

HOW AGE MODERATES THE RELATIONSHIP BETWEEN ENTREPRENEURIAL INTENTION, SELF-EFFICACY AND PROACTIVITY

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ABSTRACT

Purpose - Entrepreneurial intention is an important topic in entrepreneurship research because none of any entrepreneurial process will not start without it. A variety of individual factors that influence a person's intention to engage in a start-up business have been investigated. Of which age, self-efficacy and proactive personality are among the most important predictors. However, the direct impacts of age in formulating entrepreneurial intention remains inconclusive. Moreover, although individuals' social, financial and human capital change as they age, extant literature has explored the impacts of the interaction between age and other cognitive characteristics on entrepreneurial intention to a limited extent. Therefore, the study aims to investigate how age moderates the effect of individuals' perceived entrepreneurial self-efficacy and proactivity on their entrepreneurial intention to fulfill the above gaps.

Methodology - The study used the Global Entrepreneurship Monitor's (GEM's) Adult Population Survey 2019 that covers 50 countries from 4 regions (Middle East & Africa, Asia & Pacific, Latin America & Caribbean, Europe & North America) to construct its dataset and SPSS 28 software to proceed statistical analysis.

Results - The study found that age and entrepreneurial self-efficacy are a significant predictor of individual propensity to engage in entrepreneurial activities. Moreover, the older people are, the better individual experience, skill and knowledge predict their intention to launch a new venture.

Implications - The findings imply the potentials of promoting entrepreneurship among third age groups because this group may have not only accumulated knowledge, experience and skills but also desire to continue their social and professional status and optimize their free time. The study also suggests the necessity of considering non-linear influence of age on entrepreneurial proactivity when promoting entrepreneurship in society.

Originality/Value - The study enhances literature on positive relationship between entrepreneurial self-efficacy and entrepreneurial intention, while enriching literature on the role of demographic characteristics in entrepreneurial development process. The study also expands empirical evidence about the effects of proactive personality on entrepreneurial intention, which may vary over the course of life.

Keywords: Entrepreneurial intention, Entrepreneurial proactivity, Entrepreneurial self-efficacy, Age

Paper Type: Research Article

INTRODUCTION

Entrepreneurship, which can be defined either as the creation of new businesses or the process of identifying, evaluating and exploiting new opportunities, is a long and challenging process (Elnadi & Gheith, 2021). It has been considered, to some extent, to play a significant role in facilitating socio-economic growth in both developed and developing nations by creating jobs and

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enhancing innovation (Acs, 2006). Particularly, promoting entrepreneurship among old individuals or senior entrepreneurship is considered to be one of smart solutions that help many governments deal with pressures caused by rapidly aging population (Linardi & Costa, 2022; Maalaoui et al., 2023; Kautonen et al., 2023) such as higher health care and social security costs, or lower labor supply (Agostinho et al., 2025).

Because entrepreneurship essentially starts with entrepreneurial intention (Elnadi & Gheith, 2021), understanding factors that influence the development of entrepreneurial intention has been a major focus of entrepreneurship scholars (Tsai et al., 2016). Based on the theory of planned behavior of Ajzen (1991) and the entrepreneurial event model of Shapero and Sokol (1982) (Elnadi & Gheith, 2021), extant literature has indicated a variety of individual and contextual antecedents of entrepreneurial intention (Schmutzler et al., 2019; Zhang et al., 2022). Of which, age, self-efficacy and proactive personality are among the most widely studied and important predictors (Kumar & Shukla, 2019; Mustafa et al., 2016; Syed et al., 2024). However, compared to the other two, the effects of age on entrepreneurial intention vary and remain more inclusive (Syed et al., 2024). There is also normative belief that people are less willing to engage in entrepreneurial activities as they get older (Maalaoui et al., 2020). Although individuals' social, financial and human capital change over their life time (Maalaoui et al., 2020; Zacher & Kooij, 2017; Linardi & Costa, 2022), current entrepreneurship literature has largely focused on students (Elnadi & Gheith, 2021) and investigated the effects of interaction between individual demographic and cognitive characteristics on entrepreneurial intention to a limited extent (Liao et al., 2022; Barrera-Verdugo et al., 2023).

