

Entrepreneurship Education and Entrepreneurial Intentions of Youths in Zambia: The Mediating Roles of Entrepreneurial Self-Efficacy and Entrepreneurial Attitudes

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Abstract

The empirical study evaluated the impacts of entrepreneurship education on entrepreneurial intentions among youths in Zambia and the mediating roles of entrepreneurial self-efficacy and entrepreneurial attitudes. The quantitative methodology was employed using data gathered through survey questionnaires. Data analysed using the SEM-PLS technique via the SmartPLS 4 software. The findings revealed significant direct effects of entrepreneurship education, entrepreneurial self-efficacy and entrepreneurial attitudes on EI. However, the effects of entrepreneurial attitudes on entrepreneurial intentions were negative. In addition, the study revealed significant mediating effects of entrepreneurial self-efficacy and entrepreneurial attitudes on entrepreneurship education and entrepreneurial intentions where the latter had negative mediating effects. In overall, the study revealed significant negative mediating effects of entrepreneurial self-efficacy and entrepreneurial attitudes on entrepreneurial intentions and entrepreneurship education. The study concluded that exposure of youths in Zambia to entrepreneurship education can aid in stimulating entrepreneurial intentions through entrepreneurial self-efficacy and entrepreneurial attitudes. The study recommended for interventions by the Government of Zambia through the Ministry of Youth, Sport and Arts to put in place that promote participation of youths in EE as well as ensuring increased accessibility of EE among the youths.

Keywords: Entrepreneurship education; Entrepreneurial self-efficacy; Entrepreneurial intentions; Entrepreneurial attitudes, Youths; Zambia

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1. Introduction

1.1. Background to this research

At global level, youth unemployment has become of great concern to governments and policymakers particularly in developing economies (Fergusson & Yeates, 2021). As reported by the International Labour Organization (ILO) (2024), global youth unemployment rate stood at 20.4% in 2023 more than double the overall unemployment rate. This high rate was supported by the World Economic Forum (WEF) (2024) report which cited that nearly 65 million youths across the globe are unemployed. The issue of youth unemployment is even more pressing in the Sub-Saharan Africa (SSA) region where youth unemployment rate surpasses 20% (Fomba-Kamga et al., 2022; ILO, 2024). Precisely, according to ILO (2024), youth unemployment in the SSA region stood at 21.9% in 2023 exceeding the global youth unemployment rate. In this regard, the SSA region has been included among the three global regions considered “off track” in terms of attaining the Sustainable Development Goal (SDG) 8 target 6 of substantially reducing the proportion of youths not in education, employment or training (NEET) (ILO, 2024).

Hence, there have been efforts by national government and non-governmental organisations (NGOs) to address the persisting challenge of youth unemployment. Entrepreneurship education (EE) is among the initiatives considered a panacea towards addressing youth unemployment in most developing economies including SSA developing economies (Ndlovu et al., 2024; Otache et al., 2024). The integration of EE into the high education curricular has been witnessed in most SSA countries with the aim of promoting entrepreneurial intentions among the young people (Leger, Arsenijevic & Bosma, 2025). One of the SSA countries that has acknowledged the importance of EE towards youth entrepreneurship is Zambia where EE has been included in the education curricular (Chigunta & Mwanza, 2016; Matoka & Mwanze, 2024).

In Zambia, youth unemployment has remained a macroeconomic problem for the past decades. According to the Zambia Statistics Agency (ZSA) (2024), although the proportion of unemployed youths aged 15 to 35 years has declined from 11.02% in 2020 to 9.76% in 2024, the rate is still high. The current rates of youth unemployment are considered in Zambia given that youths account for 26.7% of the total population (Republic of Zambia, 2024). Consequently, the high youth unemployment rate has been considered a threat to attainment of national objectives and SDG 8.6 in Zambia (Simuyemba, 2022; Yangailo, 2024). As stated in the 8th National Development Plan (2022-2026) that youth unemployment is among the current challenges threatening socio-economic development (Republic of Zambia, 2022). According to the 8NDP, the government of Zambia aims to transition from the current state of unemployment through the strategic intervention of job creation towards attainment of the desired state of a prosperous middle-income economy by 2030 (Republic of Zambia, 2022).

