

# The Connective Power of Entrepreneurial Bricolage in NGOs: Unveiling its Mediating Influence on Social Entrepreneurial Orientation and Sustainability

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**Abstract:** This study investigates the mediating role of entrepreneurial bricolage in enhancing the sustainability of non-governmental organizations (NGOs). Drawing upon a sample of senior management staff, including General Managers, Operations Managers, and Finance Managers from Palestinian NGOs, the study employs a quantitative survey design and utilizes Partial Least Squares Structural Equation Modeling (PLS-SEM) for data analysis. Our findings substantiate the pivotal role of entrepreneurial bricolage in bolstering the sustainability of NGOs. Furthermore, while each dimension of entrepreneurial bricolage positively correlates with sustainability, the extent of their impacts varies, thereby pointing to differential effects. The study contributes to existing literature by introducing entrepreneurial bricolage as a theoretically grounded mediator, explaining its role in the nexus between social entrepreneurial orientation and NGO sustainability.

**Keywords:** Social Entrepreneurial Orientation, Entrepreneurial Bricolage, Sustainability.

## 1 Introduction

The issue of sustainability constitutes a perpetual dilemma for Non-Governmental Organizations (NGOs), both in Palestine and globally. NGOs are predominantly established with the intention of addressing public or social welfare objectives. These objectives may span a diverse range of areas, including human rights, electoral rights, healthcare, poverty alleviation, and animal welfare. Often referred to as civil society organizations, NGOs operate on community, national, and international scales to pursue specific social or political agendas such as humanitarian causes or environmental conservation (Folger, 2023). In the current, highly volatile business environment, the imperative for NGOs to adapt and respond quickly to changes has been underscored (Salahat, 2021a). The concept of sustainability within the context of NGOs remains a contested topic in academic discourse. For instance, Hailey (2016) defines a sustainable NGO as an organization capable of consistently achieving its mission objectives while satisfying the needs of its principal stakeholders, particularly its beneficiaries and financial supporters.

In accordance with this operational definition, sustainability should be conceptualized as a continuous, multi-dimensional process. This process amalgamates various components, including but not limited to, social, identity, political, and operational sustainability (Arhin, 2016). The significance of sustainability can be articulated through several vectors: (1) it serves as a vital mechanism for environmental preservation; (2) it possesses the potential to stimulate economic growth and job creation through the adoption of sustainable technologies and business practices; (3) it may substantially mitigate healthcare costs by reducing environmental pollutants and thereby improving public health; and (4) it represents a pivotal strategy for reversing detrimental environmental trends and safeguarding biodiversity (Emeritus, 2022).

Notwithstanding the acknowledged importance of sustainability, NGOs operating in Palestine confront a myriad of challenges that jeopardize their sustainable operations. First, the financial instability of these organizations is exacerbated by an unpredictable funding landscape and an overwhelming reliance on external financial sources (Morrar & Sultan, 2020). Second, NGOs are further burdened by restrictive donor policies that dictate the usage of allocated funds. Third, external aid aimed at supporting Palestinian causes often comes under scrutiny from the Israeli government, which employs anti-terrorism regulations and intimidation tactics as deterrents. Fourth, Palestinian NGOs receive insufficient core funding and are allocated only a limited percentage for the administration of grants, further straining their operational viability. Fifth, these

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organizations must navigate the complexities of bank de-risking practices, whereby they may be classified as 'high-risk' clients, consequently ending their transactions and impeding financial access. Lastly, Palestinian NGOs are increasingly susceptible to physical attacks, including but not limited to cyber-attacks, office raids, destruction of IT equipment, and staff detentions (Alloush, 2021). These cumulative challenges serve as the principal motivation for the present study.

More critically, the sustainability of NGOs is influenced by an array of both internal and external determinants. The focal point of this investigation is the Social Entrepreneurial Orientation (SEO), chosen specifically due to the incongruent findings in extant literature concerning its role in organizational sustainability. On one hand, various studies have elucidated a positive correlation between SEO and organizational sustainability, often interpreting these findings through the lens of the Resource-Based View (RBV) theory, which postulates the effective utilization of resources as a sustainability driver (Hockerts, 2010). On the other hand, within the expansive body of research on entrepreneurship, several studies have also identified a positive relationship between a heightened degree of SEO and firm performance (Jeremy K. Hall, 2010; Su Chen, 2023; Thomas J. Dean, 2007; Wales, 2013). Contradictorily, other research has demonstrated a direct, negative association between SEO and financial performance, thereby further complicating the understanding of its role (Miles et al., 2013).

