



Why Entrepreneurship Education Implementation Fails to Translate into Entrepreneurial Intentions: The Mediating Role of Entrepreneurial Attitude in Sub-Saharan Africa

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Abstract: *Entrepreneurship education has been widely adopted across higher education systems in Sub-Saharan Africa as a response to youth unemployment and constrained wage employment. Despite this expansion, entrepreneurial intentions among graduates remain persistently low, raising concerns about the effectiveness of entrepreneurship education implementation. This narrative literature review examines why the implementation of entrepreneurship education often fails to translate into entrepreneurial intentions, focusing on the mediating role of entrepreneurial attitude. The review synthesises empirical, conceptual, and policy-oriented studies published between 1991 and 2025. Guided by intention-based models, the synthesis shows that the implementation of entrepreneurship education frequently improves entrepreneurial knowledge and awareness but does not consistently foster positive entrepreneurial attitudes, the most proximal predictors of entrepreneurial intention. Pedagogical practices remain largely theory-driven and assessment-oriented, with limited emphasis on experiential, reflective, and affective learning, which are necessary for attitude formation. In Sub-Saharan Africa, this limitation is compounded by contextual constraints, including necessity-driven entrepreneurship, limited access to finance, weak institutional support, and high perceived risk, which further undermine the development of entrepreneurial attitudes. Methodologically, the literature is dominated by cross-sectional designs that insufficiently interrogate mediation pathways linking implementation processes to intention outcomes. Conceptually, this review foregrounds entrepreneurial attitude as the central mechanism explaining the persistent intention gap, rather than exposure to entrepreneurship education alone. The study concludes that without deliberate alignment of entrepreneurship education implementation toward attitude formation, entrepreneurship education is unlikely to generate sustained entrepreneurial intentions in Sub-Saharan Africa.*

Keywords: *Entrepreneurship education implementation; entrepreneurial attitude; entrepreneurial intention; higher education; Sub-Saharan Africa*

How to cite this work (APA):

Ahimbisibwe, E., Aluonzi, B., Munyambonera, E. F. & Siraje, K. (2026). Why Entrepreneurship Education Implementation Fails to Translate into Entrepreneurial Intentions: The Mediating Role of Entrepreneurial Attitude in Sub-Saharan Africa. *Journal of Research Innovation and Implications in Education*, 10(1), 158 – 167. <https://doi.org/10.59765/rn73k>.

1. Introduction

Across Sub-Saharan Africa, entrepreneurship education has become a central policy response to persistent youth unemployment, underemployment, and the limited

capacity of formal labour markets to absorb university graduates (African Union, 2017; World Bank, 2020). Universities have increasingly embedded entrepreneurship education across disciplines, often as compulsory components, with the expectation that graduates will transition from job seekers to job creators (Fayolle &

Gailly, 2015). In countries such as Uganda, Kenya, and Nigeria, entrepreneurship education has expanded steadily from the early 1990s to the present, aligning with structural adjustment reforms, massification of higher education, and youth employment strategies (Naudé, 2010). However, despite more than three decades of entrepreneurship education implementation (1991–2025), graduate start-up rates remain modest, and many graduates continue to prioritise salaried employment or experience prolonged unemployment (Monitor, 2014). This persistent disconnect between long-standing educational investment and entrepreneurial outcomes has intensified scrutiny of how entrepreneurship education is implemented.

This study focuses on the implementation of entrepreneurship education rather than on it as a symbolic or nominal curricular presence. Specifically, it examines how the design, pedagogy, delivery, and assessment of entrepreneurship education implemented between 1991 and 2025 influence entrepreneurial intentions among learners. The review synthesises empirical, conceptual, and policy-oriented literature from this period, with particular attention to higher education in Sub-Saharan Africa. The 1991 starting point reflects the consolidation of entrepreneurial intention theory following Ajzen's Theory of Planned Behaviour, which provided a robust framework for analysing attitudinal mechanisms in intention formation (Ajzen, 1991; Krueger, Reilly, & Carsrud, 2000). Entrepreneurial intention is conceptualised as the most reliable antecedent of entrepreneurial behaviour, while entrepreneurial attitude is examined as the central psychological mechanism linking education implementation to intention (Liñán & Chen, 2009).

