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The Role of Social Business in Promoting Clean Energy Access for Women: Case Study from Bangladesh

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Abstract

Access to clean energy remains a critical challenge for sustainable development, mainly affecting women in rural Bangladesh who experience disproportionate energy poverty due to gender inequalities. This research investigates the role of social businesses in addressing energy poverty by enhancing women's access to clean energy technologies, building vocational skills, and strengthening disaster resilience in marginalized communities. The study employs a mixed-methods approach, combining an extensive literature review, structured interviews, surveys, site visits, and direct observations at two rural schools powered by solar energy under the social business model. Data collected from these case studies include academic performance, enrollment trends, vocational training outcomes, and disaster preparedness impacted by solar electricity initiatives. Findings demonstrate that solar energy access facilitated by social businesses significantly improves educational outcomes, increases female student enrollment and participation in extracurricular activities, and empowers women economically through vocational training programs, such as sewing. Additionally, solar-powered infrastructure enhances community resilience during natural disasters by providing reliable, sustainable energy. Despite the positive impacts, resource constraints and sociocultural challenges persist, limiting wider adoption. This study suggests scaling social business models to bridge financial barriers, enhance capacity-building programs, and implement community engagement. Expanding social business initiatives can play a transformative role in promoting gender equality, sustainable energy adoption, economic empowerment, and climate resilience in developing rural settings.

Keywords: *clean energy, energy poverty, gender, social business, women's empowerment*

Abstrak

Penggunaan tenaga bersih kekal sebagai cabaran kritikal bagi pembangunan mampan, khususnya memberi kesan besar kepada wanita di kawasan luar bandar Bangladesh yang mengalami kemiskinan tenaga akibat ketidaksamarataan jantina. Kajian ini meneliti peranan perniagaan sosial dalam menangani isu kemiskinan tenaga dengan meningkatkan akses wanita kepada teknologi tenaga bersih, membina kemahiran vokasional, serta memperkuat daya ketahanan komuniti terpinggir terhadap bencana.

Kajian ini menggunakan pendekatan kaedah campuran yang merangkumi tinjauan literatur menyeluruh, temu bual berstruktur, soal selidik, lawatan tapak, dan pemerhatian langsung di dua buah sekolah luar bandar yang dikuasakan oleh tenaga solar di bawah model perniagaan sosial. Data yang dikumpul daripada kajian kes ini termasuk prestasi akademik, corak pendaftaran pelajar, hasil latihan vokasional, serta tahap persediaan bencana, yang kesemuanya dipengaruhi oleh inisiatif tenaga solar.

Dapatan kajian menunjukkan bahawa akses kepada tenaga solar yang dipermudahkan oleh perniagaan sosial memberi kesan positif yang signifikan terhadap peningkatan prestasi pendidikan, peningkatan kadar pendaftaran pelajar perempuan, penglibatan aktif dalam aktiviti kokurikulum, serta pemerkasaan ekonomi wanita melalui program latihan vokasional seperti jahitan. Selain itu, infrastruktur berasaskan tenaga solar turut meningkatkan ketahanan komuniti semasa bencana alam dengan menyediakan sumber tenaga yang boleh diharapkan dan lestari.

Walaupun impaknya positif, kekangan sumber dan cabaran sosio-budaya masih wujud, mengehadkan pelaksanaan secara meluas. Kajian ini mencadangkan peluasan model perniagaan sosial bagi merapatkan jurang kewangan, memperkuat program pembinaan kapasiti, dan melaksanakan penglibatan komuniti secara menyeluruh. Pengembangan inisiatif perniagaan sosial berpotensi memainkan peranan transformatif dalam mempromosikan kesamarataan jantina, penerimaan tenaga mampan, pemerkasaan ekonomi, serta ketahanan terhadap perubahan iklim dalam konteks luar bandar negara membangun.

Introduction

Access to clean energy is a universal requirement, a catalyst for development, and a key component in the fight against climate change. However, the most vulnerable communities, particularly in the developing world, often evade its advantages. Due to gender differences, women are affected disproportionately in these areas, and energy poverty continues to be a significant barrier to socioeconomic advancement. Women in many developing countries face numerous obstacles to acquiring clean energy solutions, which exacerbates gender inequality as well as energy poverty. In order to achieve broader sustainable development goals as well as the empowerment of women, it is crucial to address these interrelated challenges. Social businesses have become powerful change agents in this landscape by committing to addressing social and environmental issues. These organizations specialize in bridging the gap between clean energy availability, environmental sustainability, and disaster resilience by developing novel strategies catered to the particular requirements of women in marginalized communities. However, the specific ways in which social business benefits developing countries like Bangladesh by increasing access to clean

energy, gender empowerment, and disaster resilience have not been much explored.

Objectives

This study aims to explore how social business initiatives in rural Bangladesh can effectively address energy poverty faced by women by enhancing their access to clean energy technologies, building their capacity through vocational training, and improving the disaster resilience of communities. By examining empirical evidence from solar energy projects in rural schools and associated vocational programs, the research seeks to demonstrate the multifaceted role of social business in empowering women economically and socially, while contributing to sustainable development and disaster preparedness.

