

Singapore Management University

Institutional Knowledge at Singapore Management University

Dissertations and Theses Collection (Open Access)

Dissertations and Theses

4-2022

Organizational factors that facilitate collective social entrepreneurship: an exploratory study

Kesarwani NIMISHA

Singapore Management University, nimishak.2017@phdgm.smu.edu.sg

Follow this and additional works at: https://ink.library.smu.edu.sg/etd_coll



Part of the [Entrepreneurial and Small Business Operations Commons](#), and the [Organizational Communication Commons](#)

Citation

NIMISHA, Kesarwani. Organizational factors that facilitate collective social entrepreneurship: an exploratory study. (2022).

Available at: https://ink.library.smu.edu.sg/etd_coll/387

This PhD Dissertation is brought to you for free and open access by the Dissertations and Theses at Institutional Knowledge at Singapore Management University. It has been accepted for inclusion in Dissertations and Theses Collection (Open Access) by an authorized administrator of Institutional Knowledge at Singapore Management University. For more information, please email cherylds@smu.edu.sg.

ORGANIZATIONAL FACTORS THAT FACILITATE COLLECTIVE SOCIAL
ENTREPRENEURSHIP: AN EXPLORATORY STUDY

NIMISHA KESARWANI

SINGAPORE MANAGEMENT UNIVERSITY

2022

Organizational factors that facilitate collective social entrepreneurship: An exploratory
study

Nimisha Kesarwani

Submitted to Lee Kong Chian School of Business
in partial fulfillment of the requirements for the
Degree of Doctor of Philosophy in Business (General Management)

Dissertation committee:

Tan Wee Liang (Supervisor/ Chair)
Associate Professor of Strategic management
Singapore Management University

David Gomulya
Associate Professor of Strategic management
Singapore Management University

Samuel Tan
Assistant Professor of Accounting
Singapore Management University

Singapore Management University
2022

Copyright (2022) Nimisha Kesarwani

I hereby declare that this PhD dissertation is my original work
and it has been written by me in its entirety.

I have duly acknowledged all the sources of information
which have been used in this dissertation.

This PhD dissertation has also not been submitted for any degree
in any university previously.

A handwritten signature in black ink, appearing to read "Nimisha". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Nimisha Kesarwani
April 2022

Organizational factors that facilitate collective social entrepreneurship: An exploratory study

Nimisha Kesarwani

ABSTRACT

This research aims to contribute to the literature on collective social entrepreneurship (CSE) by exploring and examining the organizational factors that facilitate and motivate participation in CSE. Data were collected through an interview with the founder of a cooperative, and a survey, wherein respondents presented their expectations of a collective, their motivation to join, and the resources they deem important.

It was found that organizational factors, initialled as RRSI (relevance, resources, likelihood of success and innovativeness) which if met, have a reasonable chance of attracting participation in organizations pursuing CSE. These organizational factors had different appeal to stakeholders, based on their demographics and hence it was possible to group respondents based on these factors. The time respondents were willing to commit to the organization was also influenced by how relevant the organization was for the respondent and their employment status.

Findings from the research could help organizations orient themselves to develop these factors and attract participation; It could help empower the communities that it serves; it could guide the realignment of public spending and give a new direction to government institutions to strategically help create more dynamic and sustainable entities through CSE.

CONTENTS

CHAPTER 1- Introduction	1
1.1 Research background.....	1
1.2 Statement of the research problem.....	5
1.3 Methodology	8
1.4 Outline of the report	9
CHAPTER 2 - Literature review	10
2.1 Social entrepreneurship and Collective social entrepreneurship.....	10
2.1 Stakeholder participation in CSE	15
2.2 Government as a stakeholder in CSE	22
2.3 Fear of shareholder primacy	23
2.4 Legitimacy of an organization	25
2.5 Sustainability and homogeneity	29
2.6 CSE models	30
2.7 Infrastructure for collective social entrepreneurship.....	31
2.8 Factors that provide supportive infrastructure	33
2.8.1 Resources and diversity among resource providers	33
2.8.2 Supportive organizations.....	34
2.8.3 Organizational culture	36
2.8.4 Opportunity.....	37
2.9 Conclusion	38
CHAPTER 3- Methodology	39
3.1 Research design	39
3.2 Interview.....	40
3.2.1 Interview Objectives and method	40
3.2.2 Interview themes.....	42
3.2.3 Organizational factors to facilitate collective social entrepreneurship.	44
3.2.4 Financial and non-financial resources.....	49
3.3 Survey.....	50
3.3.1 Survey Objectives	50

3.3.2 Survey measures	51
3.3.3 Survey Scales and reliability	52
3.3.4 Survey demographics	56
3.3.5 Descriptive statistics and principal component analysis	56
3.4 Exploratory factor analysis	57
3.4.1 Deciding the number of factors	57
3.4.2 Extraction method	59
3.4.3 Rotation Method.....	60
3.4.4 Labelling of Factors.....	62
CHAPTER 4 – Findings	64
4.1 Interpretation of Factors	64
4.2 Difference in the factors	68
4.3 Cluster Analysis	70
4.4 Relationship between variables and time commitment	74
4.3 Financial resources.....	77
CHAPTER 5 Discussion.....	78
5.1 Organizational factors for collective social entrepreneurship.....	78
5.3 Financing the organization	82
5.4 Implication for practice	82
5.5 Implication for Theory.....	83
5.6 Limitations and further research.....	83
References.....	86
Links.....	100
ANNEXURES.....	102
1. Anti-Image correlation -KMO values.....	103
2. Test of equality of group means (Cluster Analysis)	104
3. Classification Table (Cluster Analysis)	104
5. Case processing Summary (Multinomial regression)	105
6. Parameter estimates (Multinomial Regression).....	106
7. Agglomerate Schedule (Cluster analysis).....	107
8. Box's M Test (Cluster Analysis).....	109
9. Classification table (Multinomial Regression)	109

LIST OF TABLES

Table 1 Kinds of entrepreneurship	14
Table 2 Types of organizational legitimacy	28
Table 3 Broad Themes from the Interview	42
Table 4 Survey scale.....	52
Table 5 Reliability Statistics.....	54
Table 6 KMO and Bartlett's Test	55
Table 7 Total Variance Explained	60
Table 8 Rotated Component matrix.....	62
Table 9 Labels and reliability of Organizational Factors that can support CSE	63
Table 10 Means, standard deviations and correlations	66
Table 11 Mean value of Factors.....	69
Table 12 Multivariate Tests	70
Table 13 ANOVA.....	71
Table 14 Group statistics.....	72
Table 15 Eigenvalues.....	72
Table 16 Wilks Lambda.....	72
Table 17 Model Fitting Information	74
Table 18 Goodness of Fit and Pseudo R Square	74
Table 19 Likelihood ratio tests.....	75
Table 20 Financial contribution	77

LIST OF FIGURES

Figure 1 Scree Plot.....	59
--------------------------	----

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to my supervisor Prof Tan Wee Liang for having the patience to go through my never-ending drafts. Thank you for your helpful suggestions, insights, and comments as I worked on this research. This dissertation would not have been possible without your support.

I am very thankful to my committee members, Assistant Professor Samuel Tan and Associate Professor David Gomulya for their advice and guidance throughout the dissertation process.

I owe deep gratitude to all the participants in this research for their time, graciousness, and openness. I wish to acknowledge the support of the Deans office, Lee Kong Chian School of Business, for their financial support of this research.

Finally, a big thank you to my family especially my husband Amit, who has been forever so supportive throughout the period of my studies, my parents for their blessings and not forgetting my children Shaswat and Saachi, they are the ones who make my academic work meaningful and worthwhile. Their laughter and smiles remind me what is truly valuable in life.

CHAPTER 1- Introduction

1.1 Research background

Most contemporary social entrepreneurship efforts and social enterprise ventures are individual efforts, or at most, small teams. Dees, in his seminal article, wrote about an idealized view of social entrepreneurs, referring to them as “change agents in the social sector” who take up the mission of creating social value (Dees, 1998). Social entrepreneurs are the “transformative forces” that pursue new opportunities and tread on the path of constant learning, adaptation, and innovation (Bornstein, 2007). They maintain accountability to their beneficiaries in their pursuit of the mission (Dees, 2018). The idealization of individual entrepreneurs is still prominent in popular media, and thus, the masses believe that the world requires “heroes” in the form of social entrepreneurs to be change makers and radical thinkers (The new heroes, 2019). This view has been challenged by contemporary social enterprise movements that use market-based approaches to create plans for serving humanity and supporting their missions (Ellis, 2010).

The government plays a crucial role in the social space; it mainly intervenes via constructive public policies that support social entrepreneurs as well as the new wave of private sector initiatives that believe in impact investing to bring about meaningful changes in the society (Keohane, 2013). However, social needs are rather complex, and today’s governments are hard-pressed for resources and expertise for dealing with these. Thus, groups focused on addressing social issues may step in and fill the gaps left by individual and government endeavors. In the last few decades, groups have mobilized

themselves by collaborating to form nonprofit organizations for finding solutions to challenges associated with collective action; in this manner, they have also been able to better utilize the urban development policies, which in turn has benefited the underserved communities (Holyoke, 2004). The credibility and benefits of collective social action have been presented in literature. Rubin and Rubin enumerated three reasons why groups should organize: One, it helps solve problems that group members face individually and collectively. Two, it enables building democratic organizations to solve their problems. Three, it empowers their communities (Rubin & Rubin, 2005). Thus, there is a growing trend toward community engagement and capacity building; it is defined as “the ability of nonprofit organizations to fulfill their missions in an effective manner,” and it can impact the overall quality of life in the communities served by nonprofit organizations.

Montgomery et al. defined collective social entrepreneurship (CSE) as “collaboration among similar as well as diverse actors for the purpose of applying business principles to solving social problems.” Entrepreneurship is not only application of business principles; a broad purview of collaboration for social benefit, as presented by Montgomery, provides compelling insights for using his definition as the guide to CSE. Entrepreneurship, as applied in this research, can be viewed as “the process of doing something new and something different for the purpose of creating wealth for the individual and adding value to society” (Kao, 1993, 1995; W. L. Tan, 2007). Other definitions of entrepreneurship are also discussed in the literature review segment. Some of these disputes the inclusion of the social aspect in entrepreneurship, while Kao’s definition of entrepreneurship fits well for the intended purpose of this research.

The adjective “social” in “social entrepreneurship” can have various connotations, and authors have linked it to whether they consider “entrepreneurship in, by, for, or involving society” (W. L. Tan et al., 2005). In this study, the connotation of social is not confined any one usage, as all these aspects are relevant for collectively addressing social problems affecting the society.

Based on these definitions, in this research, CSE is viewed as a process that involves collaboration among, a large group of similar as well as diverse actors, coming together for a mission, to do something new or different for creating businesses that add value, by collectively addressing problems affecting the society, in a way that is individually relevant for the stakeholders and motivates them to participate.

Tracey et al. provided an example of a situation where the CSE approach may be suitable; their case study presented a for-profit retail, household catalog business operated by employing homeless people (2011).

CSE can be a crucial step toward utilizing the social capital, with the possibility of collaboration at various levels. Montgomery et al. presented three prominent forms of CSE, namely, community cooperatives, collaboration across sectors, and grassroots social movements (Montgomery et al., 2012). These are described as follows.

1) CSE at an organizational level is considered a method to “leverage existing resources, build new resources, and impact the emergence and reshaping of institutional arrangements to support scalable efforts for change.” Under CSE, organizations collaborate for a specific purpose while maintaining their distinct identities. Through illustrative case studies, Montgomery et al. demonstrated how resources are handled at

multiple levels under CSE by trading or pooling resources within or across sectors. They also highlighted the benefits of CSE for its ability to gather a diverse array of material and non-material resources such as support networks, mobilization, financial assistance, and vital cultural and institutional resources necessary for social entrepreneurs to succeed (Montgomery et al., 2012).

2) Collective effort, as seen in social movements, help in the advancement of collective interests through noninstitutionalized means, and these can lead to paths for achieving justice (Kolers, 2016). With increasing interest in the movement for climate change, more scholars are focusing on aspects of social and political environment that encourage people to participate in social movements (McAdam, 2017). Social movements may also have some un-anticipated effects, as witnessed in the push for nonrenewable energy. This has led to the creation of entirely new market opportunities for wind mills, giving a huge push to entrepreneurship in the field; they did so by challenging the existing practices and disrupting the existing system, and in this process, they influenced the regulatory structure and created a platform for people to engage in collective action (Sine & Lee, 2009).

3) In CSE through the formation of cooperatives, individuals with common commercial goals collaborate for various goals, such as to improve bargaining power, cut costs, source diverse products or services, access new market opportunities, improve the quality of products or services, and increase income for the participating members. These cooperatives aim to achieve financial gain through collective effort.

These approaches emphasize the value of collective action, and some even offer suggestions and examples to help these collaborations do impactful work (Dunn, 1988;

Levi, 1998). In contemporary research, there is lack of understanding of what aspects of an organization are desired by the members and would motivate them to join, specifically in the Singapore context.

1.2 Statement of the research problem

Scholars believe that the services of only private charity and mutual aid groups would be inadequate in providing the necessary welfare to the large segments of population that need help (Hammond, 2019). Hence, in recent years, the argument about public versus private ownership of social organizations is rapidly being replaced by the idea of collaboration among various participants and the creation of adaptive ecosystems to develop better solutions to unmet social needs (Eggers, 2013). The main benefit of such collaboration is the pooling of resources required to mobilize action, get better exposure, gain credibility, and achieve individual or mutual objectives. Moreover, it ensures community empowerment and social change (H. M. Haugh & Talwar, 2016).

One of the common challenges often faced by social entrepreneurs is garnering resources; it is challenging to sustain and grow even on a small scale with limited resources. Despite their good intentions, at times, they struggle to make sure that their help reaches the people in need (Bonevski et al., 2014). These social efforts can be made more viable when they receive support from within the society via collective efforts of stakeholders.

Collective action can “create a unified public voice around an issue,” which can help communicate specific concerns to various stakeholders, including the public and the policymakers. Thus, social transformation is possible with collective, democratic

participation from the members with support from external partners (Pless & Appel, 2012). However, despite the acknowledged value of member participation and collective action, extant literature offers scant details about the characteristics of an organization that would attract members to collaborate for solving specific problems, individual or mutual.

Studies have examined several critical success factors grouped together as “The organization’s resources, competence and qualification that create its competitive advantage on a particular market at a given time and are able to determine its possible future success” (Martyna, 2013; Satar & Shibu, 2019). In the context of collectives, however, one measure of success that has been rarely discussed in organizational literature is the ability of an organization to attract members, which is a prerequisite for any collective initiative.

Montgomery et al. were the first to use the phrase “collective social entrepreneurship” to indicate a collaborative effort among various players for solving social problems by creating new institutions or getting rid of nonfunctional archaic systems. They presented methods for existing enterprises to coordinate within and across sectors through framing, convening, and multivocality. However, they did not discuss the conditions that would help organize people and facilitate the formation of a collective.

Few studies have investigated what factors in a collective are sought by potential members and would motivate them to join; the dearth of research is especially striking in the Singapore context. Therefore, herein, I aim to address this research gap by examining the organizational factors that motivate stakeholders to collaborate for CSE. A community

in Singapore is sampled for survey, and a detailed interview is conducted with the founder of a Singapore-based cooperative.

Key question guiding this research

What organizational factors facilitate CSE?

As a subset, would these factors influence the time participants might be willing to commit to the organization?

Do the organizational factors have a different appeal to participants based on their demographics?

It was determined that a collective formed by individual members and supported by the government and private stakeholders can effectively help the targeted members. Analysis of data acquired from the survey and the interview showed that, overall, the participants were convinced that coming together and setting up a collective would be useful in meeting the needs of the beneficiaries and that such an organization can provide new opportunities for members.

Various factors that such an organization will require include access to financial and non-financial resources and, remaining relevant by offering clear benefits to members and have a legitimate set up. A sense of community and working toward long-term sustainability is essential for increasing the likelihood of success for stakeholders. Finally, the organization should envision innovative ideas for distinct products and services that distinguish it from similar existing organizations.

1.3 Methodology

A two-fold approach was used to gather data for this study. First, a detailed interview was conducted with the founder of a Singapore-based cooperative, which was initiated with a group of caregivers of people with intellectual disabilities (PWIDs). I asked him about his experience with the collective approach, including the challenges and the benefits of his current system and what his organization does to attract members. The questions were designed to gain a first-hand understanding of the resource constraints faced by the organization, along with the organizational factors applicable at the grassroots level for generating the envisioned development work. The interview was conducted on Zoom to adhere to social distancing protocols during the COVID period in early 2021. The pseudonym Mr. A is used to refer to the interviewee, and his company is referred to as Company X throughout this thesis to protect his identity. The second step was a survey with caregivers of PWIDs to understand what organizational factors they envision for a collective, in terms of external support, ownership, decision-making, distribution of profit, and governance. Furthermore, they were asked to list factors that motivate them to participate in such a collective effort. Participants for the survey were contacted on various social networking sites such as Facebook and WhatsApp. A total of 137 usable responses were gathered and analyzed. Details of the methodology are provided in Chapter 3, and analysis of data of these responses is presented in Chapter 4.

1.4 Outline of the report

Chapter 1 introduces the research problem and the prominent questions that emerge. In Chapter 2, I explore the concept of CSE in detail, looking at the various models and challenges associated with CSE. To give a holistic picture, I have conducted a detailed literature review of CSE as a domain, including resources required by such entrepreneurial ventures and factors that influence member participation. In Chapter 3, a description of the methodology is provided, explaining the choice of the data collection techniques and the sample of participants. In Chapter 4, I analyze the data gathered during the interview and survey. Descriptive statistics are provided to substantiate the findings. Chapter 5 concludes the dissertation with a review and discussion of the findings first summarizing the overall findings, followed by a detailed discussion on the research questions, exploration of the implications of study findings for policymakers and professional practitioners, and the limitations of the study and scope for further research.

CHAPTER 2 - Literature review

The literature review is designed to examine the key aspects of CSE and how it motivates stakeholders to participate. Additionally, resources and support systems required for collective social entrepreneurs to thrive are examined.

2.1 Social entrepreneurship and Collective social entrepreneurship

Earlier articles in the field of social entrepreneurship(SE) have attempted to define and explain the fundamental aspects of social entrepreneurship (Shane and Venkataraman, 2000). Subsequent studies have highlighted the differences between social and commercial entrepreneurship in terms of focus, social entrepreneurs are focused on social values, whereas regular entrepreneurs focused on profits (Certo & Miller, 2008).The differences in mission between a commercial and a social organisation can potentially guide organisational management and motivation of the stakeholders. The concept of people, context, deal, and opportunity would be different for a commercial and social set up (Austin et al., 2006).

