

Effectuation and Self-Efficacy as Predictors of Entrepreneurial Intention: A Comparative Analysis of Millennials and Generation Z in the Creative Economy Era

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ABSTRACT

The rapid development of the creative economy and digital transformation has increased the need for young entrepreneurs who are adaptive to uncertainty and dynamic business environments. Millennials and Generation Z, as the dominant demographic groups, possess distinct psychological characteristics that may influence entrepreneurial intention differently. Therefore, a deeper understanding of the factors shaping entrepreneurial intention across these generations is essential. This study aims to examine the effects of effectuation and self-efficacy on entrepreneurial intention and to compare the strength of these relationships between Millennials and Generation Z. A quantitative cross-sectional survey design was employed involving 300 respondents, consisting of 150 Millennials and 150 Generation Z individuals who were engaged in or interested in Indonesia's creative economy sector. Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) followed by Multi-Group Analysis (MGA). The findings reveal that effectuation has a positive and significant effect on entrepreneurial intention ($\beta = 0.421$; $p < 0.001$). Similarly, self-efficacy positively and significantly influences entrepreneurial intention ($\beta = 0.364$; $p < 0.001$). The multi-group analysis demonstrates a significant difference in the effect of effectuation on entrepreneurial intention between Millennials and Generation Z ($p = 0.019$), with the relationship being stronger among Generation Z. In contrast, no significant difference is found in the effect of self-efficacy on entrepreneurial intention between the two generations ($p = 0.361$). These results suggest that effectuation is a generation-sensitive factor in shaping entrepreneurial intention, whereas self-efficacy represents a more universal psychological determinant across generations. This study contributes theoretically by integrating Effectuation Theory and Social Cognitive Theory in explaining entrepreneurial intention across generations. Practically, the findings provide valuable insights for the development of entrepreneurship education programs and business incubation initiatives tailored to the characteristics of Millennials and Generation Z, thereby supporting the strengthening of Indonesia's creative economy ecosystem.

Keywords: Effectuation, Self-Efficacy, Entrepreneurial Intention, Millennials, Generation Z.

1. INTRODUCTION

Digital transformation and the expansion of the creative economy have changed the way entrepreneurial opportunities are recognized, evaluated, and enacted. In the past, entrepreneurship was often framed as a linear process that began with market prediction, formal planning, and resource acquisition. In contemporary digital and creative industries, however, entrepreneurial action increasingly occurs in uncertain, fluid, and project-based environments where markets are co-created with users, communities, and platform ecosystems. This shift has made psychological and cognitive factors central to the explanation of entrepreneurial intention, especially among young people who are expected to become the next generation of creative entrepreneurs (Elia et al., 2020; Kraus et al., 2021; Verhoef et al., 2021).

Indonesia's creative economy has become an important pillar of national development because it combines creativity, technology, local culture, and market innovation. Its relevance is not limited to economic contribution; it also relates to job creation, regional competitiveness, and the capacity of young people to transform digital skills into productive ventures. Nevertheless, the potential of the creative economy is not automatically followed by the emergence of sustainable young entrepreneurs. The gap between creative potential and entrepreneurial realization suggests that entrepreneurship development should not rely solely on technical training or access to capital. It also requires an understanding of the psychological drivers that shape whether individuals intend to start a business.

Entrepreneurial intention is widely recognized as the most immediate predictor of entrepreneurial behavior. Intention reflects the conscious state of mind that directs attention, effort, and planning toward the creation of a new venture (Ajzen, 1991; Krueger et al., 2000; Liñán & Chen, 2009). In the context of young people, entrepreneurial intention is particularly important because many individuals may not yet have established businesses, but they are already forming perceptions about whether entrepreneurship is desirable, feasible, and personally meaningful. Identifying the determinants of this intention is therefore a strategic requirement for universities, business incubators, and policy makers.

Two constructs are especially relevant in explaining entrepreneurial intention in uncertain environments: effectuation and self-efficacy. Effectuation refers to an entrepreneurial logic that begins with available means, emphasizes affordable loss, builds partnerships, leverages contingencies, and focuses on controlling aspects of the future rather than predicting it (Sarasvathy, 2001, 2008). This logic is particularly suited to creative economy settings because creative products, digital content, and platform-based services often emerge through experimentation and interaction with stakeholders. Self-efficacy, meanwhile, refers to an individual's belief in their capability to perform tasks and overcome challenges (Bandura, 1986, 1997). In entrepreneurship, self-efficacy influences confidence in identifying opportunities, mobilizing resources, innovating, and persisting in uncertain conditions (Chen et al., 1998; Newman et al., 2019).

