PICCOLA IMPRESA
SMALL BUSINESS

Rivista Piccola Impresa/Small Business
n. 2, anno 2025
Codice ISSN 0394-7947 - ISSNe 2421-5724

INVESTIGATING THE RELATIONSHIP BETWEEN SOCIAL ENTERPRISE SUSTAINABILITY DIMENSIONS AND COLLABORATIVE SOCIAL PROGRAM MANAGEMENT SOURCES

Arif Ud Din
arif.uddin@cust.edu.pk
Capital University of Science and Technology

Syed Hamza Farooq
s.farooq@studenti.unisannio.it
University of Sannio

Angelo Riviezzo
angelo.riviezzo@unisannio.it
University of Sannio

Fahim Khan
Fkhan1@mtroyal.ca
Royal Roads University

Article info

Date of receipt: *28/05/2024*
Acceptance date: *07/03/2025*

Keywords: *Sustainability, Program management resources, social enterprises, Social, Economic and Environmental Sustainability.*

doi: *10.14596/pisb.4566*

Abstract

Purpose. *This paper investigates the multifaceted aspects of sustainability considered by social enterprises in selecting resources for social program management. It delves into the interplay among the three pillars of sustainability, social, economic, and environmental, and their influence on the adoption of collaborative social enterprise program management resources in Pakistan.*

Design/Methodology/Approach. *In this study, a survey questionnaire approach was used. A total of 300 responses were received from the respondents working in Pakistan's social enterprises. Data were gathered from project and program managers active in Pakistani social enterprises. Purposive and convenient sampling techniques were employed. The data was analyzed through partial least square structural equation modeling (PLS-SEM) using the PLS 3.3 software.*

Findings. *The study suggests that enterprises placing a higher emphasis on sustainability are more inclined to engage in green innovations. A notable correlation exists between the high valuation of economic and institutional sustainability and the propensity of investors to embrace green innovations.*

Practical and Social Implications. *This research highlights the emerging niche of integrating sustainability principles with project and program management practices, underscoring the significant hurdles faced by managers in implementing these principles. Moreover, it reveals that collaborative social program management resources considerably impact the sustainability dimensions within social enterprises.*

Originality of the Study. *This research makes a distinctive contribution by exploring the nature and impact of a novel program management resource, a collaborative social program management resource, and its association with sustainability.*

1. Introduction

Social enterprises (SE) have been key players in promoting sustainable and equitable development for many years. Further, this function has been highlighted in the context of industrialized nations' local development processes, where SEs has been functioning as beneficial social innovation incubators, particularly in times of economic crises. However, their capacity to have a social influence on the region and within the community is at the core of this mission (Tomei et al., 2024). In addition, the field of social enterprise research has grown dramatically over the last 20 years, with a particular emphasis on the establishment and expansion of these enterprise-based organizations, moreover, SE has seen significant expansion (Pless, 2012; Terjesen et al., 2012; Slitine et al., 2024).

To solve societal issues and promote sustainable development, social entrepreneurs have been instrumental. Furthermore, following worldwide patterns, commercial organizations, decision-makers, and academics are becoming more interested in and involved with SEs in developing nations was a realistic and promising solution to a variety of intricate and pervasive societal development issues (Gupta & Srivastava, 2021).

Although, numerous academicians and scholars have been inspired to delve into the vast and emerging topic of social entrepreneurship by its evolution. In one such study, more than 307 papers and works of literature on social entrepreneurship were gathered and examined. A cluster map resulting in 140 distinct definitions of a social enterprise was constructed (Alegre et al., 2017). However, according to social enterprise alliance, an organization employing a market-based method to address a social or environmental issue qualifies as a SE (Social Enterprise Alliance, 2018). Besides, Abu-Saifan (2012, 25) proposed the following definition in a study. "A social entrepreneur is a mission-driven person who, through an entrepreneurial oriented entity that is financially independent, self-sufficient, or sustainable, uses a set of entrepreneurial behaviors to deliver social value to the less privileged." However, SEs varies in their dedication to social and economic goals, resulting in a spectrum of outcomes, and it strives to balance the creation of social value with financial sustainability (Battilana et al., 2015; Stevens et al., 2015; Dacin et al., 2010). In addition, social entrepreneurship refers to the process of integrating resources in an innovative way to explore and utilize entrepreneurial opportunities, realize social value, promote social change, and meet social needs (Yan et al., 2022).

Studies that establish a connection between social entrepreneurship and sustainability are becoming more popular in the nascent field of academic research on social entrepreneurship because of how crucial these concepts are (Kamaludin et al., 2021). Sustainability is defined as the shared responsibility to optimize current resources and ensure a viable future for all and

a normative result that sustainable development need to achieve (Gimenez et al., 2012; Kleindorfer et al., 2005; Redman & Charles, 2014). As the globe faces more and more pressing environmental, social, and economic concerns, businesses are realizing that in order to secure long-term success, they must incorporate sustainability concepts into their strategies and operations. (Adams & Nicholas, 2007; Eccles & Krzus, 2010; Lozano, 2015). In addition, the potential for financial and reputational gains, stakeholder expectations, and regulatory obligations are some of the drivers driving the adoption of sustainability indicators (Hahn & Kühnen, 2013; Van Marrewijk, 2003). Besides, sustainability is characterized as a process aiming to foster a community that prioritizes natural resource conservation and promotes democracy (Gladwin et al., 1995).

Beyond being merely a tool, sustainability represents a strategic means for businesses to contribute to the stewardship of human and natural resources, enhancing the overall health of society and the economy (Mitchell et al., 2007). Given the complexity of contemporary environmental and social issues, organizations are compelled to adopt innovative strategies and practices (Pope et al., 2004; Wilkins, 2003). In light of a growing global population, climate change, pollution, and natural resource depletion, sustainability has become a foundational aim for modern enterprises (Boons et al., 2013). Organizations that support the triple bottom line (TBL), encompassing environmental, social, and economic aspects, operate sustainably (Dao et al., 2011; Elkington, 1998). This study aims to forge a strategy that blends the diverse facets of sustainability within the framework of project management. By adopting this approach, the goal is to unearth the components that bolster sustainability efforts (Carvalho & Rabechini Junior, 2011). The convergence of sustainable development with project management principles has sparked interest from both practitioners and scholars. Furthermore, it is posited that the application of project management principles can spearhead the creation of viable and enduring solutions to a broad spectrum of challenges (Silvius et al., 2013).

Despite the priority for SEs to serve the community effectively, their financial sustainability remains a concern. Numerous studies have examined the impact of mission drift on SEs, yet further research is necessary to devise efficient management strategies for this challenge (Battilana et al., 2015; Grimes, 2010; Smith et al., 2013; Staessens et al., 2019). However, the factors impacting the sustainability of SE remain relatively understudied; earlier studies focused on the role of dynamic capabilities and innovation in enhancing the sustainability of SE (Desiana et al., 2022). Besides, a study has also been conducted on how SE gradually transforms itself to better deliver on sustainable development and the mobilization of local citizens (Tomei et al., 2024). However, the influence of collaborative social resources on social enterprise is rarely explored in the developing country context,

like Pakistan, which is a gap that this study addressed. Therefore, the main goal of this study is to investigate how collaborative social program management resources affect the social, economic, and environmental sustainability aspects of social enterprises in Pakistan. Fundamentally, the purpose of this study is to provide a thorough response to the following important question: Do collaborative social program management resources influence the environmental, social, and economic sustainability elements of social businesses in Pakistan?

The study presents a new way of looking at how to use outside networks and resources to improve the sustainability performance of social businesses by emphasizing the value of cooperative social program management resources. This methodology not only broadens the current body of knowledge about sustainable project management, but it also offers useful perspectives for social businesses that aim to improve their sustainability outcomes. Furthermore, the study extends the discourse on sustainability in emerging economies by concentrating on the Pakistani context and providing pertinent implications for scholars, practitioners, and policymakers who are interested in the sustainability transformations of social businesses.

This introduction is followed by a thorough literature analysis in Section 2, which establishes the foundation for the study's theoretical framework and hypotheses. In-depth information about the methodology used for data collection and analysis is provided in Section 3 of the study. Section 4 presents the results, which offer empirical insights into how collaborative social program management resources affect the sustainability features of SE. In Section 5, these discoveries are discussed together with their practical consequences. The study's conclusions are presented in Section 6, which also summarizes the major findings and their implications for the field. In closing, Section 7 discusses the shortcomings of the present research and suggests avenues for further investigation, laying the groundwork for continued investigation in this important field of the study.

2. Empirical Literature Review

2.1 Collaborative Social Program Management Resource

The capacity to integrate both formal and informal social program management resources is a crucial element of a collaborative social program. It enables organizations to collect and interpret information from external sources, which can enhance their existing team and organizational resources (Tansley & Newell, 2007). According to Björk et al. (2011), networking activities significantly contribute to project success. Furthermore, Burns (2003) highlights that obtaining information from the external environ-

ment allows organizations to acquire new knowledge and secure a competitive advantage.

The collaborative social program management (PM) resource has been recognized as a novel capability essential for the success of nonprofit organizations within their sector. Unlike private entities, nonprofit missions face fewer restrictions in resource allocation (Reed et al., 2006). Moreover, case studies indicate the existence of two distinct types of collaborative social Program Management resources: formal and informal. These resources enable non-government organizations to orchestrate programs that serve community interests (Nanthagopan et al., 2016).

Given the competitive forces at play, organizations that depend solely on internal operations find themselves at a disadvantage (Liu & Liu, 2008). The ability to effectively leverage external knowledge is therefore pivotal for their continued viability (Grant, 1996; Liu & Liu, 2008). Through formal avenues, such as project advisories, nongovernmental organizations (NGOs) can reap benefits from the management of collaborative projects. Likewise, the capacity to extract insights from a range of informal external interactions is often cited as an informal collaboration social resource (Nanthagopan et al., 2016). Engaging with various individuals and organizations allows an entity to deepen its understanding of diverse work facets. This resource further facilitates the promotion of project marketing and development efforts (Nanthagopan et al., 2016).