The observed inconsistencies in empirical research concerning the relationship between Social Entrepreneurial Orientation (SEO) and organizational sustainability represent the initial research gap addressed in this study. Furthermore, this investigation introduces the construct of entrepreneurial bricolage (EB) as a mediating variable to elucidate the relationship between SEO and NGO sustainability. The utilization of EB as a mediator constitutes the second major gap in current literature, as it has not been previously employed in this specific role. This study interprets these relationships through the lens of the Resource-Based View (RBV) theory, which postulates the effective management of firm resources to capitalize on productive opportunities (Salahat & Abdul Majid, 2017; Salahat & Halim, 2016; Utami, 2022) and to enhance organizational performance (Al Zeer et al., 2023; Salahat, 2021b). RBV serves as an internally focused theoretical framework that emphasizes the role of internal resources in determining the success or failure of organizational activities. It seeks to explore how unique and properly managed firm resources may become a source of sustained competitive advantage (Barney, 2001).

## 2 Literature Review

### 2.1 Social Entrepreneurship

SEO is defined as the recognition, creation, assessment, and utilization of options to build innovative enterprises, frameworks, and solutions with an emphasis on generating mixed value," with most definitions of this concept highlighting the "hybrid nature of combining a social mission with entrepreneurial activities (Saebi, 2019) Thus, scholars have called SEO primarily a non-profit entrepreneurial orientation (Dwivedi, 2018). Miller was the leader in formulating the EO construct, which he identified in 1983 as innovativeness, risk-taking, and pro-activeness. (Miller, 2011) Krause and other authors continued to formulate a specific measurement scale for SEO with four dimensions, namely, 1. Social risk-taking, 2. Social innovativeness, 3. Socialness, and 4. Social pro-activeness is the most frequently used measure (Kraus et al., 2017; Saha et al., 2017). SEO is a multi-spectral concept that has several dimensions that indicate entrepreneurial actions (pro-activeness, innovativeness, and risk-taking) in addition to social mission (Weerawardena & Mort, 2006). Theoretically speaking, SEO and sustainability can be linked through RBV theory as mentioned earlier. Empirically, many scholars claimed that SEO affects sustainability positively and significantly (Francisco do Adro, 2021). More importantly, according to previous literature, the different studies considered three or four dimensions for Social Entrepreneurship Orientation, while this study assessed the effect of six dimensions for SEO on sustainability by adopting the dimensions of Miller (Miller, 2011). So, the present study adopted the following dimensions of SEO: innovativeness, risk taking, pro-activeness, competitiveness, social passion and autonomy. Based on the above discussion, the present study hypothesizes the following:

H1: There is a positive relationship between social entrepreneurship orientation and NGO sustainability in Palestine.

- H1a: There is a positive correlation between social passion and NGOs sustainability.
- H1b: There is a positive relation between Innovativeness and NGOs sustainability.
- H1c: There is a positive relationship between Pro-activeness and sustainability of NGOs.
- H1d: There is a positive relationship between risk taking and NGOs sustainability.
- H1e: There is a positive relationship between competitiveness and NGOs sustainability.
- H1f: There is a positive relationship between Autonomy and NGOs sustainability.

H2a: There is a positive relationship between social entrepreneurship orientation and environmental sustainability.

H2b: There is a positive relationship between social entrepreneurship orientation and social sustainability.

H2c: There is a positive relationship between social entrepreneurship orientation and economical sustainability.

### *Mediating role of entrepreneurial bricolage*

Bricolage was first used by Lévi-Strauss (Lévi-Strauss, 1962), refers to the one who works with his hand" and uses whatever

resources and repertoires he has to complete any kind of task that emerge (Visscher et al., 2018). There are two types of bricolages, the first one includes external resources used in the manifestation of operations of a new venture so it represents social relationships or physical or functional assets. The second one concerns internal resources-experiences, knowledge credentials, and certifications-which the entrepreneur gathers, adjusts and organizes the narrative about the entrepreneurial process. Both types of bricolages are essential to the success of a venturing attempt (Vanevenhoven, 2011). According to (Cai et al., 2019) enterprises who have stronger bricolage will develop low-cost, value-added goods and services for customers through creativity and learning by doing. Other forms of bricolage are labor and material. Labor refers to human resources such as customers, employees, suppliers, and other human capital that is considered as input to any operation in the enterprise, while material refers to material resources that have been discarded, neglected, or committed to a specific use but can be used through creative recombination. Theoretically, the linkage between SEO and EB and sustainability can be seen through the RBV theory concept as mentioned in the introduction. Empirically, some scholars concluded that SEO affects EB positively and significantly (Xiabao et al., 2022). Along the same line, some studies claimed that EB affects sustainability positively and significantly (Iqbal et al., 2021). Based on that, the present study deploys EB as a mediator between SEO and sustainability since there is a major gap because this is the first time to use it in this position. So, the present study hypothesized the following:

H3: Entrepreneurial bricolage mediates the relationship between social entrepreneurship orientation and NGO sustainability in Palestine.