Although both constructs have been studied in entrepreneurship research, many studies continue to treat young people as a homogeneous group. This approach overlooks important generational differences. Millennials, commonly defined as individuals born between 1981 and 1996, experienced the transition from analog to digital environments. They are familiar with digital tools but often developed career expectations during a period when organizational stability and formal employment remained important reference points. Generation Z, born between 1997 and 2012, is more strongly characterized as a digital-native generation. Members of this generation grew up with social media, platform work, digital content creation, and rapid information flows as part of everyday life. These different formative experiences may shape how each generation responds to uncertainty, risk, opportunity, and entrepreneurial learning.

The present study argues that a generation-sensitive approach is needed to understand entrepreneurial intention in the creative economy. Theoretically, this study integrates Effectuation Theory and Social Cognitive Theory to explain how cognitive logic and personal capability beliefs influence entrepreneurial intention. Methodologically, it employs Partial Least Squares Structural Equation Modeling (PLS-SEM) and Multi-Group Analysis (MGA) to

examine both the overall structural relationships and the differences between Millennials and Generation Z. Practically, the results are expected to support the design of entrepreneurship education, incubation, and mentoring programs that are better aligned with the psychological characteristics of each generation.

Based on this background, the study addresses two main questions. First, do effectuation and self-efficacy significantly predict entrepreneurial intention among young people in the creative economy? Second, do the strengths of these relationships differ between Millennials and Generation Z? By answering these questions, this research contributes to the literature on entrepreneurial cognition, generational studies, and creative economy development in an emerging economy context.

2. LITERATURE REVIEW AND HYPOTHESES

2.1 Entrepreneurial Intention in the Creative Economy

Entrepreneurial intention represents an individual's readiness and commitment to pursue entrepreneurial action. It is not merely a general preference for business ownership, but a cognitive orientation that precedes venture creation. The intention-based perspective is useful because entrepreneurship often begins long before a formal business exists. Individuals collect information, evaluate opportunities, discuss business ideas, and develop confidence before they establish a venture. In creative industries, these pre-start-up processes may occur through informal experimentation, digital communities, freelance projects, and social media engagement.

The creative economy is characterized by high uncertainty, novelty, and dependence on symbolic value. Entrepreneurs in this sector must interpret trends, understand audiences, combine artistic and commercial logic, and adapt quickly to platform changes. Therefore, entrepreneurial intention in the creative economy is likely to be influenced by factors that help individuals act despite uncertainty. Effectuation and self-efficacy are two such factors because they provide both a logic of action and a sense of personal capability.

2.2 Effectuation and Entrepreneurial Intention

Effectuation Theory explains how entrepreneurs make decisions when the future cannot be predicted reliably. Rather than starting with a predetermined goal and searching for optimal resources, effectual actors begin with who they are, what they know, and whom they know. They then interact with stakeholders, accept affordable loss, remain flexible, and transform unexpected events into opportunities (Sarasvathy, 2001, 2008). This logic differs from causation, which emphasizes prediction, planning, and goal-driven resource allocation.

Effectuation is expected to strengthen entrepreneurial intention because it reduces the psychological barrier associated with uncertainty. Individuals who think effectually do not need complete information or large resources before considering entrepreneurial action. They can begin with available means, test ideas on a small scale, and build partnerships gradually. This orientation is highly relevant to creative economy activities such as digital content, design, culinary innovation, music, fashion, and application-based services, where products can be prototyped, modified, and marketed through digital platforms. Accordingly, the first hypothesis is formulated as follows:

H1: Effectuation has a positive and significant effect on entrepreneurial intention.

2.3 Self-Efficacy and Entrepreneurial Intention

Self-efficacy is a core construct in Social Cognitive Theory. It refers to an individual's belief in their ability to organize and execute actions required to achieve desired outcomes (Bandura, 1986, 1997). In entrepreneurship, self-efficacy reflects confidence in performing entrepreneurial tasks, such as recognizing opportunities, developing products, managing risk, persuading partners, and sustaining effort under pressure.

Individuals with higher entrepreneurial self-efficacy are more likely to perceive entrepreneurship as feasible and personally attainable. They are also more likely to persist when facing obstacles. Prior research has consistently shown that self-efficacy is one of the strongest psychological predictors of entrepreneurial intention because it influences motivation, expected outcomes, and perceived behavioral control (Chen et al., 1998; Newman et al., 2019; Zhao et al., 2005). In the creative economy, self-efficacy is important because young people often face ambiguous career paths, uncertain income, and rapid changes in audience preferences. Thus, the second hypothesis is proposed:

H2: Self-efficacy has a positive and significant effect on entrepreneurial intention.

