

**THE EFFECTS OF SOCIAL NETWORKING, EDUCATION, AND SELF-EFFICACY ON ENTREPRENEURSHIP AND SUBJECTIVE WELL-BEING: A CASE STUDY ON SMALL-SCALED EMBROIDERY INDUSTRIES IN PROBOLINGGO**

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**ABSTRACT:** *There are a few researches linking to social networking, education, self-efficacy, entrepreneurship and subjective well-being (SWB). Previous researches related to economic relations and SWB, especially to compare the SWB between countries. Different from the these, this research is more comprehensive in discussing entrepreneurship. This research was intended to analyze the effects of social networking, education, and self-efficacy on entrepreneurship and subjective well-being of small-scaled embroidery industries in Probolinggo. The samples of this research consisted of 130 out of 150 embroidery entrepreneurs in Probolinggo. As means of data collection, the researchers applied survey method by asking questionnaire to the respondents (entrepreneurs at Probolinggo embroidery industries center). The questionnaire used in this research had been passed validity and reliability test to assure the questionnaire was valid and reliable. Meanwhile, data analysis process was conducted based on Partial Least Square (PLS) technique. The findings of this research indicated that: 1) embroidery entrepreneurs' social networking significantly affected their entrepreneurship; 2) their education did not significantly affect their entrepreneurship; 3) their self-efficacy significantly affected their entrepreneurship; 4) social networking significantly affected their subjective well-being; 5) their education did not significantly affect their subjective well-being; 6) self-efficacy significantly affected their subjective well-being; 7) entrepreneurship of the entrepreneurs at Probolinggo embroidery industries center significantly affected their subjective well-being.*

**KEYWORDS:** Social Networking, Education, Self-efficacy, Entrepreneurship, Subjective Well-being

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## **INTRODUCTION**

Small and medium-scaled industries play a significant role in economic development, namely by increasing employment, supplying low-cost goods and providing low-cost services, reducing poverty, and most important solving more complex social problems. There is no doubt about small and medium scaled industries contribution in economic development both in Indonesia and developed countries. Its contribution could be proved during 1997-1998 Indonesian monetary crisis when small-scaled industries with limited capital survived while most of large-scaled industries collapsed (Indonesian Ministry of Industry, 1999).

Small and medium-scaled industries resulted from entrepreneurship spirit are the indicators of economic capability and competence of a nation. As proposed by Idrus (1999), entrepreneurship was the motor of economic development formulating new economic combination through developing new products and new material sources, accumulating

capital sources, introducing new products and production functions, and developing new industries.

It is assumed that entrepreneurship skill of entrepreneurs (including those who run embroidery industries) is supported by their skill in establishing social networking among themselves and with several institutions which provide technical assistance. Meanwhile, some people argue that entrepreneurship skill was supported by adequate educational background. Entrepreneurship skill can also be seen as the result of self-efficacy, confidence in their ability to produce high quality embroidery products supplying domestic markets and exported to other countries. Some experts stated that social networking (Apiratpinyo and Suwannapisit, 2010), education (Sluis et al., 2008), and self efficacy (Boyd and Vozikis, 1994) were the driving factors of small-scaled embroidery industrialists to maintain their entrepreneurship.

Following Suryanto (2008) statement, national development cannot be determined merely based on its economic development. An entrepreneur success cannot be measured based on his/her productivity. By the end of MDGs (Millennium Development Goals) in 2015, several new goals have been proposed under SDGs (Sustainable Development Goals). SDGs tend to view successful national development more on happiness index (subjective well-being) of the people. Presidential Special Agency for MDGs (2003) stated that one of happiness index parameters was subjective well-being. This instrument could be used to measure social development based on psychological condition of the people. Therefore, happiness has been a part of well-being. Happiness prevents social depression which may decrease work productivity.

One example of social networking contribution to entrepreneurship is written in paper by Apiratpinyo and Suwannapisit (2010) according to their research about Thai immigrants in Sweden. The results show that the social networking affects the immigrant to decide the first step in growing business.

### **Research Model and Research Hypotheses Development**

Entrepreneurship which may also occur on small-scaled industries consists of several determining factors. In small-scaled industries, one of determining factors is social networking. Social networking refers to a link connecting assisting institutions, industrialists, employees, and the costumers which determines the success of embroidery industry center. Carson (1997) defines social networking as a relationship based on trust which directly (or indirectly) connects everyone in the social group. It is assumed that social networking can support entrepreneurship by providing access to rare resources which previously cannot be accessed by formal means. An entrepreneur requires information, capital, skill, skill, and employees to start his/her business. For those who have their own capital, they can perfect their resources by accessing their contacts (Jensen and Greve, 2005). An entrepreneur often faces several issues related to credit and financing his/her business, managerial experiences, and technical issues which affect the success of his/her business. Social networking helps entrepreneurs to access more resources to achieve better performance. Social networks owned by embroidery entrepreneurs are working group, center, and working community. Social networks can also be used to gain financial supports for investment (Bates, 1997). A good social networking may build good will and friendship.

