Demographic Factors of Entrepreneurs as Predictor of Batik SMEs Performance Mediated by Entrepreneurial Orientation

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Abstract. The purpose of this study was to determine the mediation role of entrepreneurial orientation on the relationship between entrepreneur’s demographic characteristics (gender, age and education level) on business performance of batik SMEs in Semarang city. The questionnaire was prepared using a 5 point Likert Scale. The number of samples that were collected from 75 SME batik owners/managers. The analytical tool used is Path Analysis and testing the effect of mediation using the Sobel test. From the results of the analysis show that demographic variables have positive and significant effect on the entrepreneurial orientation variable. The demographic variables and entrepreneurial orientation has a positive and significant effect on the performance of batik SMEs except education level variable. Entrepreneurial orientation variable is able to mediate the relationship between demographic characteristics of entrepreneurs with the business performance of batik SMEs in Semarang city.

Keywords: entrepreneur’s demographic characteristics · entrepreneurial orientation · business performance of batik SMEs

1 Introduction

According to [1] problems being faced by MSMEs in small craft industry, especially Batik Semarangan SMEs are marketing which are less attractive and less knowing by wider community, human resources issues, business management and also weaknesses for doing bookkeeping. In fact, batik is a superior Indonesian cultural heritage. Almost every region in Indonesia has its own batik art and motifs, including the city of Semarang which has the characteristics of Semarangan Batik (such as flora and fauna, typical food of Semarang City, buildings in the old city area like Lawang Sewu, Tugu Muda, tamarind charcoal and bird or fish image modification) [2]. According to [3], problems faced by small entrepreneurs can be solved through a balance of improvement efforts between internal and external problem. Improvements from external side can be done by improving the quality of batik entrepreneurs in field of business management. No less important is creating a good business environment, implementing mutually beneficial
Several studies have investigated the influence of entrepreneur characteristics on business performance using demographic characteristics approach of entrepreneurs ([6–8]). Demographic characteristics will shape their entrepreneurial behavior. Many studies have highlighted the role of demographic characteristics such as age, religion, gender, experience, background and entrepreneurial education on entrepreneurial behavior and company performance ([9, 10]). Demographic characteristics of an entrepreneur are usually associated with age, gender, business size and experience of business actors. Several studies explain that the age of 25 to 45 years is the age that shows someone is the most active in entrepreneurship [11]. Age is a period of life and certain strengths or qualifications will emerge with age. People’s skills may improve with age [12], as they learn to manage time influenceively [13]. Likewise, people who have previous experience in entrepreneurship will have a greater interest in developing a business than people who have never had entrepreneurial experience [14].

Becoming an entrepreneur is a personal challenge that many people prefer than being an employee. Entrepreneurs not only face financial risk for the business they run but also benefit from the potential for business success. High failure rate of SMEs makes it necessary to conduct further studies whether demographic factors such as age and business size influence start-ups to succeed in business ([15, 16]).

Superior performance of a company depends on the resources it has, in the form of tangible and intangible resources. Based on the RBV theory, unique, rare, easy to imitate and valuable resources are competitive advantages of companies ([17, 18]). This research is based on the RBV theory, which explains that entrepreneurial characteristics are valuable, unique and rare resources owned by company that have an influence on sustainable competitive advantage and superior performance. Because not all entrepreneurs have these specific characteristics, that are important factors for the company’s success.

2 Theoritical Basis and Hypothesis Development

Demographic Characteristics
A person’s demographic characteristics influence their behavior towards entrepreneurship. Many studies have been conducted highlighting the role of demographic characteristics such as age, religion, gender, experience, background and education of entrepreneurs on their entrepreneurial behavior and company performance [19]. Education, age, length of business, and training make significant contributions to entrepreneurial characteristics [6]. Several studies have proven that age determines business success [16]. Age is a time of life and is the main strength or qualification that comes with age. Individual skills can increase with age [20], as they learn to manage time influenceively [21]. According to previous studies, a person’s age has been considered a key demographic characteristic in understanding entrepreneurial behavior and intensity [22].