Significance of the Study

Women's unequal access to renewable energy solutions exacerbates socioeconomic inequalities and environmental degradation in developing countries. Social businesses have become powerful catalysts for change in this field because of their dedication to a positive social and environmental impact. These businesses specialize in bridging the gap between clean energy availability, environmental sustainability, and disaster

resilience by developing innovative approaches targeted to the particular needs of women in marginalized communities. This research provides insightful information on the potential for social business to impact rural communities and women's empowerment. It highlights their role in promoting gender equality and their contribution to disaster preparedness by examining the strategies they apply to promote clean energy access for women.

Background And Context

Gender and Energy Poverty

In developing nations, gender dynamics are inextricably linked to energy access. Energy poverty is typically characterized in energy studies as a lack of access to electricity and reliance upon burning solid biomass inefficiently for household energy needs, causing pollution (Sanjeevikumar, Sharmin, et al., 2021). Women in rural and remote regions are more exposed to energy poverty than their male counterparts. They frequently face the brunt of energy poverty as they are often in charge of domestic duties and food preparation, spending hours every day collecting firewood, relying on conventional, polluting energy sources, e.g., smoky cookstoves, and doing household chores in poor lighting (Energy 4 Impact (Powered by Mercy Corps,

n.d.). Women usually have less control over resources and decision-making, including those pertaining to energy, as a result of gender inequalities in economic opportunities and education.

Social Businesses as Catalysts

In order to address these challenges, social businesses have become potent change agents. Professor Muhammad Yunus, the recipient of the Nobel Prize, established the Yunus Center to promote the idea of social business, which refers to enterprises that prioritize a social mission over financial gain. These companies frequently place a strong emphasis on empowering marginalized populations, particularly women, by giving them access to affordable financing, training, and sustainable energy resources. According to the United Nations (2009), social business provides women equal access to and control over economic and financial resources, hence promoting gender equality and women's empowerment, as well as equitable and sustainable economic growth and development. The graph below illustrates the impact of social business across different countries and how they are effectively driving women's empowerment by providing them with resources, education, and opportunities to participate more actively in their communities.

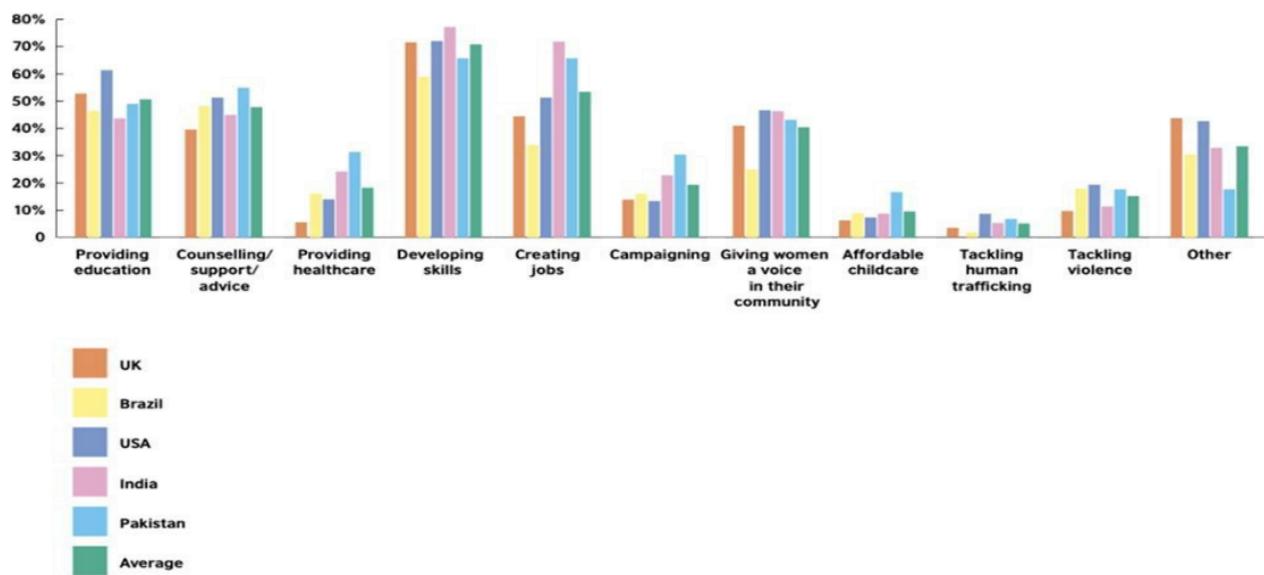


Figure: 1 "Social Business and Women Empowerment (2017)"

