









“Resilience or social support? Identifying drivers of entrepreneurial intentions among former female inmates in post-release entrepreneurship programs”

AUTHORS	Indri Murniawaty 
	 R
	Kardoyo 
	 R
	Rusdarti 
 R	
Hasan Mukhibad 	
 R	


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Hasan Mukhibad, 2026

Indri Murniawaty, Doctoral Student,
Doctoral Study Program in Economic
Education, Faculty of Economics and
Business, Universitas Negeri Semarang
[Semarang State University], Indonesia.
(Corresponding author)

Kardoyo, Ph.D., Professor, Department
of Economic Education, Faculty of
Economics and Business, Universitas
Negeri Semarang [Semarang State
University], Indonesia.

Rusdarti, Ph.D., Professor, Department
of Economic Education, Faculty of
Economics and Business, Universitas
Negeri Semarang [Semarang State
University], Indonesia.

Hasan Mukhibad, Ph.D., Associate
Professor, Department of Accounting,
Faculty of Economics and Business,
Universitas Negeri Semarang
[Semarang State University], Indonesia.



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Indri Murniawaty (Indonesia), Kardoyo (Indonesia), Rusdarti (Indonesia),
Hasan Mukhibad (Indonesia)

RESILIENCE OR SOCIAL SUPPORT? IDENTIFYING DRIVERS OF ENTREPRENEURIAL INTENTIONS AMONG FORMER FEMALE INMATES IN POST-RELEASE ENTREPRENEURSHIP PROGRAMS

Abstract

Entrepreneurship is a strategic rehabilitative approach within correctional institutions, offering incarcerated individuals viable opportunities for economic independence and social reintegration. The high recidivism rates and severe social stigma faced by women upon release underscore the relevance of identifying effective psychological and social drivers to maximize the success of these initiatives. The study aims to examine the impact of prison entrepreneurship programs (PEP) on the entrepreneurial intentions of female inmates following their release, specifically exploring whether the moderating influences of personal resilience or external social support are the predictors in this process. A quantitative research design was adopted, utilizing primary data collected through a structured survey. The population comprises 225 female inmates who are currently incarcerated but have actively participated in vocational and entrepreneurship-oriented training for a minimum of three months in four selected correctional facilities. Data processing and model estimation were performed using partial least squares structural equation modelling (PLS-SEM). The findings demonstrate that participation in the PEP has a substantial and positive effect on entrepreneurial intention ($\beta = 0.345, p < 0.001$), with the overall model explaining 62.2% of the variance in entrepreneurial intention ($R^2 = 0.622$). The moderating analysis reveals that resilience does not have a statistically significant moderating effect on the relationship between PEP participation and entrepreneurial intention ($p > 0.05$). In contrast, social support emerges as a significant positive moderator, strengthening the effect of PEP participation on entrepreneurial intention ($\beta = 0.265, p < 0.001$). The study concludes that PEPs are highly effective, but their success hinges more on the assurance of post-release social support networks than on the inmates' individual psychological resilience.

Keywords

entrepreneurship, incarceration, rehabilitation, social support, resilience, entrepreneurial intention, PEP

JEL Classification

L26, J16, J24, K42

INTRODUCTION

Over the past two decades, Indonesia has experienced a substantial rise in its female prison population. Since 2000, the number of incarcerated women has risen more than sevenfold, far outpacing the growth rate of male inmates. This trend positions Indonesia as the country with the second-fastest rise in female incarceration worldwide, following only the United States. According to recent data Directorate of Information Technology and Cooperation (2024) there are 13,140 female inmates out of a total of 272,730 incarcerated individuals nationwide, with prison facilities exceeding capacity by 187.3%. This overcrowding not only reflects rising crime rates but also highlights complex socioeconomic dynamics and growing structural inequality.

The pathways leading women to incarceration are often rooted in adverse socioeconomic conditions, including poverty, unemployment, and challenging caregiving responsibilities. These pressures often compel women to make desperate decisions to secure basic needs. Crucially, the challenges intensify significantly after release. Formerly incarcerated women routinely face profound structural and psychological barriers, such as pervasive social stigma and limited access to conventional employment and economic resources. These persistent obstacles substantially increase the risk of recidivism, perpetuating a difficult cycle of marginalization.

In response, correctional institutions have recognized their legal and ethical responsibility to provide effective rehabilitative programming to facilitate successful social reintegration. A core strategy is to develop economic self-sufficiency through vocational and entrepreneurial training. In Indonesia, the *Bimbingan Kerja* (BIMKER) or Vocational Guidance program, which includes entrepreneurial training, serves as the primary mechanism for equipping inmates with technical skills and fostering an entrepreneurial mindset. For female inmates, these prison entrepreneurship programs (PEPs) offer hands-on experience and critical preparation, as self-employment often serves as the most viable alternative to conventional jobs, effectively bypassing the severe stigma associated with a criminal background.

It is vital to identify the most effective mechanism for maximizing rehabilitation outcomes among incarcerated women. Specifically, the problem is to determine whether the necessary psychological and economic drive is primarily fueled by the inmate's internal capacity to withstand adversity, which is theoretically enhanced by the training or external social support networks, emotional validation, and reduced stigma provided by family and community upon release. Establishing which of these factors acts as the strongest driver is essential for reforming correctional policies and designing more targeted rehabilitation initiatives that deliver sustainable economic reintegration.

1. LITERATURE REVIEW AND HYPOTHESES

The successful development of new ventures and post-incarceration reintegration is often rooted in a fundamental psychological construct known as entrepreneurial intention. This intention is widely acknowledged as the most reliable predictor of entrepreneurial behavior (Cai et al., 2021; Li et al., 2023) and is even considered a prerequisite for entrepreneurial action itself (Liñán, 2004; Krueger et al., 2000). The conceptualization of entrepreneurial intention focuses on an individual's deliberate, conscious plan to initiate entrepreneurial activities (Liñán, 2004).