- H3a: Entrepreneurial bricolage mediates the relationship between social passion and NGOs sustainability.
- H3b: Entrepreneurial bricolage mediates the relationship between Innovativeness and NGOs sustainability.
- H3c: Entrepreneurial bricolage mediates the relationship between Pro-activeness and sustainability of NGOs.
- H3d: Entrepreneurial bricolage mediates the relationship between risk taking and NGOs sustainability.
- H3e: Entrepreneurial bricolage mediates the relationship between competitiveness and NGOs sustainability.
- H3f: Entrepreneurial bricolage mediates the relationship between Autonomy and NGOs sustainability.
- H3g: Entrepreneurial bricolage mediates the relationship between Social Entrepreneurship orientation and environmental sustainability.
- H3h: Entrepreneurial bricolage mediates the relationship between Social Entrepreneurship orientation and social sustainability.
- H3i: Entrepreneurial bricolage mediates the relationship between Social Entrepreneurship orientation and economical sustainability.

### 3 Methodologies

#### 3.1 Data Collection

The present study used survey research methodology to investigate the nexus of social entrepreneurial orientation and sustainability in the NGOs sector through entrepreneurial bricolage. Data were collected through a survey questionnaire, a widely used approach in similar research studies. The study's target population comprised social entrepreneurs who are consistent in every NGO. Data were gathered from general managers of NGOs, Operations Manager and the Finance Manager or any other employee deputizing them and are aware of the work notion in Palestine using a purposive sampling. Out of the 450 distributed questionnaires, 355 were returned, resulting in a response rate of 78.8%. The study ensured minimal intervention from researchers to capture real-time behavioral perceptions accurately. Ethical guidelines were strictly followed, and participants received an informed consent form, ensuring confidentiality and impartiality in data collection (Kvale, 1996).

#### 3.2 Measures

The study employed standardized scales to measure all the variables under investigation. Social entrepreneurial orientation was measured using a six-dimensional scale with 36 items adapted from (Covin & Covin, 1990; Donate & de Pablo, 2015; Lumpkin & Dess, 2001; Satar & Natasha, 2019), which included Autonomy (6 items), Competitive Aggressiveness (6 items), Innovativeness (6 items), Pro-Activeness (6 items), Risk Taking (6 items) and Social Passion (6 items). Sustainability was assessed using a three-dimensional scale with 18 items, adapted from previous research (Atmaca, 2018; Ayşe Ceren Atmaca 2019). This scale comprised social sustainability (6 items), environmental sustainability (6 items), and economic sustainability (6 items). Additionally, entrepreneurial bricolage was measured using a one-dimensional scale with 6 items, adapted from (Rönkkö et al., 2014).

## 4 Results and Discussion

The study employed variance-based structural equation modeling (SEM) technique using the smart-partial least square (PLS) software.

### 4.1 Assessment and Refinement of the Measurement Model

The measurement model was initially evaluated to verify its reliability and validity. Appendix A illustrates the high consistency and acceptability of the outer loadings. Hulland (1999) stated that acceptable outer loadings for observed variables should exceed a threshold of 0.50. In this study, the outer loadings range between 0.611 and 0.859, thus surpassing this benchmark.

**Table 1:** Assessment of the Measurement Model.  
Source: Author's Own Creation based on Smart-PLS Results

Code	Constructs	Cronbach's alpha	Composite Reliability		AVE
			Rho_a	Rho_c	
ST	<b>Sustainability</b>	0.939	0.940	0.961	0.891
EC	Economic	0.880	0.887	0.909	0.627
E	Environmental	0.909	0.910	0.930	0.689
S	Social	0.900	0.902	0.923	0.666
SEO	<b>Social Entrepreneurship Orientation</b>	0.913	0.927	0.933	0.700
A	Autonomy	0.852	0.854	0.890	0.575
CA	Competitive Aggressiveness	0.843	0.852	0.884	0.561
I	Innovativeness	0.832	0.837	0.878	0.546
PA	Pro-Activeness	0.846	0.852	0.887	0.568
RT	Risk Taking	0.771	0.796	0.850	0.588
SP	Social Passion	0.805	0.812	0.873	0.632
EB	<b>Entrepreneurial Bricolage</b>	0.744	0.758	0.838	0.564