Eminate: Social Business Case Study

Eminate, a Bangladeshi organization that ran a social business project providing solar electricity and internet connectivity to rural schools, served as an instructive case study. Its solar projects provided solar electricity to local schools in rural Netrokona. Eminate's motto is to emanate marginalized communities, based on the principle that providing access to clean energy and

educational resources will empower them, particularly women and youth. The project emphasizes creating a positive social impact rather than prioritizing financial gain, contributing to long-term benefits for the communities it serves. It is dedicated to combating gender disparity by providing women with access to clean energy,

education, and vocational training. Besides addressing energy poverty, Eminate is deeply involved in dealing with environmental issues. By promoting the use of solar power, the organization helps reduce reliance on fossil fuel electricity generation, thereby contributing to lower carbon emissions and mitigating the effects of climate change in rural areas. Unfortunately, due to heavy load shedding, rural areas of Bangladesh still rely on diesel generators. This environmental focus is integral to Eminate's mission of fostering sustainable development. This paper examines two case studies of schools that benefited from their solar projects: Koilong Puranbari Private Primary School (case study 1), which received solar power in 2021, and Koilong Alefuddin Girls School (case study 2), a girls-only school which was connected in

2022. The latter also provides vocational training to both students and women in the community, contributing to economic empowerment and skill development. Initially, Eminate funded these solar installations through crowdfunding campaigns. The organization generates revenue through several channels with its social business project, such as:

- **Tuition Fees:** Schools pay fees that contribute to the overall funding model.
- **Savings on Utility Costs:** The transition from diesel generators and traditional electricity to solar power has significantly reduced operating costs for the schools, including savings on electric bills and diesel expenses.
- **Vocational Training Fees:** Vocational training programs are offered in the school, with fees collected from students.
- **Income from Trainees:** Products made by trainees are sold, generating additional income for the schools
- **Consultancy:** Provides specialized advisory services to other institutions and businesses interested in adopting solar energy solutions

The impact of Eminate's initiative extends beyond mere connectivity and clean energy access. For example, the installation of solar power, low-power computers (Raspberry Pi 4), and internet connectivity at the schools has not only facilitated educational activities but also enabled vocational training in sewing in the second school. Digital sensors have been installed in schools, which enable remote monitoring of energy consumption; a feature that proved significant during recent cyclones. This remote monitoring revealed unexpected nighttime electricity demand, showcasing the schools' ability to serve as flood shelters thanks to their solar-powered infrastructure. Eminate's projects enhance educational and vocational opportunities while promoting energy sustainability and resilience in rural communities. By focusing on marginalized communities, particularly women, Eminate helps bridge the gap in energy access and promotes gender equality, thus enabling these communities to achieve greater economic independence and social mobility.

Literature Review

Gender Inequality and Energy Poverty

Climate change and energy poverty remain two of humanity's most critical challenges, with disproportionate impacts on women and girls, especially in developing countries. Traditional gender roles often

place the burden of household energy collection and use on women, exposing them to "time poverty" and health risks from indoor air pollution caused by biomass fuels (United Nations International Development Organization, 2022). In Bangladesh, over 90% of rural households rely on biomass for cooking, creating serious health hazards due to particulate matter exposure (Accenture and Global Alliance for Clean Cookstoves, 2012). Bangladesh ranks among the top 20 countries with the poorest access to clean fuel and cooking technologies (International Energy Agency, 2021). This energy poverty exacerbates gender inequality by limiting women's economic and educational opportunities, thereby restricting social mobility and perpetuating poverty (Cecelski et al., 2023).

Recent studies highlight that women in rural Bangladesh spend nearly six hours daily on unpaid domestic work, including cooking and fuel collection, a phenomenon identified as "time poverty" that critically reduces their opportunities for income generation and education (Inspira, 2025). Indoor air pollution from biomass cooking causes over 113,000 premature deaths annually in Bangladesh, disproportionately affecting women and children (Koomson & Danquah, 2021; UN Women & IUCN, 2022). Additionally, women represent only 10% of Bangladesh's energy sector

workforce, reflecting a significant untapped potential in energy transition and entrepreneurship (Inspira, 2025).

Socioeconomic determinants such as income inequality and education level further deepen the gender gap in energy access. Women with lower socioeconomic status face greater hardships accessing modern energy, reinforcing cycles of deprivation (Manusher Jonno Foundation, 2024). Addressing this gap supports Sustainable Development Goals, particularly SDG 5 (Gender Equality) and SDG 7 (Affordable and Clean Energy) (United Nations, 2015). Development efforts emphasize the need to empower women as energy entrepreneurs and leaders, thereby accelerating broader community benefits (Inspira, 2025).

Social Business: Catalysts for Change

Gender disparities in clean energy sectors persist globally, limiting women's access to financing and leadership (United Nations International Development Organization, 2022). Social businesses, operating with social impact at their core rather than profit maximization, are instrumental in addressing these disparities (Yunus, 2017). They focus on removing systemic barriers and promoting inclusive models that boost women's participation in clean energy markets.

Social Business and Affordable Financing

The clean energy sector still has a male-dominated workforce, with 32% of full-time employees being women, and women-led businesses and startups obtaining less funding (United Nations International Development Organization, 2022). Women frequently encounter obstacles when trying to access conventional sources of financing, notably banks and microfinance institutions. Women's limited access to traditional financial institutions reinforces energy poverty. Social business bridges this gap by giving them access to affordable financing, such as microloans for clean energy goods and services, e.g., solar lighting and clean cookstoves. Financial inclusion has been shown to reduce energy poverty significantly. A recent study by Sen et al. (2023), using survey data from the Bangladesh Household Income and Expenditure Survey held during 2010 and 2016, shows that households with financial inclusion experience significantly lower rates of acute and severe energy poverty by 13% and 33%, respectively, compared to those without financial inclusion. Rural areas benefit more noticeably from financial services, enhancing access to clean energy solutions (Koomson & Danquah, 2021). Female-headed households are statistically less likely to experience severe energy poverty, signaling the importance of gender-

sensitive financial inclusion (Kumar Sen et al., 2023).