When trust (particularly personal trust) becomes foundation which binds and in turn will result in collective action and solidarity inside an organization, social network will be the key of bridging function in entrepreneurship. However, Zalabak, Ellis, and Winograd (2010: 29) argued that social network can never be created without trust (particularly impersonal trust) as the foundation. Fuller and Tian (2006) included trust and cooperation into relational dimension of social capitals. Based on these definitions, it is assumed that social networks could affect entrepreneurship.

Besides social network, entrepreneurship may also relate to education. Several previous studies indicated positive effects of education on entrepreneurship development. On the other hand, contradictory result may also be found. A research conducted by Mwasalwiba (2012) showed that entrepreneurship education did not provide significant effect on students after course was given. This result may be caused by lack of attention given by the students on course materials. Similar to Bordieu (1986), Mwasalwiba (2012) viewed that student's attention and behaviors were mostly influenced by their family backgrounds. This is what Bordieu (1986) called as "cultural capitals". Cultural capitals consist of knowledge, skills, education, and other advantages which may upgrade their social status in the community. One way parents take to pass down these values is by transmitting behaviors and knowledge needed to be successful is through education. Education is an important mechanism in social reproduction which enables a person to reach higher social classes (Sullivan, 2007). Education is the third form of cultural capital and becomes an institutionalized state. Institutionalized knowledge is obtained through academic qualifications.

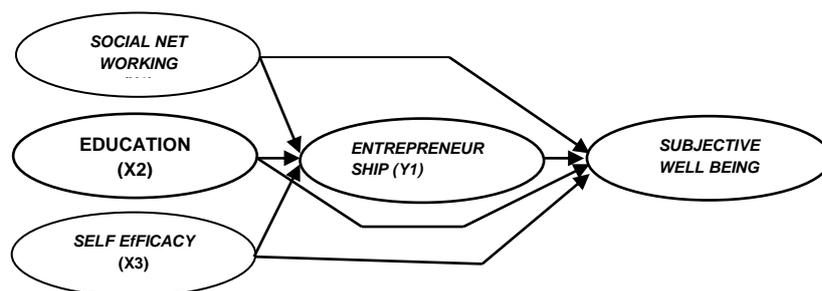
Kalla (2011) stated that education was important in creating future entrepreneurs however education was not necessarily create an entrepreneur. This statement indicated that there were other factors influencing entrepreneurship intention. A research conducted by Sluis, Praag, and Vijverberg on literatures regarding the effect of formal education on entrepreneurship found that the effect of formal education on entrepreneurs income was lower than on the income of workers in Europe, however, the effect was higher in the US. The benefit of formal education was higher in the US compared to Europe. Formal education was more beneficial on women than on men and more beneficial on the immigrants compared on white people.

Alongside social networking and education, self-efficacy was another variable on psychological capital which affected entrepreneurship. Bandura (1977) in his work *Self-Efficacy: Towards a Unifying Theory of Behavioral Change* defined self-efficacy as personal trust on his/her own capacity which navigated his/her actions/programs taken in achieving his/her goals. Gist (1987) defined self-efficacy as personal trust (confidence) owned by an individual that he/she was able to perform certain attitude needed to accomplish his/her duty. Gist (1987) viewed self-efficacy as an ability to mobilize resources in achieving certain situations. Mansor, Amer, and Dali (2013) proposed self-efficacy as a characteristic used to describe personal perception about his/her capability in accomplishing tasks. According to Bandura (1986), self-efficacy was subjective considerations regarding his/her own capability to decide several actions which should be taken in accomplishing particular tasks or solving problems which were being faced. Self-efficacy may affect the way an individual feels, thinks, acts, and motivates himself/herself. As a cognitive structure, self-efficacy was formed through accumulated lifelong learning or experiences. These experiences brought a person into a belief that he/she was able to (or was not able to) perform certain tasks or actions successfully. This phenomenon could be happened on entrepreneurs at Probolinggo embroidery industries center during Indonesian economic crisis (1997-1998).