Additionally, the 2024 National Youth Policy (NYP) highlighted that the potential of youths to significantly contribute to sustainable development in Zambia is being hampered by several challenges including high unemployment levels due to inadequate skills (Republic of Zambia, 2024). In this regard, entrepreneurship education has been considered one of the strategic interventions for job creation in Zambia (Thelma, Sylvester & Ngulube, 2024). For instance, the 2024 NYP highlighted entrepreneurship education and skills development as one of the thematic areas for overcoming the youth unemployment challenge in Zambia skills (Republic of Zambia, 2024).

The contribution of EE on promoting job creation by driving development of entrepreneurial intentions has been extensively supported in existing literature. Whilst existing empirical and theoretical literature generally confirms a positive relationship between EE and EI, the underlying mechanisms have not yet been fully examined. In addition, there is paucity of empirical studies on EE and EI and underlying mechanisms in the context of Zambian youths. Against this backdrop, the study aimed to examine the mediating roles of ESE and entrepreneurial attitudes on EE and EI among youths in Zambia. To the best of authors' knowledge, this study was the first to examine the mediating effects of ESE and entrepreneurial attitudes on the association between EE and EI in a Zambian context.

The rest of the research paper is structured as follows: Section 2 presents the theoretical background and literature review leading to hypothesis development followed by Section 3 outlining the research design. Section 4 presents the analysis and discussion of results whilst Section 5 presents the conclusion, limitations, implications, recommendations and the directions for further research.

2. Theoretical Background and Hypothesis Development

2.1. Entrepreneurship education

Since the concept of EE was first introduced in 1947, several definitions have been provided in existing literature. Liu et al. (2022) defined EE as the initiative which develops and enhances individuals' basing entrepreneurial skills, abilities and knowledge. In a similar perspective, Bae et al. (2014) defined EE as the form of education for developing and enhancing entrepreneurial capacities and skills. According to Isiaka, Osanyinlusi and Adebayo (2023), EE consists of any pedagogical programmes or processes of education for entrepreneurial skills and attitudes. Liñán, Ceresía and Bernal (2018) identified four different forms of EE which are education for awareness, entrepreneurial dynamism, continuous education for existing entrepreneurs and (2) education for start-ups. This study mainly focuses on education for start-ups

2.2. Entrepreneurial intentions

The concept of entrepreneurial intention (EI) was underscored by Bird (1988) in his Theory of Entrepreneurial Competency. According to Bird (1988), since entrepreneurial behaviours or actions are motivated by entrepreneurial intentions, there would be no entrepreneurial behaviours without entrepreneurial intentions. Hence, Bird (1988) first proposed the concept of EI defining it as the mental state which makes an individual invests much time, attention and energy to achieving specific goals. However, several definitions have emerged in literature. For instance, Krueger (2017) stated that EI is the commitment of potential individuals to undertake entrepreneurial activities in the near future. Esfandiari et al. (2019) argue that entrepreneurial intentions refer to individuals' moods which reflect on responsibility, awareness and tasks to start own businesses. Other scholars believe that EI is the intention of individuals to start a new business venture (Liu et al., 2022; Mir et al., 2023). Bae et al. (2014) referred EI to the desires to start own business. In this research, entrepreneurial intention is defined as an individual's (in this case youth) subjective tendencies and psychological inclination to establish a new venture.

2.3. Entrepreneurial self-efficacy

Generally, self-efficacy from the Bandura's (1978) theory, self-efficacy refers to the beliefs that individuals have in their

own abilities to perform a certain task. Precisely, [Matos et al. \(2020\)](#) defined entrepreneurial self-efficacy (ESE) as a person's belief in their own abilities to execute a new opportunity. According to [Bae et al. \(2014\)](#), ESE refers to the belief in one's aptitude to effectively perform various tasks and roles of entrepreneurship.