2.2 Sustainability Dimensions

The concept of sustainability was first formulated in 1987 by the UN's World Commission on the Environment and Development. It describes a process that enables society to satisfy the needs of the present generation without compromising the ability of future generations to meet their own needs (Cassen, 1987). Sustainability is a comprehensive concept that encompasses environmental, social, and economic aspects. The notion of the Triple Bottom Line (TBL) is anchored in these dimensions (Dao et al., 2011; Elkington, 1998). Recognized as the triple bottom line, the environmental, economic, and social factors are essential for enduring sustainability (Choi & Ng, 2011; Vos, 2007).

The environmental dimension of the TBL emphasizes the sustainable use of natural resources and the promotion of renewable trends. Achieving this goal involves strategies to reduce the consumption of non-renewable resources and greenhouse gas emissions (Glavič & Lukman, 2007; Ruggieri et al., 2016). Innovations in technology and services aim to mitigate adverse environmental impacts, incorporating ecological processes and technologies such as waste management and recycling (Delai & Takahashi,

2011; Galdeano-Gómez et al., 2013; Pretty et al., 2011). For operations to become more sustainable and resource-efficient, businesses are encouraged to adopt green technology and innovation (Galdeano-Gómez et al., 2013; Khan et al., 2016).

The TBL's social dimension is dedicated to fostering and maintaining the human and social capital of the communities in which it operates (Dyllick & Hockerts, 2002). This aspect of sustainability involves improving quality of life, social integration, and ensuring equal access to education (Kiel et al., 2017; Littig & Grießler, 2005). It underscores the importance of the well-being of individuals and communities, often described as the social dimension of management (Choi & Ng, 2011; Delai & Takahashi, 2011; Khan et al., 2016). Social sustainability addresses various operational dimensions of an organization, including its impact on the environment, human capital, and job creation (Galdeano-Gómez et al., 2013; Khan et al., 2016). It also encompasses the organization's societal impact through social impact reports and corporate social responsibility initiatives (Elkington, 1998; Wood, 1991). This concept arises from common social challenges faced by organizations in socially driven projects (Barone et al., 2000; Dhaoui, 2014; Handelman & Arnold, 1999), influencing factors such as employee motivation (Drumwright, 1994) and the effectiveness of sustainability marketing efforts (Berens et al., 2005; Ellen et al., 2006). Through their actions, companies contribute to a more sustainable society and foster a shared sense of purpose among community members (Kim, 2018).

The economic dimension of the TBL pertains to an organization's strategy and operations, focusing on enhancing the supply chain to create value and manage costs (Bansal, 2005). Economic sustainability involves managing the financial and environmental impacts of organizational activities (Svensson & Wagner, 2015; Wagner & Svensson, 2014). This domain, linked to a company's financial performance and its external engagements (Sheth et al., 2011), is a prominent area of research. The current economic challenges heighten concerns about long-term viability and financial security among individuals and organizations (Choi & Ng, 2011). Sustainable development considers a holistic approach to environmental, social, and economic factors, necessitating integrated support and coordination to achieve these objectives (Bansal, 2005; Evans et al., 2017; Norman & MacDonald, 2004). Despite the potential benefits of sustainability, organizations continue to grapple with the complexities of the TBL (Carrillo-Hermosilla et al., 2010; Kiel et al., 2017).

2.3 Sustainability in Project Management

Recognizing the multifaceted social, environmental, and economic consequences of initiating and maintaining infrastructure projects has become crucial. The absence of a unified framework for the assessment and evaluation of sustainability in projects is seen as an obstacle to effective analysis (Cole, 2005; Deakin et al., 2002; Thomson et al., 2011). Researchers emphasize the importance of evaluating a project's environmental impact as essential for fostering a sustainable and stakeholder-responsive environment (Pope et al., 2004; Wilkins, 2003). Such evaluations are necessary to ensure transparency and guide all decision-makers involved in the project. These assessments should be performed openly and transparently (El-haram et al., 2007; Mathur et al., 2008; Thomson et al., 2011).

Despite the availability of key concepts and methodologies, the application and quantification of sustainability principles pose significant challenges (El-haram et al., 2007; Singh et al., 2012; Thomson et al., 2011). For instance, the focus of greening tools must shift from merely achieving goals to realizing final objectives and outcomes (Gladwin et al., 1995). The unresolved technical and conceptual issues surrounding the implementation and measurement of sustainability principles highlight the need for continued development and adoption of sustainable practices and models (El-haram et al., 2007; Singh et al., 2012; Thomson et al., 2011). Moreover, the creation and evaluation of sustainable indicators are vital for achieving the objectives outlined in the Sustainable Development Agenda (Hardi et al., 1997).

The field of sustainable development, despite its extensive body of research, still requires further investigation. This necessity stems from the complexities involved in measuring and managing the impacts on the environment (Singh et al., 2012; Welsch, 2005). Sanchez (2015) suggests a methodology that enables organizations to allocate resources more efficiently, aiming to meet their sustainability goals and objectives. Many companies have formulated strategies and mission statements that highlight the significance of sustainable development. Yet, integrating these social and environmental considerations into their programs and initiatives remains a formidable challenge (Sarkis et al., 2012).

2.4 Theoretical Framework and Hypotheses Development

This study's theoretical framework combines the Triple Bottom Line (TBL) framework with the Resource-Based View (RBV) framework to investigate how Collaborative Social Program Management Resources affect the sustainability aspects of Social Enterprises (SEs). Collaborative social program management resources are conceived of in this framework as

strategic assets that have the potential to improve an organization's sustainability in terms of its social, economic, and environmental aspects. The TBL paradigm highlights the significance of striking a balance between economic performance and social equality as well as environmental protection, while the RBV contends that a firm's competitive edge is derived from the strategic management of rare and valuable resources. This integrated approach offers a fresh perspective on the contribution of cooperative resources to the attainment of sustainability goals, especially in the context of SEs that must simultaneously uphold their financial sustainability and carry out their social missions.

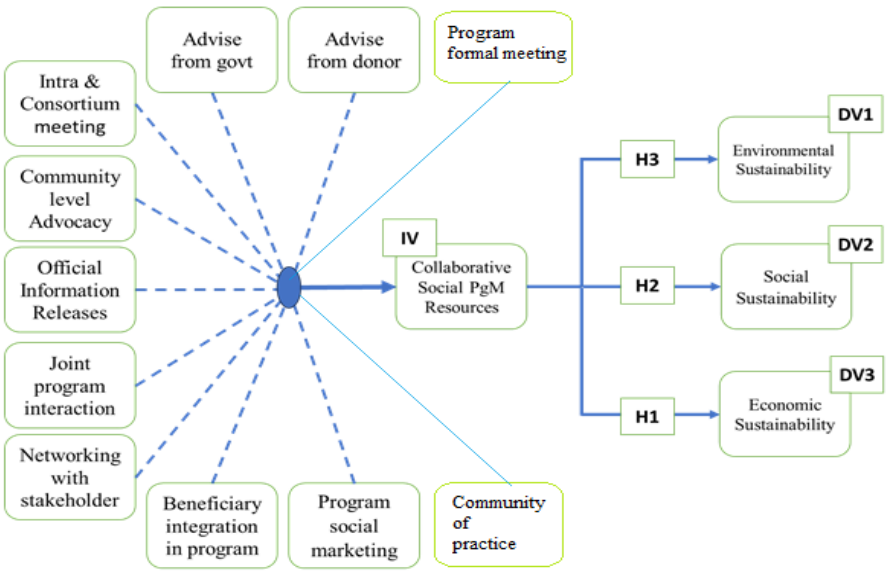
According to this study, the three fundamental hypotheses help determine the complex relationship between social program management resources and the sustainability dimensions within social enterprises, taking into account the extensive literature review conducted on the essential aspects of Collaborative Social Program Management Resources, Sustainability Dimensions, and their integration within Project Management. They are as follows:

H1: Social Program resources have a positive effect on the economic sustainability of SE.

H2: Social Program resources have a positive effect on the social sustainability of SE.

H3: Social Program resources have a positive effect on the environmental sustainability of SE.

Figure 1. *Theoretical Research Framework*



The purpose of formulating these hypotheses is to add to the body of knowledge on project management techniques and sustainable development by investigating the complex effects of collaborative social program management resources on the sustainability dimensions inside social businesses. This research aims to provide deeper understanding of how cooperative efforts and resources can be strategically exploited to improve the sustainability results of social businesses, especially in light of Pakistan's dynamic socio-economic landscape, through empirical validation.

3. Methods

3.1 Data Collection and Sampling

To methodically examine the influence of Collaborative Social Program Management Resources on the sustainability aspects of Social Enterprises (SEs) in Pakistan, this study used a quantitative research approach. The data was collected through an online survey questionnaire developed in Google docs and self-administered questionnaire. Through the use of a survey questionnaire, data collection from SEs included managers, coordinators, presidents, CEOs, monitoring and evaluation officers, program and project staff was accomplished. This ensured the acquisition of relevant and accurate information regarding their opinions and experiences. The duration of the data collection was during the year Feb 2020 to October 2020 in all regions in Pakistan. In order to maximize response rates and accommodate the preferences of all possible respondents, a dual-mode strategy was selected. To ensure a thorough grasp of the phenomenon under research, 900 people working in Pakistan's social business sector were given the questionnaires.

However, in this study a total of 300 SEs participated. The SE included in the study include categories such as education, healthcare, environmental conservation, poverty alleviation, livelihood, community development. These individuals represented a wide range of positions and responsibilities. For the identification of SEs the outreach and recruitment methods used to contact the SEs (e.g., industry associations, directories, referrals); however, a government registered directory is not available regarding SEs. According to a British Council report in 2016, there may already be as many as 448,000 social enterprises functioning in Pakistan. However, the researcher does not agree with this number due to the relatively small and unrepresentative sampling process. Despite this discrepancy, growth in the social enterprise sector in Pakistan is anticipated. With 300 valid answers obtained from the delivered sur-

veys, the study had a response rate of about 33 percent. This sample size is considered enough for carrying out significant statistical analysis since it reflects the overall response trends seen in comparable studies conducted throughout the nation. As a result, they were a rich source of information about the sustainability effects of collaborative social program management resources.