Figure 2: Role of gender in the financial inclusion-energy poverty nexus
Source (Kumar, Sen et al., 2023)

Social Business and Capacity Building

In the context of promoting clean energy through social business, capacity building will help rural women develop knowledge and skills to use and maintain renewable technologies e.g. clean cookstoves, which will empower them to effectively harness clean energy and decrease their dependence on conventional biomass. It also provides them with entrepreneurship training to run clean energy initiatives. Women could act as change agents by starting cleantech businesses, manufacturing goods with renewable energy, and advocating for sustainable energy (United Nations International

Development Organization, 2022), which will provide them with diverse employment opportunities. According to Kumar, Sen et al. (2023), The average income of residents of developing nations is lower than that of residents of developed nations; therefore, enhancing household income through capacity building and technical training is critical for transforming energy use patterns. Capacity building trains and develops skills for women, both as end-users and potential entrepreneurs in the clean energy sector, thus empowering them to be in charge of their economic well-being and energy needs. Grameen Shakti's success in training thousands of women as agents of clean cooking and biogas technologies exemplifies how capacity development fosters sustainable energy adoption and women's economic empowerment (WePower, 2021).

Clean Energy and Disaster Vulnerability

In the rural areas, women are still heavily dependent on traditional biomass, which, when inefficiently burnt, releases high volumes of black carbon, making indoor air pollution a major concern for women and girls. This combination of pollution and increased heat increases health hazards for women and is responsible for nearly 2 million deaths each year worldwide, mostly among women and children living in the poorest communities (UN Women &

IUCN, 2022). Exposure to indoor air pollution from solid fuel used for cooking results in 4.3 million premature deaths per year, with women and children accounting for 60% of these deaths (Koomson & Danquah, 2021). Renewable energy technologies promoted by social businesses help mitigate these risks. By giving them access to lighting, cooking, etc. that are not reliant on fossil fuels or energy sources which can be disrupted by disasters, clean energy lessens disaster vulnerabilities. Women's health can also be improved through renewable energy. Improved cookstoves, for instance, are more effective in terms of energy efficiency, pollution control, and improve user safety (Dutta et al., 2017). According to the World Health Organization (2006), investing in clean cooking stoves and fuel will repay itself many times over in reduced illness and increased economic benefits. Social business promoting clean energy to women in developing nations not only improves their lives but also enhances disaster resilience and contributes to reducing pollution. Moreover, clean energy access creates new economic opportunities through job and enterprise creation, contributing to poverty alleviation and increased resilience among women in vulnerable rural settings (WePower, 2021). Successful gender-inclusive energy initiatives thus represent

critical pathways to achieving multiple sustainable development goals concurrently.

Methodology

For this study, an inclusive approach was taken to the concept of social business and the organization Eminate, taking that approach, and its outcome. An extensive literature review on social business, women's empowerment, and clean energy in developing nations was conducted, which formed the foundation for the empirical studies and helped identify the primary research questions. The framework is focused on examining the role of social business in providing clean energy access for women in rural Bangladesh in the context of women's empowerment. The empirical approach phase included structured interviews, site visits, and data analysis. The questionnaires included both qualitative and quantitative questions. Direct observations were made during site visits to the rural Bangladeshi schools where the organization's initiative was put into practice. The implementation and operation of digital sensors, solar energy technology, and the use of solar electricity in the school and community were also documented. To support the case study's objectives and analysis, throughout the investigation, relevant findings from the literature were applied, which supported the significance of women's empowerment, disaster resilience,

and access to clean energy in developing nations and highlighted the potential contribution of social business to solving these issues.

Data: Sources and Collection

To ensure the accuracy and reliability of the research findings, structured surveys were conducted involving various stakeholders from both the schools and the vocational training program. These surveys consisted of administering pre-designed questionnaires (Appendix), which served as the primary data collection instruments. The questionnaires were carefully crafted to align with the study's objectives, aiming to gather both quantitative and qualitative data on the impact of clean energy access, women's empowerment, and capacity building. Site visits were conducted at the rural schools to collect observational data and facilitate interactions with school personnel and community members, providing valuable qualitative insights. Interviews were held in person at the schools and over the telephone in line with respondents' preferences, supplementing questionnaire responses with more nuanced information. Participants included teachers, students, and parents from the schools, along with trainers and trainees from the vocational program. The questionnaires incorporated a mix of closed-ended questions for measurable outcomes, such as

changes in academic performance and income levels from vocational activities, and open-ended questions to explore perceptions of gender roles and empowerment. Detailed interview guides complemented the questionnaires to explore relevant themes in depth. Observational notes captured the practical effects of renewable energy access and documented the operation and benefits of solar technologies and sensors within the community.

