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People-Centered Entrepreneurship: The Impact of Empathy and Social Entrepreneurial Self-efficacy for Social Entrepreneurial Intention

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ABSTRACT

Purpose: This study aims to examine the impact of empathy on social entrepreneurial intention. This study also investigates the mediating role of social entrepreneurial self-efficacy on the relationship between empathy and social entrepreneurial intention.

Design/methodology/approach: Questionnaires were employed to collect data from future social entrepreneurs. A total of 250 completed questionnaires were returned. Multiple regression analysis was used to test the hypothesis.

Findings: Results showed that empathy and social entrepreneurial self-efficacy were positively related to social entrepreneurial intention. Further, the link between empathy and social entrepreneurial intention was mediated by social entrepreneurial self-efficacy.

Research limitations/implications: This study empirically confirmed that empathy and social entrepreneurial self-efficacy are important drivers of social entrepreneurial intention and also need to make an educational program that can increase the level of empathy and social entrepreneurial self-efficacy. Future studies may extend existing research by adopting other factors for the mediation mechanism.

Originality/value: This study is one among few studies to identify the mediating effect of social entrepreneurial self-efficacy on the relationship between empathy and social entrepreneurial intention by examining Korea's unique dataset an Asia-Pacific country. Therefore, gaining insight from Asia-Pacific country that empathy, social entrepreneurial self-efficacy positively affects social venture creation is valuable for broadening the social entrepreneurial intention research.

Keywords: Empathy, Social entrepreneurial self-efficacy, Social entrepreneurial intention, Future social entrepreneur

I. Introduction

Social entrepreneurship has evolved as a research domain of great significance for scholars and practitioners (Younis *et al.*, 2021; Gupta *et al.*, 2020; Kannampuzha & Hockerts, 2019; Short *et al.*, 2009). In many developed

and developing countries, the inability of state institutions to provide adequate welfare for all citizens contributes significantly to the forming of social needs. The presence of these social needs increases the value of social ventures to mitigate such needs (Yamini *et al.*, 2020). Social problems that countries, including large corporations, have failed to discover or are struggling to solve, such as environmental pollution, unemployment, little regard for social minorities, poverty, and human welfare have motivated social ventures to conduct business

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with an embedded social drive (Gupta *et al.*, 2020). So, as an increasingly important question, what drives a potential social entrepreneur with the idea of a social mission, beyond the desire to make a profit? How can social entrepreneurial activities increase? The social value created by the activities of social ventures determines the importance of this type of entrepreneurship and, consequently is a growing interest in knowledge of individual's decisions to become social entrepreneurs who start social ventures that create social value (García-Jurado *et al.*, 2021; Yamini *et al.*, 2020; Tiwari *et al.*, 2020). Investigating social entrepreneurial intentions prove valuable in the social entrepreneurship (SE) domain since several researchers (Urban, 2020; Bacq & Alt, 2018; Urban & Teise, 2015).

Traditional commercial entrepreneurial intention refers to the intention to launch a new venture to achieve the goal of profit maximization (Krueger & Brazeal, 1994). In contrast, social entrepreneurial intention refers to the willingness to create a social venture for the pursuit of a social mission beyond the desire to make a profit. Social entrepreneurs do not focus on just providing aid. Social entrepreneurs offer innovative and creative solutions to grand challenges and social problems for sustainable change (García-Jurado *et al.*, 2021; Jurkowski, 2019; Huda *et al.*, 2019; Siyal *et al.*, 2018). Looking to explain the social aspect of social entrepreneurial intention, researchers build on a long tradition of psychology research linking to empathy or responsivity to other people's experiences, to the display of helping behaviors (Bacq & Alt, 2018; Schroeder & Graziano, 2017; Davis *et al.*, 1999; Eisenberg *et al.*, 1989). Indeed, the goal of a social entrepreneur is to help others through people-centered entrepreneurship, not to serve their self-interests (Younis *et al.*, 2021; Bacq & Alt, 2018; Miller, 2012). Following this rationale, social entrepreneurship scholars propose that empathy is a key characteristic distinguishing social entrepreneurs from traditional commercial entrepreneurs, and an additional antecedent in traditional models of entrepreneurial intent (Younis *et al.*, 2021; Bacq & Alt, 2018; Hockerts, 2017; Forster & Grichnik, 2013; Dees, 2012).