The concept and definition of social organisations varies in different jurisdictions from profit-oriented businesses supporting social causes and hybrid organisations with a double bottom line (with profit goals and social objectives) to non-profit organisations (NPOs) engaged in commercial activities to support their mission. Hartigan talked about the 'leveraged non-profits' model of SE driven by the social entrepreneur who brings

together various private and public organisations along with volunteers to serve its social cause. For survival, the enterprise gathers funds from external sources including grants and donations; 'its long-term sustainability is enhanced because of the commitment of a multiplicity of actors to the vision and objectives of the organisation' (Hartigan, 2006). The statement reiterates the view that a model of SE that works towards the welfare of marginalised communities needs commitments from diverse players for its sustainability.

Scholars describe innovativeness as a critical component of entrepreneurship, it is the entrepreneurial dimension that separate SE from other non-entrepreneurial social ventures.(Nicholls & Albert Hyunbae Cho, 2006). Another aspect that differentiates SE from commercial entrepreneurship is the pursuit of positive externalities with a desire to discover sustainable solutions to often neglected social problems (Certo & Miller, 2008; Santos, 2012). Positive externalities achieved by addressing and solving social problems improves the quality of the ecosystem and increases the chances of attracting new participants (Kline et al., 2014). A commonly held notion about SE is that the social entrepreneur is virtuous. These virtues are not just the universally accepted ones such as honesty, compassion, integrity, and empathy, but also reach a higher level where the social entrepreneur has 'an unwavering belief in the innate capacity of all people to contribute meaningfully to economic and social development; a driving passion to make that happen; a practical but innovative stance to a social problem.' It is this belief that can keep them motivated to tirelessly work for the social cause (Mort et al., 2003). The term passionate is commonly associated with SE, there is discussion about the theoretical and practical implications of the relationship between passion and

entrepreneurship for businesses, which is relevant from the individual to the community point of view (Baraldi et al., 2020). Shane and Venkateshwara came up with a context-free conceptual definition of entrepreneurship and defined it as a process by which 'opportunities to create future goods and services are discovered, evaluated, and exploited' (Shane & Venkataraman, 2000).

Social entrepreneurship theory often portrays the effort of a social entrepreneur who creates 'magic' with the immense social impact that he creates (Praszkier & Nowak, 2011). Prominent names of Muhammad Yunus, father of microfinance and the winner of the 2006 Nobel Peace Prize, Bill Drayton, founder of the Ashoka network of social entrepreneurs and Jeff Skoll, founder of the Skoll Foundation, are often highlighted as outstanding social entrepreneurs (Nicholls, 2006). Undeniably the social entrepreneur in most SE studies is the change agent, but what is often not acknowledged is the aspect of relevance of the organization to them and whether others might be willing to join if it is equally relevant to them?

Creativity, innovation, and resourcefulness are considered key elements of entrepreneurship. It is also seen what differentiates SE from traditional social service providers is that "they are non-traditional; they are disruptive in their approach, pioneering, and entrepreneurial. Hence innovation appears to be one of the main dimensions defining social entrepreneurship often aiming at systemic change" (Nicholls & Albert Hyunbae Cho, 2006). This found resonance with our factors of resources, innovativeness, and likelihood of success.

The question of what a social organisation can do to be impactful has led researchers to recognise factors associated with successful social entrepreneurship that are

instrumental in bringing about significant improvement in the economic and socio-political contexts of the needy segments of society. The belief that 'social entrepreneurship creates innovative solutions to immediate social problems and mobilises the ideas, capacities, resources, and social arrangements required for sustainable social transformations' highlights the ultimate aim of social entrepreneurship as a catalyst for long-term sustainable social transformation (Alvord et al., 2004).

The aim of social entrepreneurship is also to benefit a specific mission; this aspect leads to the concept of embeddedness and the enabling or constraining effects of it. Enterprises that are highly embedded might have inertia to change, specifically radical changes that might be required in certain circumstances. On the other hand, embeddedness might be useful in the initial phase of the business establishment where the businesses need access to resources. (Granovetter, 1985; Mair & Martí, 2006).

This research extends the SE literature to find out what would motivate people to collectively engage in SE. The desire to do social good and being 'virtuous' and 'passionate' are aspects, often discussed in SE literature, that makes the organization relevant for the stakeholder, but relevance is not limited to these, and definitely not when there are a large number of diverse participants in CSE. It was found in this research that other than need for resources, innovativeness and likelihood of success, direct benefit that a stakeholder might derive from participation could be an important aspect that makes the organization more relevant for the participants, more so when the participants belong to a social segment that needs help. Relevance could be in terms of direct benefits stakeholders can derive, providing them with a platform to do social good or meeting stakeholders expectation of associating with a legitimate organization.

Hence CSE has a component of relevance that differentiates it from SE. Table 1 provides a comparison between Commercial, social and Collective social, forms of entrepreneurship .

Table 1 Kinds of entrepreneurship

	Commercial entrepreneurship	Social entrepreneurship	Collective social entrepreneurship
What it is	-A process by which 'opportunities to create future goods and services are discovered, evaluated, and exploited' (Shane & Venkataraman, 2000).	-It is the pursuit of positive externalities with a desire to discover sustainable solutions to often neglected social problems (Certo & Miller, 2008; Santos, 2012) -Ultimate aim of social entrepreneurship is to act as a catalyst for long-term sustainable social transformation (Alvord et al., 2004)	"Collaboration among similar as well as diverse actors for the purpose of applying business principles to solving social problems." (Montgomery et al., 2012)
Who are the participants	Regular entrepreneurs focused on profits (Certo & Miller, 2008).	-Social entrepreneurs are "change agents in the social sector" who take up the mission of creating social value (Dees,1998) -Social entrepreneurs are the "transformative forces" that pursue new opportunities and tread on the path of constant learning, adaptation, and innovation (Bornstein, 2007). -Social entrepreneur is 'virtuous' and has 'an unwavering belief in the innate capacity of all people to contribute meaningfully to economic and social development; a driving passion to make that happen; a practical but innovative stance to a social problem.' (Mort et al., 2003).	"People most likely to participate are those facing difficulties and who need more services than the average resident. This group is also traditionally at risk—people with many family responsibilities and fewer competitive market skills because of a lack of training and education" (Xu, 2007)
Why it is needed	Entrepreneurs are the ones who locate new ideas and to put them into action. They are the ones who lead and inspire (Baumol, 1968)	"Innovation appears to be one of the main dimensions defining social entrepreneurship often aiming at systemic change" (Nicholls & Albert Hyunbae Cho, 2006)	-One, it helps solve problems that group members face individually and collectively. Two, it enables building democratic organizations to solve their problems. Three, it empowers their communities (Rubin & Rubin, 2005) -Leads to collaboration among various participants and the creation of adaptive ecosystems to develop better

			solutions to unmet social needs (Eggers, 2013)
Types	“Entrepreneurship takes a variety of forms and appears in both small and large firms, in new firms and established family firms, in the formal and informal economy, in legal and illegal activities, in innovative and more conventional concerns and in all regions and economic sub-sectors”(Westhead et al., 2011)	The most common types of social entrepreneurs are The Community Social Entrepreneur, The Non-Profit Social Entrepreneur, The Transformational Social Entrepreneur, The Global Social Entrepreneur (Welfont, 2018)	Montgomery et al. presented three prominent forms of CSE, namely, community cooperatives, collaboration across sectors, and grassroots social movements (Montgomery et al., 2012).

2.1 Stakeholder participation in CSE

For meaningful CSE, the involvement of stakeholders is essential; hence, the recruitment and management of participants is important. Studies have examined the motivation and the changing dynamics of volunteer engagement with collectives. It has been demonstrated that a better understanding of these aspects can contribute toward maintaining the commitment of stakeholders, enabling the long-term sustainment of the collective (Hibbert et al., 2003).

The importance of stakeholders, defined as “those groups who have a stake in or claim on the firm, specifically, the suppliers, customers, employees, stockholders, and the local community, as well as management in its role as agent for these groups...,” was highlighted by Freeman in his 1984 book that proved to be a landmark in the development of stakeholder theory (E. Freeman, 1998; R. E. Freeman, 2010).

According to researchers, managers in an organization are responsible for building relationships between various stakeholders as part of the business, creating value for all stakeholders (Harrison et al., 2010). In this regard, human resource managers focus on the participation of employees in an organization and its relationship with employee well-being and firm performance. A recent study showed a “significant relationship between any form of participation and employee well-being,” and counterintuitively, the same study determined an inverse relationship between employee decision-making and participation and labor productivity (Uribetxebarria et al., 2021).

Studies on participation, such as those by Corrigan-Brown et al. and Mc Adam, have mainly focused on individual characteristics that influence participation. The study by Corrigan-Brown et al., conducted in the US, examined the extent to which some homeless individuals participated in movement-sponsored protest activities (Corrigan-Brown et al., 2009). Another similar motivator for individual participation could be “intense ideological identification with the values of the movement,” which when combined with a supportive network can attract an individual toward a social movement or an organization supporting their specific cause. Notably, participation in movements differs considerably from participation in organizations as the boundaries of a movement are not as clearly defined as those of a formal organization (McAdam, 1986).

Demographics such as age, gender, education, lifestyle, and income levels, influence people’s motivation to participate in community-based organizations (Weil, 2005). Some studies, primarily in China, have found that less educated, elderly people were easily mobilized for community engagement and for volunteering in mutually helpful activities

(Chan, 1993; Leung & Wong, 1999; Wong, 1998). Moreover, the stage in life of a specific individual can also play a key role in his decision to participate, such as biographical availability, that is, “the absence of personal constraints that might increase the costs and risks of movement participation, such as full-time employment, marriage, and family responsibilities” can be a key factor in an individual’s ability to participate in community organizations (McAdam, 2017).

To understand the various factors that affect participation and mobilization of stakeholders to get involved in local organizations, some researchers in China considered the involvement of stakeholders in the decision-making process as the criteria of participation. They determined that “people most likely to participate are those facing difficulties and who need more services than the average resident. This group is also traditionally at risk—people with many family responsibilities and fewer competitive market skills because of a lack of training and education” (Xu, 2007). Clearly, these participants were focused on their pressing present and/or future needs and interests, and hence, had a clear agenda and shared goal of enhancing service availability for themselves. Potential beneficiaries of community service programs had a higher chance of participating in the collective social efforts. For these stakeholders, “the prospect of control and self-determination is a motivator for participation and is crucial to attracting and retaining high-quality participants and to motivating continued engagement”(Palmer et al., 2011; Xu, 2007). Though the content of Xu’s study is unique, the data collection is unique to China, as it has a communist regime and a clear top-down decision-making process. Aspects of stakeholder participation are distinct to a country based on its social, political, and economic environment; hence, it would be worth exploring this dimension of

involvement in decision-making in the Singapore context, getting participants' opinions about who they think should make decisions in a collective and the extent of stakeholders' participation in the process.

Another area where scholars have contrasting views is about participation among urban and rural populations; some researchers have claimed that lower participation in urban centers is attributed to the availability of many opportunities for leisure, leading to a lesser need to participate in local organizations. However, these claims were refuted in a 2012 study that disregarded the rural–urban divide with respect to voluntary participation in organizations (Hooghe & Botterman, 2012). This might not be relevant for a city state like Singapore, but it is an aspect worth considering when engaging with members. The aforementioned points are important in understanding the profiles of people who participate voluntarily; however, they do not provide guidance on how organizations can attract and retain participants.

Exploring the role of an organization in attracting participation reveals one aspect of participation that is less dependent on individual characteristics, that is, political participation. It has been shown that the presence of a democratic institutional infrastructure can help convert social capital into community political participation. As part of participatory literature on stakeholder engagement, Tesdahl and Speer examined two qualities of a social organization, namely, the variety of activities it offers and the quality of relationships between staff and stakeholders to encourage individual participation. They found that organizations could increase participation by redistributing resources and opportunities more equitably within the organization (Tesdahl & Speer, 2015). A study on

neighborhood organizations determined that members expect to derive certain benefits from their neighborhood organization, such as its ability to enhance community improvement, influence government policies, develop a sense of community, and influence members' level of participation (Ohmer, 2008). The idea of members benefiting from participation in organizations has also been presented in studies that identified organizational characteristics related to collective empowerment, referred to as "values, processes, or outcomes, as well as to activities at the level of the individual, the organization, or the community." These studies determined that organizations that reduced participation costs and increased the benefits for members, and also created a perception of being task focused and inclusive in terms of participation of members in decision-making and discussions, produced more collective empowerment (McMillan et al., 1995). This idea of participation benefits and the motivation for joining the organization was incorporated in the design of the survey in this study. Scholars have observed that the fundamental factor influencing member participation is the presence of "strong decentralized community-based organizations in which community level professionals, such as social workers and community organizers, play a crucial and catalytic role" (Moser, 1989). Given that people with strong organizational relationships have a higher probability of participating in community activities (Herbert Rubin & Irene Rubin, 2005), it is imperative that organizations work toward building these relationships. Here, the role of the leadership of an organization becomes crucial for recruiting and developing board members, raising philanthropic support, and enhancing community relations (King, 2004). Another aspect that can influence member participation is the organization's focus on economic aspects of the project rather than the social components; this can be perceived

by the members as well as from the attitude of the stakeholders (Moser, 1989). Some challenges are associated with CSE, which may be due to “members’ relative prioritization of community, environmental, and commercial logic.” Leaders should find ways to manage these issues, while maintaining member participation through collaboration and compromise (Mitzinneck & Besharov, 2019).

Some characteristics of an organization that enable CSE include the legal framework, financial resources, management, and social environment. This research focuses on an organization from the perspective of members who form the core of the collective. For these stakeholders, CSE might emerge as a response to collective aspirations and needs driven by social demands and expectations that are not fulfilled because it is not lucrative for capitalist entrepreneurs and because the public sector response to these needs is delayed or ineffective. The resulting social economy is often referred to as the third sector; it comprises organizations and enterprises that are not a part of the profit-oriented private sector or the state-owned and administered public sector; rather, it combines “modes of creation and administration that are private (e.g., autonomy and economic risk) with those that are collective (e.g., associations of persons).” The guiding principal for such a collective would be “to respond to an unfulfilled significant need, and the act of belonging to a social group that has a collective identity or common destiny” (Bouchard, 2013). A psychological sense of community, which gives members a feeling of belonging to a complex entity, captures the emotional connections and links that bind individuals and communities, based on shared “interests, concerns, resources and practices,” can provide insights for encouraging member participation (Mannarini et al., 2012). This is examined further in the study.

Having shared needs can be a precursor for the creation of a collective; however, for success, the organization requires several critical success factors, which, in the context of social entrepreneurship, are the characteristics and conditions that are essential for competitive advantage and eventual success.(Aghaei & Monavvarian, 2010; Satar & Shibu, 2019; Singh, 2019)

In the cooperative model, members are the main beneficiaries; however, despite good intentions, only few organizations can truly engage with the community and command participation. Moreover, the success of these efforts varies according to the unique social purposes of these organizations. Some methods may be used to nurture and develop these social organizations; however, due to the nature, complexity, and challenges of social organizations, multiple stakeholders and resources are required to provide solutions (Austin, 2000). Inclusive innovation that responds to local interests and community values by providing bottom-up solutions for sustained development can be effective; nevertheless, the question remains whether it can be successful without participation from the members and effective governance (Sengupta, 2016). Studies have reported successful models that have delivered complete inclusion and democratic governance for the members of social organizations. This, however, can only be accomplished with robust external support, in the form of training, funding, and knowledge transfer (Pless & Appel, 2012).

There has been considerable research on participation and engagement of members, covering social movements, activism, neighborhood organizations, social empowerment, political participation, rural–urban divide, community self-determination, and so on. Broadly, two aspects can lead to greater participation from members: first, the individual

circumstances and characteristics, and second, the organizational characteristics. This study focused on organizational characteristics that encourage participation from members and touched on the individual circumstances, such as the demographics of the respondents and the time they can commit to a collective effort.

2.2 Government as a stakeholder in CSE

In multi-stakeholder collectives, which might include the state government, there is an anticipated risk of the organization becoming dominated by the government; in such a situation, the community partners' roles could become superfluous. The other end of the spectrum believes that "governments using public-private partnerships may experience a loss of control, threats to authority, or greater difficulty in holding private organizations accountable to public standards" (Gazley & Brudney, 2007). Thus, understanding the intention of the government in supporting these organizations is one of the key factors, as it is known that "for national governments there is often a fundamental contradiction between lip service to participation for reasons of political expediency, and a real fear that grassroot organization will lead to the empowerment of local communities." Government support is available in the form of financial and non-financial resources (for example, loans and grants, providing professionally trained staff or local personnel to assist the members in developing their projects, land usage, and so on). Hence, any delay or lag in government support can be detrimental to many dependent organizations (Moser, 1989).

Another risk associated with government partnership with CSE-based organizations is the possibility of cutting down of welfare services provided through public organizations or outsourcing of community services required for the disadvantaged to collective organizations or nonprofit organizations as an alternative to better paid public services. Governments may sometimes offload some of their responsibilities in this manner, which may worsen the condition of the community that really needs the support. This occurred in Canada where under the scheme of Ontario Works plan, in the late 1990s, the government of Ontario used nonprofit organizations to minimize spending on social tasks (Dancause & Morin, 2013).

Authors such as Salamon have provided a conciliatory perspective; they promoted the view that the association of nonprofit organizations and the state could be a “natural and necessary path to effectiveness, and to certain inherent limitations of the state that make engagement of nonprofits a natural and useful path to state effectiveness” (Salamon & Toepler, 2015). In the survey conducted during this research, respondents’ views were gathered on whether they would want the government as a stakeholder and a prominent decision-maker in the envisioned collective.

2.3 Fear of shareholder primacy

As seen in the earlier section, people who tend to participate in CSE are the ones “facing difficulties and who need more services than the average resident” (Xu, 2007). In this context, a potential challenge for CSE could be when profits become a driving force and the interest of the shareholders increases, with the maximization of shareholder value as the ultimate aim, at times, at the cost of the workers and ordinary members (McSweeney,

2008). Over the last few decades, shareholders have started expecting increasingly higher returns; for example, in the 1970s, UK companies gave approximately 10% of their profits in dividends, and by 2016, this figure was 70%; this trend is mirrored across many developed economies (*News - Behind the Purpose of the Corporation Infographic - Purpose of the Corporation*, 2016). This domination of shareholders' interest in regular for-profit enterprises and in many cooperatives has left socially conscious businesses, impact investors, and social entrepreneurs—who are in the for-profit space—severely constrained in fulfilling their social mission. This shareholder primacy, which often comes at the cost of ordinary members, can demotivate members, leading to decreased participation in the collective organization. One possible solution to this problem is the establishment of benefit corporations that “expand the obligations of boards, requiring them to consider environmental and social factors, as well as the financial interests of shareholders. This gives directors and officers the legal protection to pursue a mission and consider the impact their business has on society and the environment” (*Benefit Corporations Are Necessary | Benefit Corporation*, n.d.).