Purposive and convenient non-probability sampling approaches were incorporated in the sample procedure. With this strategy, the researcher is allowed to make sure that the respondents had the necessary training and expertise to give meaningful answers. The unit of research analysis is Social enterprise in Pakistan, and has been established for over 5 years. The other criteria are that SE should be primarily based in Pakistan. Organization should be not for profit SE. The firm should be legally registered as a not for profit organisation and the primary goal is to carry out a social mission.

3.2 Measurement and Instrumentation

A structured questionnaire was used as the assessment tool to gather information about the management resources of collaborative social programs and how they affect the social, economic, and environmental sustainability of SEs. The questionnaire was split into two sections: scale-based questions about the study's constructs and demographic data. To guarantee the applicability and precision of the measures, the scales were taken from the body of existing literature and modified. For the scale-based questions, respondents were asked to indicate how much they agreed or disagreed with each statement using a five-point Likert scale that went from "1" (strongly disagree) to "5" (strongly agree). Before completing the questionnaire, potential respondents were offered screening questions to make sure they met the requirements. The following were the filter questions: 1. The organization has been in existence for over five years; 2. SE should be primarily based in Pakistan. 3. Organization should be not for profit SE. 4. The firm should be legally registered as a not-for-profit organization. 5 The primary goal is to carry out a social mission. The variables, their items, and the references used to create the scale for this study are displayed in Table 1. Additionally, Table 2 provides a detailed description of previous research on the social program management resources.

Table 1. *Total measurements*

S#	Concepts	Code	Variables	References	***Total Items***
1	*Collaborative*		*Social PgM Resource*	Jugdev and Mathur (2006), Nanthagopan, et al., (2016), and Pact (1996)	11
		SMR1	Coordination meeting with Govt bodies		
		SMR2	Advice from sponsors		
		SMR3	SE intra and consortium summits		
		SMR4	Programme official info dissemination		
		SMR5	PgM formal meeting		
		SMR6	Joint programme with partner Org.		
		SMR7	Networking with stakeholders		
		SMR8	Beneficiary incorporation in program		
		SMR9	Programme social marketing		
		SMR10	Community of practice		
		SMR11	Community-level advocacy		
			Social sustainability		05
		SS_socialsus1	Local labour and decent work		
		SS_socialsus2	Health & Safety conditions		
2	*Sustainability*	SS_socialsus3	Development of the community		
		SS_socialsus4	Diversity & equal opportunity	Tam, (2018), Silvius et al. (2013, 2016)	
		SS_socialsus5	Human rights		
			Economic sustainability		05
		ES_Ecosus1	Profitability for investors		
		ES_Ecosus2	Employment opportunity		
		ES_Ecosus3	Value for money		
		ES_Ecosus4	Donation/grants for Local SEs		
		ES_Ecosus5	Local area economic growth		
			Environmental sustainability		05
		EnS_Envsus1	Supplier Know-how and partnership		
		EnS_Envsus2	Energy consumption and or pollution in programme implementation processes.		
		EnS_Envsus3	Energy consumption as programme design parameter		
		EnS_Envsus4	Water & pollution consumption as programme design parameter		
		EnS_Envsus5	Waste management in program design		
				Total Instrument of the Questionnaire	

Source: *Researcher own*

Table 2*. Social resources used in previous researches*

Social Resources Indicators	Studies
Project Advise from Govt	Nanthagopan et al. (2016); Reilly (2013); Agg (2006); Coston (1998); Pact (1996); Salamon (1995); Lipsky and Smith (1990); OECD (1988); De Laat (1987); Thomas (1985)
Project Advisorr from Sponsors	Nanthagopan et al. (2016); Low et al. (2001); Pact (1996); Berg (1993); Gray (1997); Godfrey et al. (2002)
Intra and consortium summits	Nanthagopan et al. (2016)
Official Information Releases	Nanthagopan et al. (2016); Ron et al. (2005); Pact (1996)
Formal interactions	Nanthagopan et al. (2016); Steelcase Inc (2010); Shuya (2009); Rogers (1974)
Informal Interactions	Delone, 2009; Meyer (1997); Pact (1996); Nanthagopan, Williams, and Page (2016); Alter and Hage, (1993).
Linkage with Stakeholders	Nanthagopan et al. (2016); Dalaibuyan (2010); Jugdev and Mathur (2006); Madon (1999).
Beneficiary Incorporation	Nanthagopan et al. (2016); Pact (1996)
Project Marketing	Nanthagopan et al. (2016); Jackson and Smith (2014); Rothschild and Milofsky (2006); Pact (1996).
The community of Practice through Online Social Networks	Nanthagopan et al. (2016); Briones et al. (2011); Hird (2010); Waters (2009); Waters et al. (2009); Kent (2008); Eyrich et al. (2008); Jugdev and Mathur (2006); Christ (2005); Kent and Taylor (1998); Bortree and Seltzer (2009.
Community-level advocacy	Pact (1996)

3.3. Demographics

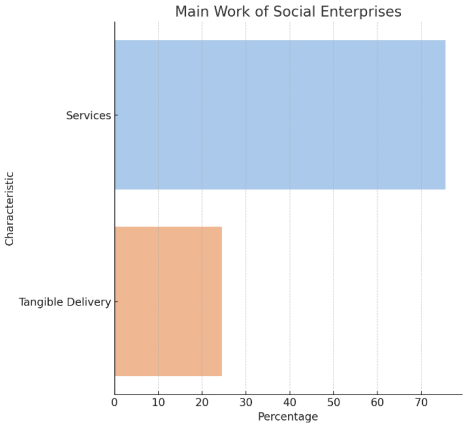
A further look at the sample's demographics, as illustrated in Figure 2, indicates that the social entrepreneurs prioritize service delivery, with 75.5% of their workforce providing services and 24.5% delivering physical goods. The geographic representation was distributed over a number of regions, with the highest concentrations in AJK (28.5%) and Islamabad (26.2%) and the lowest concentrations in Punjab (2.2%), KP (11.3%), and Sindh (11.9%). This geographic diversity guarantees a thorough comprehension of the sustainability consequences in a variety of locations. With 43.4% of the firms administering less than two programs and a smaller percentage (3.0%) involved in nine or more programs, the enterprises also demonstrated a broad spectrum of programmatic engagement across the sector.

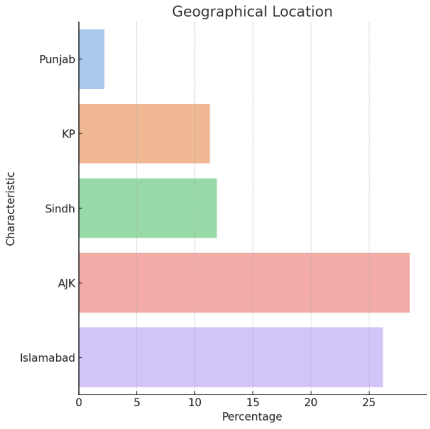
A significant proportion of the social firms surveyed (23.8%) had between 100 and 149 employees, notwithstanding the wide range of organizational sizes among them. This implies that the majority of the sector's businesses are mid-sized, but the entire range of employee counts, from less than 10 to 250–300, highlights the organizational diversity of the in-

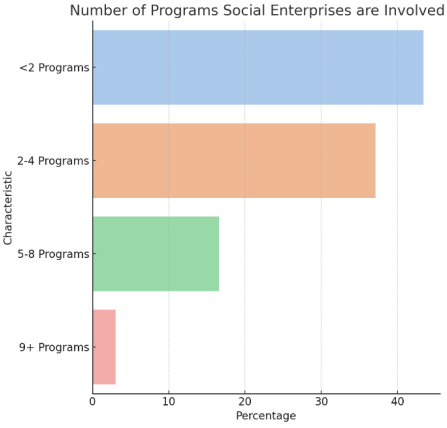
dustry. The age distribution of these businesses further demonstrated their established presence in the industry; of them, 57.9% had been in operation for more than 20 years, while the remaining businesses had been in operation for less than five years to between 11 and 20 years, indicating a mix of recently founded and established businesses in the social enterprise space.

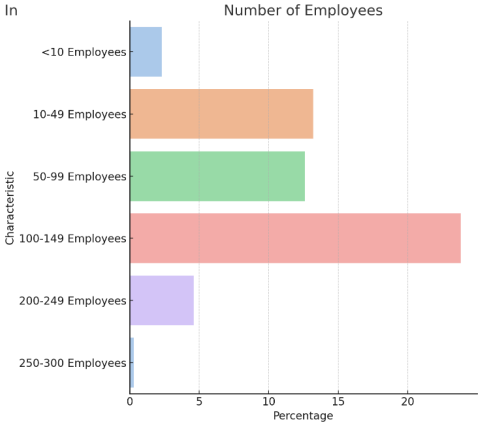
Gender diversity in the sector is indicated by the study's finding that the gender distribution within these businesses is primarily male (71.5%), with women making up 28.5% of the total. It is also clear that there is a wide range of age groups represented, with 45.0% of participants being between the ages of 25 and 34 and 34.4% being between the ages of 35 and 44, respectively. This indicates that a younger demographic is active in social businesses. In addition, there was a wide range of experience among the respondents; notably, a sizable portion (57.3%) had between 0 and 5 years of experience, suggesting a relatively new viewpoint in the industry. The majority of the people working in these social enterprises had higher education backgrounds; 49.7% of them had a Master's degree and 26.8% a Bachelor's degree, showcasing a well-educated workforce. Additionally, the positions that respondents hold within their organizations, from CEOs/Owners (2.6%), to Program Managers (19.5%) and a variety of other positions like Program Coordinators (23.8%) and Program Field Staff (17.5%), also demonstrate the range of leadership styles and areas of expertise that are present in the industry. The wide range of functions that social enterprises play highlights the intricacy of these businesses and the various strategies they use to fulfill their social missions.