Recent theoretical and empirical studies showed positive correlation between entrepreneurship activities and life quality. Samli (2008: 204) recorded when an entrepreneur develops his/her business by producing or distributing service and goods, he/she and all people involved in the business will feel the improvement on their life quality. According to previous studies, entrepreneurship may contribute to individual life quality and life quality of a community; thus analogically, entrepreneurship was also positively correlated to social characteristics of life quality. It was assumed that there was a strong correlation between social entrepreneurship and subjective well-being. When innovations directly affect economic development and economic development (income improvement) directly affects subjective well-being, innovations might have causal consequence on subjective well-being (Dolan et al., 2008). Sajeva and Rybakovas (2013) stated that social entrepreneurship has significant impact on individual and community subjective well-being. One of entrepreneurship indicators on a businessman lies on his skills to create employment. Consistent study indicated high negative impact of unemployment on subjective well-being. Unemployed individuals were the unhappiest group in a community.

Based on theoretical descriptions and review of related studies above, the research hypotheses proposed in this research are:

1. Social networking significantly affects entrepreneurship.
2. Education significantly affects entrepreneurship.
3. Self-efficacy significantly affects entrepreneurship.
4. Social networking significantly affects subjective well-being.
5. Education significantly affects subjective well-being.
6. Self-efficacy significantly affects subjective well-being.
7. Entrepreneurship significantly affects subjective well-being.



**Figure 1: Conceptual Framework**

## METHODOLOGY

### Research Samples and Procedures

The objects of this research were embroidery entrepreneurs in Probolinggo Regency and Municipality, the population of the research was all entrepreneurs run embroidery business in Probolinggo Regency and Municipality. Preliminary data indicated there were 150

embroidery entrepreneurs in Probolinggo Regency and Municipality. However, due to some reasons, the samples of this research were 130 embroidery entrepreneurs in Probolinggo Regency and Municipality.

The primary data collection method utilized in this research was conducted by distributing research questionnaires onto embroidery entrepreneurship in Probolinggo Regency and Municipality as the respondents. Respondents' perceptions were measured using self-rating process.

### **Measurement**

In this research, the research measured several variables. First, social networking referred to a set of relationships established based upon high trust which directly or indirectly connected everyone in a social group (Casson, 1997). Second, education which referred to grade of education, education length, and types of education owned by the entrepreneurs and became their cultural capital. Third, self-efficacy referred to personal trust level on his/her own competence in conducting each stage of treatment, revealing particular behaviors, and performing particular tasks to achieve the expected outcome which was measured by adopting 11 measurement items proposed by Bandura (1986).

Fourth, entrepreneurship referred to several characteristics served as driving factors of business development was based on entrepreneurs' skills to conduct innovations such as introducing new products and production functions, expanding new material sources, accumulating capital sources, and organizing and developing new industries. Entrepreneurship was measured by adopting 6 measurement items proposed by Meredith (1996).

Fifth, subjective well-being referred to a broad category of phenomena including personal emotional responses, main satisfaction, and global judgment of life satisfaction. It was measured based on 6 measurement items proposed by Deiner et al. (1999).

All of these variables were measured based on Likert's scale which scores ranged from 1 (one) to 5 (five).

### **Findings and Analysis**

In this research, the researchers utilized *Partial Least Square* (PLS) analysis technique due to several advantages PLS was a powerful analysis tool because it did not assume data based on particular measurement scale and particular amount. PLS was also applicable to prove some theories (Hair et al., 2010).

The respondents of this research can be grouped into several categories. Based on their ages, 42 of them (32.30%) aged between 22 and 35 years old; 72 of them (58.50%) aged between 36 and 50 years old; and 12 of them (9.20%) were older than 50 years old (51-66 years old). Based on their sex, 11 respondents (8.50%) were male and 119 respondents (91.50%) were female. Based on their educational background, most of respondents had lower education. 102 respondents (78.40%) were graduated from junior high school (*SMP*) and elementary school (*SD*) and 28 (21.60%) were graduated from high school (*SMA*). Based on the year the respondents started their business, 14 respondents (10.80%) said they started their business between 1977 and 1989. The majority of the respondents (71 respondents or about 54.60%)

said they started their business and joined Probolinggo embroidery industries center between 1990 and 2002 while 45 respondents (34.60%) just started their business after 2003.

### Testing the Hypotheses

**Table 1: Results of Path Coefficient Test**

Inter-variables Relationship	Original Sample Estimations	t-statistic values	p-values
Social Networking (X1) → Entrepreneurship (Y1)	0.28	5.68	0.00
Education (X2) → Entrepreneurship (Y1)	-0.04	0.69	0.49
Self-Efficacy (X3) → Entrepreneurship (Y1)	0.71	11.53	0.00
Social Networking (X1) → Subjective Well-being (Y2)	0.39	5.68	0.00
Education (X2) → Subjective Well-being (Y2)	0.13	1.85	0.07
Self-Efficacy (X3) → Subjective Well-being (Y2)	0.44	6.45	0.00
Entrepreneurship (Y1) → Subjective Well-being (Y2)	0.36	3.45	0.00

The path coefficient score of social networking to entrepreneurship indicated 0.28 and its t-statistic and p-value scores were 5.68 and 0.00 respectively. Its t-statistic score was higher than its critical value 1.96 and p-value was lower than error standard 0.05. Hence, hypothesis 1 was accepted implying significant relationship between social networking and entrepreneurship. The relationship between social networking and subjective well-being was proven to be significant which was indicated by its t-statistic score 5.68 which was higher than critical value 1.96 indicating that hypothesis 4 was accepted.