2.4. Entrepreneurial attitudes

Generally, attitudes refer to the hypothetical construct which reflects negative, neutral or positive evaluations of emotional state towards a particular object, situation or event ([Ajzen, 2020](#)). Further, [Ajzen \(2020\)](#) reported that attitudes can be deduced from three types of responses namely cognitive response (thoughts and perceptions), affective response (feelings and evaluations) and conative or behavioural response (actions and intentions). In the field of entrepreneurship, attitudes are defined as the degree to which individuals perceive the outcomes and consequences of entrepreneurship as valuable, satisfactory and advantageous ([Hattenberg, Belousova & Groen, 2021](#)). According to [McNally et al. \(2016\)](#), entrepreneurial attitudes refer to individuals' evaluative judgments of the benefits of engaging in entrepreneurial activities.

2.5. Entrepreneurship education and entrepreneurial intentions

The relationship between EE and entrepreneurial intentions has been extensively studied and confirmed. For instance, the research by [Liu et al. \(2022\)](#) revealed significant positive impacts of EE on EI among Chinese university students. According to the Theory of Entrepreneurial Competency propounded by Bird (1988), entrepreneurship competence leads to development of entrepreneurial intentions. Furthermore, the Human Capital Theory (HCT) by [Becker \(1975\)](#) is among the theoretical perspectives which argue that EE can positively influence EI. Recently, [Wang et al. \(2023\)](#) revealed that EE has significant positive impacts on EI among students in China. [Khalil et al. \(2024\)](#) also established significant positive impacts of EE on EI among university students in UAE. However, [Bae et al. \(2014\)](#) found significant but a small positive correlation between EE and entrepreneurial intentions. In conclusion, it can be predicted that EE can significantly influence EI leading to the following hypothesis:

H₁: Entrepreneurship education has significant positive impacts on entrepreneurial intentions

2.6. Relationship between EE, ESE and entrepreneurial intentions

The intricate relationship between EE, ESE and EI has attracted attention of researchers and scholars. Studies such as [Malebana and Swanepoel \(2014\)](#) and [Wardana et al. \(2020\)](#) have shown that exposure to EE stimulates development of ESE and ultimately EI. On the other side, other studies have reported significant positive impacts of ESE on entrepreneurial intentions ([Nursyirwan et al., 2022](#); [Ren, Li & Li, 2018](#); [Ribeiro & Fernandes, 2020](#); [Santos & Liguori, 2020](#)). In addition, the study by [Hoang et al. \(2020\)](#) which explored the mediating roles of ESE in the relationship between EE and EI in Vietnam employing the hierarchical regression test revealed that EE positively affects EI mediated by self-efficacy. Another similar study in the context of China by [Gao and Qin \(2022\)](#) showed that ESE plays a significant partial mediating role between EE and EI.

[Jiatong et al. \(2021\)](#) and [Wu et al. \(2022\)](#) also believe that that ESE has complete intermediary effects on the relationship between EE and EI. The research by [Yun \(2010\)](#) also found ESE as positive mediator of the association between EE and entrepreneurial intentions. [Wang et al. \(2023\)](#) also revealed that ESE has significant positive mediating impacts on EE and EI among students in China. In the context of Nigeria, the research by [Otache et al. \(2024\)](#) revealed that ESE significantly mediates the relationship between EI and EE. [Amani et al. \(2024\)](#) also found significant mediation role of ESE on EE and entrepreneurial intentions.

