular and selective choices of female directors the SME sector.

1. Introduction

In strategic decision-making process are male respondents did indicate a bigger overall satisfaction with venture performance than did females (Sonfield e.o., 2001). Female managers tend to be more ethical in their intention than their male counterparts (Marta e.o., 2008). Investment decision making is statistically and significantly influenced by gender, one of the socio-economic characteristics of investors (Obamuyi, 2013). There are differences in the willingness of men and women to make risky decisions on behalf of a group:
The fraction of women being willing to make the group decision is lower than men;
- The amount of risk taken for the group is generally lower by women (Ertac, 2012).

The Theory of Reasoned Action (Fishbein & Aijzen, 1975 and 1980) proposed that attitude (evaluation of own beliefs) and subjective norm (evaluation of director about the views of others in the level of cooperation) lead to intention and ultimately to specific behaviour, i.e. actual actions. However the decision making process by female directors in SME sector is different from their male colleagues and is more selective, as shown in this study.

The leaders, directors of the companies (men and women) are lead and direct the organisation in a particular direction. Their supportive behavior influence the problem-solving capacity of employees, especially creative performance and originality (Carmeli, 2013). The leaders of the companies can influence and optimise the organisational culture (Haneberg, 2009). How it should be different if the decisions are made by men or women directors?

The increasing ratio of women directors on corporate boards is associated with decision-making dynamics. Women have a high level of information sharing and the results of the study support the notion of women directors as significant influencers (Beate & Gro, 2012).

In innovative and other business processes the decision making of the directors still became more important. In SME sector to make a right decision to invest or innovate is dependent on the decision maker, the director of the company, most often only one person who is going to decide (director/major shareholder, in family business).

The risk avoiding behavior can be beneficial for companies, some may argue, it can represent progress and long term stability.

The women owner of manager small businesses is more selective in their information sources: they selected the information sources based on qualification more than any other criteria. Women owners/manager are looking for social support as instrumental information outside the company, through their external networks (Smeltzer & Fann, 1989).

By way of this study, the results regarding the method behind the interpretation of ‘psychological part’ of conceptual model, namely decision making process, shows the SME directors interpretation. On the basis of a qualitative analysis, a review was conducted of the Psychological concepts that was considered to be the most desirable and was therefore utilised by the SME directors. The answers have been
subdivided into themes for each concept (behavioural beliefs, normative beliefs, attitude & subjective norm) and the distribution pattern has been incorporated in a table. The main questions posed in the study are as follows:

- In which manner is the decision making process (‘psychological mental part of conceptual model) interpreted and utilised by the SME director?
- What are the differences in the interpretation of decision making by men and women SME director?

In Chapter 2 of this article, the first aspects relates to the definition of the concepts of decision making - behavioural beliefs, normative beliefs, attitude & subjective norm - very briefly discussed. Subsequently, in Chapter 3, the results of exploratory studies relating to the interpretation of each concept have been presented in a matrix analysis. The results of the exploratory research and the results of the study have been incorporated in tables and diagrams and additional explanations have been included. Chapter 4 completes this article with the final conclusions and further discussion.

2. Decision making process – the definitions

2.1. Decision making process - explanation

The decision is going about the passing of judgment on issue, the act of reaching a conclusion or making up one’s mind, it is going about the choices and outcome. The decision making process is the thought process of selecting a logical choice from the available options. To make a good decision, a person go weight the positives and negatives of different options, consider the alternatives and choose the best option. The people are thinking about the best outcome by each option and go to determine which should be the best in a particular situation.

In The Theory of Reasoned Action (Fishbein & Aijzen, 1975 and 1980) is a model for prediction of behaviour. The behavioural intention, followed by attitude and subjective norm, predict that the person is go to perform a behaviour. The decision making process to go or not to go to perform a behaviour consist 4 main concepts before the person get an intention that leads to behaviour (Fishbein & Aijzen, 1975):

- Attitude,
- Subjective norm,
- Beliefs (own),
- Beliefs about the expectations from other people.
Attitude consists of beliefs of the person about their own consequences of performing the behaviour by evaluation of the consequences. Attitude is the evaluation that can influence the behaviour. In the case the evaluation looks beneficial to the individual, the person may intend to act or participate in a particular behaviour.