The relationship between education and entrepreneurship turned out to be insignificant. It was indicated by t-statistic score 0.69 lower than its critical value 1.96. This made Hypothesis 2 was rejected. Meanwhile, the path coefficient of education to subjective well-being indicated score 0.13 with t-statistic score 1.85 which was lower than critical value 1.96 and p-value score measured 0.07 which was higher than error standard 0.05. Therefore, it seemed that Hypothesis 5 was also rejected.

The relationship between self-efficacy and entrepreneurship was proven to be significant as showed by its t-statistic score 11.53 which was higher than critical value 1.96 and its p-value measured 0.00 which is lower than its error standard 0.05 while path coefficient of self-efficacy to entrepreneurship was 0.71. This made Hypothesis 3 accepted. As displayed on the table above, the path coefficient value, t-statistic, and p-value for self-efficacy to subjective well-being were 0.44, 6.45, and 0.00 respectively. The t-statistics score was higher than its critical value 1.76 while the p-value was lower than its error standard 0.05. Thus, it implied that Hypothesis 6 was also accepted.

Path coefficient value for entrepreneurship to subjective well-being indicated the score -0.36 with t-statistic score 3.41 and p-value 0.00. Its t-statistic was higher than critical value 1.76 and its p-value was lower than error standard 0.05. Hence, it can be said that Hypothesis 7 was accepted.

Path Diagram of Hypotheses testing was presented by Figure 2 below:

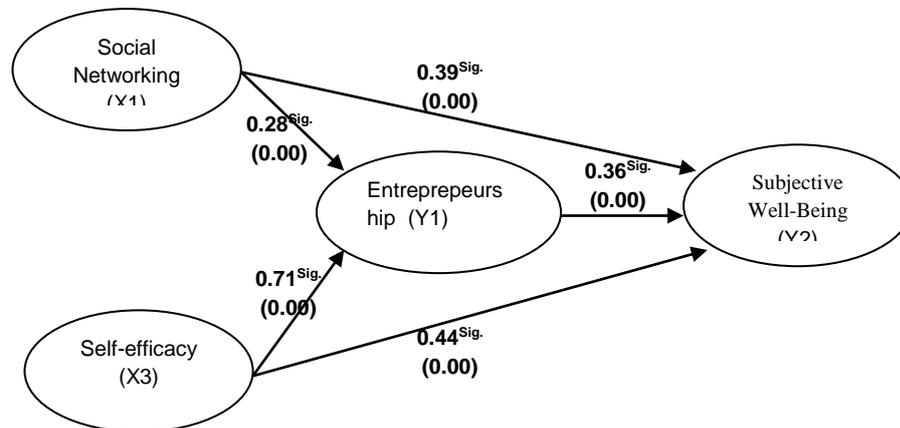


Figure 2: Path Diagram of Hypotheses Testing

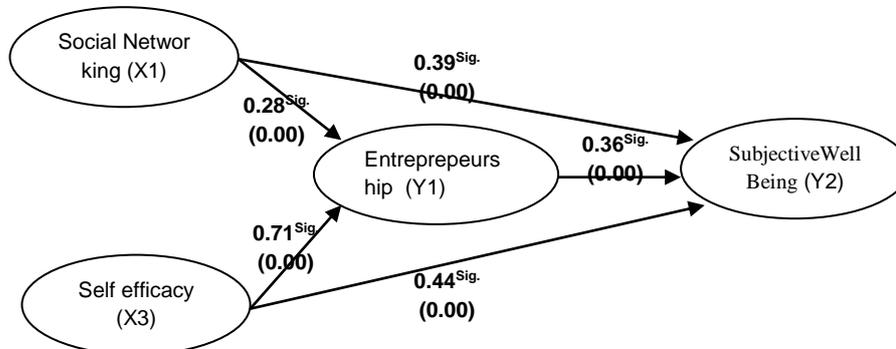
## DISCUSSIONS

### Effects of Social Networking on Entrepreneurship

Several definitions regarding social networking had been explained above, such as definitions proposed by Casson (1997), Davern (1997), and Bordieu (1998) who defined social networking as social capital in form of potential relationship built based on high trust which directly or indirectly connected everyone in a social group. Social networking was more long-lasting and institutionalized than acquaintance and knowing each other. In developing and expanding his/her business, an entrepreneur did not only rely on economic capital, but also on cultural and social capital (including social networking). In scope of small-scaled industry, social networking referred to a network which connected developer institutions, business owners, employees, and customers which supported the success of embroidery industries center. Result of descriptive analysis on social networking and all of its indicators was well perceived and could describe actual condition of social networking on Probolinggo center of embroidery industries. In general, descriptive analysis result of entrepreneurship could describe the entrepreneurship of embroidery entrepreneurs at Probolinggo center of embroidery industries.