A number of studies have investigated role of gender in entrepreneurship and business success ([23] – [26]). [27] State that there are many different forms of cultural imbalance in gender. Several studies have highlighted gender differences with regard to abilities, potential and other entrepreneurial attributes ([28] and [29]. Some studies believe that
more involved men work better than women [30]. Similarly, several other studies have described gender as an important predictor of entrepreneurial behavior and intensity and revealed that men have more intensity towards entrepreneurship than women [31]. Likewise, many women want academic and personal freedom, but are less able and confident to run a business [32].

A study by [33] and [34] find that entrepreneurship education produces independent individuals. In addition, they found that entrepreneurship education increased formation of new businesses, possibility of entrepreneurship, possibility of developing new products, and likelihood of entrepreneurial graduates owning a high-tech business. Entrepreneurship education is often related to finances and ability of individuals to obtain sources of capital. Higher levels of education increase ability to obtain bank loans, accumulate personal wealth and increase financial support from stakeholders [35]. The higher a person’s education level, the higher the vigilance in obtaining funding sources for his business. At this time, a highly educated entrepreneur will be more careful in making decisions accompanied by consideration of the steps to be taken.

**Entrepreneurial Orientation**

Entrepreneurial orientation describes strategic development process in organizations as basis for decision-making and actions taken by entrepreneurs ([36];[37]. Roots of entrepreneurial orientation come from strategy-setting process literature [38]. In formulating strategy requires many aspects such as planning, decision making, analysis, and many aspects of the value system, culture and organization [39]. [38] emphasized that the development of an influenceive strategy is result of strategic resources and personal actions of entrepreneurs. Therefore,[40] and [41], view entrepreneurial orientation as related to policies and practices that form the basis for the decisions and actions of entrepreneurs. Entrepreneurial orientation is not only related to variables at individual level ([42]; [42]) as in previous entrepreneurial theory, but is also related to processes at company level.

**SMEs Performance**

[43] and [44] explain business performance through the relationship between entrepreneurial orientation and company performance. A business that is supported by an entrepreneurial orientation will have the ability to find and exploit new market opportunities [45]. The success of small and medium-sized companies can be measured through improving their business performance ([46] and [47]).

**Hypothesis Development**

1) **The Influence of Owner/Manager Age on Entrepreneurial Orientation**

Manager’s age [48] and [49] is considered the most easily observed and measured factor but has a strong influence on manager behavior. The entrepreneur age group has significant results on entrepreneurship [50]. A study conducted by ([51] p.9) found a positive influence of marginal age on the concept of entrepreneurial orientation, namely entrepreneurs in the 40–60 year old category (F (1,135) = 4.124, p < 0.05) were vulnerable to risk in significantly lower rates than entrepreneurs aged under 40 and over.
60 years, reflecting their general entrepreneurial orientation. Other authors also confirm that young entrepreneurs are more likely to be energetic, and more likely to test their skills than older entrepreneurs [52]. [53] also found that older youth (aged 25–29) were more likely to be self-employed than younger individuals between the ages of 20–24.

H1: Age of the owner/manager of SMEs has a positive influence on entrepreneurial orientation.

2) The Influence of Entrepreneur’s Gender on Entrepreneurial Orientation

Entrepreneurship itself creates different environments with different challenges for men and women and some of these can relate to stereotypes that can create barriers for women in starting their businesses. It has also been found that most women are focused on various business sectors, generally from a few small companies, their businesses are more difficult to fund or get support due to limited reputation and lack of interest in investors for this type of business [23].

However, [54] and [24] found that positive perceptions of entrepreneurship by the community had a stronger influence on women than men to pursue entrepreneurial activities, also that gender equality did not increase the number of women entrepreneurs. However, the perception of women entrepreneurs becomes more positive in this society, which perceives women as stronger as women pioneers (when deciding to start a business) ([51] and [55]).

This is supported by Bank of Indonesia data which states that total Micro, Small and Medium Enterprises (MSMEs) in 2018 reached 57.83 million with more than 60% managed by women (the number of female MSME actors in Indonesia reached 37 million). (www.kumparan.com, 19 October 2018).

H2: Gender differences have an influence on entrepreneurial orientation.