Furthermore, entrepreneurial intention is understood as a cognitive state or mindset that drives entrepreneurial behavior among both aspiring and practicing entrepreneurs (Badghish et al., 2022). In a broader context, it reflects the desire to establish ventures that balance social, economic, and environmental objectives, introducing a sustainability perspective (Tehseen & Haider, 2021). Thus, entrepreneurial intention embodies not only the motiva-

tion to act but also the mental readiness and perseverance necessary to confront entrepreneurial challenges (Krueger et al., 2000). Studies on women's entrepreneurship have become increasingly relevant when viewed from a gender perspective. As demonstrated by García-Palma et al. (2016), women tend to emphasize experiential learning through everyday practices and place greater focus on core competencies such as business skills, market understanding, and long-term vision. Within the scope of this study, entrepreneurial intention serves as an indicator of how strongly female inmates plan to engage in entrepreneurial endeavors after release, acting as a crucial motivational resource that facilitates both economic reintegration and social adjustment through entrepreneurship (Cai et al., 2021; Li et al., 2023).

Prison entrepreneurship programs (PEP) represent a transformative educational approach that equips inmates with the entrepreneurial skills and mindsets necessary for social and economic reintegration. Within this framework, entrepreneurship functions as a lifelong learning process, in which the development of entrepreneurial capabilities serves to achieve post-release employability

and self-sufficiency (Baggen et al., 2021; de Sousa et al., 2024; Nabi et al., 2017). The effectiveness of such programs is grounded in a comprehensive pedagogical model that integrates technical learning with cognitive and emotional development.

The impact of entrepreneurship education, including in prison settings, depends heavily on the alignment between learning approaches, instructional objectives, and their effects on participants' cognitive, affective, and behavioral dimensions (Nabi et al., 2017). Successful entrepreneurship training is believed to require the incorporation of cognitive, affective, and behavioral components (Garavan & O'Connell, 1994), while experiential and project-based learning, combined with reflective practices, enhance the applicability of learning to real-world contexts (Pittaway & Cope, 2007). The success of PEP is, therefore, reflected not only in participants' improved entrepreneurial competencies but also in their ability to foster sustainable entrepreneurial orientations and intentions (Fayolle & Gailly, 2015). Consistent evaluation of entrepreneurial attitudes, knowledge, and outcomes is essential for determining the long-term influence of such initiatives (Martin et al., 2013). Ultimately, the value of PEP extends beyond technical skill enhancement; it helps shape entrepreneurial identity and supports inmates' reintegration into society, offering an alternative path to economic stability and empowerment for individuals facing social stigma and employment barriers (Martin et al., 2013; de Sousa et al., 2024; Baggen et al., 2021).

Resilience has long been understood as the ability of individuals or systems to absorb shocks, adapt, and maintain functionality under stress or change (Longstaff et al., 2010). It involves dynamic adaptive processes that allow individuals to sustain positive psychological outcomes despite adversity (Rutter, 2006; Norris et al., 2007). Resilience is viewed as the capacity to manage stress effectively (Windle, 2011) or as a personal characteristic that enables adjustment in difficult circumstances (Hu et al., 2015). Resilient individuals can recover from setbacks, learn from failure, and continue pursuing their goals with mental strength and flexibility (Steinbrink & Ströhle, 2023). Resilience has been shown to be more than merely an individual's capacity to cope effectively with adversity (Hedner et al., 2011).

In entrepreneurship, resilience is a vital competency that helps individuals navigate uncertainty, setbacks, and the inherent risks of business creation (Lee & Wang, 2017). Entrepreneurial resilience refers to the adaptive process through which entrepreneurs maintain focus and business continuity during crises (Ayala & Manzano, 2014; Rezaei-Moghaddam et al., 2021). It is conceptualized as the capability to anticipate and respond effectively to challenges, emerging stronger afterwards (Duchek & Shatov, 2016). For women transitioning out of incarceration, resilience is particularly important for overcoming stigma, psychological pressure, and structural barriers to employment, enabling them to remain goal-oriented and positive during reintegration. This mental fortitude may strengthen the effectiveness of entrepreneurship training in fostering sustainable entrepreneurial behavior after release (Ayala & Manzano, 2014; Rezaei-Moghaddam et al., 2021; Duchek & Shatov, 2016; Steinbrink & Ströhle, 2023).

Social support is recognized as both a psychological and social resource that influences individual motivation and behavioral outcomes, including entrepreneurship. It is defined as the exchange of tangible or intangible resources intended to enhance the recipient's well-being (Shumaker & Brownell, 1984). This support can take emotional or instrumental forms, ranging from encouragement by family and peers to guidance in managing challenges (Jolly et al., 2021). From a psychological standpoint, social support enables individuals to mobilize internal resources, regulate emotions, and maintain self-confidence and identity (Gubbins et al., 2020).

Within the entrepreneurial domain, social support shapes confidence, decision-making, and perseverance in uncertain conditions. It encompasses one's perception of how reference groups, such as family or close friends, view entrepreneurship (Ozaralli & Rivenburgh, 2016). Positive reinforcement from these networks enhances entrepreneurial intention and facilitates its translation into real action, often extending to access to capital, recognition, and social endorsement that sustain entrepreneurial engagement (Hossain et al., 2021). For formerly incarcerated women, social support plays a crucial role in reinforcing the outcomes of entrepreneurship training. Practical assistance and encouragement from family, peers, or community networks provide emotional stability and tangible resources for manag-