Despite sustained implementation of entrepreneurship education over the 1991–2025 period, empirical evidence shows that its effects on entrepreneurial intentions remain inconsistent and often weak (Rauch & Hulsink, 2015; Nabi et al., 2017). Many programmes enhance entrepreneurial knowledge and awareness but fail to cultivate favourable attitudes toward entrepreneurship as a desirable and feasible career option (Oosterbeek, Van Praag, & Ijsselstein, 2010). In Sub-Saharan Africa, this challenge is compounded by contextual constraints such as necessity-driven entrepreneurship, limited access to finance, regulatory barriers, and high perceived risk of business failure, which shape attitudes independently of educational exposure (Naudé, 2010; Monitor, 2014). Consequently, entrepreneurship education may increase awareness of constraints without strengthening entrepreneurial attitudes, thereby weakening the formation of entrepreneurial intention. Addressing this long-standing paradox is urgent given the scale and duration of entrepreneurship education investments across the region.

To the best of our knowledge, existing reviews spanning the 1991–2025 period have largely focused on the direct relationship between entrepreneurship education and entrepreneurial intention, with limited synthesis of the mediating role of entrepreneurial attitude, particularly within Sub-Saharan Africa (Fayolle & Gailly, 2015; Nabi et al., 2017). Moreover, much of the literature treats entrepreneurship education as a homogeneous intervention, overlooking temporal changes in implementation quality, pedagogy, and institutional context across three decades (Neck & Greene, 2011). As a result, the mechanisms through which the implementation of entrepreneurship education has influenced or failed to influence entrepreneurial intentions over time remain insufficiently synthesised. This review, therefore, asks: Why has the implementation of entrepreneurship education between 1991 and 2025 often failed to translate into entrepreneurial intentions? And how does entrepreneurial attitude mediate this relationship within the Sub-Saharan African context? Conceptually, this study foregrounds entrepreneurial attitude as the primary mechanism explaining the persistent gap between the implementation of entrepreneurship education and entrepreneurial intention across the 1991–2025 period, extending intention-based theories beyond exposure-driven explanations (Ajzen, 1991; Liñán & Chen, 2009). Contextually, it situates entrepreneurship education outcomes within the evolving structural and institutional realities of Sub-Saharan Africa over more than three decades (Naudé, 2010). Methodologically, the study provides a gap-oriented narrative synthesis spanning 1991–2025, enabling comparison across phases of entrepreneurship education expansion and reform. Practically, it aims to inform curriculum design, pedagogy, and policy by emphasising the need to implement entrepreneurship education that deliberately prioritises the development of entrepreneurial attitudes alongside knowledge and skills.

1.1 Problem Statement

Since the early 1990s, entrepreneurship education has been widely implemented across higher education systems as a strategic response to youth unemployment, graduate underemployment, and limited absorption of graduates into formal wage employment, particularly in Sub-Saharan Africa (African Union, 2017; Gibb, 1993; Naudé, 2010). Universities have invested heavily in entrepreneurship education programmes, courses, and policy-driven curricular reforms with the expectation that graduates will develop entrepreneurial intentions and engage in venture creation. However, despite more than three decades of sustained entrepreneurship education implementation (1991–2025), empirical evidence consistently shows that entrepreneurial intentions among graduates remain low,

inconsistent, or weak, indicating a persistent gap between educational implementation and intended behavioural outcomes (Oosterbeek, Van Praag, & Ijsselstein, 2010; Rauch & Hulsink, 2015; Nabi et al., 2017).

This problem is particularly pronounced within higher education institutions in Sub-Saharan Africa, where entrepreneurship education has expanded rapidly alongside massification of higher education and youth employment policy reforms, yet has not translated into commensurate levels of graduate entrepreneurship (Monitor, 2014; World Bank, 2020). While entrepreneurship education implementation has improved students' awareness and knowledge of entrepreneurship, it has not reliably translated into intentions to start businesses, suggesting that the challenge lies not in the existence of entrepreneurship education but in how it is implemented and how it shapes the psychological processes underlying intention formation (Fayolle & Gailly, 2015).