In conclusion, several studies have confirmed the significant relationship between EE, ESE and EI. However, majority of the empirical studies have focused on university students representing a significant population gap which this study attempted to address focusing on youths in Zambia. From the aforementioned arguments, the study argues that exposure of youths to EE promote development of strong EI through ESE. Therefore, the following hypotheses are formulated:

H₂: Entrepreneurship education has significant effects on entrepreneurial self-efficacy

H₃: Entrepreneurial self-efficacy has significant effects on EI

H₄: Entrepreneurial self-efficacy has significant mediating effects on EE and EI

2.7. Relationship between EE, entrepreneurial attitudes and entrepreneurial intentions

Existing studies and theories reveal the relationship between EE, entrepreneurial attitudes and EI. For instance, [Yaqub et al. \(2015\)](#) established significant positive effects of EE on attitudes towards entrepreneurship whilst others found significant association between entrepreneurial attitudes and EI ([Johnson & Mathew, 2017](#); [Nursyirwan et al., 2022](#)). [Rakhmadiningrum, Soetjipto and Rahayu \(2021\)](#) also found that entrepreneurial attitudes represent significant predictors of EI. Scholars such as [Herta \(2018\)](#) have found that EE positively and significantly influence attitudes towards entrepreneurship which in turn impacts EI.

However, other scholars such as [Mwatsika and Sankhulani \(2016\)](#) reported that EE can have weak or negative impacts on entrepreneurial attitudes. Besides, [Al-Qadasi et al. \(2024\)](#) found that entrepreneurial attitudes have significant mediating effects on EE and indirect relationship with EI, which indicated a partial mediation role of ATE and ESE. The [Ajzen's \(1991\)](#) Theory of Planned Behaviour (TPB) also provides a solid theoretical foundation that support the role of attitudes in stimulating intentions towards a particular behaviour or action. The research by [Wardana et al. \(2020\)](#) also showed that the relationship between EE and EI is significantly mediated by attitudes towards entrepreneurship.

From the discussions, it can be predicted that entrepreneurial attitudes play a significant mediating role on the relationship between EE and EI. Thus, it is hypothesised that:

H5: Entrepreneurship education has significant effects on entrepreneurial attitudes

H6: Entrepreneurial attitudes have significant effects on EI

H7: Entrepreneurial attitudes have significant mediating effects on EE and EI

2.8. Conceptual model

The conceptual model for the research is presented in Figure 1.

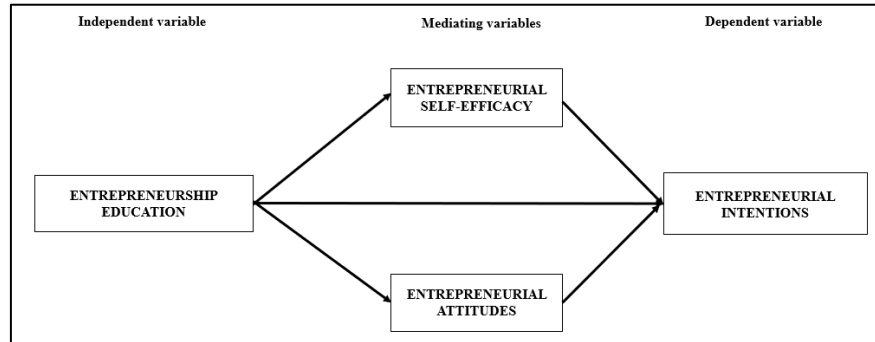


Figure 1. Conceptual framework

3. Research Methodology

3.1. Sample and data collection

For this study, the survey quantitative design was employed. Primary data sources were employed where structured questionnaires were employed. The target population for the research was all the youths aged from 18 to 35 years in Lusaka province. According to the 2022 Census for Zambia, Lusaka province had a total population of 3,079,964 where 23.7% are youths between 15 and 35 years (ZSA, 2022). This implies that there are approximately 729,952 in Lusaka province (ZSA, 2022). Hence, the study employed the Yamane’s (1970) sample size determination formula basing on the population size (N) of 729,952 and sampling error margin (e) of 0.05. The minimum sample size for the study was found to be 400. This sample size was adequate for the research as Hair et al. (2013) recommends minimum sample sizes of 200 for multivariate data analysis.