Redding as cited in Tesfom (2006) added that each person in a social network was considered as important factor determining success of a business. Based on this empirical study, social network marked by involvement of its members in this research could improve the confidence and optimism as indicators of entrepreneurship in developing Probolinggo center of embroidery industries. The more they got involved in activities at the center of embroidery industries, the higher their optimism and confidence on their own capability which in turn affects the development of their business. Fact showed that most of small-scaled embroidery industries were passed down through generations. The growing numbers of small-scaled

industries could not be separated from contribution of social networking, such as other small-scaled industry communities. This phenomenon indicated entrepreneurship spirit development caused by social networking contribution (other groups and organizations).



### Effects of Education on Entrepreneurship

The result of descriptive analysis on education and all of its indicators was well perceived so that it could describe education condition of the members of Probolinggo center of small-scaled embroidery industries. Similarly, the result of descriptive analysis on entrepreneurship was also able to describe the entrepreneurship of embroidery entrepreneurs. In this case, education referred to types of education which was suitable and able to create mindset of the entrepreneurs and guide them in their daily activities at the center of embroidery industries, Probolinggo. Entrepreneurship spirit of the entrepreneurs was represented by their confidence and optimism. On the other hand, future orientation was also consideration which had been applied at Probolinggo center of embroidery industries. These findings indicated that from empirical and conceptual points of view, education tended to be indicated by appropriate types of education while entrepreneurship was seen as manifestation of confidence and optimism on his/her business achievements.

The result of hypotheses examination indicated hypothesis 2 was rejected. It means education owned by the entrepreneurs at Probolinggo center of embroidery industries could not help improving their entrepreneurship particularly in terms of confidence and optimism required in developing their businesses. Kalla (2011) stated that education was required to prepare future entrepreneurs but education did not necessarily create an entrepreneur. In other words there should be other factors besides education which affected entrepreneurship intention.

This finding why education did not significantly affect entrepreneurship was very interesting to be further analyzed. The understanding about education as a cultural capital was proposed long before Bordieu. It was Lerner (1981) who came to this understanding based on his research on five Middle-East countries. Related to modernity characteristics, education represented literacy (reading skill). When an individual was able to read, he/she would easily identify his/her daily situation. Through his/her reading skills, an individual would have high empathy. Empathy refers to an ability to feel, measure, and position himself/herself on other people position. In other words, through this knowledge, an individual could consider what should be done and could build a hope that everything could be achieved using his/her skills. When facing unfavorable situations or new model, he/she will consider his/her skills. Therefore, he/she becomes confident in his capability. This is the basic of entrepreneurship.

The next question is whether education (specifically formal educations) could produce entrepreneurs. Following the idea of Paolo Freire (2008), dreams about educational institutions (particularly formal educations) seemed too far from reality. Educational institutions applied strict sets of curriculum which were created to accommodate various interests of its stakeholders, including industries. Learning process became very formal and there was unequal relationship between teachers and students. Teachers were positioned as source of knowledge while students as knowledge. Standard of achievements were determined by the institutions limited student creativity and making them apathy to their surroundings. Paolo Freire (2008) called this education model as *banking style education*.

This education model was applied in most third-world countries, including Indonesia. Therefore, it is reasonable that a study conducted by Mwasalwiba (2012) indicated there was no significant result of entrepreneurship education course given to students. This result was initiated by inability of the students to pay attention to the course given. Boudieu (1986) and Mwasalwiba (2012) related this finding to the background of students' families. Insignificant relationship between education can be explained through the fact that developing entrepreneurship did not only require cultural capital (education and cultural background), it also required socialization in their surroundings. It implied education institutions failure in developing entrepreneurship habits. The essences of entrepreneurship such as creativity and leadership cannot be instantly acquired. In other words, entrepreneurship should be integrated in cultural capital. Entrepreneurship was developed as time passed by involving culture, traditions, and elements which were passed down by family through socialization (Kraaykamp and van Eijck, 2010: 212).