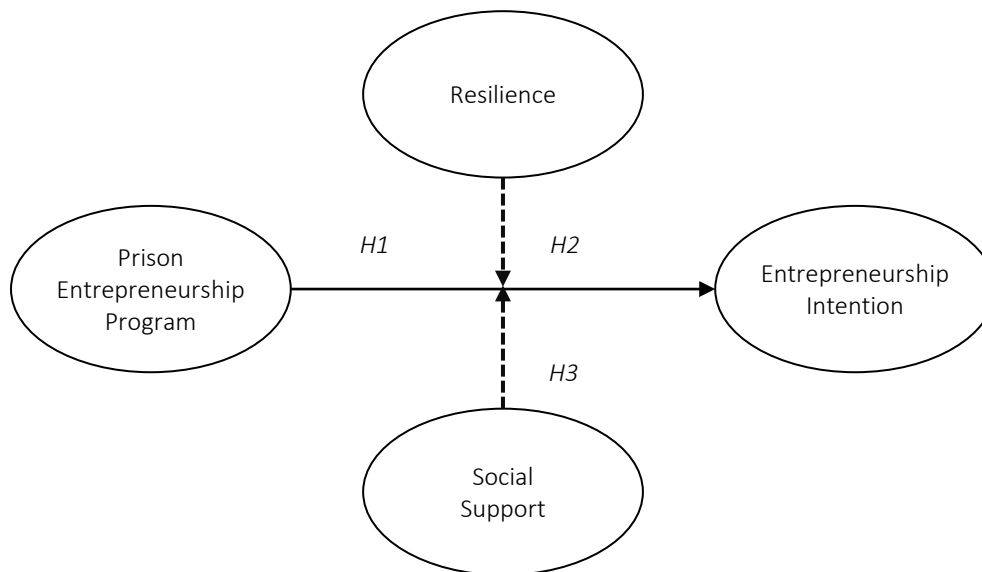


Figure 1. Research framework

ing post-release uncertainty (Gubbins et al., 2020; Hossain et al., 2021). This support enhances self-efficacy and persistence in pursuing business goals (Ozaralli & Rivenburgh, 2016; Jolly et al., 2021). Therefore, social support is expected to function as a moderating variable that amplifies the relationship between participation in entrepreneurship programs and entrepreneurial intention after release.

While the literature consistently supports the central role of PEP in enhancing entrepreneurial intention and acknowledges the crucial roles of resilience and social support in navigating post-release challenges, empirical studies that explicitly compare the moderating strength of internal resources (resilience) against external resources (social support) within the context of female inmates remain limited. Greater attention is needed to understand the dynamic interplay between program development, individual fortitude, and societal backing in maximizing entrepreneurial intention as a bridge to reintegration.

Therefore, the purpose of this study is to analyze the direct impact of prison entrepreneurship programs on the entrepreneurial intentions of female inmates and to compare the moderating effect of individual resilience against external social support on this relationship. Based on the literature review, the following hypotheses (Figure 1) are proposed:

H1: Participation in the prison entrepreneurship program (PEP) positively influences entrepreneurial intention after release.

H2: Resilience moderates the relationship between participation in entrepreneurship programs (PEP) and post-release entrepreneurial intention.

H3: Social support moderates the relationship between entrepreneurship programs (PEP) and post-release entrepreneurial intention.

2. METHODOLOGY

This study employed a quantitative, cross-sectional design to analyze the structural relationship between participation in prison entrepreneurship programs (PEP) and the entrepreneurial intentions of female inmates post-release. A deductive approach was used to test the proposed hypotheses, focusing on the moderating roles of resilience and social support. The research was conducted in selected Indonesian correctional institutions that provide vocational training programs (*Bimbingan Kerja*), which include entrepreneurship-related activities. The overall study procedure commenced after obtaining ethical clearance from the Institutional Review Board (IRB) of Universitas Negeri Semarang and official authorization from the correctional authorities. Data collection oc-

Table 1. Demographic characteristics of respondents (N = 225)

Characteristic	Category	Frequency (n)	Percentage (%)
Age	18–25 years	27	11.6%
	26–35 years	176	78.2%
	> 35 years	23	10.2%
Education	Secondary School or lower	106	44.1%
	University/Higher Education	109	52.8%

curred over a year, starting from December 2024. Data analysis was performed using partial least squares structural equation modeling (PLS-SEM).

The target population comprised female inmates currently serving sentences who had participated in entrepreneurial training. A purposive sampling technique was employed to ensure that all selected participants had meaningful exposure to the entrepreneurial process. The study involved a total of 225 female inmates from correctional facilities located on Java Island (Table 1). These specific locations were chosen because they have established, mature BIMKER programs, which facilitate the homogeneity of the intervention being studied.

The inclusion criteria for participation were strictly defined:

- 1) the respondent must be a female inmate;
- 2) she must have participated in the BIMKER program for a minimum of three months to ensure sufficient program exposure; and
- 3) she must have actively produced goods (such as handicrafts, food products, or garments) and experienced the full cycle of entrepreneurial activity within the correctional setting (from planning and production to marketing).

Participants were randomly selected from the pool of eligible inmates within these institutions. Data collection was conducted manually using paper-based, structured questionnaires and administered by trained correctional facility staff.

2.1. Ethical considerations

The study strictly adhered to all ethical guidelines regarding research involving human participants, particularly those in vulnerable populations. Formal ethical approval was obtained from

the relevant Institutional Review Board. All participants provided informed consent prior to completing the questionnaire, confirming their voluntary participation. To ensure anonymity and protect respondents' privacy, the questionnaires were anonymous, and data confidentiality was guaranteed. The correctional facility staff who administered the questionnaires were explicitly trained to maintain impartiality and had no direct supervisory or power relationship with the respondents during the data collection process, thereby minimizing the risk of coercion or bias.

The primary data were obtained through a structured questionnaire incorporating measurement scales adapted from well-established instruments. All constructs employed a five-point Likert-type response format, ranging from 1 ("strongly disagree") to 4 ("strongly agree").

Entrepreneurial intention was measured using three dimensions and six statement items adapted from Lee-Ross (2017). An example item is: "I have serious doubts about ever starting my own business". Cronbach's Alpha was 0.87.

The prison entrepreneurship program (PEP) was measured using nine statements adapted from Ciptono et al. (2022). An example item is: "Entrepreneurship training can explore my creativity and innovation in the creation of business opportunities". The construct reliability (CR) was .913, and the average variance extracted (AVE) was .539. Cronbach's Alpha for the whole sample was .91.

Entrepreneurial resilience was measured through 10 statement items adapted from Fatoki (2018). An example item is: "Tends to bounce back after illness or hardship". Cronbach's Alpha was 0.80.

Support from family and friends was measured using three *ad hoc* items adapted from Molino et

al. (2018). An example item is: “People who are important to me think I should choose an entrepreneurial career”. The construct reliability (CR) was .98, and the average variance extracted (AVE) was .78. Cronbach’s Alpha for the whole sample was .91.