Given unavailability of a database of unemployed youths in Zambia, the study employed a non-probability sampling technique that is the convenience sampling technique. Basing on this technique, youths were recruited in the study based on their availability and voluntary consent to participate. For data collection, the questionnaires were administered electronically via digital platforms such as social media platforms since majority of youths in Zambia often use digital platforms. Prior the main study, the questionnaires were pilot-tested to a sample of 20 youths in Lusaka district whilst the questionnaires were also shared with experts for expert validation. The data collection process was done in December 2024.

3.2. Measurement of variables

The main variables for the research were EE (independent variable), EI (dependent variable), ESE (mediating variable) and entrepreneurial attitudes (mediating variable). The five-point Likert scale (1=strongly disagree to 5=strongly agree) was adopted. The measurement scales for each of these variables were obtained from difference sources to avoid common method bias as suggested by Kock, Berbekova and Assaf (2021). In this study, EE was measured employing the 5-item scale adapted from Amani et al. (2024) and Otache et al. (2024) whilst the scale for measuring EI was adapted from the six-item EI scale developed and validated by Chen, Greene and Crick (1998) and Khalil et al. (2024). Entrepreneurial self-efficacy was measured using the self-efficacy scale developed and validated by Moberg (2013). Lastly, the measurement scale for entrepreneurial attitudes was adapted from the five-item scale by McNally et al. (2016) and Al-Qadasi et al. (2024).

3.3. Reliability and validity test

Reliability and validity of the survey questionnaire were determined by estimating the Cronbach’s Alpha (α) value, average variance (AVE) and composite reliability (CR) for all the four constructs and the results are reported in Table 1.

Table 1: Reliability and validity test results

Construct	No. of Items	AVE	CR	α
Entrepreneurship education	5	0.538	0.852	0.848
Entrepreneurial intentions	6	0.621	0.906	0.903
Entrepreneurial self-efficacy	5	0.563	0.860	0.875
Entrepreneurial attitudes	5	0.706	0.923	0.921

Table 1 shows that the Cronbach's α values for each construct (latent variable) was higher than the recommended 0.7 whilst the AVEs and CR values were greater than the recommended 0.5 and 0.7 respectively implying the scales had good levels of reliability and validity. According to [Hair et al. \(2013\)](#) validity and reliability are established when the AVE statistics are greater than 0.5, CR and α statistics are greater than 0.7.

3.4. Data analysis

Data from the survey was first cleaned checking for missing data and outliers in data. Thereafter, data was analysed making use of the Structural Equation Modeling-Partial Least Square (SEM-PLS) technique employing SmartPLS version 4 software was employed.

3.5. Ethical considerations

In this study, permission to carry out the survey was obtained from the Ministry of Youths, Sport and Arts and the Lusaka City Council. In addition, confidentiality and anonymity were observed whilst informed consent was sought from the target participants. No harm was done to the participants and the researcher only permitted youths aged from 18 years to participate. More so, no financial incentives were provided to the participants as tokens of appreciation.

4. Research Findings and Discussion

4.1. Response rate

As per the computed minimum sample, the anticipated response was 400. Nevertheless, a total 317 youths participated in the survey resulting in successful return rate of 79.3%. This return rate was adequate and good for the study given that [Bryman and Bell \(2015\)](#) consider a response rate of more than 70% as good.

4.2. Demographic characteristics of respondents

Table 2 present results for the demographic characteristics of the respondents to the survey. Table 2 shows that majority of the respondents were males (64.7%) whilst females constituted 35.3% of the sample. These results align with the results for the 2022 Census that majority of youths in Zambia are males ([ZSA, 2022](#)). Furthermore, the study found that 44.2% of the respondents were aged 26-29 years followed by 30.3% aged 18-25 years and 25.6% aged 30-35 years. The respondents (youths in Zambia) were fairly distributed in terms of age categories. Table 2 further shows that 53.3% of the respondents had secondary education whilst 40.7% had tertial educational qualifications and only 6.0% had primary education.