Empathy has been studied extensively in different research contexts (Younis *et al.*, 2021; Wang *et al.*, 2019;

Bas-Sarmiento *et al.*, 2019; Balakrishnan & Fernandez, 2018; Kardos *et al.*, 2017). However, empathy examining social entrepreneurial intention has been little studied. In particular, in Asian countries, empirical evidence is scarce due to the lack of cross-cultural studies. Moreover, present study investigates how empathy promotes social entrepreneurial intention but, scholars have not begun to uncover specific mechanisms to better understand the relationship between empathy and social entrepreneurial intention. A number of studies have identified individuals' social entrepreneurial self-efficacy as a key antecedent of their social entrepreneurial intention. Therefore, social entrepreneurial self-efficacy may play a critical mediating role in explaining the formation mechanism of social entrepreneurial intention. (Urban, 2020; Yu *et al.*, 2020; Younis *et al.*, 2021; Terblanche-Smit & Terblanche, 2011). This study explores whether these logics still hold to social entrepreneurship. The purpose of this study then was to investigate social entrepreneurial self-efficacy as a mediator in the empathy and social entrepreneurial intention relationship, based on Korea's unique dataset in an Asian country.

II. Theoretical Background and Hypotheses

A. Empathy and Social entrepreneurial self-efficacy

There is no consensus on a single definition of empathy. But, empathy is generally defined as sharing and recognizing the same feelings experienced by other people (Ayob *et al.*, 2005; Decety & Jackson, 2004). In other words, empathy is the ability of a person to understand the thoughts, feelings, and desires of others (Younis *et al.*, 2021; Shamay-Tsoory, 2011). Similarly, several researchers have defined empathy as a person's ability to be in touch with and respond socially to the thoughts and feelings of others (Younis *et al.*, 2021; Laghi *et al.*, 2019; Héту *et al.*, 2012). In psychological research, empathy is related to the experiences of others (Davis, 2015). Saban and Kirby (2019) stated that empathy is an emotional response to another's emotional state. Mair and Noboa (2003) defined empathy

as the ability to intellectually recognize and emotionally share the emotions or feelings of others (Wilton, 2016). Empathy is not only the willingness to care for the sorrows of others but it is also related to the real-life propensity of helping them (Younis *et al.*, 2021; Kim & Han, 2018; Bierhoff *et al.*, 1991).

Higher levels of empathic concern lead to higher levels of social entrepreneurial self-efficacy by reducing an individual's level of visceral arousal in challenging situations, such as those experienced by potential beneficiaries of social entrepreneurship (Younis *et al.*, 2021; Bacq & Alt, 2018; Bandura, 1982). Both the cognitive and affective dimensions of empathy are positively associated with social entrepreneurial self-efficacy (Bacq & Alt, 2018). Self-efficacy is defined as one's belief in one's capability to achieve a specific goal (Bandura, 1977; Gist, 1987). In other words, it is a level of belief of a person about the possibility of learning or accomplishing a certain task (Kim, 2019). Self-efficacy is a judgment about task capability (Gist and Mitchell, 1992). Thus, social entrepreneurial self-efficacy can be defined as an individual's belief in an individual's capability to accomplish entrepreneurial tasks related to social innovation and benefitting others, such as identifying social problems and creating new products to solve these problems. Whereas traditional entrepreneurial self-efficacy refers to an individual's belief that he or she is capable of conducting the various entrepreneurial tasks successfully, consisting of five factors: marketing, innovation, management, risk-taking, and financial control (Younis *et al.*, 2021; Kim, 2019; Bacq & Alt, 2018; Chen *et al.*, 1998).