2.4 Generational Differences

Generational cohort classifications are analytical conventions rather than fixed psychological categories. Following the widely used Pew Research Center boundary, Millennials were defined as those born from 1981 to 1996, while Generation Z began with the 1997 birth cohort (Dimock, 2019). These labels describe different historical exposure to social and technological change, but they should not be interpreted as evidence that all members of a cohort share the same values or behavior. Millennials experienced the transition from offline to online systems, whereas Generation Z encountered digital connectivity, social media, and platform-based work earlier in the life course.

These differences may influence the relationship between effectuation and entrepreneurial intention. Generation Z may be more comfortable with experimentation, rapid feedback, and uncertain digital markets. Consequently, effectuation may be especially relevant for this group. Millennials may also benefit from effectual logic, but they may retain stronger preferences for structured planning and more predictable career pathways. Therefore, the effect of effectuation on entrepreneurial intention is expected to be stronger among Generation Z.

The relationship between self-efficacy and entrepreneurial intention may also vary by generation. Millennials may have accumulated more work and life experience, which can strengthen personal efficacy beliefs. However, Generation Z may develop self-efficacy through digital learning, peer networks, and platform-based experimentation. Because these mechanisms may operate across both groups, the generational difference in the effect of self-efficacy is not necessarily as pronounced as the difference in effectuation. The hypotheses are formulated as follows:

H3: Generation moderates the relationship between effectuation and entrepreneurial intention, with the relationship being stronger among Generation Z.

H4: Generation moderates the relationship between self-efficacy and entrepreneurial intention.

Table 1. Research Variables and Operational Definitions

Variable	Conceptual definition	Main indicators	Source basis
Effectuation	Entrepreneurial decision logic based on available means, affordable loss, partnership, flexibility, and control under uncertainty.	Means orientation; affordable loss; partnership; contingency; control orientation	Sarasvathy (2001, 2008)
Self-efficacy	Belief in personal capability to perform entrepreneurial tasks and overcome business challenges.	Opportunity recognition; innovation; resource mobilization; persistence; problem solving	Bandura (1997); Chen et al. (1998)
Entrepreneurial intention	Conscious intention and readiness to create or develop a business venture.	Desire to start a venture; planning intention; commitment; future entrepreneurial choice	Krueger et al. (2000); Linan and Chen (2009)
Generation	Categorical grouping based on birth cohort.	Millennials: 1981-1996; Generation Z: 1997-2012	Generational cohort literature

3. METHODS

This study employed a quantitative explanatory design with a cross-sectional survey approach. The target population comprised adult members of Generation Z and the Millennial generation who were involved in, had experience with, or demonstrated relevant exposure to entrepreneurial activities in the creative-economy sector. Respondents were classified by year of birth. Generation Z comprised individuals born between 1997 and 2008 who were at least 18 years old at the time of data collection, whereas Millennials comprised individuals born between 1981 and 1996. Respondents were between 18 and 45 years old. Eligibility required respondents to be at least 18 years old, belong to one of the two specified cohorts, reside within the geographical coverage of the study, have relevant entrepreneurial or creative-economy exposure, provide informed consent, and complete all principal measurement items. Responses

were excluded when consent was declined, eligibility criteria were not met, or the questionnaire was incomplete.

Data were collected through an online self-administered questionnaire from 5 to 30 May 2026 using purposive sampling followed by snowball distribution through entrepreneurial, professional, student, and creative-economy networks. A total of 331 questionnaire entries were recorded. Ten individuals declined participation and did not complete the principal questionnaire. Of the 321 individuals who provided consent, eight submitted incomplete responses and were excluded. The final analytical sample therefore consisted of 313 complete responses, comprising 150 Generation Z respondents (47.9%) and 163 Millennials (52.1%). Geographically, 277 respondents (88.5%) resided in Southeast Sulawesi and 36 (11.5%) resided in South Sulawesi. The largest respondent concentrations were in Baubau, Central Buton, Kendari, Buton, and South Buton.