Study Population and Sampling

The study population consisted of key stakeholders involved in two rural schools in Netrokona, Bangladesh, where social business initiatives provided solar energy access and vocational training. Each school operates with a single large teaching hall accommodating students from grades one through five. To ensure comprehensive representation across grades, two students from each grade were purposively selected for interviews, along with one parent per student, totaling ten student-parent pairs per school. Both teachers from each school (two per school) were also interviewed. For the vocational training program, the sample included the trainer, ten trainees, and their parents. Purposive sampling allowed for purposeful selection based on context relevance, increasing the validity of qualitative insights obtained. The surveys incorporated structured questionnaires

designed to capture measurable impacts related to changes in academic performance, vocational income, and perceptions of gender roles. The sample size, while limited, was sufficient for a detailed case study approach consistent with established qualitative research practices that prioritize depth over breadth (Denscombe, 2014).

Data Analysis

The case studies were written with a comprehensive understanding of all the qualitative and quantitative data collected, ensuring that the findings accurately reflect the experiences and outcomes observed in both schools. The qualitative data, particularly the detailed responses from interviews and surveys, were integral to understanding the full impact of the solar electricity initiatives on the educational environment and vocational training programs. Content analysis was carried out on the information gathered from the observations and interviews. In order to identify recurrent themes relating to women's empowerment and access to clean energy, interview transcripts were meticulously analyzed, which enabled them to identify insights and patterns from the qualitative data. Smart solar monitoring system was used to analyze quantitative data, such as trends of electricity usage tracked by sensors. In order to enhance the reliability and validity of the results,

multiple data sources and procedures were used. A more comprehensive understanding of the research objective was attained by comparing interview responses with empirical data.

Case Presentations and Findings

A Bangladeshi organization, Eminate's social business project, which provided solar electricity and internet connectivity with low-power Raspberry Pi 4 computers to rural schools for women, served as an instructive case study. One of the schools also provides vocational training in sewing. As they are in remote areas without a reliable grid-tied electricity system, solar energy with battery storage provides students with long hours of electricity for education and vocational training. In addition, digital sensors have been installed, enabling remote monitoring of energy consumption. This revealed unexpected nighttime electricity demand during cyclones and storms, showcasing the schools' ability to serve as flood shelters due to their solar connections. With newfound stitching skills and improved access to electricity through solar energy, these women have been empowered to develop the self-confidence to pursue additional income-generating options and apply for microcredit loans. The data collected covered relevant questions that reflect positive changes observed in the school's functionality and the

study habits of students since the introduction of solar electricity. Participation and attendance of women increased both in the classroom and vocational training, and access to clean energy affected the students' learning experiences.

Case Study 1

Koilong Puranbari Private Primary School, situated in the rural area of Netrokona, Bangladesh, received its solar electricity connection in 2021. The school serves a growing number of students, both male and female, and has faced challenges related to frequent load shedding and inadequate lighting and air circulation. The solar installation was intended to address these issues and enhance the overall educational experience, including the increased number of students in extracurricular activities (ECA) and improved academic performance.

Table 1: Total Number of Enrolled and Female Students in School

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|-----------------------|------|------|------|------|------|
| Total Female Students | 31 | 37 | 42 | 42 | 55 |
| Total Students | 90 | 103 | 109 | 111 | 127 |

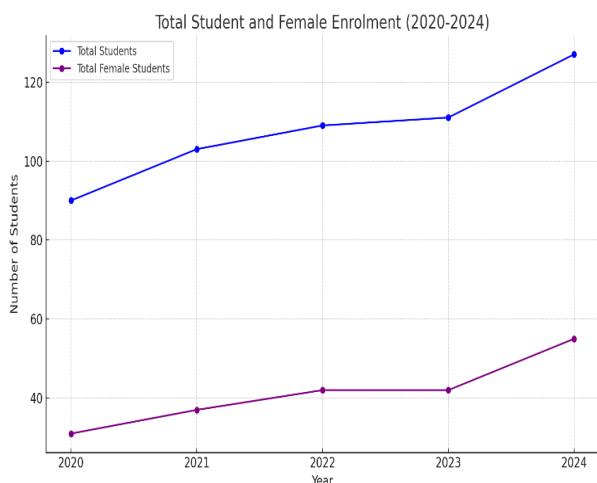


Figure 3 Total Number. of Students and Female Enrolment

Figure 3 illustrates the enrollment trends of total students and total female students from 2020 to 2024. The number of total students steadily increases each year, starting from around 90 in 2020 to 127 by 2024. The enrollment of female students also shows a consistent rise, although at a slower rate, starting from 31 in 2020 to 55 in 2024. The gap between the total students and female students suggests that while female enrollment is increasing, the total student body is growing at a faster rate, indicating a larger proportion of male students over the years.