Bacq and Alt (2018) state that individuals who are more likely to feel warmth and compassion for others in need are less likely to experience personal distress in the face of the experiences of others. As a result, individuals who display a high level of empathic concern for others may be more confident in their ability to help themselves by creating social ventures through people-centered entrepreneurship. In contrast, those who feel less warmth and compassion for others in need will experience higher levels of visceral arousal, which will increase their vulnerability and thus decrease their social entrepreneurial self-efficacy (Bandura, 1982;

Davis, 1980; Hoffman, 1976). Based on previous studies discussed above, the hypothesis of empathy and social entrepreneurial self-efficacy can be developed as follows.

Hypothesis 1: Empathy is positively related to social entrepreneurial self-efficacy.

B. Empathy and Social entrepreneurial intention

Empathy is regarded as an important personality trait of social entrepreneurs distinguishing from traditional commercial entrepreneurs, and an important antecedent of social entrepreneurial intentions (Younis *et al.*, 2021; Tiwari *et al.*, 2020; Bacq & Alt, 2018; Hockerts, 2017; Dees, 2012). Mair and Noboa (2006) found that empathy leads to social entrepreneurial intentions because empathic individuals will have a desire to alleviate the suffering of others. These authors argued that a positive amount of empathy is necessary to stimulate perceived desirability to create a social venture (Wilton, 2016; Mair & Noboa, 2003). This insight is based on numerous psychology studies that have linked high levels of empathy with greater helping behaviors that are voluntary behaviors performed to benefit other individuals or groups (Bacq & Alt, 2018; Davis, 2015; Davis *et al.*, 1999; Eisenberg *et al.*, 1989).

Social entrepreneurial intention refers to the willingness to create a social venture for the pursuit of a social mission beyond the desire to generate profits. Indeed, the goal of social entrepreneurs is to offer innovative solutions to social problems for improving the welfare of others in need, not to serve their self-interests (García-Jurado *et al.*, 2021; Younis *et al.*, 2021; Jurkowski, 2019; Bacq & Alt, 2018; Huda *et al.*, 2019; Siyal *et al.*, 2018; Miller, 2012; Santos, 2012). Bacq and Alt (2018) paid attention to the importance of the other orientation. That is, they argued that the other orientation of social entrepreneurs can be viewed as a form of ongoing helping behavior over a continuous period of time. It follows that an empathetic individual can develop an intention to become a social entrepreneur as a way to help others overcome social problems (Miller *et al.*,

2012; Mair & Noboa, 2006). Accordingly, several recent studies provide empirical evidence for the positive relationship between empathy and social entrepreneurial intention (Bacq & Alt, 2018; Hockerts, 2017; Wilton, 2016; Forster & Grichnik, 2013; Mair & Noboa, 2003). Nicholls (2018) also pointed out that a social venture owner should possess empathy for the action. Similarly, Ernst (2011) identified that being a social entrepreneur requires understanding the feelings and emotions of others.

Goubert *et al.* (2005) argued that empathy as an antecedent is widely used in helping behavior relationships, considered the starting point for social entrepreneurial intention with empirical evidence for a positive link between empathy and the tendency to help others (Tiwari *et al.*, 2020). Several researchers have identified a positive significant role of empathy in developing social entrepreneurial intentions (Bacq & Alt, 2018; Tiwari *et al.*, 2017; Hockerts, 2017; Ernst 2011). Based on previous studies discussed above, the hypothesis of empathy and social entrepreneurial intention can be developed as follows.

Hypothesis 2: Empathy is positively related to social entrepreneurial intention.