Table 2: Respondents' demographic characteristics

Characteristics	Frequency (n)	Percentage (%)
Gender		
Male	205	64.7
Female	112	35.3
Age		
18-25 years	96	30.3
26-29 years	140	44.2
30-35 years	81	25.6
Education		
Primary education	19	6.0
Secondary education	169	53.3
Tertiary education	129	40.7

4.3. Results for the SEM-PLS model

Structural model

Figure 2 shows the study's structural model from the SEM-PLS analysis.

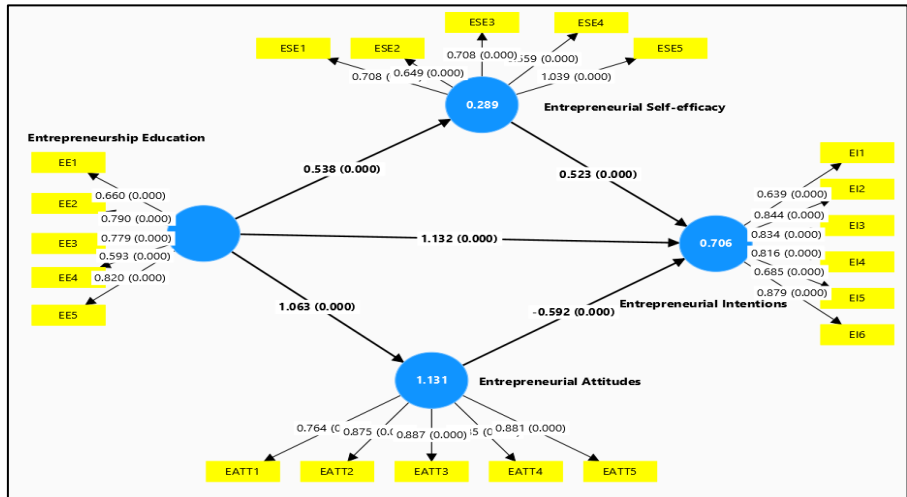


Figure 2: Structural model for the study

The results from the SEM-PLS analyses are summarized in Table 3 showing the path coefficients (β), standard error (SE), t-statistics (t), significant level (p) and the 95% confidence intervals (CI) for the direct and indirect effects of the model.

Table 3: Summary of SEM-PLS analysis

Effects	β	SE	t-statistic	p-value	95% CI
Total direct effects					
EATT \rightarrow EI	-0.592	0.102	5.799	0.000***	(-0.799) – (-0.398)
ESE \rightarrow EI	0.523	0.067	7.767	0.000***	0.383 – 0.654
EE \rightarrow EATT	1.063	0.010	102.250	0.000***	1.046 – 1.086
EE \rightarrow EI	1.132	0.092	12.333	0.000***	0.955 – 1.317
EE \rightarrow ESE	0.538	0.056	9.681	0.000***	0.418 – 0.639
Specific indirect effects					
EE \rightarrow ESE \rightarrow EI	0.281	0.029	9.856	0.000***	0.221 – 0.333
EE \rightarrow EATT \rightarrow EI	-0.629	0.106	5.923	0.000***	(-0.841) – (-0.426)
Total indirect effects					
EE \rightarrow EI	-0.348	0.099	3.522	0.000***	(-0.547) – (-0.158)

Note: *** = statistically significant at 5% level; EE = entrepreneurship education; EI = entrepreneurial intentions; ESE = entrepreneurial self-efficacy; EATT = entrepreneurial attitudes

Direct effects

For the total direct effects, the results in Table 3 show that EE exert significant positive influence on EI ($\beta = 1.132$, $t = 12.333$, $p = 0.000$; 95%CI = 0.955 – 1.317). These results imply that exposure of youths in Zambia to EE can significantly lead to increased entrepreneurial intentions. In other words, EE can significantly promote development of intentions towards starting entrepreneurial start-ups leading to self-employment thereby reducing youth unemployment in Zambia. The results supported the hypothesis that EE has significant positive impacts on entrepreneurial intentions. These results are consistent with scholars such as Wang et al. (2023) and Khalil et al. (2024) who also established significant positive impacts of EE on EI.