Beliefs are opinions of individual that some particular behaviour leads to a certain outcome.

Subjective norm is going about a perception of individual of what others think and belief about the particular behaviour the individual should do. Subjective norm is a kind of particular expected pressure from outside the individual if person participates in any actions/behaviour. The expected pressure is the evaluation of a possible behaviour and can, as individual thinks, influenced strongly by the people around them. The people may include friends, managers in the same company and other important employees, family, advisors, auditors, community or congregation members, dependent on situation and evaluating behaviour.

Beliefs about the expectations from other people are also opinions of individual that some particular behaviour influences other people. They can have opinions in eyes of individual and judge the consequences of some particular behaviour. Individuals may be inclined to act or participate if their desire to comply with others. The beliefs that individual can be punished by laws or other people lead to correct the behaviour and can develop a negative attitude and strong intention not to act in negative behavioural actions (for example drunk-driving, stealing, etc.).

Behavioural intention is a function of attitude and subjective norms (evaluations of own beliefs and expectations of other people) toward the behaviour, which has been found to predict actual behaviour. Own attitudes combined with the subjective norms about potential act or performing, each with their own weight, lead individual to own intention to participate (or not), which lead to own actual behaviour of individual.

The theory Fishbein & Aijzen (1975) proposed that attitude (own beliefs, the convictions of an individual) and subjective norm (the views of others and evaluation of the level of cooperation provided by the director) lead to intention and ultimately to behaviour/other actions.
In the next chapter the results of exploratory studies relating to the interpretation of each concept have been explained and presented in a matrix analysis.

### 2.2. Decision making and gender

The different studies show that there differences between men and women in decision making process. Female work councillors are more extraverted and exhibit a stronger internal Locus of Control, while male work councillors are more conscientious as compared to their non-councillor counterparts (Störmer, 2010).

The empirical results of Peliova (2013) support the outcomes of large scale surveys, whose results shown significant difference in risk taking among genders: Female subjects did not reflect the change in market settings into the change in their decisions. Male subjects increased their wagers in regulated market settings. However there no significant gender differences in venture innovation/risk situation or in strategies chosen by business owners, but male respondents did indicate a higher overall satisfaction with venture performance than did females (Sonfield et.al., 2001).

The results of hypotheses concerning the relationships among selected individual differences variables ( locus of control, delay of gratification, gender, and race) and five different ethical beliefs support the relationship between ethical beliefs and locus of control, delay of gratification, race, but gender is not related to ethical beliefs (McCuddy, et.al., 1996).

The empirical research of Vuksanović (2012) shows that besides personality characteristics (intelligence, communication, morality, fairness, and emotional stability, adequate knowledge and the need for continuous improvement), gender has a significant role in the selection of managers and

- 53.06% of respondents of both genders would choose a man for the manager, although male and female candidates have equal abilities;
- 24.49% of respondents would choose a woman for the manager, and
- 22.45% of respondents said that it did not matter whether the manager was a man or a woman.
- Women executives are more unwelcome as leaders among women than among men (Vuksanović (2012)).

The results of the study about risk tolerance matters of risky decision making in mixed-gender teams indicate that consistent with previous findings, men tend to be greater risk takers compared to women, and that the male rather than female tolerance toward risk that is more influential in determining the ultimate risk tolerance within a mixed-gender decision-making group (Karawosky, 2001).

There are factors influencing investment decisions of investors and results of how these factors are related to the investors’ socio-economic characteristics- past performance of the company's stock, expected stock split/capital increases/bonus, dividend policy, expected corporate earnings and get-rich-quick. The study finds that the socio-economic characteristics of investors, as for example age and gender, statistically and significantly influenced the investment decisions of investors in Nigeria (Obamuyi, 2013).
The study of relationship between cognitive ability, gender and risk preferences (Booth, et.al., 2013) shows that cognitive ability has no effect on risk preferences, but gender issues affect the risks - young women are significantly more likely than young men to assess themselves as being prepared to take risks, women choose to invest significantly less when they are confronted with a clearly specified investment decision based on hypothetical lottery winnings. “This difference between the impact of gender on risk attitudes and the hypothetical lottery investment suggests that impatience and framing affect young women and men differently” (Booth, et.al., 2013).

In next chapter the conceptual model, method and sample have been separately presented in subparagraph.