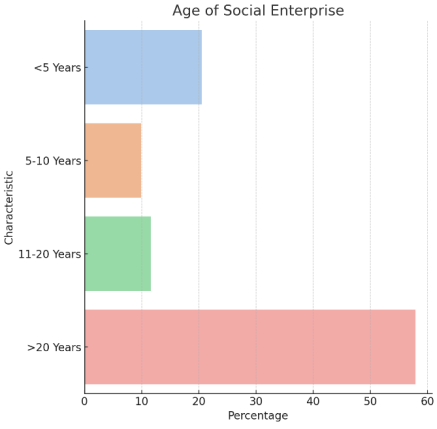
One of the most important factors for these businesses was financial support; 95.4% of them had funding. In order to maintain the numerous projects and programs targeted at making a social impact, funding is essential. As a result, the sample distribution used in the study not only offers an overview of the situation of social enterprises in Pakistan today, but it also creates a solid basis for future research into the effects of cooperative social program management on sustainability. This study provides important insights into the dynamics of sustainable practices within the social enterprise sector by illuminating the diversity of enterprises contributing to the sustainability discourse, as evidenced by the differences in operation size, geographic location, program involvement, organizational age, and financial backing.

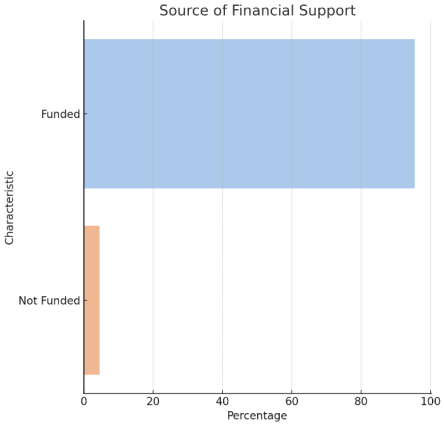

Main Work of Social Enterprises
Services
Tangible Delivery
Characteristic
0
10
20
30
40
50
60
70
Percentage


Geographical Location
Punjab
KP
Sindh
AJK
Islamabad
Characteristic
0
5
10
15
20
25
Percentage


Number of Programs Social Enterprises are Involved In
<2 Programs
2-4 Programs
5-8 Programs
9+ Programs
Characteristic
0
10
20
30
40
Percentage


Number of Employees
<10 Employees
10-49 Employees
50-99 Employees
100-149 Employees
200-249 Employees
250-300 Employees
Characteristic
0
5
10
15
20
Percentage


Age of Social Enterprise
<5 Years
5-10 Years
11-20 Years
>20 Years
Characteristic
0
10
20
30
40
50
60
Percentage


Source of Financial Support
Funded
Not Funded
Characteristic
0
20
40
60
80
100
Percentage

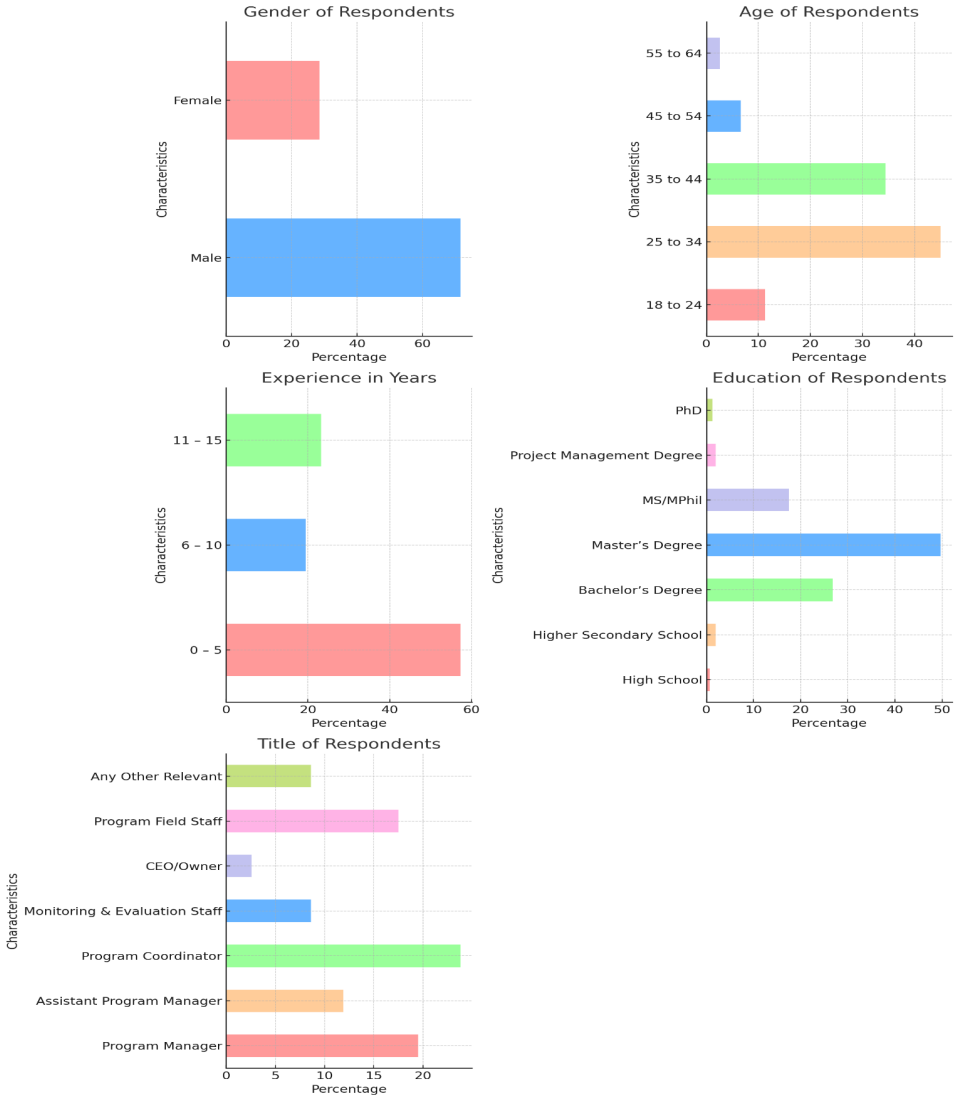


Figure 2. *Demographic Distribution of Social Enterprises in the Study*

3.4. Data Analysis Methods/Tests

The study employed Smart PLS Version 3.3 software for data analysis, enabling a thorough investigation of the correlations among the variables under investigation via confirmatory factor analysis and structural model evaluation. In order to confirm the validity and reliability of the constructs, the analysis concentrated on assessing the measurement model for convergent and discriminant validity. Furthermore, an analysis of the structural model was conducted to verify the conjectures regarding the connections

between the sustainability aspects of SEs and the management resources for collaborative social programs. In order to ascertain the effectiveness of the collaborative resources in impacting the results of economic, social, and environmental sustainability within the setting of Pakistani social businesses, this required evaluating the predictive relevance (Q2) and the model fit (SRMR).

4. Results

4.1 Modeling of Structural Relationships (SEM)

Partial Least Squares Structural Equation Modeling (PLS-SEM) stands out as a pivotal method for deciphering complex models and the interrelations between underlying constructs, providing a robust framework for validating academic theories (Hair et al., 2017). Originating from the pioneering work of geneticist Sewall Wright in 1921, its capacity to uncover causal correlations among variables has revolutionized its application in quantitative research, making it particularly valuable for probing theoretical constructs within social and behavioral sciences (Worthington & Whittaker, 2006). The distinction between Variance-Based SEM (PLS-SEM) and Covariance-Based SEM (CB-SEM), the former being celebrated for its versatility in handling complex models and non-normally distributed data, underscores PLS-SEM's critical role in researching complex, multifaceted environments (Henseler et al., 2009).

In the context of this study, employing PLS-SEM offers significant benefits, chiefly due to its proficiency in analyzing the intricate relationships among various dimensions of sustainability. The method's adaptability is instrumental in managing the diversity and volume of data, ensuring the delivery of reliable insights without the prerequisite of extensive datasets. Moreover, PLS-SEM's predictive precision is essential for elucidating the nuanced connections within the theoretical framework, affirming the method's suitability despite potential criticisms. Its efficacy in accommodating non-normally distributed data further validates the choice of PLS-SEM, establishing it as an indispensable tool in navigating the unique challenges presented by the study's objectives.

4.1.1 Partial Least Squares Path Modeling (PLS-SEM)

Henseler et al. (2017) and Becker et al. (2023) describe Partial Least Squares Structural Equation Modeling (PLS-SEM) as a robust statistical approach that employs both an inner and an outer model to analyze data. The inner model, or structural model, leverages existing literature to establish the relationships between different vari-

ables, providing a theoretical framework for how these variables interact with each other. Conversely, the outer model, also known as the measurement model, is where the hypothesized relationships between observed variables and their underlying latent constructs are defined and tested.

Table3. *Measurement Model*

Construct	Item Code	Loadings	Outer weight	Cronbach Alpha	Rho	CR	AVE
Collaborative social resources				0.969	0.982	0.973	0.781
	SMR1	0.862	0.097				
	SMR11	0.872	0.106				
	SMR2	0.889	0.086				
	SMR3	0.894	0.088				
	SMR4	0.900	0.138				
	SMR5	0.900	0.151				
	SMR6	0.891	0.133				
	SMR7	0.893	0.136				
	SMR8	0.896	0.101				
	SMR9	0.838	0.093				
Economic Sustainability				0.886	0.922	0.915	0.682
	ES_Ecosus1	0.742	0.125				
	ES_Ecosus2	0.866	0.333				
	ES_Ecosus3	0.862	0.250				
	ES_Ecosus4	0.831	0.261				
	ES_Ecosus5	0.823	0.227				
Environmental Sustainability				0.930	0.943	0.946	0.78
	EnS_Envsus1	0.877	0.224				
	EnS_ Envsus2	0.889	0.244				
	EnS_ Envsus4	0.861	0.160				
	EnS_ Envsus5	0.903	0.270				
	EnS_ Envsus3	0.884	0.230				
Social Sustainability				0.946	0.956	0.959	0.823
	SS_socialsus1	0.915	0.223				
	SS_socialsus2	0.907	0.260				
	SS_socialsus4	0.889	0.196				
	SS_socialsus5	0.914	0.235				
	SS_socilsus3	0.911	0.188				

Note: *SMR 10 has been removed due low loading*

This dual-model structure of PLS-SEM makes it an indispensable tool in empirical research, allowing for a thorough exploration and dissection of the intricate web of interactions among variables. By integrating these two models, PLS-SEM offers researchers a comprehensive method for investigating complex relationships, enhancing our understanding of the dynamics at play within various research domains.