To ensure that the instruments were both linguistically accurate and culturally meaningful for Indonesian respondents, a rigorous forward-backward translation procedure was implemented. The translated versions were subsequently examined by a panel of bilingual subject-matter experts, who verified that the semantic and conceptual equivalence between the original and translated instruments was adequately preserved.

The data were analyzed using partial least squares structural equation modeling (PLS-SEM) with SmartPLS version 4.0. This approach was chosen because it efficiently manages complex structural models and is appropriate for datasets with small to medium sample sizes. The analysis was conducted in two primary phases. The first phase involved evaluating the measurement model to con-

firm that the constructs demonstrated sufficient reliability and validity. This evaluation included examining factor loadings, Cronbach’s alpha, composite reliability (CR), and average variance extracted (AVE), as well as assessing discriminant validity through the Fornell-Larcker criterion and the Heterotrait-Monotrait (HTMT) ratio. The second phase focused on testing the structural model to verify the study’s hypotheses. Path coefficients, together with their respective *t*-values and *p*-values, were generated using the bootstrapping method. Moreover, the coefficient of determination (R^2) was used to assess the explained variance of the overall structural model.

3. RESULTS

To confirm the robustness of the measurement model, several statistical indicators were evaluated based on recommendations from prior methodological studies (e.g., Hair et al., 2019; Kline, 2011). The reliability and validity assessments included internal consistency reliability, composite reliability, convergent validity, and discriminant validity.

Table 2. Convergent validity analysis and reliability

Indicators	Outer Loading	Cronbach’s Alpha	Composite Reliability	Average Variance Extracted (AVE)
Int1	0.799	0.881	0.888	0.738
Int2	0.890			
Int3	0.893			
Int4	0.850			
Progm1	0.945	0.971	0.973	0.813
Progm2	0.846			
Progm3	0.944			
Progm4	0.938			
Progm5	0.834			
Progm6	0.923			
Progm7	0.928			
Progm8	0.845			
Progm9	0.902	0.957	0.958	0.719
Resil1	0.834			
Resil10	0.843			
Resil2	0.867			
Resil3	0.835			
Resil4	0.868			
Resil5	0.839			
Resil6	0.860			
Resil7	0.836			
Resil8	0.857			
Resil9	0.836	0.859	0.859	0.783
Sos1	0.946			
Sos2	0.864			
Sos3	0.840			

As reported in Table 2, all Cronbach's alpha values for the latent constructs exceeded the acceptable threshold of 0.70, ranging from 0.859 to 0.971, indicating satisfactory internal consistency.

Similarly, composite reliability (CR) ranged from 0.859 to 0.973, indicating high construct reliability. All standardized factor loadings were greater than 0.70, demonstrating that each indicator appropriately represented its underlying construct. Furthermore, convergent validity was supported by average variance extracted (AVE) values ranging from 0.719 to 0.813, indicating that a substantial portion of the variance in the observed indicators was explained by their respective constructs.

To assess discriminant validity, the cross-loading matrix was examined as shown in Table 3. According to Hair et al. (2019) and Leguina (2015), discriminant validity is established when each indicator loads highest on its assigned construct compared to all other constructs. In this study, all indicators demonstrated higher loadings on their respective latent variables than on any other latent variables, thus satisfying the cross-loading criterion for discriminant validity.

To verify that each construct was distinct, discriminant validity was evaluated using the Fornell-Larcker (1981) criterion (Table 4). Under this criterion, a construct is considered discrimi-

Table 3. Cross loading

Indicators	Entrepreneurial Intention	Prisoner Entrepreneurship Program	Resilience	Social Support	Social Support x Prisoner Entrepreneurship Program	Resilience x Prisoner Entrepreneurship Program
Int1	0.799	0.574	0.486	0.398	0.148	0.066
Int2	0.890	0.625	0.590	0.425	0.138	0.149
Int3	0.893	0.618	0.639	0.442	0.050	0.057
Int4	0.850	0.517	0.517	0.392	0.126	0.202
Progm1	0.580	0.945	0.511	0.470	-0.036	0.059
Progm2	0.688	0.846	0.616	0.392	0.018	0.166
Progm3	0.577	0.944	0.507	0.470	-0.036	0.059
Progm4	0.569	0.938	0.500	0.477	-0.057	0.062
Progm5	0.688	0.834	0.603	0.458	-0.004	0.178
Progm6	0.551	0.923	0.489	0.475	-0.067	0.032
Progm7	0.583	0.928	0.530	0.469	-0.042	0.033
Progm8	0.677	0.845	0.606	0.435	-0.011	0.140
Progm9	0.542	0.902	0.491	0.497	-0.094	0.024
Resil1	0.543	0.453	0.834	0.296	-0.162	0.052
Resil10	0.549	0.556	0.843	0.138	0.067	0.218
Resil2	0.596	0.568	0.867	0.272	0.126	0.230
Resil3	0.534	0.462	0.835	0.321	-0.165	0.040
Resil4	0.591	0.566	0.868	0.277	0.125	0.222
Resil5	0.522	0.456	0.839	0.301	-0.156	0.012
Resil6	0.577	0.586	0.860	0.265	0.103	0.197
Resil7	0.511	0.454	0.836	0.333	-0.192	0.042
Resil8	0.585	0.547	0.857	0.252	0.062	0.232
Resil9	0.520	0.468	0.836	0.277	-0.170	0.005
Sos1	0.424	0.458	0.277	0.946	-0.152	-0.023
Sos2	0.430	0.467	0.257	0.864	-0.173	0.014
Sos3	0.428	0.428	0.317	0.840	-0.196	-0.069
Resilience x Prisoner Entrepreneurship Program	0.136	0.099	0.153	-0.029	0.496	1.000
Social Support x Prisoner Entrepreneurship Program	0.132	-0.038	-0.035	-0.197	1.000	0.496

Note: Items in bold indicate the highest loading of each indicator on its respective construct.