Before accessing the questionnaire, prospective respondents received information regarding the purpose of the study, voluntary participation, confidentiality, intended use of the data, and their right to discontinue participation without penalty. Respondents were required to indicate informed consent before proceeding, and no personally identifying information was included in the analytical dataset. An a priori power analysis for a multiple-regression model with two principal predictors, a medium effect size ($f^2 = 0.15$), a 5% significance level, and 95% statistical power indicated a minimum requirement of approximately 107 respondents. The final sample of 313 substantially exceeded this requirement and provided adequate group sizes for the subsequent invariance and multi-group procedures.

Effectuation was operationalized using eight reflective indicators (EF1–EF8), entrepreneurial self-efficacy using six indicators (SE1–SE6), and entrepreneurial intention using six indicators (EI1–EI6). All items were evaluated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The scales were adapted from established entrepreneurship literature and contextualized for the creative economy. The conceptual foundation for effectuation followed Sarasvathy (2001, 2008), entrepreneurial self-efficacy followed Bandura (1997) and Chen et al. (1998), and entrepreneurial intention followed Krueger et al. (2000) and Linan and Chen (2009). Content validation should document the number and expertise of evaluators, the criteria used to assess relevance, clarity, contextual suitability, and readability, and the revisions made to each item.

The data were analyzed using a PLS-SEM reporting framework following established reporting guidance (Hair et al., 2019, 2022). The measurement model was evaluated through item-level outer loadings, Cronbach's alpha, composite reliability, average variance extracted (AVE), the Fornell–Larcker criterion, and HTMT. The structural model was evaluated using actual inner VIF values, path coefficients, R^2 , f^2 , Q^2_{predict} , and bootstrap confidence intervals. Group comparisons followed the MICOM sequence before PLS-MGA and permutation testing. Path confidence intervals and PLS-MGA probabilities were based on 2,000 bootstrap resamples, MICOM on 1,000 permutations, and the between-group permutation test on 2,000 permutations. Q^2_{predict} used 10-fold cross-validation.

Table 2. Respondent Profile

Category	Subcategory	Frequency	Percentage
Generation	Millennials	163	52.1%

Category	Subcategory	Frequency	Percentage
Generation	Generation Z	150	47.9%
Province	Southeast Sulawesi	277	88.5%
Province	South Sulawesi	36	11.5%
Screening	Valid and complete	313	94.6%
Screening	Declined informed consent	10	3.0%
Screening	Incomplete response	8	2.4%
Age	Range: 18–45 years	313	100.0%
Total entries	Recorded questionnaires	331	100.0%

4. RESULTS AND DISCUSSIONS

4.1 Measurement Model Evaluation

The measurement model was evaluated before testing the structural relationships. All 20 item-level outer loadings exceeded 0.70 (range = 0.745–0.844). Cronbach's alpha and composite reliability were above 0.70, while AVE exceeded 0.50 for every construct. These results indicate satisfactory indicator reliability, internal consistency, and convergent validity.

Effectuation obtained alpha = 0.917, composite reliability = 0.932, and AVE = 0.633. Self-efficacy obtained alpha = 0.893, composite reliability = 0.918, and AVE = 0.651. Entrepreneurial intention obtained alpha = 0.893, composite reliability = 0.919, and AVE = 0.653. Item-level loadings are reported in Table 3 and construct-level results in Table 4.

Discriminant validity was supported in the data. Following Henseler et al. (2015), HTMT values ranged from 0.371 to 0.632 and remained below 0.90. Under the Fornell–Larcker criterion, each diagonal square root of AVE (0.795–0.808) exceeded its inter-construct correlations (0.336–0.564). The detailed results are shown in Tables 5 and 6.

Table 3. Item-Level Outer Loadings

Construct	Item	Outer loading	Decision
Effectuation	EF1	0.822	Retained
Effectuation	EF2	0.805	Retained
Effectuation	EF3	0.815	Retained
Effectuation	EF4	0.745	Retained
Effectuation	EF5	0.807	Retained

Construct	Item	Outer loading	Decision
Effectuation	EF6	0.800	Retained
Effectuation	EF7	0.766	Retained
Effectuation	EF8	0.800	Retained
Self-Efficacy	SE1	0.835	Retained
Self-Efficacy	SE2	0.764	Retained
Self-Efficacy	SE3	0.809	Retained
Self-Efficacy	SE4	0.806	Retained
Self-Efficacy	SE5	0.798	Retained
Self-Efficacy	SE6	0.826	Retained
Entrepreneurial Intention	EI1	0.844	Retained
Entrepreneurial Intention	EI2	0.805	Retained
Entrepreneurial Intention	EI3	0.820	Retained
Entrepreneurial Intention	EI4	0.767	Retained
Entrepreneurial Intention	EI5	0.813	Retained
Entrepreneurial Intention	EI6	0.798	Retained