C. Mediating effect of social entrepreneurial self-efficacy

Empathy is a key characteristic distinguishing social entrepreneurs from commercial entrepreneurs (Younis *et al.*, 2021; Bacq & Alt, 2018; Hockerts, 2017; Forster & Grichnik, 2013; Dees, 2012). Previous studies discussed above, a higher level of empathetic concern leads to a higher level of social entrepreneurial self-efficacy by reducing the level of individual's visceral arousal in challenging situations such as experienced by potential beneficiaries of social entrepreneurship (Younis *et al.*, 2021; Bacq & Alt, 2018; Bandura, 1982) Because it enables orients individuals' feelings of agency toward intentions to help others (Bacq & Alt, 2018). Individuals who display a high level of empathic concern for others may be more confident in their ability to help themselves

by creating social ventures through people-centered entrepreneurship. In contrast, those who feel less warmth and compassion for others in need will experience higher levels of visceral arousal, which will increase their vulnerability and thus decrease their social entrepreneurial self-efficacy (Bandura, 1982; Davis, 1980; Hoffman, 1976).

Entrepreneurial self-efficacy refers to a level of a person's belief that he or she is capable of accomplishing the specific tasks which are consisting of five factors: marketing, innovation, management, risk-taking, and financial control. Entrepreneurial self-efficacy is widely recognized as a key contributor to the formation of new ventures (Younis *et al.*, 2021; Kim, 2019; Bacq & Alt, 2018; Bullough *et al.*, 2014; Fitzsimmons & Douglas, 2011; McGee *et al.*, 2009; Zhao *et al.*, 2005; Chen *et al.*, 1998; Boyd *et al.*, 1994). Most studies examining the relationship between entrepreneurial self-efficacy and start-up intentions refer to either the theory of planned behavior (TPB) or the entrepreneurial event model (SEE), referring to entrepreneurial self-efficacy as an indicator of the degree to which one considers the prospect of forming new firm (Bacq & Alt, 2018; Fitzsimmons & Douglas, 2011; Krueger *et al.*, 2000; Krueger & Brazeal, 1994; Ajzen, 1991; Shapero & Sokol, 1982). Existing social entrepreneurial intention studies are based on this premise, and likewise argue that social entrepreneurial self-efficacy contributes to the development of social entrepreneurial intentions by allowing individuals to see the feasibility of creating social ventures while previous studies provided empirical evidence for the positive relationship between social entrepreneurial self-efficacy and social entrepreneurial intention (Bacq & Alt, 2018; Hockerts, 2017; Mair & Noboa, 2006). Based on previous studies discussed above, the hypothesis of empathy, social entrepreneurial self-efficacy, and social entrepreneurial intention can be developed as follows.

Hypothesis 3: Social entrepreneurial self-efficacy positively mediates the relationship between empathy and social entrepreneurial intention.

III. Methodology

A. Sample and data collection

The purpose of this study was to examine social entrepreneurial self-efficacy as mediator in the empathy and social entrepreneurial intention relationship. This study collected data from college students taking social venture-related courses in business schools at different universities in South Korea for statistical analysis. Temporal separation of procedural remedies was used to control for common method bias. Temporal separation is the introduction of a time lag between the measurements of the predictor and criterion variables. Therefore, Questionnaires were delivered for independent variable measured two weeks after the measurement of the mediating variable and dependent variable (Kim, 2020; Podsakoff *et al.*, 2003). A total of 250 completed questionnaires were returned. A sample size of 250 can be considered sufficient to run multiple regression (Ceresia & Mendola, 2019). Samples were well matched in terms of major (all respondents majored in business), age (28 years old or less: 96 percent), and gender (64 percent male, 36 percent female).

B. Variable measurement

All the measurements were modified and used for this study. A multi-item questionnaire measured on a five-point interval scale was used. All the respondents were requested to record their responses from 1 = strongly disagree to 5 = strongly agree. Empathy is the ability of a person to understand the thoughts, feelings, and desires of others. Empathy was measured with three items and was adopted from Davis (1980) and Hockers (2015, 2017). A sample item is "Seeing socially disadvantaged people triggers an emotional response in me." Cronbach's alpha was 0.96. Social entrepreneurial self-efficacy is one's belief in one's capability to accomplish entrepreneurial tasks related to social innovation and benefitting others. Social entrepreneurial self-efficacy was measured with three items and was adopted from Hockers (2015, 2017),