3) The Influence of Education Level on Entrepreneurial Orientation

According to [56] and [57] education provides opportunities in existing companies and, thereby, reduces entrepreneurial desire due to opportunity costs. But so far the influence of education on the intensity of entrepreneurship is not clear. Many founders/business owners have lower levels of education as well as above average formal education. As found in [58] namely from 103 SMEs in South Africa, it was found that the highest level of education achieved was recorded as 73% of respondents had higher education qualifications, while 26% had completed their secondary education, and none of the respondents chose category “did not complete secondary education”.

[59] stated that individuals with lower educational averages had lower entrepreneurial intensity. [60] studied corporate managers, small business owners and entrepreneurs, and found that corporate managers were the most educated compared to entrepreneurs. In contrast, [61] found that college-educated entrepreneurs are closely related to the survival of companies and high-tech start-ups. Research conducted by [51] stated that education obtained abroad brought entrepreneurs a higher level of proactiveness (F (1.135) = 3.974, p < 0.05) compared to entrepreneurs who did not have the opportunity to study abroad.
H3: The education level of SME entrepreneurs has a significant influence on entrepreneurial orientation.

4) **The Influence of Owner/Manager Age on SME Performance**

There is a theoretical explanation that explains influence of owner/manager advocate age for younger owners/managers; Argument here rests on the fact that younger owners/managers have the necessary motivation, energy and commitment to work and are more likely to take risks [35]. The logic is that the older owner/manager is likely to have achieved his initial aspirations [62]. Previous research has claimed that the family approach to succession planning is often strongly related to the age of the founder [63]. This is evidence that owner age is an important determinant of the succession planning process among male-led, but not female-led businesses [64]. Research shows that mature executives tend to have a stronger commitment to the organization [65].

According to [66], stock market or company performance reacts negatively to appointment of a young family successor. This reaction suggests that due to young age of successors, investors appear to lack confidence and also reflects the lack of management experience in successors. Thus, age does affect company’s performance. [67] argues that managerial success (company performance) is positively correlated with age. It is said that when managers mature in age, the chances of the company’s managerial success are higher compared to younger managers. This may also be due to the level of experience the manager has. Other studies evidence that each age level reacts to environmental forces called “stimulus stresses” by changing the aggregates. Younger people change faster than older people and seize opportunities more quickly, so indirectly this action does help improve company performance. While adults tend to be more risk averse than younger people ([10] and [68].

H4: Age level of SME owners/managers has a positive influence on performance of SMEs.

5) **The Influence of Gender on the Performance of SMEs**

Gender has an impact on entrepreneurial success and hence on company performance [69]. A deeper gender balance in entrepreneurship can imply a better work-life balance in a society [70]. As research conducted by [71] that gender affects financial performance of SMEs in Portugal. In doing so, economy can benefit from convincing enough talented women to start a business and embark on a challenge, which may prove difficult for some. Several studies have described gender as a vital determinant of entrepreneurial behavior, intentions and performance and revealed that men have more entrepreneurial intentions than women ([52, 72] and [73].

H5: Gender differences have a significant influence on performance of SMEs.

6) **The Influence of Education Level on SME Performance**
Quality education has a positive impact on company performance because it increases self-confidence and self-efficacy of entrepreneurs ([74] and [75]). Education builds confidence, psychology, knowledge and skills, which are very important in achieving company goals. In addition, educated entrepreneurs will be more creative and innovative and therefore they can look for unique ways to satisfy desires ([76] and [77]).

Level of education of a business enterprise owner can help a business to survive and manage a complex environment and maintain corporate objectives. [78] analyzes the influence of education level on the performance of SMEs and finds that the education level of SME entrepreneurs has an influence on the quality of business, which is manifested through the implementation of strategies, visions, systems, market orientation, and innovation principles. This combination leads to improved performance. Education is accepted as the main process in supporting organizational development [79]. Education that plays a basic role in the acceptance and use of information technology increases the level of knowledge and profession. It is an integrated part of the implementation of enterprise resource planning and is one of the critical success factors. Failures in education lead to implementation problems.

H6: Level of education of the owner/manager has a positive influence on performance of SMEs.