I. Measurement Model (Outer Model)

In the measurement model assessed using Smart PLS Version 3.3, the confirmatory factor analysis focused on evaluating both convergent and discriminant validity, revealing significant insights into the model's reliability and construct validity. The first table showcases the Average Variance Extracted (AVE) ranging from 0.682 to 0.823 for each latent variable, surpassing the minimum acceptable threshold of 0.5, as suggested by Fornell and Larcker (1981). This indicates a strong level of convergent validity, demonstrating that each construct significantly reflects its associated indicators. Moreover, factor loadings and composite reliability all exceeded the benchmark of 0.7, while Cronbach's alpha and rho A values also surpassed this critical point, indicating a high level of internal consistency and reliability across the measurement constructs (Nunnally & Bernstein, 1994). Such results underscore the robustness of the constructs, confirming their adequacy in capturing the essence of the underlying phenomena being studied.

Table 3, therefore, plays a pivotal role in illustrating the strength and appropriateness of the measurement model. The data presented highlight not only the reliability of each construct within the study but also the rigorous methodological approach undertaken to ensure these constructs accurately measure what they are intended to. This meticulous evaluation forms the cornerstone of the study's empirical analysis, laying a solid foundation for the subsequent examination of the relationships between constructs within

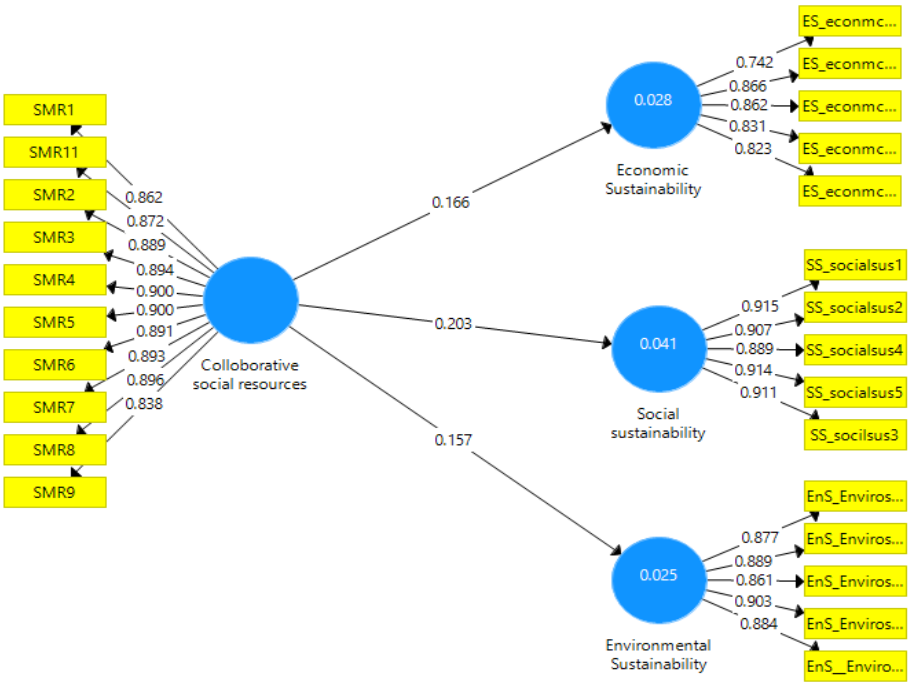


Figure 3. *Measurement Model*

the broader structural model. The attention to detail in exceeding the established benchmarks for factor loadings, composite reliability, and validity measures provides a high level of confidence in the subsequent findings derived from this model. Whereas fig. 3 shows the factor loadings and path coefficient of the study.

i. Discriminant Validity

The discriminant validity assessment, Table 4 delineates the unobserved variable correlation and the square root of AVE for each construct, fulfilling the criteria for discriminant validity. This analysis demonstrates that each construct is sufficiently distinct from the others, as evidenced by the square root of the AVE being greater than the inter-construct correlations, aligning with the standards set by Chin (1998) and Fornell and Larcker (1981). This distinctiveness is crucial for affirming that each construct captures a unique aspect of the phenomenon under investigation without significant overlap with other constructs, ensuring the clarity and specificity of the constructs within the model.

Table 4. *Discriminant validity (Unobserved variable correlation Sq. root AVE)*

	C Social Res	***Eco Sus***	***Envir Sus***	***Social Sus***
C Social PgM Res	**0.884**			
Eco Sus	0.166	**0.826**		
Envir Sus	0.159	0.309	**0.883**	
Social Sus	0.203	0.091	0.031	0.907

Table 5, presenting the Heterotrait-Monotrait ratio (HTMT), further corroborates the discriminant validity of the model. The HTMT values do not exceed the recommended threshold of 0.85, reinforcing the distinctiveness of the constructs. This finding is vital for the model's validity, confirming that the relationships modelled are between truly distinct constructs rather than variations of a single construct. The successful validation of discriminant validity through both the second and third tables not only enhances the credibility of the measurement model but also reinforces the integrity of the study's overall structural analysis, ensuring that the complex relationships explored are based on accurately defined and distinct constructs.

Table 5*. HTMT (Heterotrait-Monotrait ratio)*

	C Social Res	***Eco Sus***	***Envir Sus***	***Social Sus***
C Social PgM Res				
Eco Sus	0.161			
Envir Sus	0.158	0.340		
Social Sus	0.200	0.101	0.065	

II. Structural Model

Table 6 and Figure 4 illustrate how the structural model of this study, which was examined using Partial Least Squares Structural Equation Modeling (PLS-SEM), includes a thorough validation of multicollinearity among independent variables, a crucial first step. By use the Variance Inflation Factor (VIF) statistics, it was verified that every VIF value was below the cutoff of 5, following the recommendations of Cassel et al. (1999) and Martínez-Navalón et al. (2019). This ensured that there were no problems with multicollinearity that could skew the analysis. In addition, the predictive power of the model was assessed; the R-squared values for social, environmental, and economic sustainability were found to be 0.41, 0.25, and 0.28, respectively. These figures support the findings of Henseler et al. (2009) by showing a strong influence of independent factors on dependent

ones. According to Loureiro (2014), the predictive relevance demonstrated by Q2 results (0.312, 0.342, and 0.346) validates the model's effectiveness in forecasting results. Furthermore, a satisfactory match between the model and the observed data was indicated by the model fit index, or SRMR (Standardized Root Mean Square Residual), which was determined to be 0.073. This value is well within the acceptable range of less than 0.80 as recommended by Hu and Bentler (1999).

Table 6. *Values of R2, VIF, Q2, F2 and SRMR*

Construct	*R2*	*Adj. R2*	*VIF*	*Q2*	*f2*	*SRMR*
Eco Sus	0.28	0.24	2.22	0.312	0.28	
Envir Sus	0.25	0.22	2.89	0.342	0.25	0.073
Social Sus	0.41	0.38	3.23	0.346	0.43	

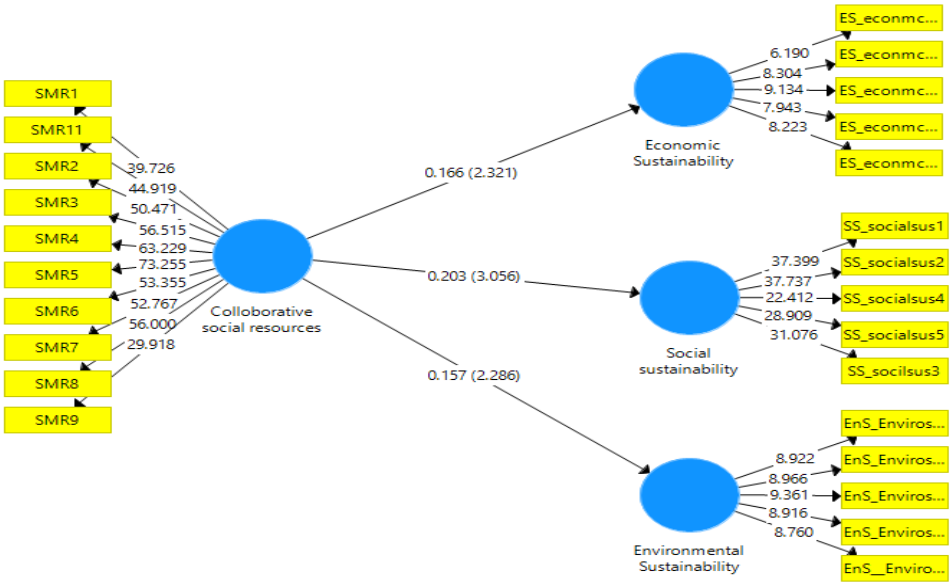


Fig. 4 *Structural Model (Path coefficient and T statistics)*

Table 7 presents the findings of the structural model, which further demonstrate the important impact of collaborative social program management resources on several sustainability parameters. With path coefficient values for social, economic, and environmental sustainability standing at 0.166, 0.157, and 0.203, respectively, the analysis supported the proposed hypotheses H1, H2, and H3. These coefficients support the structured hypotheses of the study by highlighting the beneficial and significant effects these resources have across sustainability aspects along with their related T values (2.321, 2.286, and 3.056).

Table 7. *Hypothetical Paths*

Hypothesis	*Relationships*	*Beta*	*Mean*	*SE*	*t-Value*	*Pvalue*	*Decision*
H1	*CSMR -> ECOSUS*	0.166	0.182	0.072	2.321	0.020	*Accept*
H2	*CSMR -> ENVSUS*	0.157	0.169	0.069	2.286	0.022	*Accept*
H3	*CSMR -> SocialSUS*	0.203	0.209	0.066	3.056	0.002	*Accept*

Essentially, the structural model emphasizes how important collaborative social program management resources are to improving organizational sustainability practices. The study firmly validates the predicted beneficial effects across economic, environmental, and social sustainability by carefully verifying the model's integrity through tests on multicollinearity, predictive power, and model fit. These results highlight the importance of cooperative approaches in promoting sustainable development goals and not only validate the theoretical framework put forth at the outset but also add insightful empirical evidence to the discourse on sustainability practices.