Table 4. Inter-construct correlations

Variable	Fornell-Larcker criterion			
	Entrepreneurial Intention	Prisoner Entrepreneurship Program	Resilience	Sosial Support
	1	2	3	4
Entrepreneurial Intention	0.859	–	–	–
Prisoner Entrepreneurship Program	0.682	0.902	–	–
Resilience	0.654	0.606	0.848	–
Social Support	0.483	0.511	0.321	0.885

Note: Items in bold represent the square root of the Average Variance Extracted (AVE) for each construct.

nantly valid when the square root of its Average Variance Extracted (AVE) exceeds its correlations with other constructs in the model.

As presented in Table 4, the diagonal AVE values (square roots) for all constructs were higher than the off-diagonal correlations with other constructs. This outcome implies that each construct was more strongly related to its own indicators than to indicators of other constructs, thereby confirming that the constructs represented conceptually distinct dimensions. These findings provide strong empirical support for the measurement model’s adequacy in capturing the distinct effects of entrepreneurial intention, participation in prison entrepreneurship programs, resilience, and social support.

The structural equation modelling (SEM) approach was applied to test the proposed hypotheses and assess the overall explanatory power of the research model. The primary goal of this stage was to assess the model’s ability to account for and predict variations in the endogenous variable, specifically entrepreneurial intention, as influenced by entrepreneurship program participation and moderated by resilience and social support.

Following Chin’s (1998) guideline, an R^2 value of 0.10 or higher is regarded as the minimum acceptable level to indicate predictive relevance. As reported in Table 5, the R^2 value for entrepreneurial

intention was 0.622, surpassing the suggested minimum threshold. This demonstrates that the model possesses satisfactory explanatory power in predicting entrepreneurial intention. This indicates that the model explains approximately 62.2% of the variance in entrepreneurial intention, demonstrating substantial explanatory power. The result confirms that the combination of entrepreneurship program participation and the moderating variables meaningfully contributes to predicting post-release entrepreneurial intention among female inmates.

Table 5. Coefficient of determination (R2)

Endogenous Latent Factors	R-square	R-square adjusted
Entrepreneurial Intention	0.622	0.603

To examine the proposed hypotheses, a bootstrapping procedure was conducted using SmartPLS 4, allowing the estimation of path coefficients, t-values, and p-values for both direct and moderating effects. Three hypotheses were tested, encompassing the main effect of participation in the Prisoner Entrepreneurship Program (PEP) and the moderating roles of resilience and social support. The analysis revealed that participation in PEP had a positive and statistically significant effect on entrepreneurial intention ($\beta = 0.345$, $t = 3.700$, $p < 0.001$), providing support for Hypothesis 1. Conversely, the moderating effect of resilience on the relationship between PEP participation and

Table 6. Hypotheses testing

Hypotheses	Beta (β)	T Value	P values	Decision
Prisoner Entrepreneurship Program → Entrepreneurial Intention	0.345	3.700	0.000	Accepted
Resilience x Prisoner Entrepreneurship Program → Entrepreneurial Intention	-0.065	1.039	0.299	Rejected
Social Support x Prisoner Entrepreneurship Program → Entrepreneurial Intention	0.265	3.742	0.000	Accepted

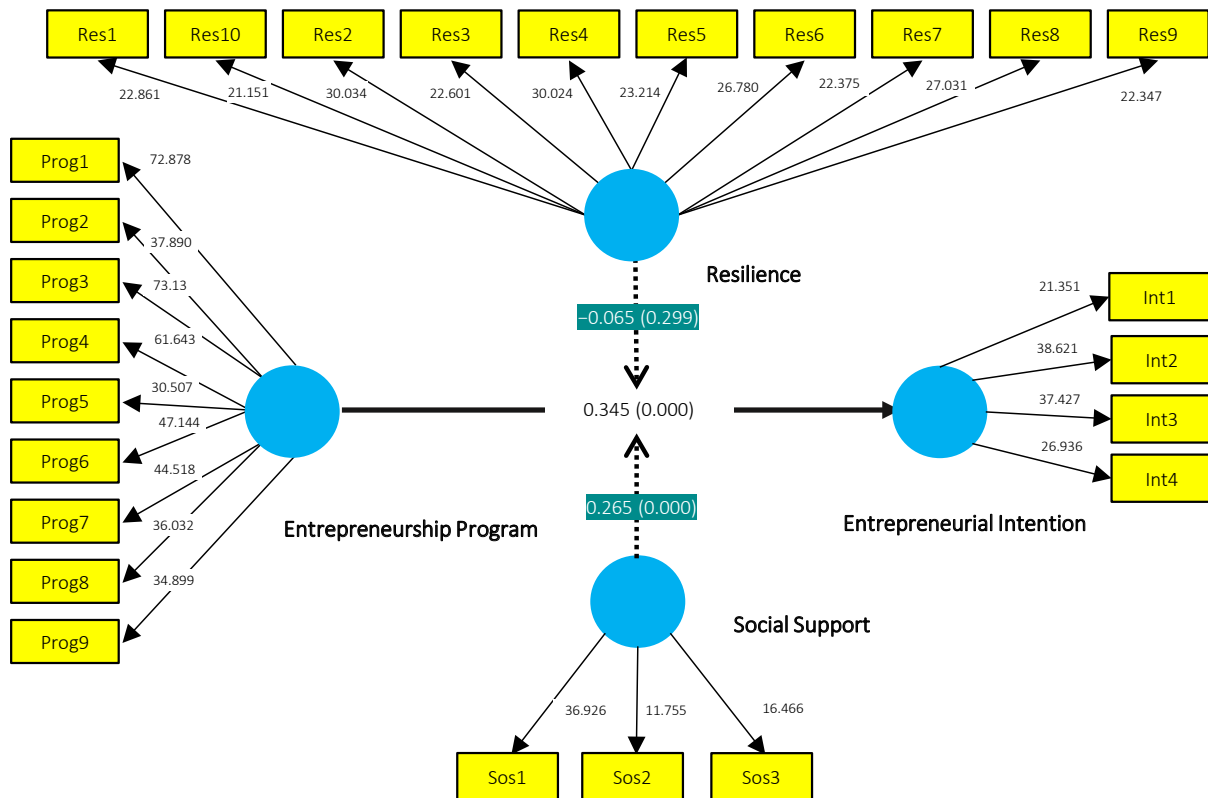


Figure 2. Structural inner model

entrepreneurial intention was not significant ($\beta = -0.065, t = 1.039, p = 0.299$), leading to the rejection of Hypothesis 2. In contrast, social support significantly moderated the relationship ($\beta = 0.265, t = 3.742, p < 0.001$), confirming Hypothesis 3. Overall, the findings indicate that two out of three hypotheses were supported, highlighting the key role of PEP participation in fostering entrepreneurial intentions among incarcerated women. Moreover, the results suggest that social support serves as a significant enhancer of this relationship, whereas resilience did not demonstrate a moderating influence in this context. These findings underscore the importance of both program participation and interpersonal support in shaping entrepreneurial motivation in correctional settings.