7) The Influence of Entrepreneurial Orientation on SME Performance

Entrepreneurial orientation plays an important role in improving business performance. [80] reveal that entrepreneurial orientation becomes an acceptable meaning to explain business performance. Meanwhile, [81] and [82] studied entrepreneurial orientation, knowledge management and business performance in the role of organizational culture. Entrepreneurial orientation has played an important role in the growth of an organization in a competitive environment. Entrepreneurial orientation is an administrative and decision-making activity that will lead to several new developments in SMEs. Furthermore, entrepreneurial orientation has created a positive impact on the organizational performance of SMEs. Entrepreneurial orientation, which is reflected in an attitude full of innovation, proactiveness and the courage to take risks, is believed to be able to boost the company’s performance. This is confirmed by [83], which states that higher entrepreneurial orientation can increase the company’s ability to market its products towards better business performance. Entrepreneurial orientation of an entrepreneur can lead to an increase in business performance as stated by[84]. Entrepreneurial orientation plays an important role in improving business performance ([85] and [86]).

H7: Entrepreneurial orientation has a positive influence on performance of SMEs.

8) The Mediation Influence of Entrepreneurial Orientation on the Relationship Between Demographic Variables and SME Performance

Entrepreneurial orientation is very important for entrepreneurs because it means building a successful strategy for business success through an influenceive decision-making process ([87, 88]; and [89]). Entrepreneurial orientation acts as a mediator in the relationship between entrepreneur characteristics and firm performance. Without an
entrepreneurial orientation, entrepreneurs cannot develop a vision, goals and success strategies for the company’s success. And thus, lack of vision and lack of a successful strategy can lead to business failure. Therefore, the contribution of entrepreneurial orientation in company success cannot be ignored [10].

H8a, b, c: There is a mediating influence of entrepreneurial orientation on relationship between demographics variables and SME performance.

3 Research Method

This research approach uses a verification method [90] by conducting causal research to examine relationship between demographic characteristics variables (age, gender and education level), entrepreneurial orientation, and MSME performance. Population in this study were all batik SME entrepreneurs/craftsmen in Semarang City, totaling 108. Each craftsman comes from the Semarang City area which includes the areas of Kampung Batik, Krapyak, Musi, Ngesrep, Tegal Rejo, and Banyumanik. The number of samples calculated using the Slovin formula is 75 batik SMEs. Sampling method uses convenience sampling, namely subjects who are most easily found will be respondents in a study [90]. Analysis tool uses path analysis regression and mediation tests using the Sobel test [91].

Demographic characteristics of entrepreneurs are independent variables which include age, gender and education level. Age is grouped into two, namely young age group (25 - 45 years) is coded 1 and adult age group (46 - 65 years) is coded 2. In this study, a nominal scale was used to measure gender, namely for men coded 1 and code 2 for women. Education level was measured using a nominal scale with code 1 for junior high school graduates, code 2 for high school graduates, code 3 for D3 graduates, code 4 for S1 graduates and code 5 for S2 graduates. Entrepreneurial orientation is a mediating variable. Measurement of this variable consists of eight indicators. Three indicators represent the dimensions of risk taking, namely (1) business risk-taking, (2) financial risk-taking, and (3) personal risk-taking [92]. Innovativeness dimension consists of three indicators, namely (1) emphasis on marketing existing products, (2) new types of products and services offered, and (3) radical changes in products and services ([36] and [93]); and the proactive dimension consists of two indicators, namely (1) initiatives to make changes and (2) introducing new products or services, administrative systems, production methods, etc. on a regular basis [94]. SME performance measurement consists of six indicators consisting of financial performance (sales growth, ROA, profitability) and non-financial performance (customer satisfaction, customer growth and product and service quality) ([36] and [95]). All research variables were measured using a five-point Likert scale. With a scale of 1 = strongly disagree and 5 = strongly agree. Research model framework is shown in Fig. 1 (Table 1).
Fig. 1. Research Model. Source: develop for this study, 2021