Miller *et al.* (2012), and Zhao *et al.* (2005). A sample item is "I could find a way to solve the problems facing society." Cronbach's alpha was 0.95. Social entrepreneurial intention is the willingness to create a social venture for the pursuit of a social mission beyond the desire to generate profits. Social entrepreneurial intention was measured with five items and was adopted from Fitzsimmons and Douglas (2011), Liñán and Chen (2009), and Liñán *et al.* (2009). A sample item is "I have seriously thought of starting a social venture." Cronbach's alpha was 0.95. Gender and age were used as control variables by taking into consideration some previous studies that male students may be more interested in creating a new firm than female students and that generation Y was more interested in starting a social venture (Kim, 2019, 2020; Harding, 2007; Urbano, 2006; Kundu and Rani, 2008).

C. Validity and Reliability

Prior to regression analysis, exploratory factor analysis (EFA) was conducted to test the underlying patterns of the measurement scales. Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett test of sphericity tests indicated the appropriateness of data to conduct factor analysis. Principal component analysis and varimax rotation are employed for the data set. All items are loaded with proper factors, and the criteria for determining the number of factors are defined as a 1.0 Eigen value. Cronbach's Alpha reliability analysis was applied to measure the internal consistency of the constructs. Usually in social science, acceptable reliability is limited up to 0.6.

Table 1 shows summarization of Cronbach's Alpha coefficient and exploratory factor analysis to verify reliabilities of each variable. Since the p-value was significant by 0.000 in the Bartlett test of sphericity, Kaiser-Meyer-Olkin measure of sampling adequacy was 0.610, measurement variables' factor loading was higher than 0.5, cumulative dispersion of over 60%, and Cronbach's Alpha of over 0.6, All these values were satisfactory (Kim, 2020; Nunnally, 1994; Fornell and Larcker, 1981; Nunnally and Bernstein, 1978).

Table 1. Reliability analysis and Exploratory Factor Analysis results

| Factors | Factor Loading | Reliability |
|--------------------------------------|----------------|-------------|
| Empathy | | |
| E1 | .964 | .960 |
| E2 | .964 | |
| E3 | .964 | |
| Social entrepreneurial intention | | |
| SEI1 | .888 | .952 |
| SEI2 | .888 | |
| SEI3 | .888 | |
| SEI4 | .805 | |
| SEI5 | .805 | |
| Social entrepreneurial self-efficacy | | |
| SES1 | .912 | .954 |
| SES2 | .911 | |
| SES3 | .912 | |

IV. Results

A. Correlation Analysis

Table 2 shows the correlations of variables. The correlation between variables is found out to be statistically significant, and the variables show a positive relationship with each other. The correlation coefficient of variables does not exceed .85 (Kline, 2015). Following the suggestion of Hair et al. (2021), the VIF values for all indicators were found below 5 which indicates that there is no multicollinearity.

B. Test of Hypotheses

The purpose of this study was to examine social entrepreneurial self-efficacy as a mediator in the empathy

and social entrepreneurial intention relationship. To achieve study objectives, a series of regression analyses were conducted. Based on Baron and Kenny's suggestion, a total of three analyses were conducted to assess the relations among constructs and mediating role of social entrepreneurial self-efficacy. Mediation effect was found based on the following conditions: first, independent variable should have a significant effect on mediating variable: second, independent variable should have a significant effect on the dependent variable: third, both independent and mediating variables should have a significant effect on the dependent variable. In addition, the standardized regression coefficient β value of the independent variable in Step 3 should be less than the standardized regression coefficient β value of the independent variable in Step 2 (Kim, 2019, 2020; Baron & Kenny, 1986). The statistical results are as follows.

First of all, Table 3 explains the result of regression analysis. H1 proposed a positive relationship between empathy and social entrepreneurial self-efficacy.