Table 1 demonstrates that the research meets the criteria for convergent validity. This is substantiated by the Average Variance Extracted (AVE) measurements for each construct, which fall between 0.546 and 0.689, surpassing the pre-established criterion of 0.50 (Ajouz Salhab, et al., 2020; Hair et al., 2016). Regarding the composite reliability (rho\_a & rho\_c) for the latent variables, the range is from 0.796 to 0.930. Similarly, the values for Cronbach's Alpha (CA) lie between 0.771 and 0.909, exceeding the levels deemed acceptable according to prior studies (Ajouz et al., 2023; Ajouz, Abdullah, et al., 2020; Hair et al., 2019). These findings reinforce the measurement model's validity and reliability.

**Table 2:** Discriminant Validity for First-Order Model  
Source: Author's Own Creation based on Smart-PLS Results

	EC	E	S	A	CA	I	PA	RT	SP	EB
EC	<b>0.792</b>	0.829	0.826	0.782	0.699	0.789	0.752	0.476	0.747	0.778
E	0.638	<b>0.830</b>	0.824	0.847	0.682	0.764	0.770	0.434	0.781	0.724
S	0.633	0.640	<b>0.816</b>	0.809	0.677	0.732	0.835	0.413	0.700	0.726
A	0.564	0.650	0.713	<b>0.758</b>	0.783	0.826	0.891	0.645	0.783	0.790
CA	0.614	0.610	0.605	0.656	<b>0.749</b>	0.726	0.812	0.701	0.673	0.811
I	0.682	0.670	0.643	0.698	0.623	<b>0.739</b>	0.855	0.650	0.802	0.717
PA	0.646	0.567	0.738	0.661	0.695	0.623	<b>0.753</b>	0.628	0.813	0.769
RT	0.425	0.402	0.381	0.547	0.587	0.539	0.533	<b>0.767</b>	0.504	0.550
SP	0.637	0.674	0.606	0.656	0.574	0.648	0.680	0.429	<b>0.795</b>	0.727
EB	0.663	0.637	0.634	0.639	0.678	0.598	0.645	0.458	0.601	<b>0.743</b>

**Notes:** Diagonal and italicized are the square roots of the AVE. Below the diagonal elements are the correlations between the construct's values. Above the diagonal elements are the Heterotrait–Monotrait ratio of correlations values.

To assess discriminant validity, the current investigation utilized the approach outlined by Fornell and Larcker

(1981). More precisely, Tables 2 and 3, representing the First-Order and Higher-Order Models respectively, reveal that the square roots of the Average Variance Extracted (AVE) for each primary construct significantly exceed the correlational values with other constructs. This notable difference among the constructs manifests as a clear evidence of discriminant validity. Such results are consistent with the Fornell-Larcker criteria, thereby endorsing the solidity of the adopted methodology and corroborating earlier scholarly contributions (Abuamria & Ajouz, 2020; Ajouz et al., 2023; Hair et al., 2019).

Additionally, the study applied the Heterotrait-Monotrait (HTMT) test as formulated by Henseler et al. (2015). The outcome indicated HTMT values that span from 0.413 to 0.891 in the First-Order Model and from 0.717 to 0.870 in the Higher-Order Model, well below the established 0.90 threshold (Gold et al., 2001). These results furnish unequivocal evidence for the distinctiveness between the scrutinized constructs, thereby strengthening the discriminant validity of the current investigation (Alomary et al., 2023). Tables 2 and 3 elucidate this distinctiveness, relating to the First-Order and Higher-Order Models, respectively.

**Table 3:** Discriminant Validity for Higher-Order Model  
**Source:** Author's Own Creation based on Smart-PLS Results.

	ST	SEO	EB
<b>Sustainability</b>	<b>0.944</b>	0.870	0.717
<b>Social Entrepreneurship Orientation</b>	0.819	<b>0.837</b>	0.827
<b>Entrepreneurial Bricolage</b>	0.613	0.697	<b>0.751</b>

**Notes:** Diagonal and italicized are the square roots of the AVE. Below the diagonal elements are the correlations between the construct's values. Above the diagonal elements are the Heterotrait–Monotrait ratio of correlations values.