Table 1. Demographic Description of Respondents

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Total</th>
<th>No</th>
<th>Description</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gender</td>
<td></td>
<td>4</td>
<td>length of business</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Male</td>
<td>25</td>
<td>2</td>
<td>2 - 5 years</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>- Female</td>
<td>50</td>
<td>2</td>
<td>5 - 10 years</td>
<td>38</td>
</tr>
<tr>
<td>2</td>
<td>Age</td>
<td></td>
<td></td>
<td>&gt; 10 years</td>
<td></td>
</tr>
<tr>
<td></td>
<td>31–35 years</td>
<td>7</td>
<td>5</td>
<td>Turnover of business</td>
<td></td>
</tr>
<tr>
<td></td>
<td>36–40 years</td>
<td>10</td>
<td></td>
<td>10–20 millions</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>41–45 years</td>
<td>9</td>
<td></td>
<td>21–25 millions</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>46–50 years</td>
<td>30</td>
<td></td>
<td>26–30 millions</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>51–60 years</td>
<td>19</td>
<td></td>
<td>31–40 millions</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>Education level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yunior High School</td>
<td>1</td>
<td></td>
<td>&gt; 50 millions</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Senior High School</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bachelor Degree</td>
<td>45</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Postgraduate</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: processed primary data, 2021

4 Result

Path Analysis

Mediation Test 1: Influence of age on performance of SMEs mediated by entrepreneurial orientation

\[ Sab = \sqrt{b^2Sa^2 + a^2Sb^2 + Sa^2Sb^2} \]

\[ = \sqrt{(0.629)^2(0.064)^2 + (2.314)^2(0.064)^2 + (0.631)^2(0.064)^2} = 0.4266 \]
Table 2. Summary of Regression Analysis Results (Eq. 1)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coeff.</th>
<th>Standardized Coeff.</th>
<th>T</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>25.049</td>
<td>2.091</td>
<td>11.981</td>
</tr>
<tr>
<td>Age</td>
<td>2.314</td>
<td>.631</td>
<td>.344</td>
<td>3.667</td>
</tr>
<tr>
<td>Gender</td>
<td>1.574</td>
<td>.644</td>
<td>.230</td>
<td>2.443</td>
</tr>
<tr>
<td>Level of Education</td>
<td>1.758</td>
<td>.397</td>
<td>.417</td>
<td>4.427</td>
</tr>
</tbody>
</table>

a. Dependent Variable: OW
R² = 0.375; Adj R² = 0.349; F test = 14.224; Probability = 0.000
Source: processed primary data, 2021

Table 3. Summary of Regression Analysis Results (Eq. 2)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coeff.</th>
<th>Standardized Coeff.</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.304</td>
<td>1.964</td>
<td>.155</td>
</tr>
<tr>
<td>Age</td>
<td>.757</td>
<td>.372</td>
<td>.128</td>
<td>2.036</td>
</tr>
<tr>
<td>Gender</td>
<td>1.045</td>
<td>.363</td>
<td>.174</td>
<td>2.883</td>
</tr>
<tr>
<td>Level of Education</td>
<td>.355</td>
<td>.243</td>
<td>.096</td>
<td>1.462</td>
</tr>
<tr>
<td>OW</td>
<td>.629</td>
<td>.064</td>
<td>.716</td>
<td>9.810</td>
</tr>
</tbody>
</table>

a. Dependent Variable: SMEs Performance
R² = 0.767; Adj R² = 0.754; F test = 57.670; Probability = 0.000
Source: processed primary data, 2021

\[
t = \frac{(2,314)(0,629)}{0,4266} = \frac{(1,574)(0,629)}{0,4266} = 3,412
\]

Value of \( t \) count = 3,412 > \( t \) table value = 1,985 with a significance level of 5%, it proves that entrepreneurial orientation (Z) is able to mediate relationship between influence of age (X1) on performance of SMEs (Y).

Mediation Test 2: Influence of gender on performance of SMEs mediated by entrepreneurial orientation

\[
Sab = \sqrt{b^2a^2 + a^2b^2 + Sa^2Sb^2}
\]

\[
= \sqrt{(0,629)^2(0,644)^2 + (1,574)^2(0,064)^2 + (0,644)^2(0,644)^2} = 0,4196
\]

\[
t = \frac{(1,574)(0,629)}{0,4196} = \frac{0,990046}{0,4196} = 2,359
\]
Value of $t$ count $= 2,359 > t$ table $= 1,985$ with a significance level of 5%, it proves that entrepreneurial orientation ($Z$) is able to mediate relationship between gender ($X_2$) and performance of SMEs ($Y$).