However, it would be unfair to shun multi-stakeholder collectives that have a revenue-generation agenda along with a mission-driven approach; one of the common challenges faced by such organizations is the pursuit of multiple goals involving many stakeholders and dealing with ever-evolving government policies and external environments. Additionally, stakeholders expect the work integration of disadvantaged workers as a prerequisite as per the definition of an ideal social organization (Nyssens et al., 2006). In the case of CSE, this pivot toward engagement of members is essential.

With growing focus on diversifying revenue strategies, the pursuit of diverse commercial activities, such as producing and selling products or offering some chargeable services, is becoming crucial, as it gives the collective a higher chance of being self-reliant and influences its long-term sustainability (Froelich, 1999). However, the challenges associated with increasing business revenues are often underestimated and can distract the managers from their core social missions (Foster & Bradach, 2005). Nevertheless, many believe that the risks associated with these ventures can be “identified, evaluated, and managed” (Dees & Anderson, 2003). The survey also collected respondents’ opinions about the relative importance they place on social missions and long-term financial sustainability.

2.4 Legitimacy of an organization

The issue of legitimacy, which can be viewed as “generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions” (Suchman, 1995), for collective identity of new entrepreneurial groups remains a challenge. Intuitively, an organization that is considered legitimate might have higher chances of attracting participation from members. This aspect is explored in this study through the survey and the interview. Some scholars believe that expanding the group can provide strength in numbers and thus legitimacy (Hannan & Freeman, 1993); some scholars also believe that rapid expansion “can lead to an overly broad set of members, thereby diluting the coherence of a collective identity, whereas too little can hinder the development of a

visible profile to gain the attention of external audiences” (Wry et al., 2011). Wry et al. also opined that legitimacy is facilitated when a nascent group of members decide on a “collective identity defining story” that describes their core purpose and create a narrative around it, and then, the external audience is more likely to accept the legitimacy of the group. These are interesting perspectives and should be part of the decision-making process during the growth of a collective.

A bigger challenge to legitimacy of a social organization—that can potentially deter participation—would be the shift in focus from social mission to profits (Mukesh Sud et al., 2009). To fully understand this situation, we should first understand the difference in the funding model of a nonprofit and a social enterprise. Nonprofits, in most cases, get their funding from membership fees, government grants, and other user fees (P. J. DiMaggio & Anheier, 1990). A social enterprise, on the other hand, cultivates new markets to subsidize their social activities by collaborating with commercial corporations and exploiting profitable opportunities in their core activities (Nicholls, 2006). In their effort to have a double bottom line, that is, fill in the gaps left by governments and markets and generate a profit, the “financial results tend to subsume the social mission, if not in the social entrepreneur’s mind, certainly in the reporting requirements for investors and donors” (Bruck, 2006). This perception of the organization being a profit chaser, benefiting only the investors, can be counterproductive for members who might want the organization to work, primarily in their interest. Another aspect that can affect the legitimacy of an organization is social judgment, which can be defined as “evaluator’s decision or opinion about the social properties of an organization (Bitektine, 2011). Stakeholders in an organization evaluate its reputation, legitimacy, and status, and hence,

it is imperative to devise means to judge the legitimacy of an organization and attract participation. Reputation as an asset has also been studied by scholars using the resource-based view (Boyd et al., 2010). Empirical evidence suggests the survival advantage of organizations that possess legitimate ties to external social actors, which may include legislative and administrative authorities such as government agencies, regulatory commissions, or other organizations that have community and social acceptance, such as religious bodies or public schools (Baum & Oliver, 1991). Hence, to address the issue of legitimacy and to enable an enterprise to focus on its desired social outcomes, collaboration with institutions is crucial; for example, cocoa farmers in Africa formed cooperatives, which became successful only when Fairtrade International, an organization that provides support for social, economic, and environmental standards, stepped in (*Cooperating to Create Change*, 2020). This is a small example that shows the value of partnerships and external help to support the efforts of low-income and disadvantaged communities. This research explores whether partnership with stakeholders such as government agencies can provide legitimacy to a collective.

To ensure legitimacy, the perceptions of various stakeholders should be managed to ensure them that their interests are guarded; this necessitates the need to understand the relationships among various stakeholders in a multi-stakeholder collective. In this context, some authors categorize institutional stakeholders (usually members and workers who have primary economic expectations and management powers over the cooperative enterprise) as strong links in the social network, whereas other stakeholders or social representatives—comprising volunteers and users or their representatives, which account for small capital shares and some management power but not much

economic expectation other than in a collective manner—are categorized as the weak links. In a collective, strong as well as weak linkages are required; “Weak ties provide people with access to information and resources beyond those available in their own social circle; but strong ties have greater motivation to be of assistance and are typically more easily available” (Granovetter, 1983). Organizations engaged in CSE should avoid the working drift; after the foundation stage, the strong ties become crucial, and the importance of weak ones starts declining. It is necessary to achieve a balancing between the strong and weak ties, which would ensure the stakeholders of equal importance to both.

Table 2 presents the findings of studies that identified several feature-based types of organizational legitimacy (Baum & Oliver, 1991; Suchman, 1995).

Table 2 Types of organizational legitimacy

Procedural legitimacy	Based on favorable evaluations of the soundness of the organization’s procedures and processes
Consequential legitimacy	Based on evaluations of outcomes of the organization’s activity
Structural legitimacy	Based on evaluations of the organization’s structure and classification in a “morally favored taxonomic category
Personal legitimacy	Based on the charisma of the organization’s leaders
Linkage legitimacy	Based on the organization’s linkages with highly legitimate social actors in its environment

Source: Baum and Oliver, Suchman

In the survey conducted in this research, the options provided to respondents regarding legitimacy were guided by some aspects of the above literature review.

2.5 Sustainability and homogeneity

A collective, like any organization, needs an “entrepreneurial orientation” to help it attain its objective of being sustainable and less dependent on external aid (Lurtz & Kreutzer, 2017). Such orientation, when applied to cooperatives, can be extremely successful through economies of scale; however, at times, there is direct competition with private sector players (sometimes, supported by the government) that feel threatened. “Smallness – rather than the cooperatives’ growth – is touted by the interested parties as the value to be sustained.” This lobbying of the private sector to keep a collective small (i.e., not strong) is a challenge faced by many ambitious CSE initiatives that might want to scale up and grow (Levi & Davis, 2008). An example of this situation is the CSE initiative by Indian dairy cooperatives, which has shown that membership with a farmers’ collective enhances small farmers’ chances of participation in modern dairy markets, giving them better bargaining powers and economies of scale in marketing their product collectively. This move was, however, contested by the private lobbies of large multinationals in the dairy business (Sharma, 2015). There are also cases of large collectives that often get purchased and converted into investor-owned firms but continue to camouflage as collectives to benefit from tax exemptions. Such polarity between large and small collectives is a challenge. Though respondents were not directly asked how scalable they imagined the collective to be, they were asked whether long-term financial sustainability was important and whether they considered financial sustainability as a benchmark of success.

Proponents of institutional theory have also highlighted that if we consider creating an organization by bringing together some new and some established actors, there could be

the risk of homogenization (or isomorphism), where the influence of rationalization and bureaucratization could make the new entity similar to the ones that collaborated to form this entity (P. J. DiMaggio & Powell, 1983). This can be a catch-22 situation, as it can lead to loss of innovation in the long run as well as provide the much-needed structure to a fledgling new entity.

2.6 CSE models

CSE can be applied in various organizations. Historically, social economy organizations that involved participation from communities have been grouped into four prominent categories, namely, cooperative enterprises, mutual societies, associations, and foundations (Borzaga et al., 2014). Different jurisdictions have different types of CSE organizations. In Italy, grassroots communities are engaged through social cooperative enterprises that work for “general interest of the community for human promotion and the social integration of citizens” (as per Italian Law n. 381 on Social Cooperatives). These types of collectives also use the multi-stakeholder model, which in their case involves volunteers, other individuals, and service users in significant roles alongside the workers within the association base (Travaglini, 2012). Similar initiatives are seen under the Belgian Law (1995) that has legislation for such collectives. Countries such as France, Portugal, Spain, and England follow the model, where they are called cooperatives of collective interest, social solidarity cooperatives, housing cooperatives, and community interest companies, respectively (Levi & Davis, 2008). There is another similar sounding set up called a cooperative venture, which is a “collaboration between two or more

independent companies with no financial or legal connection. The companies coordinate or merge business processes to improve their overall performance.” (Marxt & Link, 2002).

2.7 Infrastructure for collective social entrepreneurship

Authors such as Wooley and Tan have referred to entrepreneurial infrastructure as “the facilities and services present within a geographic area which encourage the birth of new ventures and the growth and development of small- and medium-sized enterprises,” alluding to the elements of assistance with tasks, physical and financial resources, knowledge, and information (Tan et al., 2000). Broadly, external support can be institutional and organizational structures that can boost entrepreneurship (Woolley, 2017).

Studies have determined that entrepreneurial infrastructure should have the following elements: 1) support organizations; 2) culture; 3) learning opportunities; 4) assistance with task; 5) resources and resource provider diversity (Begley & Tan, 2001; Roundy, 2017; Tan et al., 2000); and 6) networks (H. Haugh, 2007).

Social enterprises and nonprofit organizations (NPOs) often struggle to cope with market pressure, because of which, they are forced to adopt competitive strategies in their operations to deliver superior value for their stakeholders (Weerawardena & Sullivan, 2001). It is challenging to sustain and grow on a small scale with limited resources. For an entrepreneurship to flourish, an environment that provides the munificence required is necessary. At the national or economy level of analysis, it has been suggested that

ecosystems that support entrepreneurship are necessary for start-ups (Roundy, 2017). The same idea is partially reflected in incubators and accelerators as these are mini environments, akin to nurseries for young plants, with the necessary conditions for growth. Owing to its usefulness, this research looks at the role of incubators, technology centers, and universities, and the positive influence of these on the growth of a firm (Roig et al., 2015).

Universities play crucial roles as incubators. A study in Brazil highlighted the role of universities and their incubator programs that not only encourage entrepreneurship but also support the innovative capacity of the nation through the knowledge transfer and socioeconomic progress that happens in the process (Kipper et al., 2014). Another example of a university-led incubation program is the University of Washington's Global Social Entrepreneurship Competition; they organized a competition among teams comprising student and nonstudent participants to submit business plans that "create sustainable, positive solutions to some of the world's most challenging issues—poverty, health and development." The program aimed to generate ideas that could be scaled up to bring about positive changes in the society (Huster et al., 2017). Notwithstanding their unique focus and insights, these studies share a common premise of encouraging and supporting good ideas from a nascent stage.

Research has recognized how entrepreneurial activity can be galvanized with suitable infrastructure for assisting entrepreneurs with the required information, resources, knowledge, and task assistance (T. M. Tan et al., 2000). These infrastructures that contribute to the entrepreneurial ecosystems could be useful in revitalizing areas undergoing economic decline. In such a scenario, it is not surprising that the government

and policymakers in these jurisdictions are realizing that “the creation of entrepreneurial ecosystems and social entrepreneurship represents activities at the confluence of economics and society which overlap in the expectation that, moving forward, they will be critical to economic development and wealth creation” (Roundy, 2017).

2.8 Factors that provide supportive infrastructure

The presence of supportive infrastructure might help attract participation from members who will have more confidence in the success of their collective endeavor if it has access to such resources. Hence, it is crucial to understand the structure of the entity to make the collective more efficient, such as the funding schemes it has access to, government support, how it taps into corporate support, how it gets volunteers, and the role of organizations such as SG Enable, Raise, and incubators.

2.8.1 Resources and diversity among resource providers

Key resources for a CSE-based organization can be physical, financial, intellectual, or human. From the perspective of resources, developing partnerships as a resource-building process could assist the success of social enterprises. Firms are considered capable of achieving a sustainable competitive advantage if they “exploit their internal strengths through responding to environmental opportunities while neutralizing external threats and avoiding internal weaknesses” (Barney, 1991). A Korea-based study reported a positive association between partnerships with government organizations and NPOs and the performance of social enterprises (Choi et al., 2018).The conceptualized

enterprise would garner resources and achieve strategic advantage through its tripartite collaboration and alliances across sectors (Podolny & Baron, 1997).

Investor diversity also helps social entrepreneurs find better matches among investors who have different return expectations. Conventional investors, impact investors, and nonprofit investors might be valued differently in different organizations; hence, it would be beneficial for social enterprises to have an ecosystem with diverse investors (and philanthropists) with varying tolerance for risk and return along with different investment focus and motivation (Froelich, 1999). Diversity is also necessary in cultivating skilled and unskilled labor that can potentially enhance the flexibility of the organization in responding and adapting to disruptions (Roundy, 2017). In this context, a collaborative approach through CSE can potentially bring together diverse individuals in the collective who can tap on their connections, close or distant, and help establish networks beneficial for the organization (Granovetter, 1983; H. Haugh, 2007). A CSE infrastructure also requires social alliances that can act as facilitate dealings in multi-dimensional issues, whose resolution requires engagement of “multiple actors on multiple levels and by multiple means” (Waddock and Post, 1991)

2.8.2 Supportive organizations

A social enterprise requires supportive organizations that can help make a real difference through social innovation, such as ones that become partners in a social mission using the best people and core skills for the project to solve their business problems (Kanter, 1999). On one hand, strategic collaboration between NPOs and corporations has become

a necessity, while governments are forced to downsize due to budgetary pressures, limiting their ability to offer social services; this trend has led to the shifting of functions from central governments to the local level and greater involvement of the private sector, including NPOs as well as corporations. On the other hand, social issues have become increasingly complex, requiring more contributions from the private sector to stand in place of public efforts. Another development on the corporate side is that “businesses are increasingly re-examining their traditional philanthropic practices and seeking new strategies of engagement with their communities that will have greater corporate relevance and higher social impact.” This move can encourage corporates and NPOs to pool resources and bring in more effective organizational approaches (J. E. Austin, 2000). One of the elements within the entrepreneurship infrastructure is the resources available to the nascent entrepreneurs. Outside of the policy initiatives, entrepreneurship development accounts indicate that to mutually help others seeking to start businesses, the fledgling social enterprises require partners for the collective that would use their core teams to assist social projects not only via financial contribution or some peripheral work but also by helping bring about a sustainable change. They encourage “new ideas for systemic change that private enterprises are uniquely qualified to contribute.” In her influential article, Kanter identified the characteristics of successful private–public partnerships; “a clear business agenda, strong partners committed to change, investment by both parties, rootedness in the user community, links to other organizations, and a long-term commitment to sustain and replicate the results” (Kanter, 1999). The success of start-ups depends on finding sustainable solutions to issues through community assistance in the form of dedicated individuals who could act as catalysts for change by

raising awareness about the problem that needs public and government attention to find sustainable solutions (Waddock & Post, 1991). These individuals and resources can be found in the social networks within which the nascent entrepreneurs reside (Stuart & Sorenson, 2005). Doh et al. advocated solving grand environmental challenges that threaten private and public interests by forging a partnership among businesses, non-governmental organizations, and the government, to leverage their specialized competencies “to discover, develop, and scale innovative adaptive responses to environmental challenges” (Doh et al., 2019). The research survey included questions about the involvement of external agencies, and the analysis evaluated whether the respondents value the support of such philanthropic and state organizations to the conceptualized collective.

2.8.3 Organizational culture

Several authors have spoken about the importance of organizational culture for success, especially in a collective where people collaborate for a specific cause. Identity is a prominent part of the sociology of culture; there could be different perspectives of collective identity, the identities of collectives, and the collective aspects of the identities of individuals (P. DiMaggio, 1997). In this study, it is considered that the aspect of identifying with the cause can play a part in bringing the caregivers of PWIDs together—it was one of the key questions in the survey—in the form of a common purpose.

2.8.4 Opportunity

Entrepreneurial opportunities can be defined as “those situations in which new goods, services, raw materials, and organizing methods can be introduced and sold at greater than their cost of production” (Casson, 1982). Individuals need support and assistance to identify opportunities for social entrepreneurship, to collect prior information required to identify an opportunity, and to develop the cognitive abilities to value these identified opportunities (Shane & Venkataraman, 2000). Because individuals might lack these aspects, a collective approach might facilitate better access to necessary infrastructure. Involvement of government funded organizations such as Raise and SG Enable can provide help and support to social entrepreneurs for discovering these opportunities.

A major hurdle for social entrepreneurs is the lack of access to other established entrepreneurs from whom they can learn about the relevant pitfalls and opportunities. Thus, “social entrepreneurs can benefit from vicarious learning, a type of organizational learning that involves observing the behaviors and outcomes of other firms” (Lévesque et al., 2009).

Based on the review presented in sections 2.7 and 2.8, respondents were asked about what non-financial resources would be important for the collective; such as 1) access to networks that help form social alliances to generate business and overall support; 2) business opportunities, created by public or private sector, to help the organization; 3) supportive government and non-government organizations that can become partners in the social mission using the best people and core skills for the project to solve their

business problems; and 4) assistance with tasks, in terms of new ideas for systemic change that private enterprises are uniquely qualified to contribute.

2.9 Conclusion

The above literature review highlights aspects to be considered in CSE. It provides insights about key aspects of member participation, organizational factors, legitimacy, resources, and collective entrepreneurship that are investigated in this study and influence the design of the questionnaire for the survey and the interview. It also provides insights about organizational factors that can potentially attract participation from its members.

CHAPTER 3- Methodology

3.1 Research design

This study is designed to gain an understanding of the views of the participants with regards to what characteristics an organization modeled on CSE approach should have to facilitate their participation. A mixed research method, defined as “research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration,” is applied to benefit from the strengths of both qualitative and quantitative methods (Johnson et al., 2007). The aspect of complementarity that “seeks elaboration, enhancement, illustration, clarification of the results from one method with the results from the other method” has helped obtain different but complementary data using qualitative as well as quantitative methods (Schoonenboom & Johnson, 2017).

The qualitative data gathered from the interview allows exploration of the process in detail from the perspective of an individual respondent. The main aim of the interview was to explore how an entrepreneur views the challenge, limitations of his organization, and what external support, if provided, would make his organization attractive for members to join.

Based on the interview and the literature review, a survey questionnaire was designed to obtain the views of the caregivers of PWIDs¹, who were the main respondents, about how a collective can be structured to attract participation. For the quantitative study, a survey on Qualtrics (an online survey platform) with closed questions enabling statistical reporting was used. The data sets were then synthesized to develop a more complete understanding about the organizational factors of the collective.