### **Effects of Self-Efficacy on Entrepreneurship**

There were several definitions of self-efficacy such as what proposed by Bandura (1986), Karl et al. (as cited in Mansor, Amer, and Dali (2013)), Gist (1987), Wood and Bandura (1989), and Bandura and Locke (2003) who defined self-efficacy as subjective considerations of an individual regarding determining several actions needed to accomplish particular tasks. Self-efficacy was more related to personal considerations regarding what should be done rather than personal skills. Self-efficacy would affect the way a person feels, thinks, acts, and motivates himself/herself.

Descriptive analysis result of self-efficacy and all of its indicators was well-perceived so that it was able to describe self-efficacy condition of Probolinggo center of embroidery industries members. Similarly, the result of descriptive analysis on entrepreneurship could indicate general entrepreneurship condition of the members. In this case, self-efficacy was represented by the power of trusts on professionalism and personal skills which in turn influence personal motivation. Meanwhile, entrepreneurship was represented by confidence and optimism. However, future orientation was also a consideration which had been applied at Probolinggo center of embroidery industries. Conceptually and empirically, this finding implied that self-efficacy was represented by the power of trust while entrepreneurship was described as implementation of confidence and optimism on all of his/her business achievement.

Based on hypotheses test, hypothesis 3 was accepted which implied that self-efficacy owned by the members of Probolinggo center of embroidery industries mainly indicated by skills and trust could improve entrepreneurship particularly in terms of confidence and optimism in developing business. Wood and Bandura (1989: 362) emphasized that although everyone was the products and producers of their environment and self-effectiveness of individuals and

their environment tended to change, generative power of self-efficacy could organize these changes.

An empirical study related to the relationship between self-efficacy and entrepreneurship had been conducted by Lukmayanti (2012) on 12<sup>th</sup> grade students of SMK Negeri 6 Yogyakarta. This study found that there was positive and significant relationship between self-efficacy and entrepreneurship intention of the respondents. Similarly, a study conducted by Sarwoko (2011) also showed significant effect of self-efficacy on entrepreneurship intention of college students. Boyd and Vozikis (1994) had developed Entrepreneurship Intention Model proposed by Byrd (1988) by explaining more about self-efficacy-applied Intuitive Holistic Thinking which alongside Rational Holistic Thinking (derived as Attitude and Perception) determined entrepreneurship intention and actions. Significant relationship between self-efficacy and entrepreneurship indicated that the entrepreneurs at Probolinggo center of embroidery industries own entrepreneurship spirit as implementation of perception and self-consideration on his/her own skills which could improve his/her confidence and optimism. This finding confirmed Bandura (1986) statement that although self-efficacy did not necessarily reflect actual skills, self-efficacy was related to individual confidence.

### **Effects of Social Networking on Subjective Well-Being**

Casson (1997), Davern (1997), and Bordieu (1998) defined social networking as potential relationship built based on high trust which directly or indirectly connected everyone in social environment and was more long-lasting and more institutionalized compared to acquaintance and knowing each other. In terms of small-scaled industry, social networking referred to a network which connected developer institutions, business owners, employees, and customers who determined the success of embroidery industries center. Subjective well-being was defined by Diener et al (1996) as broad category of phenomena which included emotional responses, main satisfaction, and global assessment on life satisfaction. Specifically, Tiberius (2006) viewed well-being as part of life satisfaction theory which could be objective or subjective based on personal condition.

Result of descriptive analysis on social networking and all of its indicators was well perceived and could describe actual condition of social networking on Probolinggo center of embroidery industries. Similarly, the result of descriptive analysis on subjective well-being in general was also well perceived and could describe actual condition of social networking on Probolinggo center of embroidery industries. In this case, social networking was represented by member's involvement in solving other member's problems. It was also indicated by the ability to access information provided by the center of industries which was beneficial to all members. Meanwhile, subjective well-being of the entrepreneurs was represented by main satisfaction which was indicated by freedom from unfavorable feelings such as guilty, shame, sorrow, worry, stress, depression, and jealousy.

Based on hypotheses test, hypothesis 4 was accepted which implied that social networking owned by the members of Probolinggo center of embroidery industries mainly indicated by involvement of the members could improve their subjective well-being particularly in terms of confidence and optimism in developing business. Wood and Bandura (1989: 362) emphasized that although everyone was the products and producers of their environment and self-effectiveness of individuals and their environment tended to change, generative power of self-efficacy could organize these changes.

One of related studies on relationship between social networking and subjective well-being which was linear to this research was conducted by Walen and Lachman (2000). Entrepreneurs in Probolinggo who joined center of small-scaled embroidery industries and other organizations were benefitting their members by sharing information including information on technological development, government regulations, marketing, and other information. These social supports from their social networks could improve life satisfaction and contributed positive effect. Another related study was conducted by Karen L. Siedlecki et al (2003). Life satisfaction was indicated by social supports obtained and felt while positive effect was indicated by rapport and peer supports while negative effect was indicated by lack of supports.