#### 4.2 Structural Model

The hypotheses in question were assessed through the Partial Least Squares (PLS) bootstrapping technique, a methodology known for its rigorous statistical inference and applicability for model evaluation (Hair et al., 2017). Figure 4 portrays the predictive strength of the model, showing that it explains approximately 68.6% of the total variance in NGO sustainability, denoting a high level of explanatory power for such multifaceted phenomena.

The scrutiny provides empirical corroboration for all the proposed relationships, confirmed at a 95% confidence interval and systematically illustrated in Tables 3, 4, and 5. A significant revelation of this investigation is the validation of the theoretical framework suggesting that entrepreneurial bricolage serves as an essential mediator in projecting sustainability in the context of NGOs. This mediating role is relevant to the three principal dimensions of sustainability: economic, environmental, and social. Such an outcome not only expands our understanding of the role entrepreneurial bricolage plays in NGO sustainability but also offers valuable insights for its practical improvement.

The results presented offer a comprehensive insight into the relationship between various dimensions of social entrepreneurship orientation and sustainability, as well as the impact of social entrepreneurship orientation on environmental, social, and economic aspects. Each hypothesis (H1, H1a to H1f, and H2a to H2c) is supported, as evidenced by the p-values that are statistically significant at the 0.000 level.

Starting with H1, the Standardized Beta (ST Beta) value of 0.709 and a T-Value of 12.912 strongly suggest that social entrepreneurship orientation has a substantial positive impact on sustainability. This aligns with the literature that emphasizes the role of social entrepreneurship in fostering sustainable practices.

For the sub-dimensions under H1 (H1a to H1f), all show positive relationships with sustainability, but the magnitudes vary. Social passion (H1a) and autonomy (H1f) have relatively lower ST Beta values compared to pro-activeness (H1c), suggesting that while all are important, pro-activeness may be more crucial for sustainability. This could be interpreted in line with the proactive behavior literature, which argues that proactive organizations are better at adapting to environmental changes.

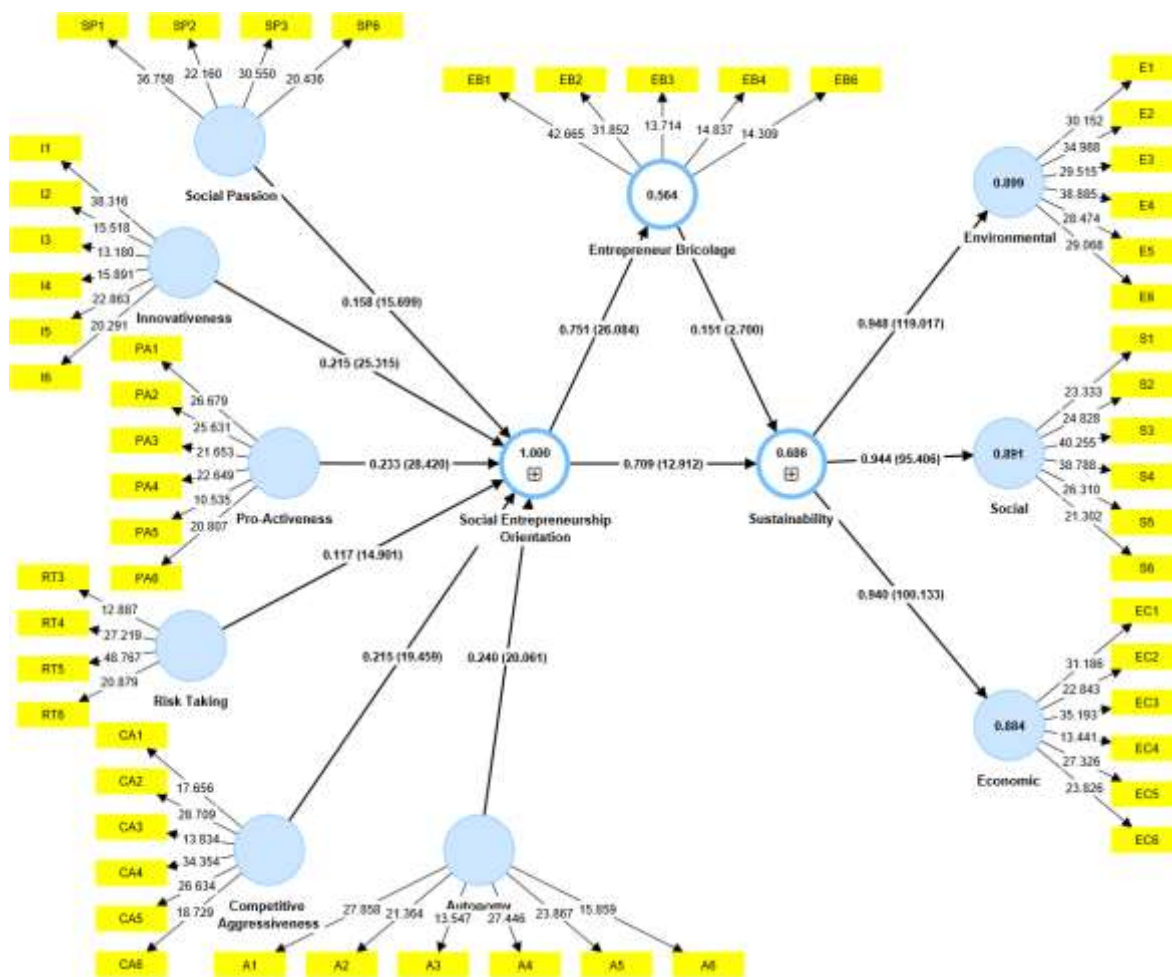
**Table 3.** PLS-SEM Results: Direct Path Coefficients of the Adjusted Model  
**Source:** Author's Own Creation based on Smart-PLS Results