The research followed the guidelines set by the Institutional Review Board, which vetted and approved the interview and survey questionnaires.

A total of 137 acceptable responses were collected; 93.4% respondents agreed that an organization that brings together caregivers to support their family members with special needs will be a useful step toward addressing the requirements of PWIDs. Furthermore, 97.1% respondents agreed that such an organization can help tap new opportunities for people with special needs.

3.2 Interview

3.2.1 Interview Objectives and method

To understand the perspective of entrepreneurs who are already engaged in CSE, a qualitative questionnaire was designed for a semi structured interview with a founding member of a CSE venture that works with the members of a disadvantaged group.

¹ This comprises 1.5% of the population of PWIDs and 3% as their parents/immediate caregivers in Singapore, which includes a substantial 4.5% of the population as per <https://www.spd.org.sg/about-us/disability-facts-figures/>

Mr. A is one of the founding members of a Singapore-based cooperative and a caregiver of a PWID. He, along with a few other caregivers of PWIDs, started an organization called Company X to help provide employment for PWIDs. Since the research aims to understand the perspective of stakeholders in a collective, the model of the cooperative set up by Mr. A with caregivers of PWIDs was found to be suitable in the context of the study, as the stakeholders had a profile like that of the respondents of the survey, with shared concerns and motivations for participating in the collective. A detailed interview was conducted with Mr. A in February 2021.

An applied thematic approach, which is “rigorous, yet inductive, set of procedures designed to identify and examine themes from textual data in a way that is transparent and credible,” was used to analyze the interview data (Guest et al., 2012).

The broad objectives for interview with the social entrepreneur were to determine what resources he has access to, the challenges he faces in supporting the community that he endeavors to support, and how additional resources and external support can alleviate these problems.

Mr. A is one of the four founders of Company X; as a caregiver of a PWID, he explained that the main reason he started a cooperative with other caregivers was to set up a system where the job fits the employee rather than the employee fitting the job. The caregivers’ cooperative gave them more control over the environment and the terms of employment for their family members with intellectual disabilities (IDs). Mr. A spoke at length about the requirements of a collective, such as people, necessary support, and management and employment of members. The interview also brought forth the reasons why he and his fellow caregivers decided to collaborate and set up Company X instead of working as

individual entrepreneurs. He mentioned the challenges of such an endeavor and offered suggestions on the possible drivers for success of a CSE. The exposure and size of Company X is rather limited, like most cooperatives registered in Singapore (other than National trade unions congress, which represents the trade unions). The size and scope of the conceptualized organization could be much broader. Nevertheless, the insights highlighted the main issues and helped in formulating the questions for the survey.

Data obtained from the interview were analyzed using thematic analysis and coded using techniques and procedures described by several experts in the field of data analysis (Flick, 2002; Glaser, 1999; Leavy, 2014). Coding helped identify patterns, relationships, and similarities.

3.2.2 Interview themes.

Table 3 Broad Themes from the Interview

Broad Themes	Sub themes	Initial Codes
Requirements	People	Motivation to work Make adaptations. Understand capabilities.
	Employment	Terms of employment Aspirations of PWID Assistive tools Productivity Control over work hours Travel arrangement Training and skills Social interaction and engagement Structure of day Inclusion in community Independence Safety
	Support	Govt support Financial support Training

		Networking Volunteers Knowledge and expertise
	Business Model	Outsourcing Partial production Full set up
	Environmental control	Legal
	Management	Expertise Marketing Multitasking Salary Production Troubleshooting Leverage on channels Fresh ideas Passion
Reasons for collective action	Social	To make members self-reliant Involve corporations to play their part Minimize societal, political, and financial costs
	Governmental	Reduce dependence on govt Cope with a growing PWID population
Challenges	Starting a business	Collaborators Finding space Sourcing material Financial viability Preferably not client facing Job support Friction with colleagues Running cost Low productivity Scalability Risk appetite Poor paymaster Difficulty attracting talent Sustaining operations Competition disadvantage in cost and speed
	Changing job landscape	Technological advancement Redundancy Constraints of space
	Managing Caregivers	Too protective Interfering in work
Suggestions	Organizational form	Ease of setting up Social focus Enterprise in nature Clear bylaws Commitment of mission and vision

		Provide gainful employment. Focus on operations and people
	Government	Cross subsidization
	Human capital	Tap into retirees. Young graduates Caregivers
	Measures of success	Financial independence Confidence Quality of life
	Product	Suitable for members to produce. Easy to sell
	General suggestions	Have a buddy system Caregivers' initiative Many helping hands approach Community support Need a group to initiate. Start small and grow slowly Focus away from bottom line Start the conversation

The themes that emerged from the interview provided a basic understanding of the issues that participants in a collective might face and possible solutions to some of their problems. These themes, along with insights obtained from the literature review, helped formulate the survey questions.

3.2.3 Organizational factors to facilitate collective social entrepreneurship.

Mr. A outlined the aspects that could facilitate CSE. In his view, the organization must be employee centric, with the job scope fitting the person and not vice versa; also, practical issues such as travel, work environment, and job support should be carefully managed.

“What is important is that they get a slice of work experience like any neurotypical person...Its important they feel included and are engaged.”

Measures of success for a collective should be different from those of a regular collective or a for-profit company. For Company X, the biggest measure of success was financial independence of its employees (who are PWIDs), their enhanced confidence, and a better quality of life. This is the primary goal, and it is given importance even at the cost of financial gains.

This brings our attention to the main point as to why the caregivers would consider participating in a CSE. The answer in this group of caregivers, founders of Company X, was the possible benefits to the family members of PWIDs. This same aspect was observed in the survey responses; a factor that emerged was the motivation to join and create a legitimate organization that benefits the family members of PWIDs (*as interpreted from what Mr. A said about success factors*).

Company X considered and dabbled into various businesses, such as a mushroom farm or laundry for hotels. Identifying a suitable program that will tick most boxes for all the members was challenging. For people to join CSE, the organization should have a clear understanding of what business it wants to participate in and what model it should use, such as whether it should act as an outsourcing vendor to a large company, do part production in a large production line or do a full set up with upstream and downstream control. Mr. A shared that for the cause that he was working for, it was easy to receive a large grant from the government, but the organization needs to decide how soon they want to scale up and whether they have the wherewithal to do justice to that scale; hence, a clear understanding and agreement on the size and growth expectations of the organization would be imperative for future success. This highlighted that the collective should be able to communicate the operating and funding model of the organization to

the participants. An organization with good funding and a clear plan would have a higher chance of success, and peoples' participation may be influenced by this information.

Mr. A was emphatic about starting the organization small and gradually scaling it up, in his view,

“When you involve many people at the start trying to get them on the line, marching to the same tune is going to take up more effort than anything else.”

Company X is small and does not have a board, and there seems to be a lack of decisive action; in a larger organization, these issues would be resolved by developing and implementing a clear and specific strategy. A question on board composition and decision-making was introduced in the survey to get clarity in this regard.

Mr. A spoke about collaboration with a special needs educational institute in Singapore; however, it could not be materialized due to the status of Company X as a voluntary welfare organization, as its constitution does not permit such financial arrangements. Company X was set up as a cooperative, keeping in mind the social commitment, ease of setting up, and shared vision of members and entrepreneurial nature. A collective should have built-in flexibility to allow for partnerships and expansion as it grows.

To gain legitimacy and public support, a CSE organization should be willing to allow people to visit and see for themselves how it is operated and the impact it has on the quality of life of the employees.

“The legitimacy comes with showing that you are being true to your mission.”

Mr. A talked at length about the additional challenges that an organization faces when employing PWIDs, such as the limitation of what projects can be taken up, quality of work by PWIDs, and competitive costing. He also said that accommodating diverse views from members of the collective can be challenging.

Mr. A spoke about the aging population in Singapore and how the government is burdened with managing it; with this in view, it is important that CSE organizations should not be too dependent on the government and should be adequately self-reliant.

“We need not look at government all the time. We are prepared to do this on our own, with help from philanthropies and demonstrate that this is workable, then I think the government will be more than happy to adopt it and keep it going.”

Organizations that are planning to work with disadvantaged groups should be geared to accept additional challenges and seek support from external organizations and government agencies, as seen in the literature review and the feedback from interviewee. In the long run, however, the organizations must endure to reduce this reliance.

A possible organizational factor that could lead to better participation is an understanding of the inherent psychological motivation of why people would consider joining a collective. For Mr. A and the cofounders of Company X, the motivation to initiate the collective was the fear of leaving behind a PWID after the demise of the caregiver, and thus the desire to create an environment where family members with IDs are independent and safe. Involvement of the caregivers and their collaborating for a CSE would alleviate this concern of parents of PWIDs to some extent.

“It is frightening, while we are around, we can provide care and support. But when we are no longer around, then what happens?”

In Mr. A's view, the most important thing for members to come together to form an organization is a shared vision and their ability to adhere to that in the long term. He clarified that for his organization, the aim was to offer,

“Choice of Jobs for All Persons with Intellectual Disabilities, enhancing their Quality of Life and to establish and operate social enterprises that employ persons with disabilities as the majority of the employees.”

Mr A. mentioned that the parents of PWIDs have the highest stakes, as they are the ones who most want their family member, a PWID, to have a better quality of life. In his view, the contribution from primary caregivers need not be monetary.

“If we do not come together and do it, then I think the chances of people (PWID's) having a better quality of life is affected. I think parents will be the first line that needs to do it. Then basically, next comes philanthropies and after that the passionate public and it need not be money.”

What might motivate members to join such organizations could be the realization that the final responsibility for their family member with ID lies with them and hence the sense of urgency and effort to see them gainfully employed also should come from them. Talking about the scarcity of employment options after the age of 18 years for PWIDs, Mr. A said

“Looks like they go to school and retire at the age of 18 years. Which is a terrible thought, right?”

Hence, the motivation to join such an organization must be a shared vision personal interest in terms of getting support for their family member with ID (*as interpreted from what Mr. A said about motivation*).

When members come together, they bring together their diverse expertise and professional experiences of accountancy, engineering, and so on, which would be beneficial for an organization. The role of motivation, as explained by Mr. A, formed the backbone of the survey and eventually emerged as the key factor that can attract participation in the collective.

3.2.4 Financial and non-financial resources

Mr. A mentioned the many helping hands approach² that Singapore government follows, as part of its public service, rather than depending on one source for all help. In his view, *“The government does fund capital costs generously. But the running costs is really the biggest challenge.”* Hence, the envisioned organization should have a plan to financially sustain its operations. This was desired by the respondents, who expected the organization to strive toward long-term self-sustainment.

Human resources, in terms of individual time, is an essential resource in CSE, especially when stakeholders are not working as full-time paid staff. Mr. A spoke about college students and retirees as volunteers:

² <https://www.psd.gov.sg/heartofpublicservice/our-institutions/supporting-singaporeans-and-ensuring-no-one-is-left-behind/>

“I think that the biggest challenge is demand on individuals time. There are many willing people, but then they are short of time.”

Another question was included in the survey to understand the time commitment that members can make. Company X forged alliances to benefit from their partners’ technology, marketing skills, and infrastructure. This highlights the value of leveraging channel partners for financial and non-financial resources, something a collective should consider (*as interpreted from what Mr. A said about partnering with other stakeholders*).

Mr. A spoke about the various costs involved, such as the societal, political, and financial costs; hence, the government cannot be not involved. In his view, government support can be achieved via cross subsidization, cheaper leases for land, training of employees at government-sponsored adult sheltered workshops, and so on (*as interpreted from what Mr. A said about financial resources*).

The themes that emerged from the interview, along with the aspects that got highlighted from the literature review, formed the basis for designing the survey questionnaire.

3.3 Survey

3.3.1 Survey Objectives

This study examined the organizational factors that enable CSE. The survey sought answers to help understand the views of the caregivers about the characteristics they expect in a collective, ones that they consider desirable and motivating toward participation. Responses to questions on demographics and time commitment were used to analyze their relationship with the factors.

3.3.2 Survey measures

From the literature review and data obtained from the interview, nine broad constructs were developed, each with approximately four items. These involved gauging the survey respondents' views on the characteristics of an organization, such as how it can gain legitimacy, the possible personal motivations for stakeholders to participate in such an organization, the primary importance of the social mission as opposed to financial performance, financial and non-financial resources required by this organization, to what extent an organization like this can help in building a sense of community, and lastly, what this organization must achieve to be successful.

For the data obtained from the questionnaire, statistical analyses were carried out on two aspects, the demographic information, and the perceived organizational factors. McAdam pointed to biographical availability, which is the absence of personal constraints, as a key factor in an individual's ability to participate in community organizations (McAdam, 1986). Statistical analyses of demographics, such as the educational background, age, employment status, relationship to PWID, gender, income bracket, and marital status, yielded insights on whether these variables may guide individuals to participate in a CSE venture.

Statistical analyses of these variables were used to analyze differences in perception across the participants' (caregivers) demographic characteristics. The organizational factors that emerged were used in a cluster analysis to find possible groups of participants that have intra-cluster similarities. A multinomial regression was conducted to identify

the relationship between organizational factors and demographics with the time that participants were willing to commit to the organization.

3.3.3 Survey Scales and reliability

Various scales have been developed to examine social entrepreneurship, but most have been in specific areas, such as organizational social entrepreneurship (Kannampuzha & Hockerts, 2019), measuring the social identity of entrepreneurs (Sieger et al., 2016), and social entrepreneurship orientation (Kraus et al., 2017). Due to the paucity of research on CSE and the absence of any existing scale to meet the specific requirements of the study, a new scale was designed. First, the constructs were conceptualized based on the literature review, which highlighted the indicators that could influence participation.

Table 4 Survey scale

5	4	3	2	1
Very important	Important	Neutral	Less important	Not important
Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Various scales have been developed to examine social entrepreneurship, but most have been in specific areas, such as organizational social entrepreneurship (Kannampuzha & Hockerts, 2019), measuring the social identity of entrepreneurs (Sieger et al., 2016), and social entrepreneurship orientation (Kraus et al., 2017). Due to the paucity of research on CSE and the absence of any existing scale to meet the specific requirements of the study, a new scale was designed. First, the constructs were conceptualized based on the literature review, which highlighted the indicators that could influence participation.

An initial pool of 52 items was generated to get responses on various organizational factors sought in a caregivers' collective. To enhance the accuracy and comprehensiveness of the constructs and evaluate the practical aspects of administering the survey, the survey questions were reviewed by four caregivers of PWIDs; they highlighted issues such as the length of the survey, as well as practical aspects such as respondent exhaustion. Consequently, some questions on organizational culture and some other aspects were removed. The format of questions was modified to allow efficient usage on mobile phone, as it was pointed out by these reviewers that majority of respondents would use a mobile phone to fill the survey, and the initial format was too tedious. The reviewers also highlighted the challenges and additional measures of success for the collective; these were incorporated in the survey. While writing the items for the scale, effort was made to ensure clear and concise phrasing, use of positively and negatively worded items, and most importantly, the format of responses was clearly defined on a 5-point Likert scale (Netemeyer et al., 2003). The caregivers were approached through a structured questionnaire eliciting their perception on a 5-point Likert scale (survey scale presented in Table 4) about different organizational factors for several pertinent questions and statements. A few items were also adapted from contemporary social entrepreneurship literature.

Nine broad constructs were developed, each with approximately four items. A pilot test was conducted, and further adjustments to the questionnaire were done based on the results of the pilot test. The caregivers were contacted on various dedicated groups on social media platforms such as WhatsApp and Facebook. This ensured a diverse sample

in terms of age, gender, education, and social background. The survey was designed to ensure that the respondents remained engaged throughout (Brace, 2018).

Data gathered in the survey were analyzed using SPSS. Cronbach's alpha reliability test was conducted to measure the internal consistency or the reliability of the measuring instrument (i.e., the questionnaire). Its usage was appropriate as the questionnaire was developed using multiple Likert scale statements.

Table 5 Reliability Statistics

Reliability Statistics

Cronbach's Alpha	N of Items
.952	22

The above table presents the overall reliability; the value of Cronbach's alpha is 0.952, indicating that the data are sufficiently reliable for further analyses. It also indicates high level of internal consistency with respect to the variables for appropriate decision-making.

A few questions from the survey were not used during the analysis as they did not fit the theoretical concept. Since the data were ordinal (Likert scale) and most of the independent variables entailed two or more items, the Kruskal–Wallis test (Welman, 2001) was considered appropriate to determine the significant differences. The level of significance used for the test was 0.05 (or 5%).

Once the survey was complete, data from 137 respondents were analyzed using factor analysis, which is a statistical technique for identifying underlying factors that are measured by a (much larger) number of observed variables. It is also used to describe variability among observed, correlated variables in terms of a potentially lower number of unobserved variables called factors. It is used to check the validity of the data.

Table 6 KMO and Bartlett's Test

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.907
Bartlett's Test of Sphericity	Approx. Chi-Square	2747.988
	df	231
	Sig.	.000

Table 6 shows two tests that indicate the suitability of these data for structure detection. We checked whether our example is suitable for exploratory factor analysis (EFA) by looking at the Kaiser–Meyer Olkin Measure (KMO) for sampling adequacy. $KMO > 0.5$ indicates that the sample is adequate for analysis. In the table above, KMO value of 0.907 meets this requirement. The Bartlett's test of sphericity was used to test the null hypothesis that the correlation matrix is an identity matrix. An identity correlation matrix means that the variables are unrelated and not ideal for factor analysis. A significant statistical test ($p < 0.05$) shows that the correlation matrix is indeed not an identity matrix,

thus rejecting the null hypothesis. Both these tests confirmed that our example has patterned relationships and that the factor model is appropriate.

Once the factors were derived, to further identify structures within the data, cluster analysis was carried out. It is an exploratory analysis that tries to find a natural grouping within the data; effort was made to find high intra-cluster similarities within a group and a low inter-cluster similarity between the two groups. To determine the relationship between demographic and organizational factors to the time a respondent would be willing to commit, a multinomial logistic regression was conducted.

3.3.4 Survey demographics

From a total of 137 respondents, majority of the respondents were female (78.8%), and majority of caregivers of PWIDs were their parents (80.3%). Age group of 41–50 years was the highest category with 43.1% representation in the survey, with the next highest 17.5% belonging to the age group of 51–60 years. Graduates formed a large proportion of all respondents (46%), followed by 23.4% who received education less than A levels. Monthly income of majority of respondents (55.5%) was <SGD3000. In terms of employment, 46.7% of the respondents stated that they are employed full-time, followed by 21.9% of the respondents who were homemakers; 81.8% of the respondents were married.

3.3.5 Descriptive statistics and principal component analysis

From the survey, 22 statements were extracted; these were checked for unengaged responses, missing values, improper coding, and outliers. To check for accurate values,

an anti-image correlation was conducted (refer to Annex 1). This provided individual KMO values of each statement, which were >0.5 .