4. DISCUSSION

This study investigated the impact of the Prisoner Entrepreneurship Program (PEP) on the entrepreneurial intentions of incarcerated women, specifically examining the moderating influence of resilience and social support. The empirical results,

derived from a robust bootstrapping procedure, reveal that participation in PEP significantly fosters entrepreneurial aspirations ($\beta = 0.345, t = 3.700, p < 0.001$), thereby providing strong support for Hypothesis 1. This primary finding aligns with the transformative learning perspective, which asserts that entrepreneurship education for marginalized and justice-involved groups serves as a vital catalyst for post-release empowerment and self-efficacy (Fayolle & Gailly, 2015). By integrating cognitive, affective, and behavioral learning dimensions, the PEP functions as a sophisticated rehabilitative strategy that transcends conventional vocational training, cultivating a sense of autonomy and future-oriented purpose within the restrictive confines of a correctional facility (Martin et al., 2013; Baggen et al., 2021).

The positive association between PEP participation and entrepreneurial intention underscores the critical role of structured pedagogical interventions in the process of identity reconstruction. For incarcerated women, the transition from state dependency toward the prospect of independent economic activity represents a fundamental shift in

self-perception and agency (de Sousa et al., 2024). These findings corroborate existing evidence suggesting that well-designed entrepreneurship initiatives can effectively mitigate the psychological scarring of incarceration by fostering a proactive and resilient mindset. Consequently, the program acts not merely as a skill-acquisition exercise but as a transformative mechanism for self-sufficiency, enabling participants to envision a professional future that is decoupled from the pervasive stigma of a criminal record and social marginalization.

In a departure from theoretical expectations, the moderation analysis revealed that resilience did not significantly moderate the relationship between PEP participation and entrepreneurial intention ($\beta = -0.065$, $t = 1.039$, $p = 0.299$), leading to the rejection of Hypothesis 2. While mainstream entrepreneurship literature frequently identifies individual resilience as a cornerstone of the entrepreneurial spirit, particularly in navigating market uncertainties (Ayala & Manzano, 2014; Duchek & Shatov, 2016), its lack of statistical significance in this context highlights the unique environmental constraints of the prison setting. One plausible interpretation is the existence of a “ceiling effect,” wherein the shared experience of extreme adversity inherent to incarceration leads to a uniform baseline of psychological resilience among the participants. This lack of variance may diminish the capacity of resilience to function as a distinct statistical moderator within this specific demographic.

Furthermore, the non-significance of resilience suggests that internal psychological traits may require a conducive, agentic environment to manifest as effective amplifiers of intent. As noted by Rezaei-Moghaddam et al. (2021), the functional efficacy of resilience is often context-dependent and contingent upon the availability of complementary external resources and social validation. In a highly regulated and structured correctional environment where personal autonomy is severely curtailed, the internal capacity to “bounce back” may be insufficient to independently intensify the impact of an educational program. This suggests that for justice-involved women, individual grit is secondary to the presence of an enabling infrastructure that can translate internal strength into a concrete and reinforced motivation for future business ownership.

In direct contrast, social support emerged as a powerful and highly significant moderator of the PEP-intention link ($\beta = 0.265$, $t = 3.742$, $p < 0.001$), decisively confirming Hypothesis 3. This result aligns with the sociological perspective of entrepreneurship, which emphasizes that social networks and perceived support systems are vital in shaping entrepreneurial motivation and reducing the perceived risks of venture creation (Hossain et al., 2021; Ozaralli & Rivenburgh, 2016). For women navigating the complexities of reentry, the presence of emotional and instrumental support from family, peers, and the community is fundamental to rebuilding self-confidence (Gubbins et al., 2020). Such support, characterized by trust and deep emotional attachment often manifested in the ability to confide in others (Colvin et al., 2002) serves as a critical bridge between the skills acquired within the facility and the actualization of those skills in the post-release market.

Theoretically, these findings extend existing entrepreneurship and rehabilitation frameworks by demonstrating that in highly constrained and marginalized contexts, social embeddedness and external validation may outweigh internal psychological dispositions. While resilience remains a relevant construct for general psychological health, it is the relational resources provided by social support that significantly magnify the impact of entrepreneurship training. This provides a nuanced contribution to the literature, suggesting that the “rugged individualist” archetype of the entrepreneur is particularly inapplicable to justice-involved individuals. For this population, success is deeply intertwined with the surrounding social ecosystem and the degree to which social support can mitigate the systemic barriers and stigmas associated with their past (Jolly et al., 2021).

From a practical standpoint, the results strongly suggest that prison-based entrepreneurship programs must evolve beyond a narrow focus on technical business plans and vocational expertise. To maximize program efficacy, curricula should be designed holistically, integrating mandatory components such as peer mentorship, community resource linkage, and family reintegration strategies. By deliberately embedding psychosocial support mechanisms into the entrepreneurial framework, correctional admin-

istrators can strengthen the external support infrastructure available to inmates. Ultimately, fostering an environment of interpersonal encouragement alongside structured vocational training appears to be the most viable pathway for ensuring sustainable economic reintegration and reducing recidivism among formerly incarcerated women.