3. The conceptual model, method and sample

3.1 Introduction
In this study, dept-interviews were conducted by SME directors. Thereafter, the conceptual model was explained by way of the qualitative in-depth interviews with the directors. The objective of the depth interview with SME directors about the conceptual model was to gain more knowledge and insight into the choice of concepts and the relationships between these concepts. The results of this study will be used in further research for the formulation of questions for concepts in a questionnaire in survey research.

3.2 Method
The entire study relates to the detailing of the concepts in the conceptual model by experts from the actual enterprises (i.e. D/MS’s, CEO’s and CFO’s). Each participant was asked to answer the questions posed regarding each concept in the proposed conceptual model and regarding the relationships between the various concepts. After having discussed all of the concepts included in the conceptual model, the participants were asked to circle the most important concepts and to indicate the relationship / causality between the concepts by way of drawing (directional) arrows (Groenland (2009, 2011), see also Heckman, 1979, 2004, 2009).

The study presented in the paper is going about the explanation of one part of the complete conceptual model: psychological/Mental, namely the decision making process.
Study questions regarding external validity:

**Table 1: Study question & study sub-questions regarding external validity**

<table>
<thead>
<tr>
<th>Study Questions</th>
<th>Sub-questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mail question: In which way do the concepts presented in the conceptual model work?</td>
<td></td>
</tr>
<tr>
<td>The paper study question: In which way is decision making process (psychological/mental), namely the concepts - the behavioural beliefs/normative beliefs/attitude/subjective norm concepts in the conceptual model interpreted and detailed by directors (female &amp; male)?</td>
<td>In which way is the concept of behavioural beliefs in the conceptual model interpreted and detailed by SME directors?</td>
</tr>
<tr>
<td></td>
<td>In which way is the concept of normative beliefs in the conceptual model interpreted and detailed by the SME directors?</td>
</tr>
<tr>
<td></td>
<td>In which way is the concept of attitude in the conceptual model interpreted and detailed by SME directors?</td>
</tr>
<tr>
<td></td>
<td>In which way is the concept subjective norm in the conceptual model interpreted and detailed by the SME directors?</td>
</tr>
</tbody>
</table>

3.3. Sample SME directors:

Below, the characteristics of the directors interviewed have been incorporated into table 2 and a figure.

**Table 2: Characteristics of the directors in the qualitative study**

<table>
<thead>
<tr>
<th></th>
<th>D/MS</th>
<th>CFO</th>
<th>CEO</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Female</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>7</td>
<td>5</td>
<td>18</td>
</tr>
</tbody>
</table>

Table 2 explanation: In total, 18 SME directors were interviewed, of whom 12 participants were males and 6 participants were females. In the group, directors-major shareholders, a total of 6 participants were interviewed, i.e. 4 males and 2 females. In the group, CFO’s, a total of 7 participants were interviewed, i.e. 5 males and 2 females. In the group, CEO’s, a total of 5 participants were interviewed, i.e. 3 males and 2 females.
3.4. Basic concepts: complete conceptual model

The conceptual model was established on the basis of the COSO framework and The Theory of Reasoned Action ‘TRA’ model developed by M. Fishbein & I. Aijzen and it illustrates the structure and level of detail of the internal control measures selected by the CEO or the CFO. The analysis of the results of the interviews, together with the theoretical framework of the Fishbein & Aijzen model and components of the COSO Internal Control – Integrated Framework ‘ICIF’ (1992) led to the drafting of the questions for the survey research for this component.

The conceptual model consists of four components, as follows:
- BASIC/Input CONCEPTS (characteristics of the enterprise / businessperson)
- PSYCHOLOGICAL / MENTAL (Fishbein & Aijzen, TRA model concepts)
- BEHAVIOUR / BUSINESS ACTIVITIES (investment behaviour and COSO 1992 components)
- YIELDS/Revenues (efficiency / effectiveness and satisfaction)

Below, the complete conceptual model has been visually incorporated in a figure:

Figure 2: The complete conceptual model and research part

Figure 2 explanation – components of the conceptual model

The complete conceptual model includes the following terms / concepts: main characteristics of the company (1), characteristics of the person (2), beliefs / evaluations (3), normative beliefs (4), attitude (5), subjective norm (6), behaviour (7), business activities (8) (i.e. Control Environment Principles (CEP), Risk Assessment (RA), Control Activities (CA) and Information & Communication Principles (ICP)), efficiency (9), effectiveness (10) and satisfaction (11).