Table 2: "Total Number of Enrolled and Female Students in ECA"

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|-----------------------|------|------|------|------|------|
| Total Female Students | 7 | 6 | 20 | 22 | 30 |
| Total Students | 10 | 16 | 30 | 36 | 50 |

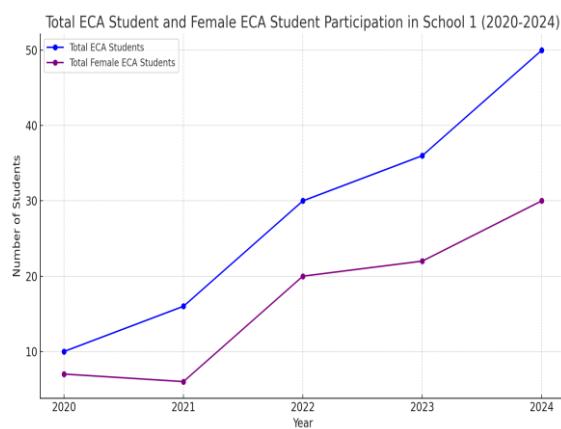


Figure 4 Total no of Students and Female ECA participation

Figure 4 shows the participation trends of total ECA students and female ECA students from 2020 to 2024. The participation in extracurricular activities has grown significantly over the years, starting from 10 students in 2020 to 50 students by 2024. There is a consistent upward trend with a sharp increase between 2023 and 2024. The number of female students participating in ECA also increases over the period, starting from 7 in 2020 and reaching 30 by 2024. However, the growth is slower compared to the total ECA students,

indicating that while female participation is increasing, it constitutes a smaller portion of the total ECA student body. The gap between the total and female students shows that while female participation in ECA is increasing, the overall growth in ECA participation includes a larger proportion of male students.

Key Findings

The availability of solar electricity has positively influenced academic performance at the school. Students reported increased motivation and better study habits due to the reliable power supply. The latest survey conducted in 2024 revealed that 68% of students rated the improvement in their study habits as 4 on a scale of 1 to 5, indicating a significant positive impact. Additionally, two students from Class 5 received government scholarships, highlighting the academic advancements made possible by the improved learning environment. The steady increase in student enrollment from 90 in 2020 to 127 in 2024 also suggests that the improvements brought about by solar electricity have made the school more attractive to both students and parents. The school's ability to provide a consistent and comfortable learning environment, despite the challenges of load shedding, has likely contributed to this growth. The number of students participating in ECA has grown significantly

since the introduction of solar electricity, from 10 students in 2020 to 50 students in 2024. The growth is particularly notable among female students, who accounted for 60% of the total ECA participants by 2024. The introduction of activities such as art, music, and Holy Quran recitation classes has enriched the students' educational experience, contributing to their holistic development. The data also reveals that although there was a slight dip in female participation in ECA in 2021, this was due to their involvement in other training programs. By 2022, the number of girls in ECA had increased significantly, demonstrating the school's success in balancing academic and extracurricular activities (ECA). The reliable solar-powered electricity has enabled students to engage more in computer-based learning, which has contributed to higher educational outcomes. Teachers reported that students were more interested in learning when they had access to technology, leading to better retention of information and improved test scores. This aligns with the survey results, where a majority of students rated their study habit improvements highly after the installation of solar power. The implementation of solar electricity at the school has been largely successful, with no significant challenges reported by the school administration. However, to sustain and further enhance

these benefits, it is recommended that the school continues to expand its extracurricular offerings and explore additional technological resources to support computer-based learning. The introduction of solar electricity at the school has been a transformative initiative, leading to improved academic performance, increased student enrollment, and greater participation in extracurricular activities. The reliable power supply has not only mitigated the challenges posed by load shedding but has also created a more engaging and conducive learning environment for the students.

Case Study 2

Koilong Alefuddin Girls School, an all-girls institution also located in rural Netrokona, received its solar electricity connection in 2022. In addition to regular academic classes, the school also offers a vocational training program in sewing, designed to empower female students and other women in the community. The school aims to provide skills that contribute to economic independence and gender equality.

Table 3: Total Number of Students Enrolled and in ECA

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|-----------------------|------|------|------|------|------|
| Total Students | 45 | 50 | 60 | 66 | 75 |
| Total Students in ECA | 0 | 0 | 0 | 13 | 20 |

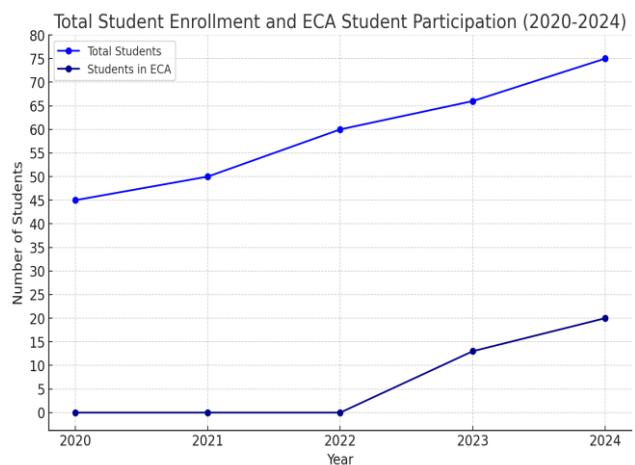


Figure 5 Total Number of Students Enrolled and ECA Participation

Figure 5 displays the total student enrollment and the participation of students in extracurricular activities (ECA) from 2020 to 2024, and both of them show an upward trend. There is a consistent increase in the total number of students each year. The number of students started at 45 in 2020 and rose steadily each year, reaching 75 by 2024. Before the intervention of solar electricity in 2022, the school did not provide any ECA classes. The school started

ECA from 2023 and participation grew notably, from 13 to 20 within a year.