Entrepreneurial intention theories, particularly the Theory of Planned Behaviour, identify entrepreneurial attitude as the most proximal predictor of entrepreneurial intention (Ajzen, 1991; Krueger, Reilly, & Carsrud, 2000; Liñán & Chen, 2009). However, entrepreneurship education implementation often prioritises cognitive knowledge and technical skills while giving limited attention to the deliberate development of attitudes, including perceptions of desirability, feasibility, and risk (Neck & Greene, 2011; Fayolle & Gailly, 2015). In Sub-Saharan Africa, this weakness is compounded by contextual constraints such as necessity-driven entrepreneurship, limited access to finance, regulatory barriers, and high perceived risk of business failure, which may further undermine positive entrepreneurial attitudes even among educated graduates (Naudé, 2010; Monitor, 2014).

If this problem remains unresolved, entrepreneurship education will continue to function as a symbolic policy intervention with limited behavioural impact, perpetuating graduate unemployment and underemployment and undermining national development strategies reliant on entrepreneurship-led growth (Nabi et al., 2017; World Bank, 2020). The problem adversely affects students, higher education institutions, policymakers, and economies across Sub-Saharan Africa. Addressing this problem is therefore both current and urgent. By examining the mediating role of entrepreneurial attitude in the relationship between the implementation of entrepreneurship education and entrepreneurial intention, this study seeks to clarify why long-standing educational investments (1991–2025) have yielded limited outcomes and to extend existing entrepreneurship education and intention theories by explicating the mechanisms through which implementation influences behavioural intention.

1.2 Objectives

1. To examine the influence of entrepreneurship education implementation on entrepreneurial intention among higher education students in Sub-Saharan Africa.
2. To analyse the effect of entrepreneurship education implementation on entrepreneurial attitude among higher education students in Sub-Saharan Africa.
3. To determine the role of entrepreneurial attitude in the relationship between entrepreneurship education implementation and entrepreneurial intention among higher education students in Sub-Saharan Africa.

2. Literature Review

This literature review critically synthesises empirical, conceptual, and policy-oriented studies on the implementation of entrepreneurship education in higher education, with particular attention to its influence on entrepreneurial attitude and entrepreneurial intention. Rather than treating entrepreneurship education as a uniform curricular presence, the review focuses on how pedagogical design, delivery approaches, assessment practices, and contextual conditions shape intention formation processes. Organised around the study objectives, the review examines (i) the relationship between entrepreneurship education implementation and entrepreneurial intention, (ii) the influence of entrepreneurship education implementation on entrepreneurial attitude, and (iii) the mediating role of entrepreneurial attitude in linking education implementation to intention outcomes. In doing so, it identifies persistent theoretical, methodological, and contextual gaps that help explain why sustained entrepreneurship education implementation has often failed to translate into entrepreneurial intentions, particularly within Sub-Saharan Africa.

2.1 Entrepreneurship education implementation and entrepreneurial intention

Entrepreneurship education implementation is increasingly evaluated by its influence on entrepreneurial intention, which is widely recognised as the most immediate antecedent of entrepreneurial behaviour (Ajzen, 1991). Intention-based models emphasise that educational

interventions affect behaviour only insofar as they shape motivational readiness to act entrepreneurially (Krueger, Reilly, & Carsrud, 2000). Within this framework, the implementation of entrepreneurship education is expected to enhance intention by strengthening perceptions of desirability and feasibility associated with venture creation (Kent, Sexton, & Vesper, 1982). Empirical entrepreneurship research consistently positions intention as a more reliable outcome measure than post-graduation start-up behaviour due to contextual and timing constraints (Liñán & Chen, 2009). Studies further demonstrate that intention formation is sensitive to how entrepreneurship education is structured and delivered rather than to mere exposure (Kautonen, Van Gelderen, & Fink, 2015). Consequently, entrepreneurship education implementation has become a focal variable in explaining heterogeneous intention outcomes across higher education contexts (Schlaegel & Koenig, 2014).