The research part of the presented paper - the components, psychological / intellectual and behaviour / business activities, relate to the concepts from the model in the perspective of the CEO / CFO and are the concepts from the model according to the theory of Fishbein & Aijzen regarding behaviour and behavioural intentions (Fishbein & Aijzen, 1975). In The Theory of Reasoned Action (Fishbein & Aijzen, 1975 and 1980), it was proposed that attitude (own beliefs, the convictions of an individual) and subjective norm (the views of others and evaluation of the level of cooperation provided by the director) lead to intention and ultimately to specific
behaviour, i.e. actual actions. Above, the choice of decision making concepts from the conceptual model in a figure 2.

In next chapter the results of the four concepts have been separately presented in subparagraph.

4. Results
Following the presentation and discussion of the conceptual model, the participants were asked to explain the concepts of their behavioural beliefs considered to be the most important and give some examples from own business environment. These concepts have been incorporated in the table below.

**Table 3: Behavioural beliefs**

<table>
<thead>
<tr>
<th>Director</th>
<th>Financial targets</th>
<th>Strategy Future/Long term targets</th>
<th>Alertness</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men (6)</strong></td>
<td><img src="1" alt="" /></td>
<td><img src="1" alt="" /></td>
<td><img src="1" alt="" /></td>
<td><img src="1" alt="" /></td>
</tr>
<tr>
<td><strong>Women (6)</strong></td>
<td><img src="1" alt="" /></td>
<td><img src="1" alt="" /></td>
<td><img src="1" alt="" /></td>
<td><img src="1" alt="" /></td>
</tr>
</tbody>
</table>

Explanation of choices of concepts of Behavioral beliefs by SME directors (Table 4)

Following the dept-interview results, the following concepts showed dominant pattern distribution by women:

- **Strategy/Future/Long term targets:**

  By men showed the concepts of strategy, future and long term targets average pattern distribution.

  The following concepts showed average pattern distribution by men and women:

- **Financial targets:**
  Profit, solvency, turnover, etc.

- **Image:**
  Publicity, power, good name.

  The following concept showed low pattern distribution by men and women:

- **Alertness:**
  Attentive, watchful for warnings/risks out/inside the company.
Table 4: Normative beliefs

<table>
<thead>
<tr>
<th>Director</th>
<th>Advisors</th>
<th>Employees</th>
<th>Management</th>
<th>Family</th>
</tr>
</thead>
</table>
| Men (6)  | !!!! !!!!!!  
          | !!!!!! !!!!!!  
          | !!!!!! !!!!!!  
          | !!!!!! !!!!!!  
          | -        |
| Woman (6)| !!!!!! !!!!!!  
          | !!!!!! !!!!!!  
          | !!!!!! !!!!!!  
          | !!!!!! !!!!!!  
          | !!!!       |

Following the discussion of behavioural beliefs in decision making in the conceptual model, the participants were asked to explain the concepts of their normative beliefs, the own perceptions of people around them and the examples, stories about persons participating in decision making process of the directors. These concepts have been incorporated in the table above. Following the dept-interview results, the following concepts showed dominant pattern distribution by women:

- **Advisors:**
  Advisors outside the company: auditor, supervisors, shareholders, etc.

  Women are more intend to find help and ask for advise outside the company. Management has by woman in their decision making process a low pattern distribution.
  By men showed the concepts of group advisors outside the company average pattern distribution.

  The following concepts showed average pattern distribution by men and women:

- **Employees:**
  People working in a company.

  The following concept showed low pattern distribution by men and women:

- **Family:**
  Family of SME directors
Table 5: Attitude

<table>
<thead>
<tr>
<th>Director</th>
<th>Example</th>
<th>Environment rules</th>
<th>Internal group advisors</th>
<th>External group advisors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men (6)</strong></td>
<td></td>
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<td></td>
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<td><strong>Woman (6)</strong></td>
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</tbody>
</table>

Following the discussion of normative beliefs in decision making in the conceptual model, the participants were asked to explain the concepts of their attitude, their own attitude toward behaviour in the company. These concepts have been incorporated in the table above. Following the dept-interview results, the following concept showed dominant pattern distribution by men:

- **Example:**
  To be example for own employees
  Men are more intend to be in a company as a 1st example, to be visible. By women showed the concept of example average pattern distribution.