Considering this background, the study aims to explore the moderating role of age on the relationship between entrepreneurial self-efficacy, entrepreneurial proactivity and entrepreneurial intention using a large dataset collected from Global Entrepreneurship Monitor's (GEM's) Adult Population Survey. The findings contribute to enriching literature on the role of individual demographic characteristics in general and age in particular in predicting entrepreneurial intention, while expanding empirical evidence for the effects of individual cognitive characteristics. The study is structured into 5 parts: theoretical background and hypotheses development, methodology, results, discussion and future research suggestions.

LITERATURE REVIEW

Entrepreneurial intention

The concept of intention has been increasingly studied in entrepreneurship field in the recent years (Maalaoui et al., 2023). It was early defined by Bird (1988) as psychological state that orientates "a person's attention, experience and action toward a specific object (goal) or a path in order to achieve something (means)" (Elnadi & Gheith, 2021:3). Deducing from this concept, entrepreneurial intention can be defined as mental orientation that directs individuals to select and engage in entrepreneurial activities. It reflects their readiness and commitment level to pursue entrepreneurship (Goethner et al., 2012).

Extant entrepreneurship literature has referred to plenty of approaches and theories to understand the concept of entrepreneurial intention (Maalaoui et al., 2023). Of which, theory of planned behavior by Ajzen (1991) and the entrepreneurial event model by Shapero and Sokol (1982) are two most widely used theoretical frameworks (Elnadi & Gheith, 2021). According to Ajzen (1991), entrepreneurial intention of individuals is determined by three components: their attitudes toward entrepreneurship, their perception of social pressure and acceptance of entrepreneurship, and their perceived capabilities and/or the ease of carrying out entrepreneurial behaviors. According to Shapero and Sokol (1982), three essential antecedents of a person's entrepreneurial intention are perceived attractiveness and perceived feasibility to start up a new venture, and personal inclination to act (Canever et al., 2017). Other models have been developed to factor the effects of contextual factors and their interaction with individual factors on entrepreneurial intention, yet the number of research that explores this area is still limited (Schmutzler et al., 2019).

Entrepreneurial self-efficacy and entrepreneurial intention

Self-efficacy refers to people's convictions in their capability to achieve certain outcomes. It also reflects individual differences in terms of magnitude, generality and strength toward a specific situation and activity. People with higher self-efficacy is more likely to initiate the selection of activity, expend their effort and remain persistent in dealing with challenges when intention is initiated (Bandura, 1978). Entrepreneurial self-efficacy is considered to be a context specific concept of self-efficacy and can be defined as people's self-belief in their capabilities to successfully perform entrepreneurial activities (McGee et al., 2009). Drawing upon theory of planned behavior and entrepreneurial event model, entrepreneurial self-efficacy is a crucial predictor of entrepreneurial intention (Tsai et al., 2016). A systematic literature review by Newman et al. (2019) and meta-analysis by Liao et al. (2022) indicate numerous empirical evidence supporting a strong positive relationship between entrepreneurial self-efficacy and entrepreneurial intention across national contexts. Therefore, by using a large cross-nation dataset, the study posits that:

Hypothesis 1: Entrepreneurial self-efficacy is positively associated with entrepreneurial intention

Entrepreneurial proactivity and entrepreneurial intention

Introduced by Bateman and Crant (1993), proactive personality refers to a personal enduring tendency to discover and take actions on opportunities, and preserve their efforts to bring meaningful changes without being constrained by situational forces (Crant, 1996). Because proactive personality covers one key component of entrepreneurial event model, it is highly appealing to entrepreneurship scholars. A number of research have provided empirical support for its positive association with entrepreneurial intention (Hu et al., 2023; Marshall et al., 2019). Deducing from this general concept, the study defines entrepreneurial proactivity as individual propensity to identify and pursue entrepreneurial opportunities and posits that:

Hypothesis 2: Entrepreneurial proactivity is positively associated with entrepreneurial intention.