CONCLUSION

This study was undertaken with the core objective of ascertaining the impact of participation in prison entrepreneurship programs (PEP) on the subsequent formation of entrepreneurial intentions among female inmates, specifically exploring the conditional roles of resilience and social support within the Indonesian correctional context. The analysis robustly demonstrated that structured engagement in entrepreneurship training acts as a significant catalyst for developing post-release entrepreneurial aspirations. Crucially, the investigation revealed a differential effect of psychosocial factors: external social support was found to be a potent amplifying factor for the training's effectiveness, whereas internal psychological resilience did not exhibit a similar conditional influence. The primary inference drawn from these findings is that for formerly incarcerated women navigating extreme societal stigma and structural barriers, the availability and perception of relational resources are paramount, serving as a necessary validation that helps translate acquired skills into concrete economic motivation. These results collectively assert that PEP initiatives function as highly effective rehabilitative mechanisms, provided they are complemented by robust strategies to reinforce the participants' social safety net. This paper thus leads to the principal conclusion that achieving successful economic reintegration through entrepreneurship requires a paradigm shift in program design: from purely skill-centric training to an integrated model that deliberately incorporates socio-relational support components.

Based on these findings, future scholarship should move beyond cross-sectional assessments of intent. Longitudinal research designs are highly recommended to track the evolution of these entrepreneurial aspirations into actual business creation and sustainability post-release. Further inquiry should also broaden the scope of moderating variables to include systemic or structural factors such as the impact of the institutional climate during the program, the quality of peer mentoring dynamics, and the actual accessibility of external resources upon exit.

AUTHOR CONTRIBUTIONS

Conceptualization: Indri Murniawaty, Rusdarti, Hasan Mukhibad.

Data curation: Indri Murniawaty, Hasan Mukhibad.

Formal analysis: Kardoyo, Hasan Mukhibad.

Funding acquisition: Kardoyo.

Investigation: Rusdarti.

Methodology: Indri Murniawaty, Rusdarti.

Project administration: Indri Murniawaty, Kardoyo, Rusdarti, Hasan Mukhibad.

Resources: Rusdarti.

Software: Indri Murniawaty, Kardoyo.

Supervision: Indri Murniawaty, Kardoyo, Rusdarti.

Validation: Indri Murniawaty, Kardoyo, Hasan Mukhibad.

Visualization: Indri Murniawaty, Kardoyo, Hasan Mukhibad.

Writing – original draft: Indri Murniawaty, Kardoyo, Rusdarti, Hasan Mukhibad.

Writing – review & editing: Indri Murniawaty, Kardoyo, Rusdarti, Hasan Mukhibad.

REFERENCES

1. Ayala, J., & Manzano, G. (2014). The resilience of the entrepreneur. Influence on the success of the business. A longitudinal analysis. *Journal of Economic Psychology*, 42, 126-135. <https://doi.org/10.1016/j.joep.2014.02.004>
2. Badghish, S., Ali, I., Ali, M., Yaqub, M. Z., & Dhir, A. (2022). How socio-cultural transition helps to improve entrepreneurial intentions among women? *Journal of Intellectual Capital*, 24(4), 900-928. <https://doi.org/10.1108/jic-06-2021-0158>
3. Baggen, Y., Lans, T., & Gulikers, J. (2021). Making entrepreneurship education available to all: Design principles for educational programs stimulating an entrepreneurial mindset. *Entrepreneurship Education and Pedagogy*, 5(3), 347-374. <https://doi.org/10.1177/2515127420988517>
4. Cai, L., Murad, M., Ashraf, S. F., & Naz, S. (2021). Impact of dark tetrad personality traits on nascent entrepreneurial behavior: The mediating role of entrepreneurial intention. *Frontiers of Business Research in China*, 15(1). <https://doi.org/10.1186/s11782-021-00103-y>
5. Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295-336). Lawrence Erlbaum Associates Publishers. Retrieved from <https://psycnet.apa.org/record/1998-07269-010>
6. Ciptono, W. S., Anggadwita, G., & Indarti, N. (2022). Examining prison entrepreneurship programs, self-efficacy and entrepreneurial resilience as drivers for prisoners' entrepreneurial intentions. *International Journal of Entrepreneurial Behavior & Research*, 29(2), 408-432. <https://doi.org/10.1108/ijeb-06-2022-0550>
7. Colvin, M., Cullen, F. T., & Ven, T. V. (2002). Coercion, social support, and crime: An emerging theoretical consensus. *Criminology*, 40(1), 19-42. <https://doi.org/10.1111/j.1745-9125.2002.tb00948.x>
8. de Sousa, M. M., de Almeida, D. A. R., Mansur-Alves, M., & Huziwara, E. M. (2024). Characteristics and effects of entrepreneurship education programs: A systematic review. *Trends in Psychology*, 32(3), 682-712. <https://doi.org/10.1007/s43076-022-00197-0>
9. Directorate of Information Technology and Cooperation. (2024). *Correctional data information*. Retrieved from <https://sdppublik.ditjenpas.go.id/>
10. Duchek, S., & Shatov, D. (2016). Entrepreneurial resilience: A biographical analysis of successful entrepreneurs. *Academy of Management Proceedings*, 2016(1), Article 11239. <https://doi.org/10.5465/ambpp.2016.11239abstract>
11. Fatoki, O. (2018). The impact of entrepreneurial resilience on the success of small and medium enterprises in South Africa. *Sustainability*, 10(7), Article 2527. <https://doi.org/10.3390/su10072527>
12. Fayolle, A., & Gailly, B. (2015). The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence. *Journal of Small Business Management*, 53(1), 75-93. <https://doi.org/10.1111/jsbm.12065>
13. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.1177/002224378101800104>
14. Garavan, T. N., & O'Connell, B. (1994). Entrepreneurship education and training programmes: A review and evaluation – Part 1. *Journal of European Industrial Training*, 18(8), 3-12. <https://doi.org/10.1108/03090599410068024>
15. García-Palma, M. B., & Molina, M. I. S. M. (2016). Knowledge and female entrepreneurship: A competence and social dimension. *Suma de Negocios*, 7(15), 32-37. <https://doi.org/10.1016/j.sum-neg.2015.12.005>
16. Gubbins, M., Harrington, D., & Hines, P. (2020). Social support for academic entrepreneurship: Definition and conceptual framework. *Journal of Management Development*, 39(5), 619-643. <https://doi.org/10.1108/JMD-11-2019-0456>
17. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Annabel Ainscow.
18. Hedner, T., Abouzeedan, A., & Klofsten, M. (2011). Entrepreneurial resilience. *Annals of Innovation & Entrepreneurship*, 2(1), Article 7986. <https://doi.org/10.3402/aie.v2i1.6002>
19. Hossain, Md. U., Arefin, Md. S., & Yukongdi, V. (2021). Personality traits, social self-efficacy, social support, and social entrepreneurial intention: The moderating role of gender. *Journal of Social Entrepreneurship*, 15(1), 119-139. <https://doi.org/10.1080/19420676.2021.1936614>
20. Hu, T., Zhang, D., & Wang, J. (2015). A meta-analysis of the trait resilience and mental health. *Personality and Individual Differences*, 76, 18-27. <https://doi.org/10.1016/j.paid.2014.11.039>
21. Jolly, P. M., Kong, D. T., & Kim, K. Y. (2021). Social support at work: An integrative review. *Journal of Organizational Behavior*, 42(2), 229-251. <https://doi.org/10.1002/job.2485>
22. Kline, R. B. (2011). *Principles and practice of structural equation modeling*. The Guilford Press. Retrieved from <https://www.guilford.com/books/Principles-and-Practice-of-Structural-Equation-Modeling/Rex-Kline/9781462551910>
23. Krueger, N. F. Jr, Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5-6), 411-432. [https://doi.org/10.1016/S0883-9026\(98\)00033-0](https://doi.org/10.1016/S0883-9026(98)00033-0)
24. Lee, J., & Wang, J. (2017). Developing entrepreneurial resilience: Implications for human resource development. *European Journal of*