The following concepts showed average pattern distribution by women:

- **Example:**
  Women’s attitude to be a good example for own employees shows lower pattern distribution than by men and they are more intend to be less visible in the company.

The following concept showed low pattern distribution by men and women:

- **Environmental rules:**
  Rules, customs, habits in the company

- **Internal group advisors:**
  Financial manager/accountant/controller.

- **External group advisors:**
  Advisors outside the company.

Table 7: Subjective norm

<table>
<thead>
<tr>
<th>Director</th>
<th>Own people</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men (6)</strong></td>
<td>❅♦♦♦♦</td>
<td>❅♦♦♦</td>
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<tr>
<td><strong>Woman (6)</strong></td>
<td>❅♦♦♦♦♦♦♦♦</td>
<td>❅♦♦♦♦</td>
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</tbody>
</table>

Following the discussion of attitude in decision making in the conceptual model, the participants were asked to explain the concepts of their subjective norm, based upon
their desire to comply with others. To be incline, or not inclined, to participate in a behaviour, the directors more intend to comply with own people than with others.

Following the dept-interview results, the following concept showed dominant pattern distribution by women and men:

- **Own people:**
  People director trusts and knows very well

Men and Women are more intend to listen to people they know, people in the company, people are part of the business process, good advisors.

The following concepts showed average pattern distribution by women:

- **Others (other people, outside the company):**
  People related to company/not favourite by directors.

  The female directors more intend to comply with people outside the company than male directors.

The following concept showed low pattern distribution by men:

- **Others (other people, outside the company):**
  People related to company/not favourite by directors.

  The male directors less intend to comply with people outside the company than female directors.

In next chapter the conclusions and further discussion completes this article.

5. **Conclusion & discussion**

The study outlined in this article was an exploratory empirical study regarding the interpretation of the perceptions of Small to Medium-sized Enterprise (SME) Directors regarding the concepts of decision making process: behavioural beliefs, normative beliefs, attitude and subjective norm.

. The questions posed in the study are as follows:

- In which manner is the decision making process ("psychological mental' part of conceptual model) interpreted and utilised by the SME director?

- What are the differences in the interpretation of decision making by men and women SME director?

The behavioural beliefs are represented and interpreted by following concepts: financial targets, strategy/future/long term target, alertness and image.

The normative beliefs are represented and interpreted by following concepts: advisors, employees, management and family.
The attitude are represented and interpreted by following concepts: example, environment rules, internal and external group advisors.

The subjective norm are represented and interpreted by following concepts: own people and other people.

The decision making process by female directors in SME sector is differ from their male collage’s and is more selective. The behavioural beliefs by female SME directors are represented by themes of Strategy, Future and Long Term Targets (dominant pattern distribution) while male directors divide their behavioural beliefs between themes of Financial Targets, Image and Long Term Targets (average pattern distribution).

The normative beliefs by female SME directors are dominant represented by group of Advisors (outside the company, dominant pattern distribution) and less by group of Employees (average pattern distribution). Female directors are more intend to ask for advice outside the company. Management of the company has by female director in their decision making process a low pattern distribution while male directors divide their normative beliefs between Advisors, Employees and Management (average pattern distribution).

The attitude to be a good example for employees in a company is more important for male director (dominant pattern distribution) than for female director (average pattern distribution).

The subjective norm has dominant pattern distribution by women and men by concept – own people - the directors more intend to comply with own people than with others.

Limits of the study
There is some doubt concerning the representativeness of the study, because it was undertaken among a limited group of (18) SME directors and the selection of respondents was non-random. Furthermore, the sample is too limited in size to be able to make (statistically-reliable) statements on the entire population. The study is exploratory in character.

Suggestions for further study
In a further study, the possible explanations for the most notable results could be further assessed, in addition to which it would be interesting to continue this study on a larger scale, to make it possible to be able to draw statistically-reliable conclusions and the most plausible explanation of the interpretation of the decision making concepts in SME sector by female and male directors.

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