The moderating effect of age

Current literature has indicated significant (Barrera-Verdugo et al., 2023; Liao et al., 2022) but inconclusive (Zhang & Acs, 2018; Syed et al., 2024) association between age and entrepreneurial intention. For example, using multilevel logistic regression model, Zhang and Acs (2018) found that although overall entrepreneurial intention increased in parallel with age until approximately 80, the relationship pattern varied among different types of entrepreneurs. For novice entrepreneurs, entrepreneurial intention decreased at around the age of 60 and then increased again. In contrast, for full-time entrepreneurs, it started to decrease from the age of 30 and dropped faster from the age of 60.

One of reasons for the inconclusive effects of age on entrepreneurial intention is changes in individual capabilities, perceptions, needs, lifestyle and attitudes toward entrepreneurship over lifespan. On one hand, individuals accumulate more resources such as general knowledge, experience, or socioemotional abilities as they age (Zacher & Kooij, 2017; van Veldhoven & Dorenbosch, 2008), which makes them more interested and capable of launching a business. On the other hand, according to socioemotional selectivity theory, the perception of having limited remaining time (Zacher & Kooij, 2017) can make older individuals to be more risk averse, more present oriented and more selective toward affective activities that bring immediate benefits (Bosma et al., 2020; Huang et al., 2020). Since entrepreneurship is a challenging and risk related process, this perception discourages old people from engaging in entrepreneurial activities. However, some older individuals perceive themselves younger than their actual age. According to motivational theories and continuity theory of lifespan developmental, they remain selective (Zacher & Kooij, 2017) and proactive to engage in meaningful activities as a compensation strategy for their loss of certain social roles (Maalaoui et al., 2023), as an optimization strategy for their retirement time (Zacher & Kooij, 2017) or as an instrumental tool for leaving something

value for future generations (Maalaoui et al., 2020). Entrepreneurial activity can fit well with these strategies (Maalaoui et al., 2023); therefore, aging may not discourage people from involving in entrepreneurship.

Because the number of research that takes into account the effect of different age groups on entrepreneurial intention is still limited (Zhang & Acs, 2018), especially age group of 45 and 65, the study posits that:

Hypothesis 3: Age moderates the relationship between entrepreneurial self-efficacy and entrepreneurial intention

Hypothesis 4: Age moderates the relationship between entrepreneurial proactivity and entrepreneurial intention