Empirical findings on the relationship between entrepreneurship education implementation and entrepreneurial intention remain mixed, largely due to differences in pedagogical design. Programmes incorporating experiential learning and venture-based activities tend to report positive shifts in entrepreneurial intention (Souitaris, Zerbinati, & Al-Laham, 2007). Similarly, early exposure to entrepreneurial practice has been shown to strengthen intention by enhancing perceived competence and confidence (Peterman & Kennedy, 2003). In contrast, theory-heavy and business-plan-focused implementations have been associated with weak or negative intention effects (Oosterbeek, Van Praag, & Ijsselstein, 2010). Such approaches may increase awareness of entrepreneurial constraints without adequately supporting motivational readiness (Von Graevenitz, Harhoff, & Weber, 2010). Meta-analytic evidence confirms that entrepreneurship education has, at best, a modest average effect on intention, with substantial variation attributable to implementation quality (Martin, McNally, & Kay, 2013).

In Sub-Saharan Africa, the intention outcomes of entrepreneurship education implementation are strongly shaped by labour-market and institutional conditions. High graduate unemployment has accelerated the rapid integration of entrepreneurship education into university curricula (World Bank, 2020). However, this expansion has often occurred without commensurate investment in pedagogical resources and ecosystem support (African Union, 2017). Entrepreneurship in the region is frequently necessity-driven, influencing how students evaluate entrepreneurial careers (Naudé, 2010). Global Entrepreneurship Monitor reports show that perceived opportunity and fear of failure vary significantly across SSA countries and are closely linked to entrepreneurial

intention (Monitor, 2014). Weak university–industry linkages further limit the credibility of entrepreneurship education implementation (Weidenkaff et al., 2012). As a result, entrepreneurship education may raise awareness without translating into strong entrepreneurial intentions.

Methodologically, studies linking entrepreneurship education implementation to entrepreneurial intention face several limitations. Many rely on cross-sectional designs that do not capture changes in intention over time (Nabi, Liñán, Fayolle, Krueger, & Walmsley, 2017). Short-term assessments may overlook delayed intention formation following graduation (Rauch & Hulsink, 2015). Measurement of implementation is often crude, using binary indicators rather than pedagogical intensity or fidelity (Fayolle & Gailly, 2015). Selection bias also remains a concern, as students with pre-existing entrepreneurial interest may self-select into entrepreneurship courses (Bae, Qian, Miao, & Fiet, 2014). These challenges weaken causal inference regarding implementation effects (Kautonen et al., 2015). Consequently, scholars increasingly recommend modelling indirect pathways rather than relying solely on direct effects.

2.2 Entrepreneurship education implementation and entrepreneurial attitude

Entrepreneurial attitude reflects an individual's overall evaluation of entrepreneurship as attractive, desirable, and worthwhile. The Theory of Planned Behaviour positions attitude as a central determinant of entrepreneurial intention (Ajzen, 1991). Entrepreneurship education implementation is therefore expected to influence intention indirectly through attitudinal change (Liñán & Chen, 2009). Studies consistently show that attitudes respond more readily to experiential and affective learning than to abstract knowledge transmission (Krueger, Reilly, & Carsrud, 2000; Kuratko, 2005). Where education enables mastery experiences, students develop more favourable evaluations of entrepreneurship (Bandura, 1997). Consequently, entrepreneurial attitude has emerged as a key outcome variable in evaluating entrepreneurship education effectiveness (Schlaegel & Koenig, 2014).

Empirical evidence suggests that entrepreneurship education implementation influences entrepreneurial attitudes unevenly. Programmes emphasising real venture engagement and interaction with entrepreneurs report stronger positive attitudinal shifts (Souitaris et al., 2007). Early exposure to entrepreneurial practice can also reshape perceptions of desirability and feasibility (Peterman & Kennedy, 2003). In contrast, heavily analytical or finance-

oriented curricula may increase perceived difficulty and risk (Oosterbeek et al., 2010). Such implementations may inadvertently weaken entrepreneurial attitudes by foregrounding failure and uncertainty (von Graevenitz et al., 2010). Reviews consistently conclude that attitude change depends on pedagogical design rather than curriculum presence alone (Fayolle & Gailly, 2015).