Furthermore, based on the direct effects, the results in Table 3 shows a significant positive relationship between EE and ESE ($\beta = 0.538$, $t = 9.681$, $p = 0.000$; 95%CI = 0.418 – 0.639). The positive path coefficient of 0.538 show that EE can significantly influence entrepreneurial self-efficacy. These findings show that provision of EE to youths can help in stimulating confidence towards starting own businesses among the youths in Zambia. These results agree with the findings from the study by Malebana and Swanepoel (2014) that exposure to EE stimulates development of entrepreneurial self-efficacy. Wardana et al. (2020) also found that EE is positively associated with ESE.

The results in Table 4.3 further show that EE has significant direct effects on EE and entrepreneurial attitudes ($\beta = 1.063$, $t = 102.250$, $p = 0.000$; 95%CI = 1.046 – 1.086). These results indicate that exposure to EE can significantly aid in stimulating positive attitudes towards entrepreneurship among the youths in Zambia. These results are consistent with the findings by Yaqub et al. (2015) who established significant positive effects of EE on attitudes towards entrepreneurship. Similarly, Herta (2018), Al-Qadasi et al. (2024) and Wardana et al. (2020) have found that EE positively and significantly influence attitudes towards entrepreneurship.

Furthermore, the results presented in Table 3 indicate that entrepreneurial self-efficacy has significant positive impacts EI ($\beta = 0.523$, $t = 7.767$, $p = 0.000$; 95%CI = 0.383 – 0.654). These results mean that ESE can significantly impacts EI in a positive way. In other words, confidence towards entrepreneurship that is ESE can facilitate development of

entrepreneurial intentions. The findings are consistent with findings from literature. The findings concur with the Ajzen's (1991) TPB which predicts a significant relationship between self-efficacy (perceived behavioural control) and intentions. The results also corroborate with findings in literature where ESE was found to be a significant predictor of entrepreneurial intentions (Nursyirwan et al., 2022; Ren et al., 2018; Ribeiro & Fernandes, 2020; Santos & Liguori, 2020).

However, the study revealed that entrepreneurial attitudes have significant negative impacts on EI ($\beta = -0.592$, $t = 5.799$, $p = 0.000$; 95%CI = $-0.799 - -0.398$). The results indicate that youths in Zambia may have negative attitudes post-EE exposure which negatively impact EI. The results confirm the Ajzen's (1991) TPB which predicts a significant relationship between attitudes and intentions. In addition, besides the negative effect, the results support the findings by Rakhmadiningrum et al. (2021) that entrepreneurial attitudes represent significant predictors of EI. Similarly, other scholars found significant association between entrepreneurial attitudes and EI (Johnson & Mathew, 2017; Nursyirwan et al., 2022).

Indirect effects

The results presented in Table 3 show indirect positive impacts of EE on entrepreneurial intentions through ESE ($\beta = 0.281$, $t = 9.856$, $p = 0.000$; 95%CI = $0.221 - 0.333$). These results indicate that ESE is a significant mediator for the relationship between EE and EI. In other words, the ESE mediates the effects of EE on EI among the youths in Zambia. It can be settled that exposure to EE can aid in development of positive ESE which in turn lead to positive EI. These results confirm the findings by Hoang et al. (2020), Jiatong et al. (2021), Gao and Qin (2022) and Wu et al. (2022) that ESE plays a significant partial mediating role between EE and EI. Similarly, Otache et al. (2024) and Amani et al. (2024) also found significant mediation role of ESE on EE and entrepreneurial intentions.