Conceptual framework of the study

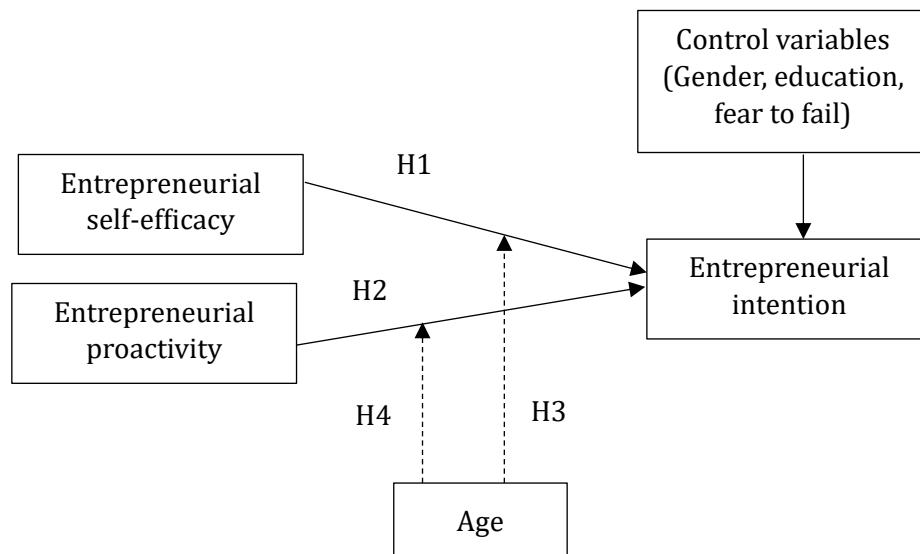


Figure 1. Conceptual framework

METHODOLOGY

Sample data and variable description

Sample data

The study used the Global Entrepreneurship Monitor's (GEM's) Adult Population Survey 2019 to construct its dataset. GEM is the world's largest and most extensive database of entrepreneurship that has been utilized by many national and international bodies for their policy evaluation and development. As of 2019, GEM had over 3 million adults and 114 economies around the world participated in their survey (Bosma et al., 2020). Adult Population Survey (APS) measures not only business characteristics but also individual factors such as motivation, attitudes or actions related to different stages of entrepreneurial process. GEM APS (2019) was administered to more than 2 000 working age adults in each country through its national representative between April and June 2019. The quality of collected data were then cross-checked by GEM's technical team (Bosma et al., 2020). The study used GEM APS because it is one of the few standardized cross-national datasets on entrepreneurship (Schmutzler et al., 2019). It is also one of the few quantitative entrepreneurship surveys that focus on individuals (Bosma et al., 2020) and has wide age coverage. The GEM APS 2019 dataset covers 50 countries from four regions (Middle East & Africa, Asia & Pacific, Latin America & Caribbean, Europe & North America) and three income groups: low-income, middle-income, high-income (Bosma et al., 2020). The original dataset has 163006 observations. However, the study removed observations that has missing data for at least one variable, therefore, the final dataset for analysis contains only 101905 observations.

Dependent variable

Entrepreneurial intention is the dependent variable of the study. It is measured through a question "Are you, alone or with others, expecting to start a new business, including any type of self-employment, within the next three years?". The variable takes value of 1 if respondent answers "Yes" to the question and 0 otherwise. Measuring entrepreneurial intention through a single item is a common approach in entrepreneurship research and fits well with the study's narrow focus (Schmutzler et al., 2019).

Independent variable

Entrepreneurial self-efficacy, entrepreneurial proactivity and age are three explanatory variables of the study.

Entrepreneurial self-efficacy is measured through a question "You personally have the knowledge, skill and experience required to start a new business?". The variable takes value of 1 if respondent answers "Agree" to the question and 0 otherwise. There are a variety of measures for entrepreneurial self-efficacy (ranging from general scale or context specific scale, from one dimension to multidimension) (Newman et al., 2019; McGee et al., 2009). However, the study uses a single-item measure for its consistency with the emphasis of Bandura (1978) for context specific of self-efficacy concept and its popularity among researchers (Schmutzler et al., 2019). Moreover, the single-item measure is considered acceptable despite its limitation (McGee et al., 2009) because the study does not aim to explore self-efficacy in different stages of entrepreneurial development process or in organizational settings (Newman et al., 2019).

Entrepreneurial proactivity is measured through a question "Even when you spot a profitable opportunity, you rarely act on it." The variable takes value of 1 if respondent answers "Agree" to the question and 0 otherwise. This single-item measure is acceptable for its focus on specific task in non-organizational context.

Age is respondents' exact age at the time of the interview and is categorized into 4 groups: first age (18-24 years), second age (25-44 years), third age (45-64 years) and fourth age (65 and above years). This categorization follows the lifespan theory (Laslett, 1987) to avoid logit linearity problem and to allow comparison with other studies.

Control variable: The study included three individual factors as control variables: Gender, Education, Fear to fail because these factors have been found to significantly influence entrepreneurial intention (Barrera-Verdugo et al., 2023; Bosma et al., 2020; Tsai et al., 2016; Schmutzler et al., 2019). Gender takes value of 1 for female and 0 for male. Education is measured on four-point scale (1=some secondary, 2=secondary degree, 3=bachelor or above, and 4=post secondary). Fear to fail is measured through a question "you would not start a business for fear it might fail". It takes value of 1 if the answer is "Agree" and 0 otherwise. The study did not include country as control variable because GEM Global report 2019 shows no difference in entrepreneurial intention among country income level (Bosma et al., 2020).

Statistical method

Given dichotomous nature of dependent variable, the study deployed a binomial logistic regression model to predict probability that an individual intends to start a new venture under the influence of age, entrepreneurial self-efficacy and proactivity. The study used SPSS 28 software to proceed statistical analysis.

RESULTS

Descriptive statistics

More than 70% of respondents did not have intention to launch a business in the next 3 years. The number of people who was unwilling to take actions even if profitable entrepreneurial opportunities were available is 1.7 times higher than that of those who were willing. The number of people who believed in their entrepreneurship capabilities is 18.4% higher than that of those who did not. Table 1 shows descriptions and descriptive statistics about the study's variables.