H <sub>x</sub>	Relationship	Std Beta	T-Value	P-Value	Decision
H <sub>1</sub>	SEO -> ST	0.709	12.912	0.000	Supported
H <sub>1a</sub>	SP -> ST	0.130	17.101	0.000	Supported
H <sub>1b</sub>	I -> ST	0.177	18.633	0.000	Supported
H <sub>1c</sub>	PA -> ST	0.192	21.225	0.000	Supported
H <sub>1d</sub>	RT -> ST	0.096	13.978	0.000	Supported

H <sub>1e</sub>	CA -> ST	0.177	20.380	0.000	Supported
H <sub>1f</sub>	A -> ST	0.197	19.692	0.000	Supported
H <sub>2a</sub>	SEO -> E	0.780	25.231	0.000	Supported
H <sub>2b</sub>	SEO -> S	0.776	24.457	0.000	Supported
H <sub>2c</sub>	SEO -> EC	0.773	24.458	0.000	Supported

H2a to H2c explore the impact of social entrepreneurship orientation on environmental, social, and economic aspects, respectively. The ST Beta values are remarkably high, ranging from 0.773 to 0.780, indicating a very strong positive relationship. This suggests that social entrepreneurship orientation is not just beneficial for sustainability in a general sense, but also has a profound impact on specific dimensions of sustainability. This finding could be seen as an extension of the triple bottom line concept, which advocates for simultaneous consideration of social, environmental, and economic factors.

In summary, the results provide compelling evidence that social entrepreneurship orientation and its various dimensions have a significant and positive impact on sustainability and its sub-dimensions. These findings contribute to the growing body of literature on the role of entrepreneurship in sustainable development and could have implications for both academic research and policy-making.



**Fig. 4.** Structural Model Results  
Source: Author's Own Creation based on Smart-PLS Results

Likewise, the results pertaining to H3 and its sub-dimensions (H3a to H3i) offer a nuanced understanding of the mediating role of entrepreneurial bricolage in the relationship between social entrepreneurship orientation and sustainability. All the hypotheses are supported, with p-values less than 0.01, indicating statistical significance. However, it is crucial to note that the ST Beta values are considerably lower compared to the previous set of hypotheses (H1 and H2), suggesting that

the effect size is smaller.

In the context of H3, which posits that social entrepreneurship orientation influences sustainability through entrepreneurial bricolage, the ST Beta value of 0.113 is statistically significant but relatively modest. This suggests that while entrepreneurial bricolage does mediate the relationship, it may not be the most potent mechanism. The concept of entrepreneurial bricolage refers to making do by applying combinations of the resources at hand to new problems and opportunities. The modest ST Beta value could imply that while bricolage is a mechanism through which social entrepreneurship orientation impacts sustainability, it is not overwhelmingly strong.

The sub-dimensions (H3a to H3f) further dissect this mediated relationship. Among these, autonomy (H3f) has the highest ST Beta value of 0.027, albeit still modest. This could be interpreted to mean that organizations that encourage autonomy are slightly more effective at utilizing entrepreneurial bricolage to achieve sustainability. On the other hand, social passion (H3a) has the lowest ST Beta value of 0.018, suggesting that while social passion is important, it may not significantly leverage entrepreneurial bricolage to impact sustainability.