In Sub-Saharan Africa, entrepreneurial attitudes are deeply influenced by structural and institutional realities. Limited access to finance and high business mortality rates shape negative evaluations of entrepreneurship (Naudé, 2010). Policy-driven expansion of entrepreneurship education has not always been matched with supportive ecosystems (World Bank, 2020). Fear of failure remains high across many SSA economies, constraining positive attitude formation (Monitor, 2014). Entrepreneurship education implementation often exposes students to these constraints without offering realistic coping mechanisms (African Union, 2017). As a result, attitudes may remain ambivalent despite increased knowledge (Weidenkaff et al., 2012). This underscores the contextual sensitivity of attitude formation.

Measurement of entrepreneurial attitude presents methodological challenges. Studies vary in whether they conceptualise attitude narrowly or embed it within broader mindset constructs (Liñán & Chen, 2009). Cross-sectional designs may fail to capture non-linear attitude trajectories (Nabi et al., 2017). Attitudes may initially decline as students confront entrepreneurial realities before recovering through competence development (Bandura, 1997). Many studies also conflate exposure with implementation quality, weakening inference (Fayolle & Gailly, 2015). Limited longitudinal evidence constrains understanding of sustained attitude change (Rauch & Hulsink, 2015). These limitations justify mediation-focused analytical approaches.

2.3 Mediating role of entrepreneurial attitude between entrepreneurship education implementation and entrepreneurial intention

Mediation theory provides a coherent explanation for weak direct effects of entrepreneurship education implementation on entrepreneurial intention. Intention models explicitly propose that educational experiences shape attitudes before influencing intention (Ajzen, 1991). Entrepreneurial attitude is therefore expected to transmit the effect of education to intention (Liñán & Chen, 2009). Empirical studies frequently report stronger indirect than direct effects of entrepreneurship education (Nabi et al.,

2017). Where attitude formation is weak, intention outcomes remain limited (Fayolle & Gailly, 2015). This positions attitude as a central explanatory mechanism rather than a secondary correlate (Krueger et al., 2000).

Studies adopting mediation perspectives show that entrepreneurship education implementation affects intention primarily when it produces favourable attitudes. Programmes with experiential learning components demonstrate stronger indirect effects through attitude (Souitaris et al., 2007). Conversely, implementations that increase realism without confidence-building suppress intention via negative attitudes (Oosterbeek et al., 2010). Meta-analyses confirm that attitude has the strongest association with intention among intention model variables (Schlaegel & Koenig, 2014). This explains why null direct effects do not necessarily imply no educational impact (Martin et al., 2013). Instead, they signal failure to activate the attitudinal mechanism (Rauch & Hulsink, 2015).

In Sub-Saharan Africa, mediation through attitude is particularly salient. Structural constraints strongly shape entrepreneurial evaluations (Naudé, 2010). Entrepreneurship education implementation often highlights barriers without offering feasible pathways to overcome them (World Bank, 2020). Fear of failure and low perceived capability mediate intention suppression (Monitor, 2014). Weak ecosystem support limits positive attitude transmission (African Union, 2017). Consequently, intention outcomes depend on whether education reshapes attitudes in spite of contextual barriers (Weidenkaff et al., 2012). This reinforces the relevance of mediation analysis in SSA contexts.

Methodologically, contemporary mediation approaches emphasise testing indirect effects rather than relying solely on stepwise logic. Modern mediation analysis demonstrates that indirect effects can exist even when direct effects are weak (Hayes, 2017). This is particularly relevant for entrepreneurship education research, where psychological mechanisms drive outcomes (Zhao, Lynch Jr, & Chen, 2010). Many studies, however, remain limited by cross-sectional designs (Nabi et al., 2017). Common-method bias further complicates mediation inference (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Stronger longitudinal and quasi-experimental designs are therefore recommended (Preacher & Hayes, 2008).