Table 1: Descriptive statistics

Variable	Code in GEM database	Description	Categorical value	Frequency	%
Dependent variable					
Entrepreneurial Intention	FUTSUPyy	Expects to start-up in the next 3 years	Yes	25479	25%
			No	76426	75%
Independent variable					
Entrepreneurial Self-efficacy	SUSKILyy	Has knowledge, skills, ability to start a business	Agree	60318	59.2%
			Disagree	41587	40.8%
Entrepreneurial Proactivity	PROACT_1	Even when you spot a profitable opportunity, you rarely act on it.	Agree	64130	62.9%
			Disagree	37775	37.1%
Age	Age9c	The exact age of the respondent	18-24	11022	10.8%
			25-44	47339	46.5%
			45-64	38639	37.9%
			65 and above	4905	4.8%
Control variable					
Gender	gender		Female	49799	48.9%
			Male	52106	51.1%
Education	GEMEDUC		Some secondary	18279	17.9%
			Secondary degree	33104	32.5%
			Bachelor and above	8449	8.3%
			Post secondary	42073	41.3%
Fear to fail	FRFAILyy	Would not start a business for fear it might fail	Agree	49150	48.2%
			Disagree	52755	51.8%

Regression results

Table 2 shows the regression results for the study. Regarding direct effect hypotheses, the study found that entrepreneurial self-efficacy significantly predicts the probability of entrepreneurial intention. This indicates that when entrepreneurial self-efficacy increases, the probability of individual intent to start up a business increases ($b = 0.976$, Wald test = 528.142, and p -value < 0.001). Individuals who believe in their skill, knowledge and experience related to entrepreneurship are 2.65 times more likely to engage in entrepreneurial activities than those who do not. In contrast, entrepreneurial proactivity is a negative but non-significant predictor ($b = -0.008$, Wald test = 0.041, p -value = 0.84) of entrepreneurial intention. Therefore, hypothesis 1 is supported, while hypothesis 2 is not supported.

Regarding moderating effect hypotheses, age does not moderate the relationship between entrepreneurial proactivity and entrepreneurial intention. In contrast, age significantly moderates the relationship between entrepreneurial self-efficacy and entrepreneurial intention ($b > 0.2$, p -value < 0.001). This indicates that the older people are, the better individual experience, skill and knowledge predict their intention to launch a new venture. Therefore, hypothesis 3 is supported while hypothesis 4 is not supported.

Regarding the interaction term between age and proactivity, one interesting result is coefficient of third age group is positive while it is negative for other age groups. This may suggest that although age is negatively related to entrepreneurial intention, its moderating effects on the predictability of proactive personality for entrepreneurial intention seem to follow U-shape.

Table 2. Regression results

Variable	B	S.E.	Wald	Exp(B)
Gender (Female)	-0.239	0.015	239.371*	0.787
Age 18-24			1040.829*	
Age 25-44	-0.599	0.05	143.728*	0.549
Age 45-64	-1.605	0.056	809.339*	0.201
Age 65 and above	-2.777	0.17	268.393*	0.062
Education (some secondary)			143.579*	
Education (secondary degree)	-0.128	0.023	31.111*	0.879
Education (Bachelor and above)	0.053	0.032	2.76	1.055
Education (Post secondary)	0.087	0.022	15.794*	1.09
Entrepreneurial self-efficacy ^a	0.976	0.042	528.142*	2.655
Entrepreneurial proactivity ^b	-0.008	0.042	0.041	0.992
Fear to fail	-0.181	0.016	132.314*	0.834
Interaction				
Entrepreneurial self-efficacy ^a * Age 18-24			112.247*	
Entrepreneurial self-efficacy ^a * Age 25-44	0.263	0.049	28.98*	1.301
Entrepreneurial self-efficacy ^a * Age 45-64	0.55	0.055	99.59*	1.734
Entrepreneurial self-efficacy ^a * Age 65 and above	0.796	0.167	22.739*	2.217
Entrepreneurial proactivity ^b * Age 18-24			4.919	
Entrepreneurial proactivity ^b * Age 25-44	-0.047	0.047	1.011	0.954
Entrepreneurial proactivity ^b * Age 45-64	0.014	0.051	0.078	1.014
Entrepreneurial proactivity ^b * Age 65 and above	-0.183	0.13	1.972	0.833
Constant	-0.855	0.047	326.594	0.425*
Chi-square model	11680.887*			
-2 log likelihood	102934.7			
Cox & Snell R Square	0.108			
Nagelkerke R Square	0.16			