5. Discussion

In the context of Pakistani social enterprises, the study presents a novel theoretical framework that explores the multifaceted connection between the social, economic, and environmental dimensions of sustainability and the adoption of collaborative social program management resources. This study is unique in that it looks at how collaborative resources affect sustainability results from the perspective of project management within social enterprises and sustainability. The goal of the study is in line with the more general goals of incorporating sustainability into an organization's daily operations, especially in developing nations like Pakistan. The paper provides empirical data on how collaborative social program management resources affect the sustainability dimensions inside social enterprises by evaluating three hypotheses.

First, the study proposed that the economic sustainability of social enterprises (SEs) is positively impacted by social program resources. The results validated this prediction by demonstrating a noteworthy correlation that emphasizes the use of cooperative resources in strengthening the sustainability's economic pillars. This is consistent with research by Bansal (2005), who highlighted how corporate sustainable development plans change over time. Moreover, Kleindorfer et al. (2005)'s discussion of the significance of sustainable operations management highlights the role that innovative practices play in boosting economic sustainability, adding to

the ongoing conversation about the economic aspects of sustainability in the social enterprise sector.

Secondly, the study that examined how social program resources affected SEs' social sustainability produced encouraging findings, supporting the theory that cooperative resources improve social sustainability. This finding implies that social companies that use collaborative management techniques will be more successful in achieving their social goals. The results are consistent with the literature's emphasis on the value of social capital and cooperative networks in accomplishing social sustainability objectives. For instance, according to the study of Battilana et al. (2015), productive tensions in hybrid organizations such as social enterprises. By highlighting the concrete advantages of cooperative social program management on the social fabric of the communities that social businesses serve, this study adds to the body of knowledge and validates the findings of previous research on the significance of social capital and collaborative networks.

Thirdly, the study's findings supported the research's hypothesis, which held that social program resources have a positive effect on SEs' environmental sustainability. This emphasizes how important it is for social enterprises to use collaborative management techniques to encourage environmental stewardship. The potential for social businesses to make a substantial contribution to environmental sustainability objectives through creative program management techniques is shown by the positive association found between collaborative social program management resources and environmental sustainability. This conclusion is especially pertinent to Pakistan, where creative solutions are required for sustainable growth due to environmental issues. Ruggieri et al. (2016), who talked about the meta-model of inter-organizational cooperation for the shift to a circular economy, repeated this. The findings of the research emphasize the critical role that cooperative management techniques play in encouraging ecological responsibility among social enterprises and highlight the substantial contributions that creative program management techniques have the potential to make to environmental sustainability goals.

6. Implications of the Study

By presenting a novel paradigm that combines the sustainability dimensions with collaborative social program management tools, the study makes a substantial theoretical contribution. By highlighting the mutually beneficial relationship between cooperative efforts and sustainable development, this theoretical contribution enhances the body of knowledge already available on sustainability and project management in social enterprises. It emphasizes how important it is to comprehend sustainability

holistically, taking into account social, economic, and environmental factors. This is essential for both thorough comprehension and practical application. This strategy invites more investigation into the interdependence of these factors and the possible trade-offs and synergies while pursuing sustainability goals in the particular setting of social businesses.

In practical terms, the study's conclusions highlight how crucial it is to implement cooperative social program management tools in order to improve social enterprises' sustainability performance. This elucidates a crucial approach for social companies, especially those operating in developing nations such as Pakistan, to harness external connections and cooperative efforts to tackle sustainability obstacles. Social companies can strategically participate in collaborative relationships that transcend traditional organizational boundaries by using the practical insights offered by this study as a guide. Through this approach, organizations can leverage an expanded network of resources, know-how, and proficiency, leading to creative resolutions to sustainability issues and augmenting their influence on the social, financial, and ecological fronts.

This study emphasizes the vital role that managers and leaders play in creating an organizational culture that actively seeks and supports sustainability through teamwork. It is recommended that managers acknowledge the strategic significance of collaborative social program management resources and establish policies that enable cross-sector collaborations and information sharing. In order to do this, a collaborative project management environment must be established, trust must be built between partners, and competencies supporting collaborative project management must be developed. Additionally, managers must strike a balance between their obligations to the social and environmental sphere and the pursuit of economic viability. This is a difficult undertaking that calls for creative problem-solving and flexible management techniques. The study's conclusions highlight the necessity of a proactive and strategic approach to harnessing collaborative resources for sustainable growth and provide managers with insights into how to successfully integrate sustainability into organizational processes.

7. Conclusion

The exploration of the Resource-Based View (RBV) in elucidating organizational activities highlights its adaptability and significance in fostering innovative development within not-for-profit sectors, particularly social enterprises operating amidst uncertain environments (Kogut & Zander, 2003). This study's investigation into the novel program management resource, Collaborative Social Program Management (Collaborative Social

PgM), reveals its pivotal role in enhancing the tripartite sustainability dimensions, economic, social, and environmental, within social enterprises. The capacity of Collaborative Social PgM to harness external knowledge through expansive networks marks a crucial strategy for social enterprises to amplify their sustainability efforts, by facilitating the acquisition and internal generation of essential resources, including information, skills, tools, and practices.

The empirical findings underscore the substantial impact of collaborative efforts on sustainability outcomes, advocating for the integration of stakeholders across public and private sectors to navigate external uncertainties. This approach not only expands the research paradigm beyond traditional stakeholder management techniques but also proposes a spectrum of network-based engagement strategies aimed at mutual benefit. It underscores the opportunity for organizations to augment their sensing and scanning capabilities, thereby responding more adeptly to the unpredictable needs of their clientele (Jugdev et al., 2011).

In the context of Pakistani social enterprises, the study's novel theoretical framework melding collaborative social program management with sustainability's core pillars offers a significant contribution to the discourse on sustainability in social enterprises. The empirical evidence provided not only validates the framework but also highlights the indispensability of collaborative efforts in bolstering social enterprises' sustainability performance across economic, social, and environmental facets. This underscores the transformative potential of collaborative strategies in addressing sustainability challenges, particularly within emerging economies like Pakistan.

Furthermore, this research broadens our comprehension of the dynamics between project management practices and sustainability outcomes, providing a blueprint for achieving sustainability goals in resource-constrained settings. The insights derived from this study bear significant implications for practitioners, policymakers, and scholars, laying the groundwork for future endeavors aimed at integrating sustainability into the operational core of social enterprises. Through embracing collaborative strategies, social enterprises can navigate sustainability complexities, fostering innovation and catalyzing positive change within their communities and beyond.

7.1 Limitations and Future Directions

While this study gives valuable insights into the sustainability practices of Pakistani social enterprises, it is not without limitations. One of the main limitations is the research's geographic emphasis, which is limited to social enterprises in Pakistan. The findings may not apply to social entrepreneurs operating in other cultural, economic, or environmental contexts due to this geographic restriction. In addition, the study's data collection from a

certain subset of social companies may not adequately represent the variety of approaches and difficulties present in the industry as a whole.

The study's methodological approach, which prioritizes quantitative analysis, is another source of constraint. The qualitative subtleties of the links between collaborative social program management resources and sustainability characteristics may not be fully captured by this approach, despite the fact that it offers insightful statistical information. To learn more about the mechanisms through which collaboration affects sustainability outcomes in social enterprises, future research could benefit from using qualitative methodologies like case studies or in-depth interviews.

Future studies could go in a number of interesting areas. Examining how technology promotes cooperative social program management and how it affects sustainability results is one approach. Considering how quickly digital tools and platforms are developing, it could be vital to look into how technology can improve sustainability and teamwork in social companies. Further research might also look at how institutional support and policy frameworks affect the uptake and efficiency of collaborative practices in social enterprises. The creation of more hospitable conditions for sustainability-oriented collaboration in social businesses may be aided by an understanding of the interactions between institutional support, policy, and collaborative techniques. Finally, comparative research in various cultural and economic contexts may provide a deeper comprehension of the generalizability and particularity of the results, advancing the global discussion on sustainability in social enterprises.

References

Abu-Saifan, S. (2012). Social Entrepreneurship: Definition and Boundaries. Technology Innovation Management Review 2 (2): 22–27. https://doi:10.22215/timreview/523

Adams, C. A., & McNicholas, P. (2007). Making a difference: Sustainability reporting, accountability and organisational change. Accounting, Auditing & Accountability Journal, 20(3), 382-402. https://doi.org/10.1108/09513570710748553

Alegre, I., S. Kislenko, & J. Berbegal-Mirabent (2017). Organized Chaos: Mapping the Definitions of Social Entrepreneurship. Journal of Social Entrepreneurship, 8 (2) 248–264. doi:10.1080/19420676.2017.1371631.

Bansal, P. (2005). Evolving sustainably: A longitudinal study of corporate sustainable development. Strategic Management Journal, 26(3), 197-218. https://doi.org/10.1002/smj.441

Barone, M. J., Miyazaki, A. D., & Taylor, K. A. (2000). The influence of cause-related marketing on consumer choice: does one good turn deserve another?. Journal of the academy of marketing Science, 28(2), 248-262. https://doi.org/10.1177/0092070300282006

Battilana, J., Sengul, M., Pache, A. C., & Model, J. (2015). Harnessing productive tensions in hybrid organizations: The case of work integration social enterprises. Academy of Management journal, 58(6), 1658-1685. https://doi.org/10.5465/amj.2013.0903

Becker, J. M., Cheah, J. H., Gholamzade, R., Ringle, C. M., & Sarstedt, M. (2023). PLS-SEM's most wanted guidance. International Journal of Contemporary Hospitality Management, 35(1), 321-346. https://doi.org/10.1108/IJCHM-04-2022-0474

Berens, G., Van Riel, C. B., & Van Bruggen, G. H. (2005). Corporate associations and consumer product responses: The moderating role of corporate brand dominance. Journal of marketing, 69(3), 35-48. https://doi.org/10.1509/jmkg.69.3.35.6635

Björk, J., Di Vincenzo, F., Magnusson, M., & Mascia, D. (2011). The impact of social capital on ideation. Ind. Innov. 18 (6), 631–647. https://doi.org/10.1080/13662716.2011.591976

Boons, F., Montalvo, C., Quist, J., & Wagner, M. (2013). Sustainable innovation, business models and economic performance: an overview. Journal of cleaner production, 45, 1-8. https://doi.org/10.1016/j.jclepro.2012.08.013

Burns, A. (2003). Business intelligence. Proceedings of the paper presentation to Australian Fore sight Institute at Victoria, Australia.