The result indicates that empathy is positively and significantly related to social entrepreneurial self-efficacy. The coefficient was found positive and significant ($\beta=.410$, $p<.001$). Variance explained was about 16.8 percent ($R^2=.168$), thereby supporting *H1*.

Table 3. Results of regression analysis

| | B | S.E. | β | <i>t</i> | <i>p</i> |
|------------|-------|-------|---------|----------|----------|
| (Constant) | 1.250 | 0.381 | | 3.278 | .001 |
| Empathy | 0.601 | 0.085 | .410 | 7.069*** | .000 |

$F=49.977$, $R^2=.168$

*** $p<.001$

Table 2. Correlation analysis among variables

| | | 1 | 2 | 3 |
|--------------------------------------|---------------------|---------|---------|---|
| Empathy | Pearson Coefficient | 1 | | |
| 1 | Significant Level | | | |
| Social entrepreneurial self-efficacy | Pearson Coefficient | .410*** | 1 | |
| 2 | Significant Level | .000 | | |
| Social entrepreneurial intention | Pearson Coefficient | .547*** | .778*** | 1 |
| 3 | Significant Level | .000 | .000 | |

*** $p<.001$

Table 4 explains the result of regression analysis. H2 proposed a positive relationship between empathy and social entrepreneurial intention.

The result indicates that empathy is positively and significantly related to social entrepreneurial intention. The coefficient was found positive and significant ($\beta=.547$, $p<.001$). Variance explained was about 29.9 percent ($R^2=.299$), thereby supporting H2.

The third hypothesis is that the effect of empathy on social entrepreneurial intention may be mediated by social entrepreneurial self-efficacy. In order to mediation effects are presented, a three-step mediated regression analysis was conducted (Baron & Kenny, 1986). Table 5 explains the result of the three-step mediated regression analysis. First, empathy is positively and significantly related to social entrepreneurial self-efficacy ($\beta=.410$, $p<.001$). Second, empathy is positively and significantly related to social entrepreneurial intention ($\beta=.547$, $p<.001$). Third, variables, empathy, and social entrepreneurial self-efficacy were positively and significantly related to social entrepreneurial intention ($\beta=.274$, $\beta=.666$, $p<.001$, respectively).

Because the standardized regression coefficient of empathy has been reduced in the third step ($\beta=.274$) than the second step ($\beta=.547$), it means that the link between empathy and social entrepreneurial intention is mediated by social entrepreneurial self-efficacy. According to examining of R^2 's variation, variance

explained was about 16.8 percent ($R^2=.168$) in the first step, 29.9 percent ($R^2=.299$) in the second step, and 66.8 percent ($R^2=.668$) in the third step. Thereby supporting H3.

V. Conclusion

A. Theoretical and Practical implications

This study addressed the mediating effect of social entrepreneurial self-efficacy on the relationship between empathy and social entrepreneurial intention. The findings supported all hypothesized relationship.

First, hypothesis 1 proposed a positive relationship between empathy and social entrepreneurial self-efficacy. The result indicated that empathy was positively and significantly related to social entrepreneurial self-efficacy.

Second, hypothesis 2 proposed a positive relationship between empathy and social entrepreneurial intention. The result indicated that empathy was positively and significantly related to social entrepreneurial intention.

Third, hypothesis 3 proposed that social entrepreneurial self-efficacy positively mediated the relationship between empathy and social entrepreneurial intention. The result indicated that social entrepreneurial self-efficacy had a mediating effect on the relationship between empathy and social entrepreneurial intention.

These results suggest theoretical and practical implications.