* p-value < 0.001

a = has skills to start a business, b= rarely take actions on entrepreneurial opportunities

Table 3. Summary of hypothesis testing result

Hypothesis	Result
H1: Entrepreneurial self-efficacy is positively associated with entrepreneurial intention	Supported
H2: Entrepreneurial proactivity is positively associated with entrepreneurial intention	Not supported
H3: Age moderates the relationship between entrepreneurial self-efficacy and entrepreneurial intention	Supported
H4: Age moderates the relationship between entrepreneurial proactivity and entrepreneurial intention	Not supported

Robustness check

The study's model obtains overall goodness of fit. Chi-square (Hosmer and Lemeshow Test) is 10.267 with p-value = 0.247. There is no evidence of multicollinearity among variables (VIF < 2) and no significant number of influence cases. Cook's distance is less than 1, Leverage value lies between 0 and 1, DFBeta for the regression intercept less than 1. Regarding outlier cases, the study has 1.76% of cases that have standardized residuals greater than 2 and has no cases that have studentized residuals greater than 3. Based on the suggestion of Stevens (2002), the study decided not to remove any of these outliers because their Cook's distance is less than 1 (Field, 2013). However, the study investigated these outliers further to understand why they do not fit

the model. The study found that all of these outlier cases reported to have intention to start up a business, even though 87.8% of them did not believe that they have necessary entrepreneurial skills, knowledge and experience, 67% were not willing to take actions on the availability of profitable entrepreneurial opportunities, and 59% feared to fail. The outlier cases have different employment status, educational level and belong to different age groups, and 61% of them are female. One of reasons for these outliers may be that respondents answered the question of entrepreneurial intention as their long-term plan (the next 3 years), while they answered other questions as their current status. They might have their own plan to build up their competence and consider changes in other environmental factors so that they can get ready to take entrepreneurial opportunities by the time of next 3 years.

DISCUSSION AND IMPLICATIONS

The study aims to explore the moderating effect of age on the relationship between two essential antecedents of entrepreneurial intention: entrepreneurial self-efficacy and entrepreneurial proactivity. The study found that age and entrepreneurial self-efficacy are significant predictors of individual propensity to engage in entrepreneurial activities. This is conceptually consistent with previous studies. Meta-analysis by Liao et al. (2022) confirmed a strong positive relationship between entrepreneurial self-efficacy and entrepreneurial intention across nations. Zhang and Acs (2018) indicated significant changes in tendency to launch a business venture over the course of life. However, unlike previous studies such as Liao et al. (2022), the study also found that age positively accentuates the effect of individuals' perceived capabilities on their entrepreneurial intention. This finding can be explained by the assumptions that as people get older, they gain more knowledge, experience and skills that enhance their willingness and readiness for pursuing entrepreneurial activities. Moreover, older individuals have larger social networks that help them navigate through uncertainties of entrepreneurship better than younger individuals (Syed et al., 2024). These findings suggest that establishing intergenerational teams in which senior people can share knowledge and experience with younger people can be useful to improve success rates of start-ups (Maalaoui et al., 2023). Academic institutions and policy makers should develop or improve entrepreneurial education programs to enhance individuals' knowledge and skills if they want to encourage their engagement in entrepreneurial activities (Mustafa et al., 2016).

Regarding entrepreneurial proactivity, the study does not find its direct contribution to predicting entrepreneurial intention. This finding is consistent with some studies such as Naz et al. (2020), but it contradicts to other studies such as Zhang et al. (2022), or Crant (1996). This inconsistency can be explained by variations in proactivity measures, participants and research context between the studies. While the previous studies measure individual proactivity in general context through the scale of Bateman and Crant (1993), this study measures the proactivity in the context of entrepreneurship. While participants of the previous studies are only students, this study focuses on working age adults. While previous studies focus on single country context such as Chinese, USA, Pakistan, this study covers 50 countries. As a result, it may not be easy to compare the findings of this study with other studies.