Carrillo-Hermosilla, J., Del Río, P., & Könnölä, T. (2010). Diversity of eco-innovations: Reflections from selected case studies. Journal of cleaner production, 18(10-11), 1073-1083. *https://doi.org/10.1016/j.jclepro.2010.02.014*

Carvalho, M. M. D., & Rabechini Junior, R. (2011). Fundamentos em gestão de projetos: construindo competências para gerenciar projetos. *https://edisciplinas.usp.br/mod/resource/view.php?id=3018852*

Cassel, C., Hackl, P., & Westlund, A. H. (1999). Robustness of partial least-squares method for estimating latent variable quality structures. Journal of applied statistics, 26(4), 435-446. https://doi.org/10.1080/02664769922322

Cassen, R.H., 1987. Our Common Future: Report of the World Commission on Environment and Development. https://doi.org/10.2307/2621529

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. Modern methods for business research, 295(2), 295-336. Book chapter, Psychology Press.

Choi, S., & Ng, A. (2011). Environmental and economic dimensions of sustainability and price effects on consumer responses. Journal of business ethics, 104, 269-282. https://doi.org/10.1007/s10551-011-0908-8

Cole, R. J. (2005). Building environmental assessment methods: redefining intentions and roles. Building Research & Information, 33(5), 455-467. https://doi.org/10.1080/09613210500219063

Dacin, P. A., Dacin, M. T., & Matear, M. (2010). Social entrepreneurship: Why we don't need a new theory and how we move forward from here. Academy of management perspectives, 24(3), 37-57. https://doi.org/10.5465/amp.24.3.37

Dao, V., Langella, I., & Carbo, J. (2011). From green to sustainability: Information Technology and an integrated sustainability framework. The Journal of Strategic Information Systems, 20(1), 63-79. https://doi.org/10.1016/j.jsis.2011.01.002

Deakin, M., Huovila, P., Rao, S., Sunikka, M., & Vreeker, R. (2002). The assessment of sustainable urban development. Building Research & Information, 30(2), 95-108. https://doi.org/10.1080/09613210275343647 7

Delai, I., & Takahashi, S. (2011). Sustainability measurement system: a reference model proposal. Social Responsibility Journal, 7(3), 438-471. https://doi.org/10.1108/17471111111154563

Desiana, P.M., Ma'arif, M.S., Puspitawati, H., Rachmawati, R., Prijadi, R., & Najib, M. Strategy for Sustainability of Social Enterprise in Indonesia: A Structural Equation Modeling Approach. Sustainability 2022, 14, 1383. https://doi.org/10.3390/su14031383

Dhaoui, C. (2014). An empirical study of luxury brand marketing effectiveness and its impact on consumer engagement on Facebook. Journal of Global Fashion Marketing, 5(3), 209-222. https://doi.org/10.1080/20932685.2014.907605

Drumwright, M. E. (1994). Socially responsible organizational buying: environmental concern as a noneconomic buying criterion. Journal of marketing, 58(3), 1-19. https://doi.org/10.1177/002224299405800301

Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. Business strategy and the environment, 11(2), 130-141. https://doi.org/10.1002/bse.323

Eccles, R. G., & Krzus, M. P. (2010). One report: Integrated reporting for a sustainable strategy. John Wiley & Sons., Book.

El-Haram, M., Walton, J., Horner, M., Hardcastle, C., Price, A., Bebbington, J., ... & Atkin-Wright, T. (2007, June). Development of an integrated sustainability assessment toolkit. In proceedings of the International Conference on Whole life Urban Sustainability and its Assessment, SUE-MoT conference, Loughborough, UK Available at: http://download. suemot. org/Conference-2007/Papers/El-Haram. pdf [Accessed on 3/4/13].

Elkington, J. (1998). Partnerships from cannibals with forks: The triple bottom line of 21st□century business. Environmental quality management, 8(1), 37-51. https://doi.org/10.1002/tqem.3310080106

Ellen, P. S., Webb, D. J., & Mohr, L. A. (2006). Building corporate associations: Consumer attributions for corporate socially responsible programs. Journal of the academy of Marketing Science, 34(2), 147-157. https://doi.org/10.1177/0092070305284976

Evans, S., Vladimirova, D., Holgado, M., Van Fossen, K., Yang, M., Silva, E. A., & Barlow, C. Y. (2017). Business model innovation for sustainability: Towards a unified perspective for creation of sustainable business models. Business strategy and the environment, 26(5), 597-608. https://doi.org/10.1002/bse.1939

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. https://doi.org/10.1177/002224378101800313

Galdeano-Gómez, E., Aznar-Sánchez, J. A., & Pérez-Mesa, J. C. (2013). Sustainability dimensions related to agricultural-based development: the experience of 50 years of intensive farming in Almería (Spain). International Journal of Agricultural Sustainability, 11(2), 125-143. https://doi.org/10.1080/14735903.2012.704306

Gimenez, C., Sierra, V., & Rodon, J. (2012). Sustainable operations: Their impact on the triple bottom line. International journal of production economics, 140(1), 149-159. https://doi.org/10.1016/j.ijpe.2012.01.035

Gladwin, T. N., Kennelly, J. J., & Krause, T. S. (1995). Shifting paradigms for sustainable development: Implications for management theory and research. Academy of management Review, 20(4), 874-907. https://doi.org/10.5465/amr.1995.9512280024

Glavič, P., & Lukman, R. (2007). Review of sustainability terms and their definitions. Journal of cleaner production, 15(18), 1875-1885. https://doi.org/10.1016/j.jclepro.2006.12.006

Grant, R.M. (1996). Prospering in dynamically-competitive environments: organi zational capability as knowledge integration. Organ. Sci. 7 (4), 375–389. https://doi.org/10.1287/orsc.7.4.375

Grimes, M. (2010). Strategic sensemaking within funding relationships: The effects of performance measurement on organizational identity in the social sector. Entrepreneurship Theory and Practice, 34(4), 763-783. https://doi.org/10.1111/j.1540-6520.2010.00398.x

Gupta, P., & Srivastava, R. (2021). Research on Social Enterprises from an Emerging Economy—Systematic Literature Review and Future Research Directions. Journal of Social Entrepreneurship, 15(2), 458–493. *https://doi.org/10.1080/19420676.2021.1974926*

Hahn, R., & Kühnen, M. (2013). Determinants of sustainability reporting: A review of results, trends, theory, and opportunities in an expanding field of research. Journal of cleaner production, 59, 5-21. https://doi.org/10.1016/j.jclepro.2013.07.005

Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. Industrial management & data systems, 117(3), 442-458. https://doi.org/10.1108/IMDS-04-2016-0130

Handelman, J. M., & Arnold, S. J. (1999). The role of marketing actions with a social dimension: Appeals to the institutional environment. Journal of marketing, 63(3), 33-48. https://doi.org/10.1177/002224299906300303

Hardi, P., & Zdan, T. (1997). Assessing sustainable development: principles in practice. ISBN 1-895536-07-3

Hart, S. L. (1995). A natural-resource-based view of the firm. Academy of management review, 20(4), 986-1014. https://doi.org/10.5465/amr.1995.9512280033

Henseler, J., Hubona, G.S. & Ray, P.A. (2016). Using PLS Path Modeling in New Technology Research: Updated Guidelines. Industrial Management & Data Systems, 116, 1-19. *10.1108/IMDS-09-2015-0382*

Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In New challenges to international marketing (Vol. 20, pp. 277-319). Emerald Group Publishing Limited. https://doi.org/10.1108/S1474-7979(2009)0000020014

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural equation modeling: a multidisciplinary journal, 6(1), 1-55. https://doi.org/10.1080/10705519909540118

Jugdev, K., & Mathur, G., (2006). Project management elements as strategic assets: preliminary findings. Management Research News, 29, 604-17. https://doi.org/10.1108/01409170610712317

Jugdev, K., Mathur, G., & Fung, T. (2011, July). Project management assets and project management performance: preliminary findings. In 2011 Proceedings of PICMET'11: Technology Management in the Energy Smart World (PICMET) (pp. 1-7). IEEE.

Kamaludin, M. F., Xavier, J. A., & Amin, M. (2021). Social Entrepreneurship and Sustainability: A Conceptual Framework. Journal of Social Entrepreneurship, 15(1), 26–49. *https://doi.org/10.1080/19420676.2021.1900339*

Khan, E. A., Dewan, M. N. A., & Chowdhury, M. M. H. (2016). Reflective or formative measurement model of sustainability factor? A three industry comparison. Corporate Ownership and Control, 13(2), 83-92.