First, since previous research (Mair & Noboa, 2006), researchers in psychology research build on a long tradition of linking empathy to explain the social aspect of social entrepreneurial intention. Indeed, the goal of

Table 4. Results of regression analysis

| | B | S.E. | β | <i>t</i> | <i>p</i> |
|--------------------------|-------|-------|---------|-----------|----------|
| (Constant) | 0.269 | 0.364 | | 0.741 | .459 |
| Empathy | 0.834 | 0.081 | .547 | 10.283*** | .000 |
| $F=105.734$, $R^2=.299$ | | | | | |

*** $p<.001$

Table 5. Mediated regression analysis for social entrepreneurial self-efficacy

| Variable | Series of regression analysis | β | <i>t</i> | R^2 |
|---|-------------------------------|---------|-----------|-------|
| Empathy Social entrepreneurial self-efficacy Social entrepreneurial intention | Step 1 | .410 | 7.069*** | .168 |
| | Step 2 | .547 | 10.283*** | .299 |
| | Step 3 (independent variable) | .274 | 6.819*** | |
| | Step 3 (mediating variable) | .666 | 16.591*** | .668 |

*** $p<.001$

a social entrepreneur is to help others, not to serve their self-interests. Following this rationale, social entrepreneurship scholars propose that empathy is a key distinguishing trait of social entrepreneurs compared with traditional commercial entrepreneurs and is an additional antecedent in traditional models of entrepreneurial intent. However, not everyone with empathy finds the prospect of creating a social venture attractive, nor do all intend to do so (Bacq & Alt, 2018; Ersnt, 2018; Tiwari et al., 2017). Therefore, it is important to understand how empathy promotes social entrepreneurial intention. Yet, little is known about the mechanisms by which empathy motivates social entrepreneurial intention. This study conceptualized how empathy is linked to social entrepreneurial intention by examining the mediating role of social entrepreneurial self-efficacy. Findings of this study empirically confirmed the mediating mechanism of social entrepreneurial self-efficacy between the relationship empathy and social entrepreneurial intention.

Second, some previous studies of relationship between empathy and social entrepreneurial intention were mainly conducted in developed countries and lacked research in Asian context due to the lack of cross-cultural studies. This study empirically confirmed that empathy had a positive effect on social entrepreneurial intention. In other words, the empathy effect may also be valid in Asia Pacific countries. This study is one among few studies to identify the relationship between empathy and social entrepreneurial intention by examining Korea's unique dataset an Asia-Pacific country. Therefore, it is valuable for broadening the social entrepreneurial intention research to gain insight from Asia-Pacific countries that empathy positively affects social venture creation.

Finally, it is suggested that universities and other social entrepreneurship-related formal institutions must be aware that empathy and social entrepreneurial self-efficacy are important drivers of social entrepreneurial intention and also need to make educational programs that can increase the level of empathy and social entrepreneurial self-efficacy. It should be noted that scholars believed it was possible to train the empathy process in students through education (Younis *et al.*,

2021; Bano *et al.*, 2019; Chen *et al.*, 2015). For example, when students interact and communicate with other students from the lower classes of society, or when they go out of the classroom through capstone projects to meet socially disadvantaged people, their knowledge will help them understand their problems and deficiencies. Therefore, these discussions and conversations can enhance empathy.

B. Limitations and Future research

Despite its contributions, the present research is also not without limitations. First, this study investigated empathy as a potential antecedent of social entrepreneurial intentions. Future studies may extend existing research by adopting other factors, such as personality trait-related factors, to investigate this phenomenon. Second, survey participants in this study completed the questionnaire based on college students. Other age groups, such as younger and older people were not included. Moreover, other majors and industries are not included. Therefore, collecting data from other age groups, conducting cross-discipline comparisons, and collecting data from people from different industries might further extend the generalizability of findings. Third, the series of regression analyzes used in this study did not assess the simultaneity of all relationships in the proposed model. In future studies, it may be interesting to use structural equation modeling as an alternative method for testing conceptual models. Forth, in this study, social entrepreneurial self-efficacy was used as a mediator. The results showed that social entrepreneurial self-efficacy mediates the relationship between empathy and social entrepreneurial intention. However, future studies may adopt other variables for the mediation mechanism. Finally, there is a need to conduct future research in several Asian countries including Europe and the US. Conducting additional cross-cultural comparisons might further extend the generalizability of findings.

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