Communalities indicate the amount of variance in each variable that is accounted for by the components. The communalities in this table are all above 0.5 (refer to table 5), which indicates that the extracted components adequately represent the variables.

Another measure for communality is the sample size; for an average communality, a value between 0.5 and 0.6 is acceptable for a sample size between 100 and 200 (sample size in this study = 137) (Fabrigar et al., 1999). Since the individual KMO and communality are both >0.5 for all statements, all the 22 statements were retained.

3.4 Exploratory factor analysis

EFA is commonly used to discover the factor structure of a measure and examine its internal reliability. It also helps reduce variables into a smaller set to save time and facilitate easier interpretations; thus, for this thesis, EFA was conducted to understand the underlying relationship between the 22 identified variables.

EFA involves three decision points: (1) the number of factors, (2) the chosen extraction method, and (3) the chosen rotation method.

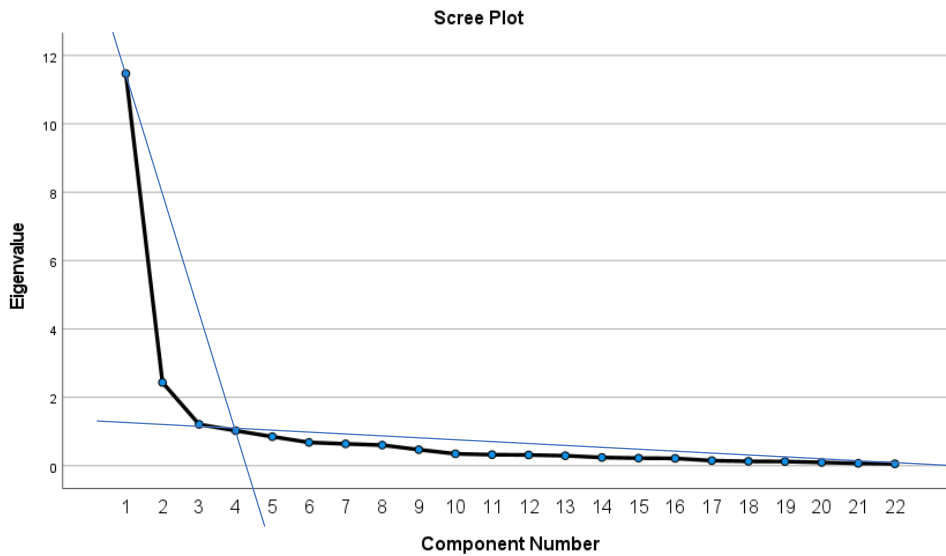
3.4.1 Deciding the number of factors

In Table 7, the total variance is explained; it determines the eigenvalues of the available factors. The Kaiser–Guttman rule, which states that the number of factors are equal to

the number of factors with eigenvalues >1 , was applied and the reliability was further examined with a scree plot (Hubbard & Allen, 1987).

Once the four factors were identified from EFA, to further check the number of factors, a scree plot, which is a two-dimensional graph with factors on the x-axis and eigenvalues on the y-axis, was drawn. Eigenvalues were produced by principal component analysis (PCA), and they represent the variance accounted for by each underlying factor. They are not represented by percentages but scores, and their sum is equal to the number of items. In this study, survey data with the 22 items will, theoretically, have 22 possible underlying factors, with each factor having an eigenvalue that indicates the amount of variation in the items accounted for by each factor. The factors are arranged in descending order based on the most explained variance. The first factor with an eigenvalue of 11.471 accounts for 52.15% of unrotated variance (Table 7). The values are arranged in a scree plot in descending order (Figure 1). To determine the “break,” a horizontal line and a vertical line starting from each end of the curve were drawn; the number of factors to be retained is the data points that are above the break (point of inflection), and this was four in this research.

Figure 1 Scree Plot



3.4.2 Extraction method

Once the number of factors was decided, another factor analysis was conducted to determine the loading for each of the factors. In this research, PCA was used to produce factor loadings for every item on every extracted factor.

Table 7 Total Variance Explained

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.471	52.140	52.140	11.471	52.140	52.140	6.709	30.496	30.496
2	2.437	11.079	63.218	2.437	11.079	63.218	4.203	19.103	49.599
3	1.211	5.506	68.724	1.211	5.506	68.724	2.995	13.614	63.213
4	1.026	4.664	73.388	1.026	4.664	73.388	2.239	10.175	73.388
5	.851	3.869	77.257						
6	.683	3.107	80.364						
7	.641	2.915	83.279						
8	.604	2.747	86.025						
9	.471	2.141	88.166						
10	.350	1.592	89.758						
11	.325	1.477	91.235						
12	.316	1.438	92.673						
13	.294	1.337	94.010						
14	.243	1.106	95.116						
15	.224	1.018	96.133						
16	.217	.986	97.119						
17	.151	.684	97.803						
18	.130	.593	98.396						
19	.125	.567	98.963						
20	.099	.449	99.412						
21	.071	.324	99.737						
22	.058	.263	100.000						

Extraction Method: Principal Component Analysis.

3.4.3 Rotation Method

Rotation is a way of maximizing high loadings and minimizing low loadings so that the simplest possible structure is achieved. Once an initial solution was obtained, the loadings

were rotated. There are two basic types of rotation: *orthogonal* and *oblique*. Orthogonal is when the factors are assumed to be uncorrelated with one another. Oblique rotation derives factor loadings based on the assumption that the factors are correlated. In this research, the factors were found to be uncorrelated; hence, orthogonal Varimax with Kaiser normalization method was used to obtain the values of loadings (Table 8) (Kaiser, 1958).

The rotation sums of squared loadings show the eigenvalues and variance after rotation. Notably, only extracted, and rotated values are meaningful for interpretation; hence, rotated eigenvalues > 1 and scree plot (Figure 1) were used to determine the number of significant factors. The extraction sums of squared loadings is identical to the initial eigenvalues except factors that have eigenvalues < 1 are not shown (Table 7).

As illustrated in Table 8, using rotation, and suppressing small coefficients aid the interpretation. Factor loadings indicate how strongly the factor influences the measured variable; our factors are desirable with variables whose values are > 0.6, and no negative values were found, implying that reverse coding was not required. Four factors emerge, explaining a cumulative variance of 73.3%.

Table 8 shows the factors that have been labeled along with the statements that they encapsulate. Loading value > 0.60 was used as a criterion for removing the less important statements.

Table 8 Rotated Component matrix

	Component			
	1	2	3	4
Helping PWIDs get respect	0.851			
Backup plan for my PWID family member	0.85			
Directly benefits my PWID family member.	0.837			
Training and employing PWID's	0.823			
Being not-for-profit with accounting transparency.	0.803			
Platform to do social good	0.796			
Share my ideas to further the cause of PWIDs	0.793			
Associating with MSF and Govt agencies.	0.783			
Supportive govt and non govt		0.867		
Access to networks		0.786		
Assistance with new ideas and system changes		0.781		
Business opportunity		0.716		
Become economically sustainable			0.714	
Joint problem solving			0.659	
Community spirit			0.613	
Financially sustainable Over time			0.609	
Offer distinctive services				0.796
Innovative ideas for services.				0.737

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 9 iterations.

3.4.4 Labelling of Factors

The factors were labeled by examining the factor pattern to determine which items load highly on which factors and then determine what those items have in common. Table 9 shows the number of items that each factor represents. All four factors individually cleared the reliability test with Cronbach's alpha value > 0.6

Table 9 Labels and reliability of Organizational Factors that can support CSE

Factor number & Label	STATEMENTS	Cronbach alpha
Factor 1 Relevance	<ol style="list-style-type: none"> 1. I will be motivated to participate in the organization because it provides me a platform to do social good. 2. I will be motivated to participate in the organization because it allows me to share my ideas to further the cause of PWIDs. 3. The organization will gain legitimacy through Associating with MSF (Ministry of social and family development) and other government departments. 4. The organization will gain legitimacy through Being not-for-profit with accounting transparency. 5. I will be motivated to participate in the organization because it directly benefits my Intellectually disabled family member. 6. I will be motivated to participate in the organization because it could be a backup plan to meet the needs of my family that has a PWID, when I am old and incapable or when I am not alive. 7. The organization will gain legitimacy through Training and Employing special needs people who have low chance of open employment. 8. The organization will gain legitimacy through Helping PWIDs get self-respect leading to change mindsets towards special needs individual. 	0.956
Factor 2 Resources	<ol style="list-style-type: none"> 1. Non- financial resources that the organization would need are Business opportunity created by public or private sector to help the organization. 2. Non- financial resources that the organization would need are Assistance with tasks, in terms of new ideas for systemic change that private enterprises are uniquely qualified to contribute. 3. Non- financial resources that the organization would need are Access to Networks that help form social alliances that can act as catalysts to generate business and overall support. 4. Non- financial resources that the organization would need are Supportive government and non-government organizations that can become partners in the social mission using the best people and core skills for the project in a way that would solve their business problems. 	0.906
Factor 3 Likelihood of success	<ol style="list-style-type: none"> 1. An organization with members of different races and backgrounds will strengthen the community spirit. 2. Become economically sustainable, rather than depend on government or philanthropic sources of funds. 3. Jointly solving problems will help people bond better 4. Over Time the organization must become financially self-sustaining. 	0.828
Factor 4 Innovativeness	<ol style="list-style-type: none"> 1. Offer distinctive services that are different from what is already available through other organizations. 2. Come up with innovative idea to expand their services. 	0.842

CHAPTER 4 – Findings

The analysis conducted in this study looks at the organizational factors that were derived from factor analysis in Chapter 3 and how they provide more information about the orientation of the respondents. In terms of their time commitment to the organization and to explore the possibility of segregating the participants into homogeneous groups, the analysis considered demographics and the organizational factors preferred by the participants.

4.1 Interpretation of Factors

From the survey 22 statements were extracted, these were checked for unengaged responses, missing values, improper coding, and outliers. To check for accurate values, an anti-image correlation was done (refer to Annex 1), this gave individual KMO values of each statement, which were found to be greater than 0.5.

Communalities, which indicate the amount of variance in each variable that is accounted for by the components are all above 0.5 which indicates that the extracted components represent the variables well.

Another measure for communality is the sample size, an average communalities value between 0.5 and 0.6 is acceptable for a sample size between 100-200(this research has a sample size of 137) (Fabrigar et al., 1999). Since both, the individual KMO and communality is above 0.5 for all statements, all the 22 statements were retained. After the rotation, variables with loading above 0.6 were retained, giving a final of 18 variables.

The means, standard deviations, and correlations of the initial 22 variables is presented in table 10.

Table 10 Means, standard deviations and correlations

		Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Each other as source of support	4.65	0.61	1.00																				
2	Supportive govt and non govt	4.63	0.56	0.52	1.00																			
3	Access to networks	4.59	0.61	0.59	0.80	1.00																		
4	innovative ideas for services.	4.59	0.66	0.50	0.53	0.51	1.00																	
5	Assistance with new ideas and system changes	4.53	0.62	0.53	0.71	0.68	0.45	1.00																
6	Joint problem solving	4.53	0.67	0.62	0.51	0.57	0.51	0.55	1.00															
7	Business opportunity	4.52	0.62	0.56	0.74	0.78	0.47	0.69	0.69	1.00														
8	Community spirit	4.51	0.69	0.67	0.52	0.59	0.50	0.55	0.76	0.62	1.00													
9	Offer distinctive services	4.49	0.78	0.33	0.36	0.42	0.74	0.37	0.48	0.51	0.41	1.00												
10	Social mission Paramount	4.45	0.79	0.36	0.45	0.35	0.40	0.46	0.38	0.41	0.34	0.35	1.00											
11	Become economically sustainable	4.35	0.90	0.39	0.32	0.48	0.53	0.40	0.55	0.53	0.52	0.54	0.17	1.00										
12	Financially sustainable Over time	4.34	0.89	0.45	0.33	0.45	0.39	0.37	0.54	0.49	0.43	0.41	0.39	0.60	1.00									
13	Mainly Caregivers members + some gov nominees	4.18	0.88	0.48	0.40	0.51	0.45	0.43	0.48	0.45	0.49	0.36	0.49	0.42	0.46	1.00								
14	Helping PWIDs get respect	4.08	0.63	0.40	0.38	0.33	0.38	0.38	0.41	0.40	0.40	0.34	0.48	0.35	0.44	0.54	1.00							
15	Training and employing PWID's	4.07	0.64	0.45	0.46	0.48	0.36	0.47	0.45	0.54	0.52	0.38	0.45	0.39	0.40	0.58	0.82	1.00						
16	Only caregivers of PWID	3.98	1.07	0.35	0.37	0.39	0.44	0.41	0.49	0.48	0.45	0.49	0.56	0.40	0.37	0.67	0.47	0.55	1.00					
17	Backup plan for my PWID family member	3.97	0.73	0.39	0.39	0.40	0.45	0.38	0.40	0.39	0.43	0.43	0.47	0.40	0.42	0.55	0.78	0.74	0.56	1.00				
18	Directly benefits my PWID family member.	3.93	0.77	0.37	0.42	0.43	0.50	0.41	0.37	0.41	0.38	0.49	0.51	0.38	0.44	0.52	0.75	0.77	0.58	0.90	1.00			
19	Being not-for-profit with accounting transparency.	3.90	0.85	0.26	0.37	0.33	0.32	0.36	0.32	0.31	0.37	0.28	0.37	0.34	0.31	0.53	0.70	0.71	0.50	0.66	0.66	1.00		
20	Associating with MSF and Govt agencies.	3.88	0.81	0.33	0.41	0.39	0.45	0.42	0.46	0.43	0.44	0.37	0.41	0.43	0.43	0.55	0.74	0.77	0.52	0.74	0.71	0.68	1.00	
21	Share my ideas to further the cause of PWIDs	3.82	0.85	0.56	0.36	0.47	0.38	0.45	0.58	0.55	0.58	0.41	0.45	0.46	0.52	0.59	0.74	0.75	0.59	0.79	0.77	0.66	0.71	1.00
22	Platform to do social good	3.77	0.89	0.44	0.36	0.42	0.36	0.42	0.56	0.54	0.51	0.47	0.43	0.40	0.49	0.51	0.71	0.75	0.62	0.78	0.79	0.65	0.69	0.90

Among the variables the lowest score of 3.77 was for, a platform to do social good and each other as source of support had the highest score of 4.65. There was positive correlation between all variables (refer to table 10).

Factor analysis presented four key factors that should be considered by organizations that aim to bring together stakeholders for CSE.

Relevance of the organization for stakeholders is the first factor. This trait can be acquired by providing participants a platform to do social good, and as an extension, it allows them to be associated with an organization that is perceived to be doing good for society, as demonstrated by its association with legitimate government organizations, having accounting transparency, supporting people who genuinely need help, and giving them a sense of self-respect. Another considerable component of participants' requirement was fulfillment of their specific needs. In the case of respondents in our survey, these needs were direct benefits for their PWID family members. An organization that meets these individual and social needs gains relevance for stakeholders, and thus, can potentially attract stakeholder participation

Second factor is the *Resources* that a collective organization can gather to attract more participants. This factor highlights the ability of an organization to forge alliances and support systems for the benefit of the collective. These alliances provide access to resources such as networks, business opportunities, and support from government and non-government organizations, working toward a common goal to enhance the probability of success of the collective.

The third factor focuses on the *Likelihood of success*, and it can be crucial for any prospective participant. The availability of financial resources in the future can be unpredictable; hence, the organizational endeavor for long-term financial independence is a factor that can attract participation. In a country like Singapore, which has a multiracial population, the likelihood of success is enhanced if there is community spirit and bonding between various races with the desire to jointly solve problems.

The fourth factor that emerged from the factor analysis is *Innovativeness*, which, in the context of the research, is the organizations' ability to differentiate from others by coming up with innovative ideas and distinctive services that are not available elsewhere, hence motivating stakeholders to join.

4.2 Difference in the factors

The factors obtained from EFA informed of the variance but did not tell us about the level of importance/agreement of the participants on the obtained factors. Hence, the mean scores of the various factors were calculated to obtain the levels of importance/agreement among the participants. Table 10 presents the mean scores to evaluate the relative importance of the factors.

Resources of the organization has the highest mean, followed by Innovativeness, likelihood of success of CSE and finally, relevance of the organization, which had the lowest mean value.

Table 11 Mean value of Factors

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
F1 Relevance	137	2.88	5.00	3.9279	.67735
F2 Resource	137	3.00	5.00	4.5675	.53765
F3 Likelihood of Success	137	2.50	5.00	4.4307	.64221
F4 Innovativeness	137	1.00	5.00	4.5401	.66988
Valid N (listwise)	137				

Within the factors, Access to resources has the highest mean and relevance of the organization for the Respondent has the lowest mean (refer to table 11).

A one-way repeated measure analysis (ANOVA) was conducted to evaluate the null hypothesis that there is no difference in the four factors (N=137) The results of the ANOVA indicate a significant difference in the four factors, Wilks' Lambda= 0.443, F (3, 134) =56.069, $p < 0.00$, $\eta^2 = 0.557$. Thus, there is significant evidence to reject the null hypothesis.

Table 12 Multivariate Tests

Pairwise Comparisons						
Measure: MEASURE_1						
(I) factors	(J) factors	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
					Lower Bound	Upper Bound
1	2	-.640*	.052	.000	-.778	-.502
	3	-.503*	.051	.000	-.639	-.367
	4	-.612*	.058	.000	-.769	-.456
2	1	.640*	.052	.000	.502	.778
	3	.137*	.042	.008	.025	.249
	4	.027	.051	1.000	-.108	.163
3	1	.503*	.051	.000	.367	.639
	2	-.137*	.042	.008	-.249	-.025
	4	-.109	.049	.166	-.241	.022
4	1	.612*	.058	.000	.456	.769
	2	-.027	.051	1.000	-.163	.108
	3	.109	.049	.166	-.022	.241

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.

Follow up comparison indicated that pairwise difference was significant. Between the 6 possible pairs with $p < 0.05$ for Factor 1&2(Relevance & Resources), Factor 1&3(Relevance & Success), Factor 1&4(Relevance & Innovativeness) and Factor 2&3(Resources & Success).

Factors 2&4(resources & innovativeness) and Factor 3&4(success & Innovativeness), highlighted in yellow, did not show a significant pairwise difference (refer to table 12).

4.3 Cluster Analysis

Discriminant analysis was conducted along with finding the groups to evaluate whether the results obtained were meaningful. Clusters were formed using hierarchical cluster analysis, which provided the number of clusters that can be formed.