Furthermore, Table 3 show significant specific indirect negative impacts of EE on entrepreneurial intentions through entrepreneurial attitudes ($\beta = -0.629$, $t = 5.923$, $p = 0.000$; 95%CI = $-0.841 - -0.426$). These results infer that entrepreneurial attitudes represent significant mediator for the relationship between EE and EI. These further mean that entrepreneurial attitudes weaken the relationship between EE and EI. Thus, it can be concluded that entrepreneurial attitudes partially and negatively mediate the relationship between EI and EE. These results contradict existing findings which found that entrepreneurial attitudes positively mediate the relationship between EE and EI (Al-Qadasi et al., 2024; Wardana et al. (2020).

In overall, the total indirect effects of EE on EI ($\beta = -0.348$, $t = 3.522$, $p = 0.000$; 95%CI = $-0.547 - -0.158$). These findings indicate that in overall, ESE and entrepreneurial attitudes weakens the relationship between EE and EI. This is due to the high indirect negative effect of entrepreneurial attitudes on EE and EI. These results disagree with scholars such as Wardana et al. (2020) and Nursyirwan et al. (2022) who reported significant positive mediating roles of ESE and attitude.

Summary of hypothesis testing

The results supported all the hypotheses as summarised in Table 4.

Hypothesis	Decision at 5%
H ₁ : Entrepreneurship education has significant positive impacts on EI	Supported
H ₂ : Entrepreneurship education has significant effects on ESE	Supported
H ₃ : Entrepreneurial self-efficacy has significant effects on EI	Supported
H ₄ : Entrepreneurial self-efficacy has significant mediating effects on EE and EI	Supported
H ₅ : Entrepreneurship education has significant effects on entrepreneurial attitudes	Supported
H ₆ : Entrepreneurial attitudes have significant effects on EI	Supported
H ₇ : Entrepreneurial attitudes have significant mediating effects on EE and EI	Supported

5. Summary, Conclusion and Recommendations

The empirical study evaluated the impacts of entrepreneurship education on entrepreneurial intentions among youths in Zambia and the mediating roles of entrepreneurial self-efficacy and entrepreneurial attitudes. The quantitative methodology was employed using data gathered through survey questionnaires. Data analysed using the SEM-PLS technique via the SmartPLS 4 software. The findings revealed significant direct effects of EE, ESE and entrepreneurial attitudes on EI. However, the effects of entrepreneurial attitudes on entrepreneurial intentions were negative. In addition, the study revealed significant mediating effects of ESE and entrepreneurial attitudes on EE and EI where the latter had negative mediating effects. In overall, the study revealed significant negative mediating effects of ESE and entrepreneurial attitudes on EI and EE. The study concluded that exposure of youths in Zambia to EE can aid in stimulating entrepreneurial intentions through entrepreneurial self-efficacy and entrepreneurial attitudes.

The study proved to have significant implications to theory, practice and policy. Theoretically, the study represented a novel and unique empirical study which brought new insights to the existing stream of literature by introducing the mediating roles of ESE and entrepreneurial attitudes in the relationship between EE and EI. Besides, the study had

significant practical implications as the findings can motivate youths in education and training to acknowledge the importance of EE leading to increased participation in EE courses. Lastly, the study can be employed in informing policies meant to promote EE and address youth unemployment in Zambia. The study therefore recommends for interventions by the Government of Zambia through the Ministry of Youth, Sport and Arts to put in place that promote participation of youths in EE as well as ensuring increased accessibility of EE among the youths.

However, the study had its limitations. Firstly, the study only focused on youths in Lusaka province indicating the room for further research to be done in other provinces. In addition, since EE encompasses both practical and theory which were not considered in this research, further research can consider separating the two dimensions of EE.

Conflict of Interest

The authors declare that they have no conflicting interests

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Ethical considerations

The article followed all ethical standards appropriate for this kind of research.

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