3. Methodology

3.1 Study Design

This study adopted a narrative literature review design to synthesise empirical, conceptual, and policy-oriented literature on entrepreneurship education implementation, entrepreneurial attitude, and entrepreneurial intention. A narrative approach was appropriate given the study's explanatory aim of examining mechanisms and implementation processes rather than estimating pooled effect sizes. The review was theoretically guided by intention-based models, particularly the Theory of Planned Behaviour, which positions entrepreneurial attitude as a central mechanism linking educational experiences to entrepreneurial intention (Ajzen, 1991). The review covered literature published between 1991 and 2025, with 1991 marking the consolidation of entrepreneurial intention theory and providing a defensible starting point for analysing attitudinal mediation.

3.2 Data Sources and Search Strategy

Literature was identified through searches of Google Scholar, Scopus, Web of Science, and ERIC, complemented by selected institutional and policy repositories. Search terms included combinations of entrepreneurship education implementation, entrepreneurial intention, entrepreneurial attitude, higher education, and Sub-Saharan Africa. The search focused on studies published between 1991 and 2025. Reference lists of key articles were manually reviewed to identify additional relevant sources through backward citation tracking. Priority was given to studies that explicitly examined pedagogical design, delivery, assessment, and psychological mechanisms underlying entrepreneurial intention formation.

3.3 Eligibility Criteria

3.3.1 Inclusion Criteria

Studies were included if they:

- (i) were published between 1991 and 2025;
- (ii) examined entrepreneurship education or its implementation in higher education or post-secondary contexts;
- (iii) addressed entrepreneurial intention, entrepreneurial attitude, or intention-based mechanisms;
- (iv) adopted empirical, conceptual, review-based, or policy-oriented approaches; and
- (v) provided sufficient detail to support interpretive synthesis.

3.3.2 Exclusion Criteria

Studies were excluded if they:

- (i) focused on entrepreneurship outcomes without reference to education;
- (ii) examined entrepreneurship education exclusively at primary or secondary levels;
- (iii) addressed employability or labour-market outcomes without engaging entrepreneurial intention or attitudinal mechanisms; or
- (iv) lacked analytical or theoretical depth relevant to the review objectives.

3.4 Ethical Considerations

This study was based solely on secondary analysis of publicly available literature and did not involve human participants or primary data collection. As a result, formal ethical approval was not required. Ethical standards were maintained through accurate citation, faithful representation of original sources, and adherence to principles of academic integrity.

3.5 Data Analysis and Synthesis

The analysis followed a thematic narrative synthesis approach. Relevant information was extracted on the implementation features of entrepreneurship education, pedagogical approaches, the formation of entrepreneurial attitudes, and entrepreneurial intention outcomes. The synthesis was organised around the three study objectives: (i) entrepreneurship education implementation and entrepreneurial intention, (ii) entrepreneurship education implementation and entrepreneurial attitude, and (iii) the mediating role of entrepreneurial attitude. Emphasis was placed on identifying recurring patterns, contextual influences, and explanatory mechanisms across the 1991–2025 period, with particular attention to Sub-Saharan Africa. This approach enabled an integrated explanation of why entrepreneurship education implementation frequently produces weak intention outcomes and how attitude mediates this relationship.

4. Results and Discussion

4.1 Entrepreneurship Education Implementation and Entrepreneurial Intention

The first objective examined the influence of entrepreneurship education implementation on

entrepreneurial intention. The main finding from the reviewed literature is that entrepreneurship education implementation does not consistently translate into strong entrepreneurial intentions, despite widespread and sustained adoption since 1991. Across studies, entrepreneurship education is shown to increase awareness and knowledge of entrepreneurship, but intention outcomes remain modest and highly variable (Ajzen, 1991; Liñán & Chen, 2009; Rauch & Hulsink, 2015; Kent et al., 1982). This finding represents a key landmark of the review and challenges the assumption that curricular inclusion alone is sufficient to motivate entrepreneurial career choices.

Interpreting this finding, the weak and unstable direct relationship suggests that the implementation of entrepreneurship education does not automatically activate motivational readiness for entrepreneurial action. Intention-based theory indicates that intention formation depends on evaluative and motivational processes rather than exposure alone (Ajzen, 1991; Krueger et al., 2000). As such, entrepreneurship education appears to operate under conditional effectiveness, where intended outcomes depend on how learning experiences are structured and delivered.