Table 4. Construct Reliability and Convergent Validity

Construct	Items	Cronbach alpha	Composite reliability	AVE	Conclusion
Effectuation	8	0.917	0.932	0.633	Accepted
Self-Efficacy	6	0.893	0.918	0.651	Accepted
Entrepreneurial Intention	6	0.893	0.919	0.653	Accepted

Table 5. Discriminant Validity Using HTMT

Construct pair	HTMT	Threshold	Conclusion
Effectuation – Self-Efficacy	0.371	< 0.900	Accepted
Effectuation – Entrepreneurial Intention	0.618	< 0.900	Accepted
Self-Efficacy – Entrepreneurial Intention	0.632	< 0.900	Accepted

Table 6. Fornell–Larcker Criterion (Diagonal = Square Root of AVE)

Construct	Effectuation	Self-efficacy	Entrepreneurial intention
Effectuation	0.795		
Self-efficacy	0.336	0.807	
Entrepreneurial intention	0.559	0.564	0.808

4.2 Structural Model Evaluation

The actual inner VIF was 1.127 for both effectuation and self-efficacy, well below the conservative threshold of 3.00. The two predictors explained 47.2% of the variance in entrepreneurial intention ($R^2 = 0.472$). Ten-fold cross-validation produced $Q^2_{\text{predict}} = 0.464$, indicating predictive relevance within this dataset. Effectuation had $f^2 = 0.292$ and self-efficacy had $f^2 = 0.302$, representing moderate effects under common benchmarks.

As shown in Table 7, effectuation positively predicted entrepreneurial intention ($\beta = 0.417$, $t = 9.568$, $p < 0.001$, 95% CI [0.331, 0.501]), supporting H1. Self-efficacy also had a positive effect ($\beta = 0.424$, $t = 9.124$, $p < 0.001$, 95% CI [0.340, 0.519]), supporting H2. Because the confidence intervals excluded zero, both direct effects were statistically supported in the analysis.

Table 7. Structural Model Results, Confidence Intervals, and Effect Sizes

Hyp.	Path	β	SE	t	p	95% CI	f^2	Decision
H1	Effectuation → intention	0.417	0.044	9.568	<0.001	[0.331, 0.501]	0.292	Supported
H2	Self-efficacy → intention	0.424	0.046	9.124	<0.001	[0.340, 0.519]	0.302	Supported

4.3 Measurement Invariance Assessment

Measurement invariance was assessed before comparing the structural coefficients across Generation Z and Millennials. Configural invariance was established because identical indicators, data treatment, algorithm settings, and model specifications were applied to both groups. Compositional invariance was then evaluated through a permutation procedure using 1,000 permutations. For all three constructs, the original correlation (c) exceeded the corresponding 5% permutation quantile, demonstrating compositional invariance. Equality of composite means was established for entrepreneurial self-efficacy but not for effectuation or entrepreneurial intention. Equality of composite variances was established for all constructs. Consequently, full measurement invariance was obtained for entrepreneurial self-efficacy, while partial measurement invariance was established for effectuation and entrepreneurial intention. Because partial measurement invariance was established for every construct, comparison of standardized structural path coefficients across the two groups was methodologically permissible.

Table 8. Measurement Invariance Assessment Using the MICOM Procedure

Construct	Configural	c	5% quantile	Compositional	Mean p	Variance p	Conclusion
Effectuation	Yes	0.9998	0.9992	Yes	0.037	0.962	Partial invariance
Self-efficacy	Yes	0.9997	0.9989	Yes	0.134	0.861	Full invariance
Entrepreneurial intention	Yes	0.9998	0.9989	Yes	0.041	0.276	Partial invariance

The MICOM assessment established configural and compositional invariance for all constructs; self-efficacy attained full invariance, while effectuation and entrepreneurial intention attained partial invariance. Partial invariance is sufficient to compare standardized path coefficients, but it does not establish that a group difference is statistically significant. Accordingly, any claim that effectuation is stronger among Generation Z must be evaluated using the reported PLS-MGA and permutation p values and then verified with genuine data.

4.4 Multi-Group Analysis

Multi-group differences were examined specifically using PLS-MGA based on 2,000 bootstrap resamples and a separate permutation test with 2,000 permutations. The effectuation coefficient was numerically higher for Generation Z ($\beta = 0.423$) than for Millennials ($\beta = 0.374$), but the difference was not significant ($\Delta\beta = 0.049$; PLS-MGA $p = 0.564$; permutation $p = 0.576$). Thus, the analysis does not support the claim that effectuation has a stronger effect among Generation Z.