The variation in the cluster coefficient values found in the agglomeration schedule (ANNEX 7) guided us in deciding the number of clusters. The 137 respondents in the survey could be divided in two clusters, 51 and 86 respondents in cluster 1 and 2, respectively. Once the parameters were defined, K mean cluster analysis was applied to form groups. ANOVA test for age, gender, income, education, marital status and the four organizational factors showed $p < 0.05$, implying a significant difference between the variables toward the groups. Employment status and Relationship to PWID were not found to be significant (refer to table 13).

Table 13 ANOVA

ANOVA

	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
Age Group	23.491	1	.628	135	37.402	.000
Gender	1.202	1	.160	135	7.495	.007
Education	3.441	1	.825	135	4.169	.043
Income	13.508	1	1.017	135	13.277	.000
Employment status	4.498	1	1.167	135	3.855	.052
Marital Status	1.242	1	.142	135	8.737	.004
Relation to PWID	.513	1	.157	135	3.270	.073
ZF1 Relevance	9.923	1	.389	135	25.530	.000
ZF2 Resource	4.271	1	.260	135	16.454	.000
ZF3 Likelihood of Success	14.056	1	.311	135	45.144	.000
ZF4 Innovativeness	8.553	1	.389	135	22.003	.000

Discriminant analysis was conducted to determine which of these variables are causing discrimination within the groups.

Table 14 Group statistics

Group Statistics

Variable	Mean	Std. Deviation	Mean	Std Deviation
	Group 1, n=51		Group 2, n=86	
Age Group	3.3333	.68313	2.4767	.85028
Gender	1.3333	.47610	1.1395	.34854
Education	2.8627	1.00039	2.5349	.84988
Income	2.1961	1.21687	1.5465	.86306
Marital Status	1.0588	.23764	1.2558	.43888
F1 Relevance	3.5784	.40617	4.1352	.72132
F2 Resource	4.3382	.51678	4.7035	.50514
F3 Likelihood of Success	4.0147	.63327	4.6773	.50855
F4 Innovativeness	4.2157	.74334	4.7326	.54068

There is no equal variance between the groups; this hypothesis was rejected by the Box's M test (table provided in Annex 8), which shows $p < 0.05$, implying clear variance between the groups.

Table 15 Eigenvalues

Eigenvalues

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	1.785 ^a	100.0	100.0	.801

a. First 1 canonical discriminant functions were used in the analysis.

Table 16 Wilks Lambda

Wilks' Lambda

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1	.359	132.634	11	.000

Canonical correlation value of 0.801 was obtained; its square was 0.6411, implying that the independent variables (gender, education, income, employment status, relationship to PWID, Marital status, age, F1, F2, F3, and F4) explained 64.11% of the variance in the dependent variables (group 1, group 2). Wilk's lambda also had a low value of 0.359, which was found to be significant.

The classification table (Annex 3) shows the probability of correct identification of the groups by the system, which were 98% and 89.5% for group 1 and group 2, respectively. Overall, the probability of correct identification of the two groups was 92.7%, giving the grouping a very high hit ratio.

Factors were discriminated against the demographics of age, education, employment, income, by combining each demographic data into 2 groups. Age was clubbed as participants below forty and above forty, income below SGD6000 and above SGD6000, education below A level and above A level, employed and not employed. The results were not found to be significant.

4.4 Relationship between variables and time commitment

To find out the relationship of demographic and organizational factors with the time a survey respondent would be willing to commit, a multinomial logistic regression was conducted. The dependent variable in this analysis was the participants' time commitment to the organization, and the independent variables tested were the four organizational factors and demographic variables of education, age, gender, income, employment, marital status, and relationship to PWID. There were three categories of dependent variables, namely, 2–5 h per month, 5–7 h per month, and 1–2 days per week (refer to case processing summary, Annex 5), to be examined; hence, multinomial regression was considered suitable. It uses maximum likelihood estimation to evaluate the probability of categorical membership.

Table 17 Model Fitting Information

Model	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	287.101			
Final	205.838	81.262	38	.000

Model fitting information: Model fitness was assessed using chi-square (χ^2) statistics; the value of chi-square was 81.262, and $p < 0.05$. This proves that there is a significant relationship between the dependent and independent variables in the final model

Table 18 Goodness of Fit and Pseudo R Square

Goodness-of-Fit			
	Chi-Square	df	Sig.
Pearson	258.411	228	0.081
Deviance	204.452	228	0.867

Pseudo R-Square	
Cox and Snell	0.447
Nagelkerke	0.509
McFadden	0.282

The Pearson (258.411) and deviance (204.452) statistical tests proved that the model has a good fit as the tests were not statistically significant, that is, $p > 0.05$. Pseudo R^2 : The pseudo R^2 measures are Cox and Snell (0.447), Nagelkerke's (0.509), and McFadden (0.282). The model accounts for 28.2%–50.9% of the variance and represents relatively decent sized effects.

The likelihood ratio test shows the independent variables of organizational factor 1 and employment status as significant, which proves that these predictors contribute significantly to the participants level of commitment to the organization

Table 19 Likelihood ratio tests

Likelihood Ratio Tests				
Effect	Model Fitting Criteria		Likelihood Ratio Tests	
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	205.838 ^a	.000	0	.
F1 Relevance	218.453	12.614	2	.002
F2 Resource	206.995	1.157	2	.561
F3 Likelihood of Success	206.036	.198	2	.906
F4 Innovativeness	205.993	.155	2	.925
Age Group	212.659	6.821	6	.338
Gender	209.825	3.987	2	.136
Education	217.426	11.588	6	.072
Income	210.089	4.251	6	.643

Employment status	223.033	17.194	6	.009
Marital Status	206.443	.605	2	.739
Relation to PWID	207.094	1.256	2	.534
The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.				
a. This reduced model is equivalent to the final model because omitting the effect does not increase the degrees of freedom.				

Interpretation:

Four categories of employment were used in the survey, namely, full-time employed = 1, part-time employed = 2, homemaker = 3, unemployed = 4.

As the values of Relevance F1 (B = 1.588, Wald = 8.062, p < 0.05) and part-time employed (B = -2.251, Wald = 4.406, p < 0.05) increased by 1 unit, compared to 5–10 h per month and 1–2 days per week respondents, the odds ratio/probability of increasing the time commitment of 2–5 h per month respondents increased by 4.893 and 0.105 times, respectively. The respondents committing 2–5 h per month were more likely to commit due to increase in the relevance of the organization for them (Factor 1); these were mostly part-time employed, compared to the base category, which was unemployed (refer to Parameter estimates table Annex 6).

For respondents in the 5–7 h per month category, F1, part-time employed, and homemakers had a significant impact on the time commitment to the organization. As F1 increased by 1 unit, the odds ratio/probability to spend 5–7 h per month, compared to 1–2 days per month, increased by 8.945 times.

For respondents whose employment status increased by 1 unit, who were in the category of part-time employment and homemaker, the odds ratio/probability of increasing the time

spent in the organization, compared to those spending 1–2 days per week, increased by 0.017 and 0.041 times, respectively. That is, respondents willing to commit 5–7 h per month are likely to commit this time due to an increase in employment status to part-time or homemaker compared to unemployed.

The classification provides a 66.4% accuracy in the predictions from this analysis (refer to classification table Annex 9).

4.3 Financial resources

The survey respondents shared their views on the sources of financial and non-financial resources that the organization should consider. Of the 137 respondents, a majority believed that funding for the organization should come from government agencies, with some considering 100% contribution from government to be ideal. A small number of respondents, however, wanted the contribution to come from members (the caregivers of PWIDs), and this was capped at a maximum of 50%. This shows the high expectations of respondents in Singapore from their government. Table 20 gives the details of the options considered.

Table 20 Financial contribution

		MIN	MAX	MEAN	SD	VARIANCE	Count
1	Contributions by Caregivers	0	50	12.54	12.17	148.16	91
2	By Government agencies like Tote board	0	100	43.27	19.36	374.92	91
3	Funded by Corporations from their CSR funds	0	60	21.62	11.1	123.16	91
4	Revenue generation by the enterprise	0	60	18.99	13.46	181.04	91

CHAPTER 5 Discussion

This research attempts to understand the organizational factors in a collective that allow for greater participation from stakeholders. The group considered in this study was that of caregivers of PWID.

As highlighted in Chapter 1, this research views CSE as a process that involves collaboration among similar as well as diverse actors for doing something new or different for the purpose of creating businesses that add value to society, by collectively addressing social problems affecting the stakeholders. To this effect, an interview was conducted with a social entrepreneur working with caregivers of PWIDs. The interviewee had limitations of scale and scope of the work that his company did, this issue is widespread in Singapore and the surrounding regions where the collective effort is made on a very small scale with limited formal collaborations. This research explores organizational factors that allow stakeholders to collaborate for CSE.

5.1 Organizational factors for collective social entrepreneurship.

To get a sense of what the potential stakeholders feel about the issues highlighted by Mr. A (refer to table 3), a survey was conducted with caregivers of PWIDs. Based on survey data, 22 variables were identified. EFA yielded four factors that explained 73.3% variance in the data (refer to table 7). These factors provided insights into what an organization based on CSE can do to attract participation. The first factor highlighted the value of relevance of the organization for the individual participant; this could be to gain direct

benefit for their family member who is a PWID during their lifetime and potentially after their demise or the desire to use their special understanding of the specific issues to do good in the society. A concurrent sentiment was to be part of an organization that would be legitimate and be able to demonstrate it with its actions of hiring people from the membership base, having accounting transparency, and being associated with respectable government organizations. All these actions promote self-respect for the people it strives to serve. The findings were in line with the research by Baum and Oliver, who acknowledged the value of ties with legislative authorities such as government agencies (Baum & Oliver, 1991). The aspect of relevance in terms of personal benefit has a higher chance of participating in CSE initiatives, as was also seen in the findings of Palmer and Xu (Palmer et al., 2011; Xu, 2007).

The second factor that emerged from the factor analysis highlighted the importance of resources, such as access to networks, business opportunities, and assistance with tasks from supportive government or non-government organizations, to help solve their business problems. This was in line with Mr. A's opinions about the importance of non-financial resources. The third factor acknowledged the aspects that would enhance the likelihood of success. The survey respondents were convinced that the actions of stakeholders who are bound together by a shared goal, that is, who come together to jointly solve problems and support each other, would go a long way in strengthening the spirit of community by bringing members of different races and backgrounds together. The participants also viewed economic sustainability and financial independence as aspects that can enhance the likelihood of success. Finally, innovativeness was seen as an organizational factor that can attract participation.

While Montgomery et al. introduced the term collective social entrepreneurship, they studied CSE by examining the multitude of external actors that often collaborate to form and support entrepreneurial ventures; they also illuminated the mechanisms of framing, convening, and multivocality, which aid the success of such collaboration (Montgomery et al., 2012). This research examines factors, such as RRSI, which if met, have a reasonable chance of attracting participation in CSE-based organizations.

5.2 Interpretation of Demographic and Organizational Factors

We find that the organizational factors are different in terms of their means. On a practical level this aspect would be useful in case the organization needs to prioritize on factors and select only one or two. Furthermore, there is a clear pairwise difference between the factors, hence between relevance and likelihood of success organization can pick likelihood of success, between relevance and innovativeness the organization can pick innovativeness, but between resources & innovativeness, the organization can pick either as there is no significant difference between their means.

A hierarchical cluster analysis yielded two clear clusters, which were differentiated by gender, education, income, age, marital status, and the preferences for the four organizational factors. On a practical level, this could help the organization adjust the organizational factors to attract a specific demographic profile, if required.

Group 1 had 51 participants who were relatively older, male, more educated, had higher income, were married, and placed relatively low importance for all factors. Group 2 had

86 participants who were younger, female, less educated, had lower income, were possibly single and placed relatively high importance for all factors.

This shows that there is a clear distinction in how various categories of people perceive the organizational factors. One might also infer that it would be more challenging to convince people in group 2 to participate, given their placing a relative high value to the organizational factors.

A multinomial regression of organizational and demographic factors against the time commitment to the organization showed a significant relationship between Factor 1, relevance of an organization to the participant, and the employment status of the participant, in determining how much time a participant would be willing to commit to the organization. Among respondents willing to commit 2–5 h per month, Factor 1, which is the relevance of the organization to them and the fact that they had part-time employment, had a significant impact on the time they could commit to the organization. Other demographic variables such as age and gender of the respondents willing to commit 2–5 h per month, compared to those willing to spend 5–10 h per month and 1–2 days per week, were not found to be statistically significant.

For people in the 5–7 h per month category, Factor 1 (relevance of the organization to the participant), employment status as part-time employed or being a homemaker had a significant impact on the time they could commit to the organization.

This information also highlights the value respondents placed on the organization being relevant for them. Respondents who were part-time employed or were homemakers had a higher probability of committing time to the organization. Respondents who were full-

time employed did not show any significant relationship with time commitment to organization. Being unemployed did not have any significant relationship with the time respondents were willing to commit to the organization.

5.3 Financing the organization

Many respondents supported the notion of the government financing the organization, while few respondents opined that the amount should be contributed by the members. Hence, we find that it is expected by members and is also feasible in Singapore's current system to obtain financial support from government agencies under various public schemes.

5.4 Implication for practice

Findings of this research can provide insights for policymakers toward creating effective channels for supporting stakeholders by mobilizing them to collaborate and work toward creating the change that they strive for. It could also motivate potential stakeholders to get together and find entrepreneurial solutions to their shared concerns.

This research has possible implications on various fronts. First, it can help realign public spending from pure welfare schemes to entrepreneurial ventures that are self-sustaining and not totally dependent on the government for funds and everyday management. Second, participation in a collective where members are active participants and stakeholders will help empower the communities that it serves. If an actual organization, as conceptualized in this research, comes to life, the members participating in a CSE,

with “skin in the game,” would be more focused and dedicated toward the collective created with their inputs. This can potentially increase social satisfaction and improve the conditions of the stakeholders. Finally, this research provides new direction to government institutions such as Raise, which are currently supporting social enterprises, to devise strategies to help create more dynamic and sustainable CSE-based entities.

5.5 Implication for Theory

Few studies have investigated what factors in a collective are sought by potential members and would motivate them to join; the dearth of research is especially striking in the Singapore context. Hence this research addresses this research gap and contributes to the literature by, first, exploring the conditions, in the form of distinct organizational factors, that would help organize people and facilitate participation in CSE, second, it expands the current social entrepreneurship theory to consider the aspect of collective through the lens of the organization being relevant to the stakeholder. Though entrepreneurial in nature, the motivation for participation in CSE is not always making a profit or being ‘passionate’ or ‘virtuous’ (as described in the literature review) rather relevance could be in terms of direct benefits stakeholders can derive, providing them with a platform to do social good and meeting stakeholders expectation of associating with a legitimate organization.

5.6 Limitations and further research

This research only highlights the benefits and hence the need for collaboration among various stakeholders in the formation of a grassroots collective organization. However,

this topic is rather vast; as such, this study does not offer details about the legal, taxation, and administration frameworks necessary to operationalize such an entity. Moreover, the survey data gathered from one group can claim limited representation of the diverse communities in Singapore and beyond. This research provides some intriguing observations that deserve attention from scholars and policymakers and further research effort.

Another issue that begs attention is the fact that from surveys, researchers can find what members want but there is no assurance that if an organization is created with all identified organizational factors, there will be full participation. Knowing what the stakeholders prioritize gives some direction, but the success of the model can only be known when an organization is created, and members sign in.

There is scope for exploring the legalities of this structure and the formulation of detailed guidelines for enlisting who does what in this collective. Grassroot innovation movements, whether they start from within the community and diffuse out or are initiated by external participants and pushed inwards to mobilize the community, are equally relevant if the internal and external participants can collaborate (A. Smith et al., 2014). The idea of an initiator can be explored more; this could be a field for research on how these organizations get started, and who could be the possible initiators. Whether the person is from within the community or from outside can be examined in more detail. The survey conducted included caregivers of PWIDs; similarly, more community specific research might reveal how other disadvantaged communities would respond to CSE. This is a constraint as well as an opportunity to research more such groups.

The research can be further extended by getting the perspective of government agencies and philanthropic organizations to understand their interest and motivation in joining such CSE initiatives. It would also be interesting to know their expectations from such initiatives.

Another aspect that is very interesting but could not be covered in this research is the organizational form that would support an organization with these factors.

References

- Aghaei, M. L., & Monavvarian, A. (2010). Recognizing critical success factors (CSF) to achieve the strategic goals of SAIPA Press. *Business Strategy Series*, 11(2), 124–133. <https://doi.org/10.1108/17515631011026443>
- Alvord, S. H., Brown, L. D., & Letts, C. W. (2004). Social Entrepreneurship and Societal Transformation: An Exploratory Study. *The Journal of Applied Behavioral Science*, 40(3), 260–282. <https://doi.org/10.1177/0021886304266847>
- Austin, J. E. (2000). Strategic Collaboration Between Nonprofits and Businesses. *Nonprofit and Voluntary Sector Quarterly*, 29(1_suppl), 69–97. <https://doi.org/10.1177/0899764000291S004>
- Austin, J., Stevenson, H., & Wei–Skillern, J. (2006). Social and Commercial Entrepreneurship: Same, Different, or Both? *Entrepreneurship Theory and Practice*, 30(1), 1–22. <https://doi.org/10.1111/j.1540-6520.2006.00107.x>
- Baraldi, E., Guercini, S., Lindahl, M., & Perna, A. (Eds.). (2020). *Passion and Entrepreneurship: Contemporary Perspectives and New Avenues for Research*. Springer International Publishing. <https://doi.org/10.1007/978-3-030-47933-6>
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Baum, J. A. C., & Oliver, C. (1991). Institutional Linkages and Organizational Mortality. *Administrative Science Quarterly*, 36(2), 187–218. <https://doi.org/10.2307/2393353>
- Baumol, W. J. (1968). Entrepreneurship in Economic Theory. *The American Economic Review*, 58(2), 64–71.