Table 4: Total no. of Trainees and Average Income

| Year (Half yearly) | 2021-1 | 2021-2 | 2022-1 | 2022-2 | 2023-1 | 2023-2 | 2024 |
|------------------------------|--------|--------|--------|--------|--------|--------|------|
| No. of trainees | 0 | 0 | 40 | 48 | 48 | 52 | 50 |
| Average Monthly Income (BDT) | 0 | 0 | 3500 | 3500 | 4500 | 4500 | 6000 |

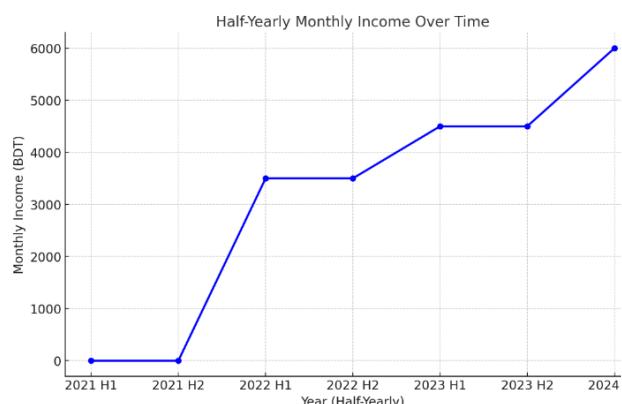


Figure 6 Half yearly Average Monthly Income

Figure 6 illustrates the progression of average monthly income (in BDT) from the first half of 2021 to the first half of 2024. The vocational training program launched in 2022, resulting in an initial income rise to 3,000 BDT, marking the start of income generation. Income grew and stabilized at 4,500 BDT from 2023 H1 until the year's end. In 2024 H1, there was a sharp rise to 6,000 BDT. The overall trend shows a steady

income increase from 2022 onwards, reflecting the positive impact of the vocational training program.

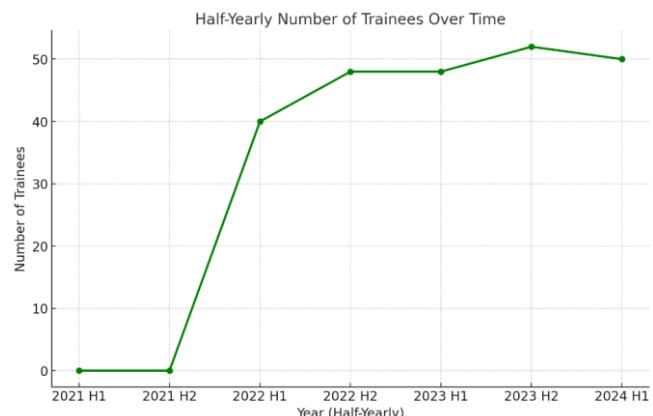


Figure 7 Half yearly no. of Trainees

Figure 7 shows the number of trainees over time. Vocational training started in 2022, leading to a rapid increase from 0 to 40 trainees in the first half of 2022. The number stabilized at 48 by the first half of 2023, then rose to 52 toward the end of 2023. A dip to 50 occurred in 2024 due to the classroom capacity limit set by the trainer.

Key Findings

The introduction of solar electricity has significantly enhanced both the academic and vocational training environments. Reliable power has ensured consistent lighting and air circulation, creating a more comfortable and effective learning space. This has been particularly beneficial for vocational training sessions, where good lighting is essential for detailed

sewing work. The number of trainees in the vocational training program grew steadily from 40 in the first batch of 2022 to a maximum of 50 trainees per batch in 2024. The decision to limit the number of trainees to 50 per batch in 2024 was made to maintain the quality of training, given the limited resources such as sewing machines and training hours. The vocational training programs have led to a substantial increase in the monthly earnings of trainees, from BDT 3500 in 2022 to BDT 6000 in 2024. This income has provided women with greater financial independence and has empowered them to contribute to their families' livelihoods. The consistent increase in earnings reflects the growing skills and confidence of the trainees, as well as the demand for their products in the local market. The vocational training programs have played a crucial role in promoting gender equality by equipping women with marketable skills. Trainees have gained not only more financial independence but also increased influence in household decision-making processes. The ability to contribute economically has elevated their status within their families and communities, challenging traditional gender roles. There has been an increase in participation of women in community decision making processes due to their access to clean energy which has changed the perceptions of roles of women

within the community. They are becoming leaders in their community as a whole, encouraging the usage of clean energy solutions resulting in more gender equality and women empowerment.