- Training and Development*, 41(6), 519-539. <https://doi.org/10.1108/ejtd-12-2016-0090>
25. Lee-Ross, D. (2017). An examination of the entrepreneurial intent of MBA students in Australia using the entrepreneurial intention questionnaire. *Journal of Management Development*, 36(9), 1180-1190. <https://doi.org/10.1108/jmd-10-2016-0200>
 26. Leguina, A. (2015). A primer on partial least squares structural equation modeling (PLS-SEM). *International Journal of Research & Method in Education*, 38(2), 220-221. <https://doi.org/10.1080/1743727x.2015.1005806>
 27. Li, C., Murad, M., & Ashraf, S. F. (2023). The influence of women's green entrepreneurial intention on green entrepreneurial behavior through university and social support. *Sustainability*, 15(13), Article 10123. <https://doi.org/10.3390/su151310123>
 28. Liñán, F. (2004). Intention-based models of entrepreneurship education. *Piccola Impresa/Small Business*, 3(1), 11-35. Retrieved from <https://www.researchgate.net/publication/235937886>
 29. Longstaff, P. H., Armstrong, N. J., Perrin, K., Parker, W. M., & Hidek, M. (2010). Building resilient communities: A preliminary framework for assessment. *Homeland Security Affairs*, VI(3). Retrieved from <https://www.hsaj.org/resources/uploads/2022/05/6.3.6.pdf>
 30. Martin, B. C., McNally, J. J., & Kay, M. J. (2013). Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes. *Journal of Business Venturing*, 28(2), 211-224. <https://doi.org/10.1016/j.jbusvent.2012.03.002>
 31. Molino, M., Dolce, V., Cortese, C. G., & Ghislieri, C. (2018). Personality and social support as determinants of entrepreneurial intention. Gender differences in Italy. *PLOS ONE*, 13(6), Article e0199924. <https://doi.org/10.1371/journal.pone.0199924>
 32. Nabi, G., Liñán, F., Fayolle, A., Krueger, N., & Walmsley, A. (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Academy of Management Learning & Education*, 16(2), 277-299. <https://doi.org/10.5465/amle.2015.0026>
 33. Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F., & Pfefferbaum, R. L. (2007). Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American Journal of Community Psychology*, 41(1-2), 127-150. <https://doi.org/10.1007/s10464-007-9156-6>
 34. Ozaralli, N., & Rivenburgh, N. K. (2016). Entrepreneurial intention: Antecedents to entrepreneurial behavior in the U.S.A. and Turkey. *Journal of Global Entrepreneurship Research*, 6(1), 3. Retrieved from <https://link.springer.com/article/10.1186/s40497-016-0047-x>
 35. Pittaway, L., & Cope, J. (2007). Entrepreneurship education: A systematic review of the evidence. *International Small Business Journal*, 25(5), 479-510. <https://doi.org/10.1177/0266242607080656>
 36. Rezaei-Moghaddam, K., Badzaban, F., & Fatemi, M. (2021). Entrepreneurial resilience of small and medium-sized businesses among rural women in Iran. *The Journal of Agricultural Education and Extension*, 29(1), 75-98. <https://doi.org/10.1080/1389224x.2021.1985539>
 37. Rutter, M. (2006). Implications of resilience concepts for scientific understanding. *Annals of the New York Academy of Sciences*, 1094(1), 1-12. <https://doi.org/10.1196/annals.1376.002>
 38. Shumaker, S. A., & Brownell, A. (1984). Toward a theory of social support: Closing conceptual gaps. *Journal of Social Issues*, 40(4), 11-36. <https://doi.org/10.1111/j.1540-4560.1984.tb01105.x>
 39. Steinbrink, K. M., & Ströhle, C. (2023). The entrepreneurial intention of top athletes – Does resilience lead the way? *International Entrepreneurship and Management Journal*, 20(2), 607-629. <https://doi.org/10.1007/s11365-023-00860-7>
 40. Tehseen, S., & Haider, S. A. (2021). Impact of universities' partnerships on students' sustainable entrepreneurship intentions: A comparative study. *Sustainability*, 13(9), Article 5025. <https://doi.org/10.3390/su13095025>
 41. Windle, G. (2011). What is resilience? A review and concept analysis. *Reviews in Clinical Gerontology*, 21(2), 152-169. <https://doi.org/10.1017/s0959259810000420>