- Begley, T. M., & Tan, W.-L. (2001). The Socio-Cultural Environment for Entrepreneurship: A Comparison Between East Asian and Anglo-Saxon Countries. *Journal of International Business Studies*, 32(3), 537–553.
<https://doi.org/10.1057/palgrave.jibs.8490983>
- Benefit Corporations are Necessary | Benefit Corporation*. (n.d.). Retrieved October 8, 2020, from <https://benefitcorp.net/attorneys/benefit-corporations-are-necessary>
- Bitektine, A. (2011). Toward a Theory of Social Judgments of Organizations: The Case of Legitimacy, Reputation, and Status. *Academy of Management Review*, 36(1), 151–179. <https://doi.org/10.5465/amr.2009.0382>
- Bonevski, B., Randell, M., Paul, C., Chapman, K., Twyman, L., Bryant, J., Brozek, I., & Hughes, C. (2014). Reaching the hard-to-reach: A systematic review of strategies for improving health and medical research with socially disadvantaged groups. *BMC Medical Research Methodology*, 14(1), 42.
<https://doi.org/10.1186/1471-2288-14-42>
- Bornstein, D. (2007). *How to change the world: Social entrepreneurs and the power of new ideas*. Oxford University Press.
- Borzaga, C., Bodini, R., Carini, C., Depedri, S., Galera, G., & Salvatori, G. (2014). *Europe in Transition: The Role of Social Cooperatives and Social Enterprises* (SSRN Scholarly Paper ID 2436456). Social Science Research Network.
<https://doi.org/10.2139/ssrn.2436456>
- Bouchard, M. J. (2013). Introduction: The Social Economy in Québec: A Laboratory of Social Innovation. In M. J. Bouchard (Ed.), *Innovation and the Social Economy*

- (pp. 3–24). University of Toronto Press.
<http://www.jstor.org/stable/10.3138/9781442695092.5>
- Boyd, B. K., Bergh, D. D., & Ketchen, D. J. (2010). Reconsidering the Reputation—Performance Relationship: A Resource-Based View. *Journal of Management*, 36(3), 588–609. <https://doi.org/10.1177/0149206308328507>
- Bruck, C. (2006). *Millions for Millions*. The New Yorker.
<https://www.newyorker.com/magazine/2006/10/30/millions-for-millions>
- Certo, S. T., & Miller, T. (2008). Social entrepreneurship: Key issues and concepts. *Business Horizons*, 51(4), 267–271. <https://doi.org/10.1016/j.bushor.2008.02.009>
- Cooperating to create change*. (2020). Fairtrade International.
<https://www.fairtrade.net/news/cooperating-to-create-change>
- Corrigall-Brown, C., Snow, D. A., Smith, K., & Quist, T. (2009). Explaining the Puzzle of Homeless Mobilization: An Examination of Differential Participation. *Sociological Perspectives*, 52(3), 309–335. <https://doi.org/10.1525/sop.2009.52.3.309>
- Dancause, L., & Morin, R. (2013). Governance and the Associative Sector of the Social Economy: The Partnership between the State and Civil Society in Question. In M. J. BOUCHARD (Ed.), *Innovation and the Social Economy* (pp. 97–126). University of Toronto Press; JSTOR.
<http://www.jstor.org/stable/10.3138/9781442695092.8>
- Dees, J. G. (1998). *The Meaning of “Social Entrepreneurship.”*
- Dees, J. G. (2018). The Meaning of Social Entrepreneurship 1 , 2. In J. Hamschmidt & M. Pirson (Eds.), *Case Studies in Social Entrepreneurship and Sustainability* (1st ed., pp. 22–30). Routledge. <https://doi.org/10.4324/9781351278560-5>

- Dees, J. G., & Anderson, B. B. (2003). Sector-bending: Blurring lines between nonprofit and for-profit. *Society*, 40(4), 16–27. <https://doi.org/10.1007/s12115-003-1014-z>
- DiMaggio, P. (1997). Culture and Cognition. *Annual Review of Sociology*, 23(1), 263–287. <https://doi.org/10.1146/annurev.soc.23.1.263>
- DiMaggio, P. J., & Anheier, H. K. (1990). The Sociology of Nonprofit Organizations and Sectors. *Annual Review of Sociology*, 16(1), 137–159. <https://doi.org/10.1146/annurev.so.16.080190.001033>
- DiMaggio, P. J., & Powell, W. W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, 48(2), 147–160. JSTOR. <https://doi.org/10.2307/2095101>
- Doh, J. P., Tashman, P., & Benischke, M. H. (2019). Adapting to Grand Environmental Challenges Through Collective Entrepreneurship. *Academy of Management Perspectives*, 33(4), 450–468. <https://doi.org/10.5465/amp.2017.0056>
- Eggers, W. D. (2013). *The solution revolution: How business, government, and social enterprises are teaming up to solve society's toughest problems*. Harvard Business Review Press.
- Ellis, T. (2010). *The new pioneers: Sustainable business success through social innovation and social entrepreneurship*. Wiley.
- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, 4(3), 272–299. <https://doi.org/10.1037/1082-989X.4.3.272>
- Flick, U. (2002). *An introduction to qualitative research* (2nd ed.). SAGE.

- Foster, W., & Bradach, J. (2005). Should Nonprofits Seek Profits? *Harvard Business Review*, 83(2), 92–100.
- Freeman, E. (1998). A stakeholder theory of the modern corporation. In *The Corporation and Its Stakeholders: Classic and Contemporary Readings*. University of Toronto Press.
- Freeman, R. E. (2010). *Strategic management: A stakeholder approach*. University Press.
- Froelich, K. A. (1999). Diversification of Revenue Strategies: Evolving Resource Dependence in Nonprofit Organizations. *Nonprofit and Voluntary Sector Quarterly*, 28(3), 246–268. <https://doi.org/10.1177/0899764099283002>
- Gazley, B., & Brudney, J. L. (2007). The Purpose (and Perils) of Government-Nonprofit Partnership. *Nonprofit and Voluntary Sector Quarterly*, 36(3), 389–415. <https://doi.org/10.1177/0899764006295997>
- Glaser, B. G. (1999). *The discovery of grounded theory: Strategies for qualitative research*. Aldine de Gruyter.
- Granovetter, M. (1983). The Strength of Weak Ties: A Network Theory Revisited. *Sociological Theory*, 1, 201–233. JSTOR. <https://doi.org/10.2307/202051>
- Granovetter, M. (1985). Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology*, 91(3), 481–510. <https://doi.org/10.1086/228311>
- Guest, G., MacQueen, K., & Namey, E. (2012). *Applied Thematic Analysis*. SAGE Publications, Inc. <https://doi.org/10.4135/9781483384436>

- Hammond, S. P. (2019). It (Still) Takes a Nation: Why Private Charity Will Never Replace the Welfare State. *Independent Review*, 23(4), 521–537.
- Hannan, M. T., & Freeman, J. (1993). *Organizational Ecology*. Harvard University Press. <http://ebookcentral.proquest.com/lib/smu/detail.action?docID=3300222>
- Harrison, J. S., Bosse, D. A., & Phillips, R. A. (2010). Managing for stakeholders, stakeholder utility functions, and competitive advantage. *Strategic Management Journal*, 31(1), 58–74. <https://doi.org/10.1002/smj.801>
- Hartigan, P. (2006). It's about people, not profits. *Business Strategy Review*, 17(4), 42–45. <https://doi.org/10.1111/j.0955-6419.2006.00433.x>
- Haugh, H. (2007). Community–Led Social Venture Creation. *Entrepreneurship Theory and Practice*, 31(2), 161–182. <https://doi.org/10.1111/j.1540-6520.2007.00168.x>
- Haugh, H. M., & Talwar, A. (2016). Linking Social Entrepreneurship and Social Change: The Mediating Role of Empowerment. *Journal of Business Ethics*, 133(4), 643–658. <https://doi.org/10.1007/s10551-014-2449-4>
- Hibbert, S., Piacentini, M., & Dajani, H. A. (2003). Understanding volunteer motivation for participation in a community-based food cooperative. *International Journal of Nonprofit and Voluntary Sector Marketing*, 8(1), 30–42. <https://doi.org/10.1002/nvsm.199>
- Hubbard, R., & Allen, S. J. (1987). An empirical comparison of alternative methods for principal component extraction. *Journal of Business Research*, 15(2), 173–190. [https://doi.org/10.1016/0148-2963\(84\)90047-X](https://doi.org/10.1016/0148-2963(84)90047-X)
- Huster, K., Petrillo, C., O'Malley, G., Glassman, D., Rush, J., & Wasserheit, J. (2017). Global Social Entrepreneurship Competitions: Incubators for Innovations in

- Global Health? *Journal of Management Education*, 41(2), 249–271.
<https://doi.org/10.1177/1052562916669965>
- Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a Definition of Mixed Methods Research. *Journal of Mixed Methods Research*, 1(2), 112–133.
<https://doi.org/10.1177/1558689806298224>
- Kaiser, H. F. (1958). The varimax criterion for analytic rotation in factor analysis. *Psychometrika*, 23(3), 187–200. <https://doi.org/10.1007/BF02289233>
- Kannampuzha, M., & Hockerts, K. (2019). Organizational social entrepreneurship: Scale development and validation. *Social Enterprise Journal*, 15(3), 290–319.
<https://doi.org/10.1108/SEJ-06-2018-0047>
- Kanter, R. M. (1999). From Spare Change to Real Change. *Harvard Business Review*, 77(3), 122–132.
- Kao, R. W. Y. (1993). Defining Entrepreneurship: Past, Present and? *Creativity and Innovation Management*, 2(1), 69–70. <https://doi.org/10.1111/j.1467-8691.1993.tb00073.x>
- Kao, R. W. Y. (1995). *Entrepreneurship: A wealth-creation and value-adding process*.
- Keohane, G. L. (2013). *Social entrepreneurship for the 21st century: Innovation across the nonprofit, private, and public sectors*. McGraw-Hill.
- Kipper, L. M., Rodrigues, E., Ferrari, A. G., & Mariani, B. B. (2014). Universities and Incubators: Key Entrepreneurship and Socioeconomic Development Driving Factors. *Independent Journal of Management & Production; Sao Paulo*, 5(4), 947–965.

- Kline, C., Shah, N., & Rubright, H. (2014). Applying the Positive Theory of Social Entrepreneurship to Understand Food Entrepreneurs and Their Operations. *Tourism Planning & Development*, 11(3), 330–342.
<https://doi.org/10.1080/21568316.2014.890126>
- Kolers, A. (2016). Social movements. *Philosophy Compass*, 11(10), 580–590.
<https://doi.org/10.1111/phc3.12351>
- Kraus, S., Niemand, T., Halberstadt, J., Shaw, E., & Syrjä, P. (2017). Social entrepreneurship orientation: Development of a measurement scale. *International Journal of Entrepreneurial Behavior & Research*, 23(6), 977–997.
<https://doi.org/10.1108/IJEBR-07-2016-0206>
- Leavy, P. (2014). *Oxford Handbook of Qualitative Research: Oxford Handbook of Qualitative Research*. Oxford University Press, Incorporated.
<http://ebookcentral.proquest.com/lib/smu/detail.action?docID=1657789>
- Levi, Y., & Davis, P. (2008). Cooperatives as the “enfants terribles” of economics: Some implications for the social economy. *The Journal of Socio-Economics*, 37(6), 2178–2188. <https://doi.org/10.1016/j.socec.2008.06.003>
- Lurtz, K., & Kreutzer, K. (2017). Entrepreneurial Orientation and Social Venture Creation in Nonprofit Organizations: The Pivotal Role of Social Risk Taking and Collaboration. *Nonprofit and Voluntary Sector Quarterly*, 46(1), 92–115.
<https://doi.org/10.1177/0899764016654221>
- Mair, J., & Martí, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41(1), 36–44.
<https://doi.org/10.1016/j.jwb.2005.09.002>

- Mannarini, T., Rochira, A., & Talò, C. (2012). How Identification Processes and Inter-Community Relationships Affect Sense of Community. *Journal of Community Psychology, 40*(8), 951–967. <https://doi.org/10.1002/jcop.21504>
- Martyna, W. P. (2013, June). *Analyzing the Success of Social Enterprises – Critical Success Factors Perspective*. Conference: MakeLearn 2013. Active Citizenship by Knowledge Management & Innovation.
- Marxt, C., & Link, P. (2002). Success factors for cooperative ventures in innovation and production systems. *International Journal of Production Economics, 77*(3), 219–229. [https://doi.org/10.1016/S0925-5273\(01\)00197-9](https://doi.org/10.1016/S0925-5273(01)00197-9)
- McAdam, D. (1986). Recruitment to High-Risk Activism: The Case of Freedom Summer. *American Journal of Sociology, 92*(1), 64–90.
- McAdam, D. (2017). Social Movement Theory and the Prospects for Climate Change Activism in the United States. *Annual Review of Political Science, 20*(1), 189–208. <https://doi.org/10.1146/annurev-polisci-052615-025801>
- McMillan, B., Florin, P., Stevenson, J., Kerman, B., & Mitchell, R. E. (1995). Empowerment praxis in community coalitions. *American Journal of Community Psychology, 23*(5), 699–727. <https://doi.org/10.1007/BF02506988>
- McSweeney, B. (2008). Maximizing shareholder-value: A panacea for economic growth or a recipe for economic and social disintegration? *Critical Perspectives on International Business, 4*(1), 55–74. <https://doi.org/10.1108/17422040810849767>
- Mitzinneck, B. C., & Besharov, M. L. (2019). Managing Value Tensions in Collective Social Entrepreneurship: The Role of Temporal, Structural, and Collaborative

- Compromise. *Journal of Business Ethics*, 159(2), 381–400.
<https://doi.org/10.1007/s10551-018-4048-2>
- Montgomery, A. W., Dacin, P. A., & Dacin, M. T. (2012). Collective Social Entrepreneurship: Collaboratively Shaping Social Good. *Journal of Business Ethics*, 111(3), 375–388. <https://doi.org/10.1007/s10551-012-1501-5>
- Mort, G. S., Weerawardena, J., & Carnegie, K. (2003). Social entrepreneurship: Towards conceptualisation. *International Journal of Nonprofit and Voluntary Sector Marketing*, 8(1), 76–88. <https://doi.org/10.1002/nvsm.202>
- Moser, N. (1989). Community Participation in Urban Projects in the Third World. *Pergamon Press*, 32, 61.
- Mukesh Sud, Craig V. VanSandt, & Amanda M. Baugous. (2009). Social Entrepreneurship: The Role of Institutions. *Journal of Business Ethics*, 85(S1), 201–216. <https://doi.org/10.1007/s10551-008-9939-1>
- Netemeyer, R., Bearden, W., & Sharma, S. (2003). *Scaling Procedures*. SAGE Publications, Inc. <https://doi.org/10.4135/9781412985772>
- News—Behind the Purpose of the Corporation infographic—Purpose of the corporation.* (2016). <http://www.purposeofcorporation.org/en/news/5009-behind-the-purpose-of-the-corporation-infographic>
- Nicholls, A. (2006). *Social Entrepreneurship: New Models of Sustainable Social Change*. Oxford University Press, Incorporated.
<http://ebookcentral.proquest.com/lib/smu/detail.action?docID=415782>
- Nicholls, A., & Albert Hyunbae Cho. (2006). Social Entrepreneurship: The Structuration of a Field. In *Social Entrepreneurship: New Models of Sustainable Social*

Change. Oxford University Press, Incorporated.

<http://ebookcentral.proquest.com/lib/smu/detail.action?docID=415782>

Nyssens, M., Adam, S., & Johnson, T. (2006). *Social enterprise: At the crossroads of market, public policies and civil society*. Routledge.

Ohmer, M. L. (2008). The relationship between members' perceptions of their neighborhood organization and their involvement and perceived benefits from participation. *Journal of Community Psychology, 36*(7), 851–870.

<https://doi.org/10.1002/jcop.20268>

Palmer, N. A., Perkins, D. D., & Xu, Q. (2011). Social capital and community participation among migrant workers in China. *Journal of Community Psychology, 39*(1), 89–105. <https://doi.org/10.1002/jcop.20419>

Pless, N. M., & Appel, J. (2012). In Pursuit of Dignity and Social Justice: Changing Lives Through 100 % Inclusion—How Gram Vikas Fosters Sustainable Rural Development. *Journal of Business Ethics, 111*(3), 389–411.

Podolny, J. M., & Baron, J. N. (1997). Resources and Relationships: Social Networks and Mobility in the Workplace. *American Sociological Review, 62*(5), 673–693. <https://doi.org/10.2307/2657354>

Praszkier, R., & Nowak, A. (2011). *Social Entrepreneurship: Theory and Practice*. Cambridge University Press.

<http://ebookcentral.proquest.com/lib/smu/detail.action?docID=833405>

Roig-Tierno, N., Alcázar, J., & Ribeiro-Navarrete, S. (2015). Use of infrastructures to support innovative entrepreneurship and business growth. *Journal of Business Research, 68*(11), 2290–2294. <https://doi.org/10.1016/j.jbusres.2015.06.013>

- Roundy, P. T. (2017). Social entrepreneurship and entrepreneurial ecosystems: Complementary or disjoint phenomena? *International Journal of Social Economics*, 44(9), 1252–1267. <https://doi.org/10.1108/IJSE-02-2016-0045>
- Rubin, H., & Rubin, I. (2005). The Practice of Community Organizing. In Marie Weil (Ed.), *The Handbook of Community Practice*. SAGE Publications.
- Salamon, L. M., & Toepler, S. (2015). Government–Nonprofit Cooperation: Anomaly or Necessity? *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 26(6), 2155–2177. <https://doi.org/10.1007/s11266-015-9651-6>
- Santos, F. M. (2012). A Positive Theory of Social Entrepreneurship. *Journal of Business Ethics*, 111(3), 335–351. <https://doi.org/10.1007/s10551-012-1413-4>
- Satar, M. S., & Shibu, J. (2019). The critical success factors of social entrepreneurship in India: An empirical study. *Int. J. Entrepreneurship and Small Business*, Vol. 37(No.3), 33.
- Schoonenboom, J., & Johnson, R. B. (2017). How to Construct a Mixed Methods Research Design. *KZfSS Kölner Zeitschrift Für Soziologie Und Sozialpsychologie*, 69(S2), 107–131. <https://doi.org/10.1007/s11577-017-0454-1>
- Sengupta, P. (2016). How effective is inclusive innovation without participation? *Geoforum*, 75, 12–15. <https://doi.org/10.1016/j.geoforum.2016.06.016>
- Shane, S., & Venkataraman, S. (2000). The Promise of Entrepreneurship as a Field of Research. *The Academy of Management Review*, 25(1), 217–226. <https://doi.org/10.2307/259271>

- Sharma, V. P. (2015). Determinants of Small Milk Producers' Participation in Organized Dairy Value Chains: Evidence from India. *Agricultural Economics Research Review*, 28(2), 247. <https://doi.org/10.5958/0974-0279.2016.00004.5>
- Sieger, P., Gruber, M., Fauchart, E., & Zellweger, T. (2016). Measuring the social identity of entrepreneurs: Scale development and international validation. *Journal of Business Venturing*, 31(5), 542–572. <https://doi.org/10.1016/j.jbusvent.2016.07.001>
- Sine, W. D., & Lee, B. H. (2009). Tilting at Windmills? The Environmental Movement and the Emergence of the U.S. Wind Energy Sector. *Administrative Science Quarterly*, 54(1), 123–155. <https://doi.org/10.2189/asqu.2009.54.1.123>
- Singh, S. (2019). Examining Success Factors of Social Entrepreneurship. *Journal of Asia Entrepreneurship and Sustainability*, 15(2), 109–131.
- Stuart, T. E., & Sorenson, O. (2005). Social Networks and Entrepreneurship. In S. A. Alvarez, R. Agarwal, & O. Sorenson (Eds.), *Handbook of Entrepreneurship Research: Interdisciplinary Perspectives* (pp. 233–252). Springer US. https://doi.org/10.1007/0-387-23622-8_11
- Suchman, M. C. (1995). Managing Legitimacy: Strategic and Institutional Approaches. *Academy of Management Review*, 20(3), 571–610. <https://doi.org/10.5465/AMR.1995.9508080331>
- Tan, T. M., Tan, W. L., & Young, J. E. (2000). Entrepreneurial Infrastructure in Singapore: Developing a Model and Mapping Participation. *The Journal of Entrepreneurship*, 9(1), 1–33. <https://doi.org/10.1177/097135570000900101>