When situated within existing literature, this finding aligns with prior reviews and meta-analyses reporting small average effects and substantial heterogeneity in entrepreneurship education outcomes (Martin et al., 2013; Bae et al., 2014; Rauch & Hulsink, 2015). Studies show that theory-heavy or business-plan-dominated implementations often fail to motivate students and, in some cases, reduce intention by highlighting risk and uncertainty (Oosterbeek et al., 2010; von Graevenitz et al., 2010). These findings are therefore consistent with earlier evidence rather than contradictory.

An unexpected outcome evident in the literature is that entrepreneurship education can sometimes weaken entrepreneurial intention. This counterintuitive result is explained by increased realism: when education exposes students to structural barriers without strengthening perceived feasibility, intention may decline. In Sub-Saharan Africa, where labour-market constraints are pronounced, this effect is particularly visible (Naudé, 2010; Monitor, 2014).

The implication of this finding is that entrepreneurship education implementation should not be evaluated solely on intention outcomes without considering intermediate mechanisms. A key limitation is that much of the literature relies on cross-sectional designs, limiting causal inference. Future research should adopt longitudinal designs to

examine how intention evolves after graduation and under varying implementation conditions.

4.2 Entrepreneurship Education Implementation and Entrepreneurial Attitude

The second objective focused on the effect of entrepreneurship education implementation on entrepreneurial attitude. A central finding of the review is that the implementation of entrepreneurship education demonstrates a more consistent and positive influence on entrepreneurial attitude than on entrepreneurial intention. Studies repeatedly show that experiential, practice-oriented, and interactive implementations foster more favourable evaluations of entrepreneurship (Peterman & Kennedy, 2003; Souitaris et al., 2007). Entrepreneurial attitude, defined as perceived desirability and personal valuation of entrepreneurship, emerges as particularly responsive to pedagogical design (Ajzen, 1991; Liñán & Chen, 2009).

Interpreting this finding, entrepreneurship education appears to shape how students *perceive* and *value* entrepreneurship rather than directly motivating action readiness. This aligns with intention-based theory, which positions attitude as a proximal determinant of intention rather than an outcome secondary to intention (Ajzen, 1991). Education, therefore, seems better suited to influencing evaluative beliefs than behavioural commitment.

Situated within existing literature, this result supports arguments that attitude change requires experiential learning, mastery experiences, and interaction with real entrepreneurial contexts (Neck & Greene, 2011; Fayolle & Gailly, 2015). Conversely, implementations dominated by analytical and financial content are associated with stagnant or negative attitudes, as they foreground difficulty and risk (Oosterbeek et al., 2010; von Graevenitz et al., 2010). This consistency across studies strengthens confidence in the robustness of the attitudinal effect.

In Sub-Saharan Africa, entrepreneurial attitudes are further shaped by contextual constraints such as limited access to finance and high business failure rates. As a result, entrepreneurship education may foster ambivalent attitudes, in which entrepreneurship is viewed as necessary but not desirable (Naudé, 2010; Monitor, 2014). This contextual influence explains why attitude change is uneven across settings.

The implication is that entrepreneurship education implementation should deliberately prioritise the development of attitudes through confidence-building and feasibility-enhancing pedagogy. The limitation of the literature is inconsistent operationalisation of entrepreneurial attitude, while future research should explore how attitudes evolve over time in constrained contexts.

4.3 Mediating Role of Entrepreneurial Attitude in the Relationship Between Entrepreneurship Education Implementation and Entrepreneurial Intention

The third objective examined the mediating role of entrepreneurial attitude in the relationship between the implementation of entrepreneurship education and entrepreneurial intention. The most integrative finding of this review is that entrepreneurial attitude functions as a central mediating mechanism explaining why entrepreneurship education implementation often yields weak intention outcomes. Across the literature, intention formation is more likely when entrepreneurship education succeeds in fostering positive attitudes toward entrepreneurship (Liñán & Chen, 2009; Nabi et al., 2017).

Interpreting this result, the mediation perspective clarifies why weak direct effects do not imply absence of impact. Intention-based theory explicitly posits that education influences intention indirectly by shaping attitudes and evaluative beliefs (Ajzen, 1991; Krueger et al., 2000; Kuratko, 2005; Weidenkaff et al., 2012). When entrepreneurship education fails to activate this attitudinal pathway, intention outcomes remain limited, even when knowledge gains are evident.