**Table 4.** PLS-SEM Results: Path Coefficients of the Adjusted Model  
Source: Author's Own Creation based on Smart-PLS Results

H <sub>x</sub>	Relationship	Std Beta	T-Value	P-Value	Decision
H <sub>3</sub>	SEO ->EB -> ST	0.113	2.685	0.007	Supported
H <sub>3a</sub>	SP -> EB -> ST	0.018	2.628	0.009	Supported
H <sub>3b</sub>	I -> EB -> ST	0.024	2.71	0.007	Supported
H <sub>3c</sub>	PA -> EB -> ST	0.026	2.667	0.008	Supported
H <sub>3d</sub>	RT -> EB -> ST	0.013	2.668	0.008	Supported
H <sub>3e</sub>	CA -> EB -> ST	0.024	2.613	0.009	Supported
H <sub>3f</sub>	A -> EB -> ST	0.027	2.623	0.009	Supported
H <sub>3g</sub>	SEO ->EB -> E	0.107	2.69	0.007	Supported
H <sub>3h</sub>	SEO ->EB -> S	0.107	2.69	0.007	Supported
H <sub>3i</sub>	SEO ->EB -> EC	0.106	2.689	0.007	Supported

H3g to H3i explore the mediating role of entrepreneurial bricolage in the relationship between social entrepreneurship orientation and environmental, social, and economic aspects. The ST Beta values are very similar, ranging from 0.106 to 0.107, suggesting that entrepreneurial bricolage equally mediates the impact of social entrepreneurship orientation across these three dimensions. This finding could be seen as an extension of the triple bottom line concept, emphasizing that entrepreneurial bricolage can be a holistic approach to achieving sustainability across multiple dimensions.

In summary, the results indicate that entrepreneurial bricolage does play a mediating role in the relationship between social entrepreneurship orientation and sustainability, although the effect sizes are modest. These findings add a layer of complexity to our understanding of how social entrepreneurship contributes to sustainability, suggesting that the mechanisms are multifaceted and may involve other mediating variables not captured in this study.

## 6 Conclusions

The present study employed Partial Least Squares (PLS) bootstrapping technique to rigorously assess the relationships between social entrepreneurship orientation, entrepreneurial bricolage, and sustainability in the context of NGOs. The model demonstrated a high level of explanatory power, accounting for approximately 68.6% of the total variance in NGO sustainability. Empirical evidence corroborated all proposed hypotheses, validated at a 95% confidence interval, thereby offering a robust statistical foundation for the theoretical framework under investigation.

A significant revelation of this research is the validation of entrepreneurial bricolage as a pivotal mediator in the relationship between social entrepreneurship orientation and sustainability. This mediating role was found to be relevant across the three principal dimensions of sustainability: economic, environmental, and social. The findings not only enrich the academic discourse on the role of entrepreneurial bricolage in sustainability but also offer pragmatic insights for NGOs aiming to enhance their sustainability practices.

Furthermore, the study provided a granular understanding of the impact of various dimensions of social entrepreneurship orientation on sustainability. The results indicated that while all dimensions positively influence sustainability, their magnitudes vary, suggesting differential impacts. For instance, pro-activeness emerged as a particularly crucial factor, aligning with the proactive behavior literature which posits that proactive organizations are better equipped to adapt to environmental changes.

Moreover, the study extended the triple bottom line concept by demonstrating that social entrepreneurship orientation has a profound impact on specific dimensions of sustainability, including economic, environmental, and social aspects (Elkington, 1997). This suggests that social entrepreneurship orientation can serve as a holistic approach to achieving multi-dimensional sustainability.

However, it is crucial to note that the effect sizes for the mediating role of entrepreneurial bricolage were modest, indicating that while it is a significant mechanism, and it may not be overwhelmingly potent. This adds a layer of complexity to our understanding of how social entrepreneurship contributes to sustainability, suggesting that the mechanisms are multifaceted and may involve other mediating variables not captured in this study.

In summary, this research contributes to the burgeoning literature on the role of entrepreneurship in sustainable development and has significant implications for both academic research and policy-making. Future research could explore other potential mediators and moderators to provide a more comprehensive understanding of the mechanisms through which social entrepreneurship orientation influences sustainability.