- Tan, W. L. (2007). *Entrepreneurship as a Wealth Creation and Value-Adding Process*.
https://ink.library.smu.edu.sg/lkcsb_research/632
- Tesdahl, E. A., & Speer, P. W. (2015). Organization-Level Predictors of Sustained Social Movement Participation. *American Journal of Community Psychology*, 55(1/2), 48–57. <https://doi.org/10.1007/s10464-014-9692-9>
- Travaglini, C. (2012). The generation and re-generation of social capital and enterprises in multi-stakeholders social cooperative enterprises: A system dynamic approach. *La Generación y Reconstrucción Del Capital Social En Empresas Cooperativas Sociales de Multistakeholders: Un Enfoque Dinámico Del Sistema.*, 47(3), 436–445. <https://doi.org/10.5700/rausp1049>
- Uribetxebarria, U., Garmendia, A., & Elorza, U. (2021). Does employee participation matter? An empirical study on the effects of participation on well-being and organizational performance. *Central European Journal of Operations Research*, 29(4), 1397–1425. <https://doi.org/10.1007/s10100-020-00704-7>
- Waddock, S. A., & Post, J. E. (1991). Social Entrepreneurs and Catalytic Change. *Public Administration Review*, 51(5), 393–401. <https://doi.org/10.2307/976408>
- Weerawardena, J., & Sullivan-mort, G. (2001). Learning, Innovation and Competitive Advantage in Not-for-Profit Aged Care Marketing: A Conceptual Model and Research Propositions. *Journal of Nonprofit & Public Sector Marketing*, 9(3), 53–73. https://doi.org/10.1300/J054v09n03_04
- Welfont, J. (2018, April 11). Types of Social Entrepreneurs. *Medium*.
<https://medium.com/@groupwelfont/types-of-social-entrepreneurs-a7dc8ac57e34>

- Welman, J. C. (2001). *Research methodology for the business and administrative sciences* (2nd ed.). Oxford University Press.
- Westhead, P., McElwee, G., & Wright, M. (2011). *Entrepreneurship*. Pearson Education UK. <http://ebookcentral.proquest.com/lib/smu/detail.action?docID=5139038>
- Woolley, J. (2017). *Infrastructure for Entrepreneurship* (Vol. 1). Oxford University Press. <https://doi.org/10.1093/acrefore/9780190224851.013.33>
- Wry, T., Lounsbury, M., & Glynn, M. A. (2011). Legitimizing Nascent Collective Identities: Coordinating Cultural Entrepreneurship. *Organization Science*, 22(2), 449–463. <https://doi.org/10.1287/orsc.1100.0613>
- Xu, Q. (2007). Community Participation in Urban China: Identifying Mobilization Factors. *Nonprofit and Voluntary Sector Quarterly*, 36(4), 622–642. <https://doi.org/10.1177/0899764006297675>

Links

- The new heroes., 2019) Retrieved 2019, <http://www.thenewheroes.org/stories.asp>)
- Dees 1998b, <https://community-wealth.org/content/meaning-social-entrepreneurship>
- Shwab foundation <https://www.schwabfound.org/resources>
- <https://ntucsocialenterprises.sg/about-us/our-heritage/>
- <https://www.straitstimes.com/opinion/stop-calling-them-vwos-they-are-social-service-organisations>
- <https://www.acra.gov.sg/how-to-guides/setting-up-a-local-company/determining-the-company-type>
- <https://www.spd.org.sg/about-us/disability-facts-figures/>
- <https://www.mccy.gov.sg/about-us/news-and-resources/statistics/2019/jan/-/media/CA469E2531864E9EB9240F4C1905D188.ashx>

<https://www.fdawu.org.sg/wps/wcm/connect/a5852e54-f0bf-4401-b907-2b7dc590de0e/NTUC+Constitution+2018+Updated.pdf?MOD=AJPERES>

ANNEXURES

2. Test of equality of group means (Cluster Analysis)

Tests of Equality of Group Means

	Wilks' Lambda	F	df1	df2	Sig.
Age Group	.783	37.402	1	135	.000
Gender	.947	7.495	1	135	.007
Education	.970	4.169	1	135	.043
Income	.910	13.277	1	135	.000
Employment status	.972	3.855	1	135	.052
Marital Status	.939	8.737	1	135	.004
Relation to PWID	.976	3.270	1	135	.073
ZF1 Relevance	.841	25.530	1	135	.000
ZF2 Resource	.891	16.454	1	135	.000
ZF3 Likelihood of Success	.749	45.144	1	135	.000
ZF4 Innovativeness	.860	22.003	1	135	.000

3. Classification Table (Cluster Analysis)

Classification Results ^{a,c}					
		ZGroups	Predicted Group Membership		Total
			Group 1	Group 2	
Original	Count	Group 1	50	1	51
		Group 2	9	77	86
	%	Group 1	98.0	2.0	100.0
		Group 2	10.5	89.5	100.0
Cross-validated ^b	Count	Group 1	46	5	51
		Group 2	9	77	86
	%	Group 1	90.2	9.8	100.0
		Group 2	10.5	89.5	100.0

a. 92.7% of original grouped cases correctly classified.

b. Cross validation is done only for those cases in the analysis. In cross validation, each case is classified by the functions derived from all cases other than that case.

c. 89.8% of cross-validated grouped cases correctly classified.

5. Case processing Summary (Multinomial regression)

Case Processing Summary			
		N	Marginal Percentage
How much time can you contribute	2-5 hrs. per month – only as an ordinary member	65	47.4%
	5-7 hrs. Per month – as a member and a volunteer	32	23.4%
	1-2 days per week – as member and a part-time, paid staff	40	29.2%
Age Group	18-30 years	12	8.8%
	31-40 years	35	25.5%
	41-50 years	59	43.1%
	51-60 years	31	22.6%
Gender	Female	108	78.8%
	Male	29	21.2%
Education	Less than O level	19	13.9%
	Less than A level	32	23.4%
	Bachelors degree	63	46.0%
	Masters degree and above	23	16.8%
Income	Less than \$3000	76	55.5%
	Between \$3001- \$6000	31	22.6%
	Between \$6001- \$10000	13	9.5%
	More than \$10000	17	12.4%
Employment status	Employed full time (including freelance, self-employed etc)	64	46.7%
	Employed part-time (including freelance, self-employed etc)	26	19.0%
	Homemaker	30	21.9%
	Currently, not employed or Retired	17	12.4%
Marital Status	Married	112	81.8%
	Single	25	18.2%
Relation to PWID	Other	27	19.7%
	Parent	110	80.3%
Valid		137	100.0%
Missing		0	
Total		137	
Subpopulation		134 ^a	
a. The dependent variable has only one value observed in 133 (99.3%) subpopulations.			

6. Parameter estimates (Multinomial Regression)

How much time can u contribute ^a		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
2-5 hrs. per month – only as an ordinary member	Intercept	8.55	3.18	7.26	1.00	0.01			
	ZF1 Relevance	(1.59)	0.56	8.06	1.00	0.01	0.20	0.07	0.61
	ZF2 Resource	0.79	0.84	0.90	1.00	0.34	2.21	0.43	11.36
	ZF3 Likelihood of Success	(0.36)	0.87	0.17	1.00	0.68	0.70	0.13	3.85
	ZF4 Innovativeness	(0.30)	0.77	0.15	1.00	0.70	0.74	0.16	3.35
	[Age Group=1]	(1.66)	1.32	1.58	1.00	0.21	0.19	0.01	2.54
	[Age Group=2]	(0.14)	0.87	0.02	1.00	0.88	0.87	0.16	4.81
	[Age Group=3]	(0.44)	0.77	0.32	1.00	0.57	0.65	0.14	2.92
	[Age Group=4]	0b	.	.	.	.	.	.	.
	[Gender=1]	(1.06)	0.87	1.47	1.00	0.23	0.35	0.06	1.91
	[Gender=2]	0b	.	.	.	.	.	.	.
	[Education=1]	(0.71)	1.06	0.45	1.00	0.50	0.49	0.06	3.94
	[Education=2]	0.72	0.94	0.58	1.00	0.45	2.05	0.32	13.02
	[Education=3]	0.43	0.81	0.28	1.00	0.60	1.54	0.32	7.46
	[Education=4]	0b	.	.	.	.	.	.	.
	[Income=1]	0.37	1.08	0.12	1.00	0.73	1.45	0.18	11.93
	[Income=2]	1.46	1.16	1.58	1.00	0.21	4.32	0.44	42.21
	[Income=3]	1.42	1.61	0.78	1.00	0.38	4.13	0.18	96.92
	[Income=4]	0b	.	.	.	.	.	.	.
	[Employment status=1]	0.05	0.99	0.00	1.00	0.96	1.05	0.15	7.31
[Employment status=2]	(2.25)	1.07	4.41	1.00	0.04	0.11	0.01	0.86	
[Employment status=3]	(1.69)	0.99	2.90	1.00	0.09	0.19	0.03	1.29	
[Employment status=4]	0b	.	.	.	.	.	.	.
[Marital Status=1]	(0.64)	0.85	0.57	1.00	0.45	0.53	0.10	2.78	
[Marital Status=2]	0b	.	.	.	.	.	.	.
[Relation to PWID=1]	(0.75)	0.69	1.17	1.00	0.28	0.47	0.12	1.83	
[Relation to PWID=2]	0b	.	.	.	.	.	.	.
5-7 hrs. Per month – as a member and a volunteer	Intercept	11.50	3.96	8.44	1.00	0.00			
	ZF1 Relevance	(2.19)	0.73	8.98	1.00	0.00	0.11	0.03	0.47
	ZF2 Resource	0.99	0.98	1.01	1.00	0.32	2.68	0.39	18.31
	ZF3 Likelihood of Success	(0.24)	0.96	0.06	1.00	0.81	0.79	0.12	5.20
	ZF4 Innovativeness	(0.29)	0.83	0.12	1.00	0.73	0.75	0.15	3.82
	[Age Group=1]	(2.43)	1.63	2.22	1.00	0.14	0.09	0.00	2.15
	[Age Group=2]	(1.66)	1.14	2.13	1.00	0.15	0.19	0.02	1.77
	[Age Group=3]	(0.67)	0.95	0.50	1.00	0.48	0.51	0.08	3.28
	[Age Group=4]	0b	.	.	.	.	.	.	.
	[Gender=1]	(1.80)	0.96	3.54	1.00	0.06	0.17	0.03	1.08
	[Gender=2]	0b	.	.	.	.	.	.	.
	[Education=1]	(2.11)	1.61	1.71	1.00	0.19	0.12	0.01	2.87
	[Education=2]	0.37	1.22	0.09	1.00	0.76	1.45	0.13	15.92
	[Education=3]	1.29	0.98	1.73	1.00	0.19	3.65	0.53	25.03
	[Education=4]	0b	.	.	.	.	.	.	.
	[Income=1]	(0.75)	1.20	0.39	1.00	0.53	0.47	0.05	5.01
	[Income=2]	0.28	1.26	0.05	1.00	0.82	1.33	0.11	15.69
	[Income=3]	0.84	1.69	0.25	1.00	0.62	2.31	0.08	63.21
	[Income=4]	0b	.	.	.	.	.	.	.
	[Employment status=1]	(1.22)	1.18	1.08	1.00	0.30	0.30	0.03	2.95
[Employment status=2]	(4.08)	1.34	9.33	1.00	0.00	0.02	0.00	0.23	
[Employment status=3]	(3.21)	1.32	5.86	1.00	0.02	0.04	0.00	0.54	
[Employment status=4]	0b	.	.	.	.	.	.	.
[Marital Status=1]	(0.66)	1.13	0.34	1.00	0.56	0.52	0.06	4.71	
[Marital Status=2]	0b	.	.	.	.	.	.	.
[Relation to PWID=1]	(0.77)	0.93	0.68	1.00	0.41	0.47	0.08	2.88	
[Relation to PWID=2]	0b	.	.	.	.	.	.	.

7. Agglomerate Schedule (Cluster analysis)

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
1	66	67	0	0	0	90
2	43	52	0	0	0	53
3	46	47	0	0	0	56
4	21	28	0.008	0	0	55
5	19	122	0.141	0	0	57
6	78	82	0.305	0	0	68
7	81	103	0.523	0	0	104
8	106	121	0.867	0	0	27
9	85	112	1.273	0	0	44
10	135	137	1.773	0	0	63
11	125	131	2.273	0	0	35
12	74	80	2.773	0	0	51
13	60	73	3.273	0	0	82
14	56	72	3.773	0	0	82
15	68	69	4.273	0	0	42
16	64	65	4.773	0	0	96
17	57	62	5.273	0	0	36
18	59	61	5.773	0	0	42
19	31	44	6.273	0	0	53
20	107	113	6.781	0	0	39
21	29	33	7.289	0	0	71
22	37	127	7.82	0	0	30
23	10	13	8.383	0	0	46
24	17	32	9.008	0	0	49
25	20	26	9.633	0	0	91
26	1	2	10.297	0	0	101
27	106	129	10.984	8	0	73
28	15	92	11.68	0	0	61
29	27	30	12.375	0	0	55
30	37	124	13.094	22	0	57
31	3	14	13.852	0	0	89
32	22	35	14.633	0	0	81
33	123	128	15.445	0	0	70
34	83	102	16.258	0	0	87
35	51	125	17.091	0	11	76
36	57	58	17.924	17	0	60
37	18	23	18.776	0	0	71
38	88	130	19.651	0	0	73
39	107	110	20.529	20	0	47
40	34	54	21.411	0	0	83
41	87	99	22.318	0	0	68
42	59	68	23.318	18	15	114
43	45	50	24.318	0	0	96
44	85	116	25.38	9	0	93
45	96	114	26.474	0	0	99
46	10	11	27.578	23	0	89
47	107	109	28.693	39	0	77
48	41	55	29.818	0	0	78
49	16	17	30.953	0	24	91
50	4	9	32.141	0	0	101
51	74	101	33.349	12	0	97
52	75	97	34.599	0	0	79
53	31	43	35.849	19	2	75
54	86	120	37.161	0	0	65
55	21	27	38.474	4	29	95
56	46	48	39.807	3	0	95
57	19	37	41.187	5	30	120

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
58	12	90	42.593	0	0	99
59	76	79	44.007	0	0	97
60	57	63	45.424	36	0	103
61	15	24	46.864	28	0	72
62	40	70	48.309	0	0	90
63	133	135	49.809	0	10	98
64	6	25	51.372	0	0	81
65	84	86	52.976	0	54	110
66	98	100	54.609	0	0	87
67	108	115	56.265	0	0	100
68	78	87	57.925	6	41	107
69	93	132	59.589	0	0	92
70	123	134	61.277	33	0	106
71	18	29	62.996	37	21	108
72	7	15	64.72	0	61	104
73	88	106	66.463	38	27	106
74	94	111	68.307	0	0	93
75	31	53	70.157	53	0	113
76	51	126	72.011	35	0	117
77	91	107	73.88	0	47	88
78	41	42	75.755	48	0	85
79	75	89	77.64	52	0	111
80	5	38	79.547	0	0	105
81	6	22	81.515	64	32	94
82	56	60	83.515	14	13	103
83	34	49	85.81	40	0	102
84	36	104	88.317	0	0	112
85	41	71	90.942	78	0	126
86	95	119	93.599	0	0	110
87	83	98	96.29	34	66	115
88	91	117	98.997	77	0	100
89	3	10	101.71	31	46	109
90	40	66	104.433	62	1	102
91	16	20	107.26	49	25	113
92	93	118	110.127	69	0	120
93	85	94	113.039	44	74	119
94	6	39	115.983	81	0	122
95	21	46	119.031	55	56	108
96	45	64	122.281	43	16	112
97	74	76	125.734	51	59	111
98	133	136	129.234	63	0	116
99	12	96	132.906	58	45	118
100	91	108	136.625	88	67	118
101	1	4	140.567	26	50	109
102	34	40	144.583	83	90	114
103	56	57	148.708	82	60	116
104	7	81	152.974	72	7	123
105	5	8	157.276	80	0	125
106	88	123	161.632	73	70	119
107	78	105	166.339	68	0	123
108	18	21	171.187	71	95	117
109	1	3	176.278	101	89	125
110	84	95	181.78	65	86	130
111	74	75	187.429	97	79	115
112	36	45	193.351	84	96	121
113	16	31	199.34	91	75	122
114	34	59	205.81	102	42	121
115	74	83	212.459	111	87	133
116	56	133	219.334	103	98	126
117	18	51	226.46	108	76	129
118	12	91	233.778	99	100	127

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
119	85	88	241.687	93	106	130
120	19	93	250.635	57	92	127
121	34	36	259.655	114	112	129
122	6	16	269.047	94	113	128
123	7	78	278.99	104	107	124
124	7	77	290.009	123	0	131
125	1	5	301.785	109	105	128
126	41	56	315.816	85	116	132
127	12	19	331.969	118	120	131
128	1	6	349.961	125	122	136
129	18	34	370.087	117	121	134
130	84	85	394.813	110	119	132
131	7	12	427.838	124	127	133
132	41	84	465.548	126	130	135
133	7	74	507.009	131	115	134
134	7	18	569.2	133	129	135
135	7	41	668.89	134	132	136
136	1	7	819.824	128	135	0

8. Box's M Test (Cluster Analysis)

Box's M		181.773
F	Approx.	2.494
	df1	66
	df2	36080.623
	Sig.	.000
Tests null hypothesis of equal population covariance matrices.		

9. Classification table (Multinomial Regression)

Classification				
Observed	Predicted			Percent Correct
	2-5 hrs. per month – only as an ordinary member	5-7 hrs. Per month – as a member and a volunteer	1-2 days per week – as member and a part-time, paid staff	
2-5 hrs. per month – only as an ordinary member	48	7	10	73.8%
5-7 hrs. Per month – as a member and a volunteer	13	16	3	50.0%
1-2 days per week – as member and a part-time, paid staff	12	1	27	67.5%
Overall Percentage	53.3%	17.5%	29.2%	66.4%