Situated within existing literature, this finding aligns with calls to move beyond direct-effect models toward mechanism-focused explanations (Fayolle & Gailly, 2015; Martin et al., 2013). It also explains inconsistent findings across empirical studies that did not explicitly model attitude as a mediator. In Sub-Saharan Africa, the mediation pathway is particularly fragile because structural constraints weaken attitude formation, thereby suppressing intention (Naudé, 2010; Monitor, 2014).

An important implication is that entrepreneurship education implementation should be evaluated through mediation models rather than simple exposure–outcome relationships reveal. A key limitation is that many studies do not formally test mediation, relying instead on correlational designs. Future research should employ

longitudinal and mediation-focused designs to validate the attitudinal mechanism and examine how ecosystem support moderates this pathway.

5. Conclusions and Recommendations

5.1 Conclusions

This narrative review examined why entrepreneurship education implementation has frequently failed to translate into entrepreneurial intentions, focusing on the mediating role of entrepreneurial attitude in Sub-Saharan Africa over the period 1991–2025. The review concludes that entrepreneurship education implementation has a weak and inconsistent direct influence on entrepreneurial intention, despite its widespread adoption in higher education. In contrast, entrepreneurship education demonstrates a more consistent influence on entrepreneurial attitude, indicating that education primarily shapes evaluative beliefs rather than immediate behavioural readiness. Crucially, entrepreneurial attitude emerges as the central mediating mechanism explaining the persistent intention gap. Where entrepreneurship education implementation fails to foster positive attitudes—particularly in structurally constrained contexts—entrepreneurial intention remains suppressed. These findings suggest that the problem lies not in the existence of entrepreneurship education, but in implementation approaches that inadequately prioritise attitude formation within complex socio-economic environments.

5.2 Recommendations (Socio-Ecological Model–Based)

Guided by the Socio-Ecological Model, the following recommendations are proposed to address the multi-level factors shaping the relationship between entrepreneurship education implementation, entrepreneurial attitude, and entrepreneurial intention.

1. Entrepreneurship education should deliberately target entrepreneurial attitude formation by strengthening learners' perceptions of desirability, feasibility, and self-efficacy. Curricula should incorporate reflective learning, confidence-building activities, and iterative mastery experiences that enable students to reinterpret risk and failure as learning opportunities rather than deterrents.
2. Educators should adopt experiential and relational pedagogies, including mentoring, coaching, peer

learning, and sustained interaction with practising entrepreneurs. Such interpersonal engagement can humanise entrepreneurship, provide role modelling, and reinforce positive entrepreneurial attitudes that are difficult to achieve through lecture-based instruction alone.

3. Higher education institutions should redesign entrepreneurship education implementation to move beyond symbolic curriculum inclusion toward implementation fidelity and pedagogical depth. This includes aligning assessment with experiential outcomes, reducing overreliance on business-plan examinations, and investing in staff capacity to deliver practice-oriented entrepreneurship education that prioritises attitudinal outcomes.
4. Entrepreneurship education should be embedded within supportive entrepreneurial ecosystems, including incubation centres, industry partnerships, seed funding mechanisms, and community-based enterprise platforms. Strengthening ecosystem linkages enhances perceived feasibility and mitigates the negative attitudinal effects of structural constraints prevalent in Sub-Saharan Africa.
5. Policymakers should avoid positioning entrepreneurship education as a standalone solution to graduate unemployment and instead adopt integrated education ecosystem strategies. Policies should synchronise the implementation of entrepreneurship education with access to finance, regulatory support, and youth enterprise programmes to ensure that positive entrepreneurial attitudes formed through education can realistically translate into entrepreneurial intentions and action.
6. Future research should adopt mediation-focused, longitudinal, and context-sensitive designs to examine how entrepreneurial attitudes and intentions evolve over time. Researchers should explicitly integrate socio-ecological variables into entrepreneurship education models to better capture the interaction between individual psychology and structural conditions.

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