Mediation Test 3: Influence of education level on performance of SMEs mediated by entrepreneurial orientation

$$Sab = \sqrt{b^2 Sa^2 + a^2 Sb^2 + Sa^2 Sb^2}$$

$$= \sqrt{(0, 629)^2(0, 397)^2 + (1, 758)^2(0, 064)^2 + (0, 397)^2(0, 064)^2} = 0, 276$$

$$t = \frac{(1, 758)(0, 629)}{0, 276} = \frac{1, 105782}{0, 276} = 4, 007$$

Value of $t$ count $= 4, 007 > t$ table value of 1,985 with a significance level of 5%, it proves that entrepreneurial orientation ($Z$) is able to mediate relationship between education level ($X_3$) and performance of SMEs ($Y$).

5 Discussion

1) The Influence of Age on Entrepreneurial Orientation

Based on Table 3, it shows that age has a positive and significant influence on entrepreneurial orientation and has the most dominant influence compared to gender and education level (Fig. 2). This is in line with research conducted by [51, 96] and [53] who found a positive influence of marginal age on the concept of entrepreneurial orientation. Number of respondents aged between 46 to 50 years is the most, this shows the maturity of an SME executive/manager. They tend to have a stronger commitment to the organization and its future, while controlling the company’s risks. When managers
mature in age, the chances of the company’s managerial success are higher than those of younger managers. This may also be due to the level of experience the manager has. Each age level reacts to environmental forces called “stimulus stresses” by changing the aggregates. Younger people change faster than older people and seize opportunities more quickly, so indirectly this action does help improve company performance. While adults tend to be more risk averse than younger people (Table 2).

2) The Influence of Gender on Entrepreneurial Orientation

Based on Table 3, it shows that gender has a positive and significant influence on entrepreneurial orientation. Female entrepreneurs are more proactive than male entrepreneurs. Although influence is the smallest compared to other independent variables. This result is in line with the findings of [54]; [24]; [51]; and [55] who say that individual entrepreneurial orientation is influenced by gender. There are important differences in the way in which men and women engage in entrepreneurial activities: (1) Men are more likely and naturally more likely to be involved in businesses that require a high level of risk taking than women entrepreneurs; (2) Men are more likely to be found to be more technology-intensive and growth-oriented businesses, thus requiring them to engage in more innovation often and at a higher level than women entrepreneurs; (3) Men are more aggressively competitive as business owners than women entrepreneurs. This is partly because men are generally less agreeable than women. Men also focus more on external factors of the company, such as their competitors, rather than on internal factors of the company; and (4) While men and women entrepreneurs appear to value autonomy equally, true autonomy due to business ownership is more common among male entrepreneurs because, overall, they rely less on their spouse, family, and friends for help and support.

3) The Influence of Education Level on Entrepreneurial Orientation

Based on Table 3, it shows that education level has a positive and significant influence on entrepreneurial orientation. Influence is quite large on entrepreneurial orientation of 1,758. This is in line with research of [59, 60, 97] and [51]. Education of SME owners/managers will bring entrepreneurs to a higher proactive level compared to entrepreneurs who do not have the opportunity to learn. Previous experience is a generator and source of learning to deepen readiness to accept higher risks, engage more in innovation and be proactive. Therefore, first experience in entrepreneurial project is very important for people to engage their passion, motivation and willingness to ask more.

4) The Influence of Age on SME Performance

Based on Table 4, it shows that age has a positive and significant influence on the performance of SMEs. This variable has an effect of 0.757. This is in line with the research conducted [67]; [10]; and [98]. Age level has an impact on entrepreneurial success. People’s skills may improve with age, as they learn to manage their time effectively. Most entrepreneurs in developing countries start their business at the age of 25–34. Entrepreneurs who are at a younger age have a higher success rate than those who are
older. Entrepreneurs get more opportunities as they age, but their willingness to become entrepreneurs decreases with age. However, it must be interpreted with caution. In this case, age should not be understood only as a chronological age, but as an entrepreneurial age, namely the length of time a person manages his business. The longer a person is involved in a business, the richer his accumulated experience, thus making him more capable of managing the business successfully.