### **Effects of Education on Subjective Well-being**

Bordieu (1986) defined education which included knowledge and skills as cultural capital required by an entrepreneur. Education could improve social status of an individual. An entrepreneur with good academic qualification owned more structured way of thinking and point of view. Hence, education became intellectual foundation in planning, conducting, and evaluating his/her business. Meanwhile, subjective well-being was defined by Diener et al (1999) as a broad category of phenomena which included emotional responses, main satisfaction, and global assessment on life satisfaction. Specifically, Tiberius (2006) viewed subjective well-being as part of life satisfaction theory which could be subjective or objective depends on personal conditions.

The result of descriptive analysis on education and all of its indicators was well perceived so that it could describe education condition of the members of Probolinggo center of small-scaled embroidery industries. Similarly, the result of descriptive analysis on subjective well-being in general was also well perceived and could describe actual condition of subjective well-being of the entrepreneurs at Probolinggo center of embroidery industries. In this case, education referred to types of education which was suitable and able to create mindset of the entrepreneurs and guide them in their daily activities at the center of embroidery industries, Probolinggo while subjective well-being of the entrepreneurs was represented by main satisfaction which was indicated by freedom from unfavorable feelings such as guilty, shame, sorrow, worry, stress, depression, and jealousy.

The fact about competition in a large community running homogenous industry undeniably could cause great impact on an entrepreneur's mind, namely worrying about development of his/her business. This unfavorable feeling might be caused by bad experiences in the past. Adorre Durayappah (2010) stated that Subjective well-being instrument proposed by Ed Diener (1985) was more suitable to measure life satisfaction in the past.

Hypotheses test result has rejected Hypothesis 5 indicating that education owned by the members of Probolinggo center of embroidery industry could not improve subjective well-being at Probolinggo center of embroidery industries particularly in terms of main satisfaction. This finding was linear with an empirical study conducted by Argyle as cited in Gatari (2008). He found that the relationship between education and subjective well-being became smaller on controlled job status. Insignificant relationship between education and subjective well-being could be explained that higher education imposed an individual to adopt higher living standards. However, it was not necessarily followed by higher subjective well-being. Micalos (2007) in his research *Education, Happiness, and Well-being* found that

the effect of education on happiness depended on how an individual perceived happiness itself.

### **Effects of Self-Efficacy on Subjective Well-being**

Bandura (1986), Karl et al. (as cited in Mansor, Amer, and Dali (2013)), Gist (1987), Wood and Bandura (1989), and Bandura and Locke (2003) defined self-efficacy as subjective considerations of an individual regarding determining several actions needed to accomplish particular tasks. Self-efficacy affected how an individual feels, thinks, acts, and motivates himself/herself which served as cognitive structure built through accumulated lifelong learning process. These experiences brought an individual into a trust that he/she was able to (or was not able to) accomplish particular tasks successfully. Meanwhile, subjective well-being was defined by Diener et al (1999) as a broad category of phenomena which included emotional responses, main satisfaction, and global assessment on life satisfaction. Specifically, Valerius Tiberius (2006) viewed subjective well-being as part of life satisfaction theory which could be subjective or objective depends on personal conditions. In this case, subjective well-being referred to indicators proposed by Diener et al (1999) consisting of happiness, freedom from unfavorable feelings, life satisfaction, and main satisfaction.

Descriptive analysis result of self-efficacy and all of its indicators was well-perceived so that it was able to describe self-efficacy condition of Probolinggo center of embroidery industries members. Similarly, the result of descriptive analysis on subjective well-being in general was also well perceived and could describe actual condition of subjective well-being of the entrepreneurs at Probolinggo center of embroidery industries. In this case, self efficacy was represented an entrepreneur's power of trust either in terms of professionalism or optimism which in turn could affect his/her personal motivation. Meanwhile, subjective well-being of the entrepreneurs was not only represented by their main satisfaction (i.e. satisfaction on their business, families, leisure, health, financial satisfaction, personal satisfaction, and group satisfaction) but also applied on representations of freedom from unfavorable feelings such as guilty, shame, sorrow, worry, stress, depression, and jealousy.

Result of hypotheses test indicated hypothesis 6 was accepted implying that self efficacy of Probolinggo center of embroidery industries members represented by their power of trust could improve their subjective well-being particularly in terms of main satisfaction. This finding confirmed previous study conducted by Hmieleski and Baron (2008) which investigated self-efficacy as the mediator of subjective well-being personal factor effect consisted of two components namely subjective happiness and life satisfaction. The findings of this study indicated significant relationship between self-efficacy and subjective well-being.