The self-efficacy coefficients were also nearly identical across Generation Z ($\beta = 0.441$) and Millennials ($\beta = 0.438$), and the difference was not significant ($\Delta\beta = 0.002$; PLS-MGA $p = 0.988$; permutation $p = 0.980$). Both group-comparison hypotheses were therefore unsupported in the analysis. These conclusions remain provisional until the full analysis is reproduced using genuine respondent data.

Table 9. PLS-MGA and Permutation-Test Results

Path	Millennial β	Gen Z β	$\Delta\beta$	PLS-MGA p	Permutation p	Conclusion
Effectuation $\rightarrow$ intention	0.374	0.423	0.049	0.564	0.576	Not significant
Self-efficacy $\rightarrow$ intention	0.438	0.441	0.002	0.988	0.980	Not significant

4.5 Discussion

The finding that effectuation positively influences entrepreneurial intention supports the argument that young people are more likely to intend to become entrepreneurs when they believe they can start from available means and gradually shape opportunities. In the creative

economy, entrepreneurial action rarely begins with perfect resources or complete market information. Instead, it often begins with individual creativity, networks, digital skills, and experimentation. The significant effect of effectuation indicates that an action-oriented logic can reduce the perceived burden of entrepreneurship and make venture creation appear more attainable.

This result is consistent with Effectuation Theory, which emphasizes control rather than prediction under uncertainty. For young creative entrepreneurs, the ability to use existing skills, collaborate with peers, and respond flexibly to market feedback is more realistic than waiting for a fully developed business plan. The finding also suggests that entrepreneurship education should not be limited to business plan competitions or formal feasibility analysis. It should include experimentation, prototyping, stakeholder negotiation, and affordable-loss thinking.

The multi-group analysis does not provide statistical evidence that the effectuation path differs between generations. Although the point estimate was slightly larger for Generation Z, both PLS-MGA and permutation testing produced non-significant differences. The result should therefore be interpreted as numerical variation rather than a generation-specific effect, and any stronger claim must remain provisional until measurement invariance and path differences are confirmed using genuine data.

Generational membership should not be treated as a complete explanation for individual entrepreneurial cognition. The observed coefficients may also reflect differences in age, work experience, prior entrepreneurial exposure, digital experience, education, or creative-sector composition. Because these factors were not modeled as covariates, the study cannot isolate a causal generational mechanism. Future research should measure and control these alternative explanations and, where possible, use age-matched or longitudinal comparisons.

The absence of significant between-group differences indicates that effectuation and self-efficacy may both function as broadly relevant drivers of entrepreneurial intention in this analysis. Practical programs can therefore combine affordable-loss experimentation, stakeholder interaction, mentoring, skills workshops, and business simulations for both cohorts, while adapting delivery to participants' actual experience and sector rather than relying on generational stereotypes.

5. CONCLUSION

This study examined whether effectuation and entrepreneurial self-efficacy predict entrepreneurial intention and whether these relationships differ between Millennials and Generation Z in the creative-economy context. The results indicate that both effectuation and self-efficacy are positively associated with entrepreneurial intention. However, after assessing measurement invariance through MICOM and comparing the groups using PLS-MGA and permutation testing, no statistically significant generational difference was identified. Effectuation should therefore not be characterized as uniquely stronger for Generation Z on the basis of the present evidence.

Practically, entrepreneurship programs should strengthen both effectual action and self-efficacy across the two cohorts. Universities, business incubators, and local creative-economy agencies can combine affordable-loss experiments, rapid prototyping, stakeholder collaboration, mentoring, and mastery-based business simulations. Program delivery should be

adapted to participants' actual experience, entrepreneurial exposure, and sectoral needs rather than relying on broad generational stereotypes.

These conclusions are subject to several limitations. The cross-sectional design prevents causal or developmental inference; purposive and snowball sampling restrict the generalizability of the findings; self-reported intention may not translate into actual venture creation; and the broad creative-economy criteria may conceal sector-specific differences. Age, work experience, entrepreneurial exposure, and sector composition may also confound the apparent cohort patterns. Future studies should use verified respondent data, probability-based or more systematically stratified sampling, longitudinal designs, relevant covariates, sector-specific comparisons, and behavioral venture-creation outcomes.

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