Proactive personality is influenced by other individual factors such as motivational, emotional states and energy level (Shi et al., 2023) and contextual factors such as age norms or entrepreneurial environment (Kautonen et al., 2011). Therefore, the non-significant relationship between entrepreneurial proactivity and entrepreneurial intention can be also explained by the absence of some potential mediators in the current study model. Mediators can be individuals' attitude toward entrepreneurship, perceived desirability of entrepreneurial activities, self-efficacy and self-regulation. Chen (2024) and Hu et al. (2023) found that individuals' preferences for entrepreneurship partially mediates the relationship between proactivity and entrepreneurial intention among Chinese university students. Tan et al. (2020) found that expectation of potential benefits gained from the pursuit of entrepreneurship compared to other career choices fully mediates the relationship between proactivity and entrepreneurial intention among Vietnamese people aged from 16. Kumar and Shukla (2019) found partial mediation of self-efficacy on the relationship between personal proactivity and entrepreneurial intention. Moreover, individuals

may be discouraged to think about and take actions on entrepreneurial opportunities (Seo et al., 2024; Kautonen et al., 2011; Pham et al., 2023) if they are often exposed to the failure of other entrepreneurs (Seo et al., 2024) or to unsupportive opinions about starting a business especially from influential groups in the society (Kautonen et al., 2011). However, prior studies indicate that if individuals have strong self-regulation, they can overcome emotional and occupational burdens from others and stay focused on their set target (Nawaz et al., 2024; Seo et al., 2024).

The study does not find any moderation effects of age on the relationship between entrepreneurial proactivity and entrepreneurial intention either. This divergent result can be explained by the desire of old people to get involved in entrepreneurial activities to continue their social and professional status, optimize their free time (Maalaoui et al., 2020), and enhance their self-actualization (Kautonen et al., 2023). For example, unlike common opinion, van Veldhoven and Dorenbosch (2008) found the positive relationship between age and proactivity at work. Although it is not statistically significant, the study may support the potentials of promoting entrepreneurship among third age groups mentioned by some authors such as Maalaoui et al. (2020) and Maalaoui et al. (2023). Old individuals are normally concerned about health care costs (Kautonen et al., 2023) and technological competencies (Maalaoui et al., 2023; Sahut & Mili, 2015). Therefore, to promote senior entrepreneurship, government can provide senior individuals with the access to a network of senior entrepreneurs (Sahut & Mili, 2015), technical and management skill training (Linardi & Costa, 2022), and affordable or single-payer health insurance (Kautonen et al., 2023). Government can also launch awareness campaigns (Maalaoui et al., 2023) to alter normative belief against senior individuals in entrepreneurship (Linardi & Costa, 2022).

Overall, by using entrepreneurship-focused measures of self-efficacy and proactivity, the study enhances literature on the positive relationship between entrepreneurial self-efficacy and entrepreneurial intention and enriches literature on the role of age in particular and demographic characteristics in general in entrepreneurial development process. The study also expands empirical evidence about the effects of proactive personality on entrepreneurial intention, which may vary over the course of life.

LIMITATIONS AND FUTURE RESEARCH POSSIBILITIES

The findings of the study should not be generalized without cautions because the study has some limitations. First, although aging refers to biological, social and psychological changes in a person (Zacher & Kooij, 2017), the study uses only biological age construct. Second, although this study measures self-efficacy and proactivity in entrepreneurship context, using single item measures may not cover full range of the construct meanings. Third, although the parsimony of the study model can make it easy to understand the relationship between constructs, it may fail to capture some important aspects of the relationship (Vandekerckhove et al., 2015). Therefore, future research should use multiple item scales to better capture meanings of self-efficacy and proactive personality in entrepreneurship context. Future research should also utilize psychological aspects of age and include more individual and contextual factors to the model in order to provide more complete picture of the role of age in the formation of entrepreneurial intention and the relationship between proactivity and entrepreneurial intention.

CONFLICTS OF INTEREST

The author declares that there are no conflicts of interest found in this research

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