Hmieleski and Baron (2008) proved self efficacy was a trust which functioned to manage positive and negative emotions and interpersonal relationship contributing to develop positive future expectation, to maintain high personal concept in order to achieve subjective well-being and more positive emotions. Significant relationship between self-efficacy and subjective well-being indicated that the members of Probolinggo center of embroidery industries owned subjective well-being indicated by main satisfactions developed from assessment and trust on his/her capability (self-efficacy).

### **Effects of Entrepreneurship on Subjective Well-Being**

In this research, entrepreneurship referred to theory proposed by Meredith (1996) regarding personal characteristics of an entrepreneur which consisted of confident and optimistic, result and task-oriented, eager to take risks, owning leadership characteristic, originality, and future-oriented. Meanwhile, subjective well-being as being defined by Diener et al (1999) referred to a broad category of phenomena which included emotional responses, main satisfaction, and global assessment on life satisfaction. In this case, subjective well-being referred to indicators proposed by Diener et al (1999) namely favorable feelings, freedom from unfavorable feelings, life satisfaction, and main satisfaction.

The result of descriptive analysis on entrepreneurship could indicate general entrepreneurship condition of Probolinggo center of embroidery industries members. Similarly, the result of descriptive analysis on subjective well-being in general was also well perceived and could describe actual condition of subjective well-being of the entrepreneurs at Probolinggo center of embroidery industries. In this case entrepreneurship characteristic of the entrepreneurs was represented by their confidence and optimism besides future-orientation which had been applied at Probolinggo center of embroidery industries. Meanwhile, subjective well-being was represented by their main satisfaction (i.e. satisfaction on their business, families, leisure, health, financial satisfaction, personal satisfaction, and group satisfaction) but also applied on representations of freedom from unfavorable feelings such as guilty, shame, sorrow, worry, stress, depression, and jealousy.

Result of hypotheses test indicated Hypothesis 7 was accepted implying that entrepreneurship of Probolinggo center of embroidery industries indicated by optimism and confidence could improve life satisfaction particularly in terms of main satisfactions which consisted of several factors such as satisfaction on profession, family, leisure, health, financial satisfaction, personal satisfaction, and group satisfaction.

Recent theoretical and empirical studies showed positive relationship between entrepreneurship activities and life quality. Samli (2008) recorded that when an entrepreneur developed his/her business to produce or to distribute his/her service/good, the entrepreneur and the people surrounding him/her who involved in the business would feel the improvement on their life satisfaction. If innovations could directly affect income or economic improvement and economic (income) improvement could improve subjective well-being, innovations would have causal consequence on subjective well-being (Dolan, Layard, and Metcalfe, 2008). Sajeve and Rybakovas (2013) stated that social entrepreneurship significantly contributed on individual and communal subjective well-being. Significant relationship between entrepreneurship and subjective well-being of Probolinggo center of embroidery industries indicated that subjective well-being of the members was the result of their entrepreneurship characteristics which improved their life satisfaction.

### **LIMITATIONS**

1. The indicators used in this research was adopted from the western country which is different from Indonesian culture, and the result may vary.
2. This research applied self-rating concept enabling subjective assessment based only on entrepreneurs' point of view.

## RECOMMENDATIONS

1. In this research, education variable indicated by grade, length, and types of education did not significantly affect entrepreneurship and subjective well-being. The next researches should view education as cultural capital which was not only represented by these variables but also based on educational curriculum taught at schools. It is assumed that entrepreneurship values taught at schools could contribute on entrepreneurship.
2. Due to homogenous characteristics of center of small-scaled industries, the findings of this research can be applied to other centers of small-scaled industries. Entrepreneurs' subjective well-being and entrepreneurship improvement cannot be done by improving their formal education. These improvements can only be done by expanding business network, and improving their self-efficacy. Entrepreneurs' perceptions on self-efficacy have been represented by generality, including high appreciation on experiences gained after joining Probolinggo center of small-scaled embroidery industries. Expanding business could be done through cooperation with other small-scaled industries centers. Improvement on entrepreneurs' self-efficacy can be done through trainings and workshops on skills and business managerial conducted by authorized institutions (Industrial Agency and Cooperation and Small and Medium-scaled Industry Agency). These trainings and workshops will increase experiences and confidence of the entrepreneurs.
3. Social networking as one of social capital owned by entrepreneurs so far was limited on small-scaled industries with its non-formal organization and voluntary membership. In order to improve the role of organization in developing small-scaled industries, a legal organization (a corporation) should be established which required the participation of Cooperation and Small and Medium-scaled Industries Agency.

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