Kiel, D., Müller, J. M., Arnold, C., & Voigt, K. I. (2017). Sustainable industrial value creation: Benefits and challenges of industry 4.0. International journal of innovation management, 21(08), 1740015. https://doi.org/10.1142/S1363919617400151

Kim, J. (2018). Social dimension of sustainability: From community to social capital. Journal of Global Scholars of Marketing Science, 28(2), 175-181. *https://doi.org/10.1080/21639159.2018.1436982*

Kleindorfer, P. R., Singhal, K., & Van Wassenhove, L. N. (2005). Sustainable operations management. Production and operations management, 14(4), 482-492. https://doi.org/10.1111/j.1937-5956.2005.tb00235.x

Kogut, B., & Zander, U. (2003). Knowledge of the firm and the evolutionary theory of the multinational corporation. Journal of international business studies, 34, 516-529. https://doi.org/10.1057/palgrave.jibs.8490248

Littig, B., & Griessler, E. (2005). Social sustainability: a catchword between political pragmatism and social theory. International journal of sustainable development, 8(1-2), 65-79. https://doi.org/10.1057/palgrave.jibs.8400058

Liu, M. S., & Liu, N. C. (2008). Sources of knowledge acquisition and patterns of knowledge-sharing behaviors—An empirical study of Taiwanese high-tech firms. International Journal of Information Management, 28 (5), 423-432. https://doi.org/10.1016/j.ijinfomgt.2008.01.005

Loureiro, S. M. C. (2014). The role of the rural tourism experience economy in place attachment and behavioral intentions. International journal of hospitality management, 40, 1-9. https://doi.org/10.1016/j.ijhm.2014.02.010

Lozano, R. (2015). A holistic perspective on corporate sustainability drivers. Corporate social responsibility and environmental management, 22(1), 32-44. https://doi.org/10.1002/csr.1325

Martínez-Navalón, J. G., Gelashvili, V., & Debasa, F. (2019). The impact of restaurant social media on environmental sustainability: An empirical study. Sustainability, 11(21), 6105. https://doi.org/10.3390/su11216105

Mathur, V. N., Price, A. D., & Austin, S. (2008). Conceptualizing stakeholder engagement in the context of sustainability and its assessment. Construction management and economics, 26(6), 601-609. https://doi.org/10.1080/01446190802061233

Mitchell, M., Curtis, A., & Davidson, P. (2007). Can the 'triple bottom line'concept help organisations respond to sustainability issues?. In Australian Stream Management Conference (pp. 270-275). Charles Sturt University.

Nanthagopan, Y., Williams, N., & Page, S. (2016). Understanding the nature of Project Manage ment capacity in Sri Lankan non-governmental organisations (NGOs): A Resource Based Perspective. International Journal of Project Management, 34(8), 1608–1624. https://doi.org/10.1016/j.ijproman.2016.09.003

Norman, W., & MacDonald, C. (2004). Getting to the bottom of "triple bottom line". Business ethics quarterly, 14(2), 243-262. https://doi.org/10.5840/beq200414211

Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory. New York: McGraw-Hill. *https://doi.org/10.1177/014662169501900308*

Pact's Organizational Capacity Assessment (OCA), (1996). Facilitation Guide. Available from: *http://www.csokenya.or.ke/site/uploads/resource/222.pdf Accessed 5 December 2013*]. https://doi.org/10.1108/IJMPB-05-2020-0179

Pless, N. M. (2012). Social entrepreneurship in theory and practice—An introduction. Journal of Business Ethics, 111(3), 317-320. https://doi.org/10.1007/s10551-012-1533-x

Pope, J., Annandale, D., & Morrison-Saunders, A. (2004). Conceptualising sustainability assessment. Environmental impact assessment review, 24(6), 595-616. https://doi.org/10.1016/j.eiar.2004.03.001

Pretty, J. N., Williams, S., & Toulmin, C. (2012). Sustainable intensification: increasing productivity in African food and agricultural systems. Routledge. *https://doi.org/10.4324/9781849776844*

Reed, M. S., Fraser, E. D., & Dougill, A. J. (2006). An adaptive learning process for developing and applying sustainability indicators with local communities. Ecological economics, 59(4), 406-418. https://doi.org/10.1016/j.ecolecon.2005.11.008

Ruggieri, A., Braccini, A. M., Poponi, S., & Mosconi, E. M. (2016). A meta-model of inter-organisational cooperation for the transition to a circular economy. Sustainability, 8(11), 1153. https://doi.org/10.3390/su8111153

Sánchez, M. A. (2015). Integrating sustainability issues into project management. Journal of cleaner production, 96, 319-330. https://doi.org/10.1016/j.jclepro.2013.12.087

Sarkis, J., Meade, L. M., & Presley, A. R. (2012). Incorporating sustainability into contractor evaluation and team formation in the built environment. Journal of Cleaner Production, 31, 40-53. https://doi.org/10.1016/j.jclepro.2012.02.029

Sheth, J. N., Sethia, N. K., & Srinivas, S. (2011). Mindful consumption: A customer-centric approach to sustainability. Journal of the academy of marketing science, 39, 21-39. https://doi.org/10.1007/s11747-010-0216-3

Silvius, G., & Schipper, R. (2016). Exploring the relationship between sustainability and project success-conceptual model and expected relationships. International Journal of Information Systems and Project Management, 4(3), 5-22. ISSN (online):2182-7788, Available online at www.sciencesphere.org/ijispm

Silviusab, A. G., Schipperb, R., & Nedeskia, S. (2013). Sustainability in project management: Reality bites. *https://pmworldlibrary.net/wp-content/uploads/2013/03/pmwj7-feb2013-schipper-nedeski-silvius-sustainability-pm-reality-biles-second-edition.pdf*

Singh, R. K., Murty, H. R., Gupta, S. K., & Dikshit, A. K. (2012). An overview of sustainability assessment methodologies. Ecological indicators, 15(1), 281-299. https://doi.org/10.1016/j.ecolind.2011.01.007

Slitine, R., Chabaud, D., & Richez-Battesti, N. (2024). Beyond social enterprise: Bringing the territory at the core. Journal of Business Research, 176, 114577. https://doi.org/10.1016/j.jbusres.2024.114577

Smith, W. K., Gonin, M., & Besharov, M. L. (2013). Managing social-business tensions: A review and research agenda for social enterprise. Business Ethics Quarterly, 23(3), 407-442. https://doi.org/10.5840/beq201323327

Social Enterprise Alliance (2018). What is Social Enterprise? Available from *https://www.dandelionphilosophy.com/blog/profit-with-purpose-how-social-enterprises-achieve-sustainablesuccess?gad_source=1&gclid=EAIaIQobChMIyf2Gh5iXiAMV6LVoCR3XHQaBEAAYASAAEgI7x_D_BwE*

Staessens, M., Kerstens, P. J., Bruneel, J., & Cherchye, L. (2019). Data envelopment analysis and social enterprises: Analysing performance, strategic orientation and mission drift. Journal of Business Ethics, 159, 325-341. https://doi.org/10.1007/s10551-018-4046-4

Starik, M., & Rands, G. P. (1995). Weaving an integrated web: Multilevel and multisystem perspectives of ecologically sustainable organizations. Academy of management Review, 20(4), 908-935. https://doi.org/10.5465/amr.1995.9512280025

Stevens, R., Moray, N., & Bruneel, J. (2015). The social and economic mission of social enterprises: Dimensions, measurement, validation, and relation. Entrepreneurship theory and practice, 39(5), 1051-1082. https://doi.org/10.1111/etap.12091

Svensson, G., & Wagner, B. (2015). Implementing and managing economic, social and environmental efforts of business sustainability: Propositions for measurement and structural models. Management of Environmental Quality: An International Journal, 26(2), 195-213. https://doi.org/10.1108/MEQ-09-2013-0099

Tam, G. C. K. (2018). Managing project sustainability: A study of the construction industry in Hong Kong (Doctoral dissertation, London South Bank University).

Tansley, C., & Newell, S. (2007). Project social capital, leadership and trust: A study of human resource information systems development. Journal of Managerial Psychology, 22(4), 350-368. https://doi.org/10.1108/02683940710745932

Terjesen, S., Lepoutre, J., Justo, R. and Bosma, N. (2012). Report on social entrepreneurship. Global Entrepreneurship Monitor. *https://www.gem-spain.com/wp-content/uploads/2015/03/gem-2015-special-report-on-social-entrepreneurship.pdf*

Thompson, J. L. (2002). The world of the social entrepreneur. International journal of public sector management, 15(5), 412-431. https://doi.org/10.1108/09513550210435746

Thomson, C. S., El-Haram, M. A., & Emmanuel, R. (2011, June). Mapping sustainability assessment with the project life cycle. In Proceedings of the Institution of Civil Engineers-

Engineering Sustainability (Vol. 164, No. 2, pp. 143-157). Thomas Telford Ltd. https://doi.org/10.1680/ensu.2011.164.2.143

Tomei, G., Terenzi, L., & Testi, E. (2024). Using Outcome Harvesting to evaluate socio-economic development and social innovation generated by Social Enterprises in complex areas. The case of BADAEL project in Lebanon. Evaluation and Program Planning, 102475. https://doi.org/10.1016/j.evalprogplan.2024.102475

Van Marrewijk, M. (2003). Concepts and definitions of CSR and corporate sustainability: Between agency and communion. Journal of business ethics, 44(2), 95-105. https://doi.org/10.1023/A:1023331212247

Vos, R. O. (2007). Defining sustainability: a conceptual orientation. Journal of Chemical Technology & Biotechnology: International Research in Process, Environmental & Clean Technology, 82(4), 334-339. https://doi.org/10.1002/jctb.1675

Wagner, B., & Svensson, G. (2014). A framework to navigate sustainability in business networks: The transformative business sustainability (TBS) model. European Business Review, 26(4), 340-367. https://doi.org/10.1108/EBR-12-2013-0146

WCED, S. W. S. (1987). World commission on environment and development. Our common future, 17(1), 1-91. *https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf*

Welsch, H. (2005). Constructing meaningful sustainability indices (pp. 7-22). Physica-Verlag HD.

https://doi.org/10.1007/3-7908-1645-0_2

Wilkins, H. (2003). The need for subjectivity in EIA: discourse as a tool for sustainable development. Environmental Impact Assessment Review, 23(4), 401-414. https://doi.org/10.1016/S0195-9255(03)00044-1

Wood, D. J. (1991). Social issues in management: Theory and research in corporate social performance. Journal of management, 17(2), 383-406. https://doi.org/10.1177/014920639101700206

Worthington, R. L., & Whittaker, T. A. (2006). Scale development research: A content analysis and recommendations for best practices. The counseling psychologist, 34(6), 806-838. https://doi.org/10.1177/0011000006288127

Wright, S. (1921). Systems of mating. I. The biometric relations between parent and offspring. Genetics, 6(2), 111. doi: 10.1093/genetics/6.2.111

Yan, Y., Si, S., Zhu, W., & Zhang, Y. (2022). Social entrepreneurship and sustainable development: The Yiwu case. Elementa: Science of the Anthropocene, 10(1). DOI: *https://doi.org/10.1525/elementa.2022.00010*