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## Appendix A: Scale items and Latent Variable Evaluation

Source: Author's Own Creation based on Smart-PLS Results

Constructs and related measurement items		Loadings
<b>Sustainability: Economic</b>		
EC1	Sustainable development requires that companies act responsibly towards their employees, customers and suppliers	0.814
EC2	Individuals should shop in the direction of their desires and wishes without regard to their needs.	0.822
EC3	Economic policies should be able to reduce poverty and differences in income distribution.	0.842
EC4	For economic development, non-production sectors should be emphasized.	0.659
EC5	The production of high-tech products for economic development should be supported.	0.811
EC6	Investments in agriculture and livestock sectors should be supported for economic development.	0.790
<b>Sustainability: Environmental</b>		
E1	Preserving the variety of living creatures is necessary for sustainable development	0.797
E2	Sustainable development requires a shift to renewable natural resources.	0.834
E3	The use of public transportation at short distances does not help to maintain atmospheric equilibrium.	0.846
E4	Every individual has responsibility to protect existing resources (water, air, soil etc.) for future generations to survive ecological problems.	0.859
E5	Wastes should be separated according to their characteristics and reused, so that raw material sources can be used by future generations.	0.827
E6	I think that nothing can be done individually to prevent global climate change.	0.815
<b>Sustainability: Social</b>		
S1	Improving people's chances for a long and healthy life contributes to sustainable development.	0.783
S2	People who exercise their democratic rights are necessary for sustainable development (for example, they vote in elections, involve themselves in	0.808

S3	social issues, express their opinions)	0.859
S4	Respecting human rights is necessary for sustainable development	0.845
S5	To achieve sustainable development, all the people in the world must have access to good education	0.804
S6	Equal opportunities should be offered to individuals in society (women/men, rich/poor, race/religion etc.).	0.796
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<b>Social Entrepreneurial Orientation: Autonomy</b>		
A1	Individuals should be provided with environments where they feel safe while living.	0.771
A2	I am an avid information seeker	0.772
A3	I encourage the employees to act independently	0.721
A4	I encourage the employees to make key strategic decisions	0.804
A5	I encourage the employees to implement key programs	0.780
A6	I respect rules and established procedures because they guide me	0.698
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<b>Social Entrepreneurial Orientation: Competitive Aggressiveness</b>		
CA1	I see opportunities where others see only social problems	0.714
CA2	I am able to identify opportunities where others do not see them	0.796
CA3	I always keep an eye out for new business ideas when looking for information	0.673
CA4	An opportunity to beat a competitor in a business deal is always a thrill	0.809
CA5	I easily take chances compared to others	0.782
CA6	Successful business people pursue any opportunity and do whatever they have to do in order to survive	0.711
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<b>Social Entrepreneurial Orientation: Innovativeness</b>		
I1	I monitor the actions of the competitors	0.818
I2	I often like to try new activities that are not typical.	0.689
I3	In general, I prefer a strong emphasis in projects on unique approaches rather than revisiting tried approaches used before.	0.677
I4	I favor experimentation to problem solving) rather than using methods others generally use for solving their problem).	0.725
I5	I have the ability to generating new ideas	0.768
I6	I do not like routine task	0.746
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<b>Social Entrepreneurial Orientation: Pro-Activeness</b>		
PA1	Continuous renewal and social innovation are important to our company.	0.767
PA2	I usually act in anticipation of future problems, needs or changes.	0.800
PA3	I tend to plan ahead on projects.	0.776
PA4	I prefer to “step-up” and get things going on projects rather than sit and wait for someone else to do it.	0.794
PA5	I usually think about how to find a new way of doing business	0.611
PA6	I usually look for ideas that have the potential/opportunities to be highlighted, but no action taken	0.756
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<b>Social Entrepreneurial Orientation: Risk Taking</b>		
RT3	I Aim to make the world a better place	0.680
RT4	I like to take bold steps to do something which is uncertain	0.775
RT5	I have to ask in advance to be briefed in business	0.847
RT6	I am willing to take risks for the sake of business	0.757
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<b>Social Entrepreneurial Orientation : Social Passion</b>		
SP1	I enjoy the risky business since they energize me more than predictable outcomes	0.848
SP2	I have an explicit focus on creating social value.	0.791
SP3	I prefer to take decisions with perceived benefits to others over the decisions with only personal benefits	0.812
SP6	I usually set ambitious yet realistic goals with regard to empowerment of people.	0.724
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EB1	we are confident in our ability to find workable solutions to new challenges by using our existing resources	0.822
EB2	We completely rely on reuse of our existing resources even in new kinds of projects	0.831
EB3	We use new resources only if it does not involve significant additional costs	0.685
EB4	Our personnel perform a larger number of diverse tasks also outside their main domain of expertise	0.675
EB6	We often involve our customers very closely and informally in our daily work	0.688

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