5) **The Influence of Gender on SME Performance**

Based on Table 4, it shows that gender has a positive and significant influence on performance of SMEs. This variable has a large influence (1.045). This is in line with research conducted by [69–72, [52] and [73]. Gender has an impact on entrepreneurial success and hence on firm performance. These batik SME entrepreneurs have adequate managerial experience and training that support the success and strong performance of their businesses. However, there is a tendency that the male batik SME owners are superior to the female batik SME owners. From the results of this study it can be concluded that women’s batik SMEs are more likely to close operations if they are less likely to make a profit and tend not to hire employees. SMEs run by women entrepreneurs have a higher default ratio than those run by men entrepreneurs. Inequality in accessing finance mostly stems from the financial literacy gap between men and women.

6) **The Influence of Education Level on SME Performance**

Based on Table 4, it shows that education level has no effect on performance of SMEs. This is not in line with the research conducted by [74, 79] and [75]. The similarity of this research lies in the business location of SMEs in big cities. The average level of education of respondents in this study is quite high. This shows that even higher education levels are not able to provide sufficient knowledge for business actors to run their business. The irrelevance of education level to business performance may have to be explained by the fact that some respondents only inherited successful companies. From their parents, and there is a tendency for entrepreneurs to prefer to work based on instinct. Another fact, for example, is that the owners of these batik SMEs prefer to do financial bookkeeping according to their own wishes, therefore the use of accounting information is not applied properly by SMEs, even though in information accounting, there are basic things that must be done in order to maintain get performance in accordance with the wishes of the SME owner. Level of education and scientific fields is not always linear with one’s abilities, because this also depends on learning process that occurs when receiving education. Although there are many success stories of entrepreneurs who drop out, they are able to become successful entrepreneurs, but with the increasingly complex conditions of business environment, education is still needed in order to produce quality of entrepreneurs.

7) **The Influence of Entrepreneurial Orientation on SME Performance**

Based on Table 4, it shows that entrepreneurial orientation has a positive and significant influence on performance of SMEs. This variable has an effect of 0.629. This
is in line with research conducted by [83, 84], and [99]. Entrepreneurial orientation has an impact on entrepreneurial success and hence on company performance. This study succeeded in proving effect of entrepreneurial orientation on business performance. This means that better entrepreneurial orientation, higher business performance of SMEs. Entrepreneurial orientation reflects the extent to which the organization is able to identify and exploit untapped opportunities. Batik SMEs are said to have a spirit of entrepreneurial orientation if they can be the first to innovate new products in the market, have the courage to take risks, and are always proactive in changing demands for new products.

8) The Mediation Influence of Entrepreneurial Orientation on the Relationship Between Demographic Variables and Performance of SMEs

Results of Sobel test showing that entrepreneurial orientation variable is able to mediate effect of demographic variables on performance of SMEs. This is in line with research conducted by [89, 100] and [10]. If entrepreneurs pursue entrepreneurial-oriented goals such as being more proactive, increasing innovation and risk taking and competing more aggressively, the demographic characteristics of entrepreneurs will automatically shift to provide support for strengthening their necessary qualifications such as attending adequate training programs, attending seminars on business development or take further studies to achieve its goals and strategies in long term. So, it is expected that its business performance will increase automatically. Entrepreneurs/managers are advised to determine level of entrepreneurial activity required and be able to organize their roles and activities to meet the needs of their entrepreneurial goals. Therefore, positive contribution of his activities as an entrepreneur/manager on his business performance can be increased.

6 Conclusion

Age level variable has a positive and significant influence on entrepreneurial orientation. The higher the age of an entrepreneur, the higher his entrepreneurial orientation. The older a person is the more capable he or she will be to become an entrepreneur and run a business over their younger counterparts due to the accumulation of financial, human and social capital over a lifetime career. Gender variable has a positive and significant influence on entrepreneurial orientation of batik SMEs in Semarang. There are differences between female SME entrepreneurs and male SME entrepreneurs in their entrepreneurial orientation.

Variable level of education has a positive and significant influence on entrepreneurial orientation. The higher the education level, the higher the respondent’s entrepreneurial orientation level. Education will influence specific skills in relation to entrepreneurial behavior, such as seizing opportunities, making decisions and developing social skills; and creating certain situations, concerning the creation of a new company or the development of its business. Age level variable has a positive and significant impact on the performance of SMEs. This shows that the higher the age of the batik SME owners, the higher their business performance will be. As they get older, their business experience
also increases. These results show that, on the one hand, the youngest SMEs are growing more than the slightly older ones, and on the other hand, the SMEs are growing more than the larger SMEs. The youngest and smallest SMEs grow with the aim of achieving a minimum efficiency measure that will allow them to survive in the market they operate in, growth diminishes as they approach that size. Regarding old SMEs, which in most cases have achieved viability, age and size are irrelevant for their growth, and growth also does not show a continuous process over time.

Gender variable has a positive and significant influence on the performance of SMEs. This shows that the more optimizing gender roles of these batik SME entrepreneurs, the more their business performance will increase. Education level variable has no effect on the performance of batik SMEs in Semarang. Entrepreneurial orientation variable has a positive and significant influence on the business performance of SMEs. This shows that these entrepreneurs have considered strategic steps for the sustainability of their business through improving non-financial performance, namely customer satisfaction, customer growth and product and service quality. Entrepreneurial orientation variable is able to mediate relationship between demographic variables and business performance of SMEs.

Mediating effect of the largest entrepreneurial orientation variable is the relationship between age variable and performance of SMEs, which is 2.213. As entrepreneurs get older, they will have a stronger commitment to organization and its future, while controlling company risks, being more proactive and innovating for business development. When managers mature in age, the chances of the company’s managerial success are higher than those of younger managers.

7 Suggestion

Roles of batik SME entrepreneurs need to be classified based on age, namely young entrepreneurs, old entrepreneurs, gray entrepreneurs, late-stage entrepreneurs. Older entrepreneurs play a role in survival and start-up of new companies, this contribution does not marginally reinforce the idea that all ages of entrepreneurs need to be taken seriously along with younger ones because they have a real impact and contribution in their business environment. Women batik SME entrepreneurs are expected to develop a more proactive nature. Someone who is proactive will be easy to get along with, has many relationships, adapts quickly and is flexible in seeing opportunities. With so many relationships, more business information can be obtained so that it can help in making business decisions.

Batik SME entrepreneurs will further hone their competencies and soft skills to support their education related to their entrepreneurial orientation learning process, among other are: have a plan and strategy, communication, ability to cooperate and self-management. To understand further effect of age level on performance of SMEs, respondents should focus on SME owners who are still in their productive age, in age range of 25 years to 50 years. To address gender gap in performance of SMEs in developing countries, business incubators, which are often set up in universities or business schools, have an important role for women batik SME owners in terms of providing infrastructure, links to investors and market opportunities as well as personalized assistance and training. Therefore, it is clear that women SME owners, in particular, should
take advantage of these institutions to increase their chances of success and realize better company performance and high business-related experience. A program that engages experienced women business owners in providing advice to potential women business owners and helping to improve the performance of women SME owners. In addition, it may further assist female business owners to enhance strategic connections through business networks that are critical to business success, such as consistent access to accountants, lawyers, and investment bankers.

Not only high knowledge, but these batik SME entrepreneurs also need to have a vision, mission and development of the dimensions of opportunity, risk taking, proactiveness and innovativeness in improving their business performance. Proactive, means taking steps to maintain the business in the long term. This will require an entrepreneur/manager to carefully analyze the situation and then identify the most suitable alternative for the business. For example, if a competitor lowers the selling price, that doesn’t mean it has to lower the price of the product as well. Instead entrepreneur/manager may choose to offer more features or perhaps better after-sales service. If entrepreneur/manager knows his own strengths and weaknesses, entrepreneur does not need to react quickly to market changes, competition, sales and other factors. Strategy to increase self-motivation is an encouragement to develop self-entrepreneurial spirit through positive suggestions to take action to achieve business goals/success. This can be done by developing entrepreneurial soft skills through cultivating a positive entrepreneurial attitude, maintaining consistency in business so that business actors do not give up easily, fostering a persistent attitude, working hard and oriented to business success so that they can be a motivator for other SMEs.

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