One challenge identified was the limitation of resources, particularly the number of sewing machines available for training. This constraint led to the decision to cap the number of trainees to ensure that the quality of training remained high. To sustain and expand the program, it is recommended that additional resources, such as more sewing machines and training materials, be provided. Moreover, some challenges related to community dynamics, such as jealousy and resistance from other villagers, were reported by the parents. These issues highlight the need for ongoing community engagement to ensure the continued success and sustainability of the clean energy and vocational training initiatives.

Disaster Preparedness

Data from the sensors revealed how the solar-powered lighting and sensors kept the schools operating during power loss. Having access to solar power contributed to disaster resilience in the schools. The solar-powered lighting allows the schools to operate during cyclones or other disasters, providing the students and others in the

community a secure and well-lit environment. During cyclones, the sensors detected exceptional nighttime electricity consumption. This also confirmed the usage of the schools as a flood shelter in case of emergencies. This is aiding the women, school staff, and the community members to reduce their disaster vulnerability.

Recommendations

In comparison to other developing nations, energy poverty in Bangladesh is considered severe. Kumar Sen et al. (2023) revealed that a significant portion of the population, mainly in rural and remote areas in Bangladesh, still lacked electricity access (18% of the total rural population in 2019), and about 41% of the total population of the country was deprived of clean cooking facilities in 2016. Although social business is known to alleviate energy poverty, the growth of social business still remains limited. While microfinance organizations have been successful in reaching poorer women, they currently reach only a fraction of those who need financial services (United Nations, 2009). Women, especially those living in rural areas and urban slums, are often deprived of formal financial services due to legal, sociocultural, etc. barriers (United Nations, 2009). Social business addresses the underfunding of women-led organizations, and it has the potential to bridge these financial barriers. According to

the British Council (2017), social businesses empower women by providing them access to financing, markets, and networks, along with assisting them to develop their knowledge and skill set. Besides, they are also effective catalysts for reducing gender gaps in energy access. Nevertheless, it is still an underutilized source of finance for gender equality (British Council, 2017).

Key factors such as improved quality of life, women's empowerment, and environmental benefits highlight the importance of expanding the reach and impact of social business for promoting clean energy for women. Despite this evidence, there is still a significant gap in their widespread adoption. The finding of this study highlights the urgent need for social businesses to commit themselves more firmly to actively engage in such ventures. In many areas, adoption of social business centered on sustainable energy for women is still very limited due to limited access to finance, cultural constraints, lack of awareness, etc. There is an urgent need for more social businesses to actively participate in clean energy initiatives that target women in order to solve these issues and take advantage of this enormous opportunity for positive change. This should include not just the development and dissemination of clean energy technologies but also partnerships, educational programs,

and public awareness campaigns that make clean energy solutions more accessible. According to research by UN Women & IUCN (2022), renewable energy in Bangladesh remains significantly underdeveloped, with a total installed capacity of only 766.8 MWp, accounting for around 3% of the total installed capacity. The on-grid capacity is 417 MWp, and the off-grid capacity is 349.79 MWp. This needs to be addressed, and overall substantial work is required for advancement in this sector.

Future Work

Both case studies illustrate the significant impact of solar electricity on education and economic empowerment in rural Bangladesh. The introduction of solar power has not only improved the academic performance and enrollment rates at both schools but also empowered women through vocational training programs, contributing to gender equality and economic independence. The author would like to launch training initiatives for the female students and staff of the school on clean cooking stoves and study the impact of social business in tackling health challenges for rural women. This will also empower them to make use of and actively manage clean energy solutions. Eventually, the author would then survey these women to determine the health benefits of adopting clean cooking fuels and energy sources.

Further study will also be conducted on other such cases. The influence of social business in the renewable energy sector will be further investigated in the future through a number of interviews. In-depth interviews will be conducted with female representatives of social enterprises operating in the clean energy sector of Bangladesh, exploring their training programs, challenges they faced in empowering women, and strategies to provide affordable financing. Furthermore, successful women entrepreneurs who have developed clean energy businesses in Bangladesh will be interviewed in order to discover their experiences, the difficulties they encountered, and the role social business played in assisting their projects. This will help recognize the effects that entrepreneurship in renewable energy has had on their lives and communities.

Conclusion

This paper has highlighted the critical role social business plays in improving women's access to clean energy in developing nations by creating innovative approaches that cater to the particular needs of women, therefore empowering them in the process. e.g., creating economic empowerment through micro-entrepreneurship. Eminate's efforts are directly linked to reducing energy poverty in rural areas by ensuring access to reliable and

sustainable energy sources. The installation of solar power in schools not only enhances educational opportunities but also contributes to the broader goal of energy security. By reducing dependence on traditional and often unreliable energy sources, such as diesel generators, social business helps to alleviate the energy poverty that plagues many rural communities. The study also revealed significant results and observations about the positive impacts of solar electricity, including disaster resilience and women's empowerment through vocational training combined with clean energy access. The introduction of solar electricity in Case 1 has been a transformative initiative, leading to improved academic performance, increased student enrollment, and greater participation in extracurricular activities. The reliable power supply has not only mitigated the challenges posed by load shedding but has also created a more engaging and conducive learning environment for the students. The solar electricity initiative in Case 2 has had a profound impact on both academic and vocational training outcomes. The reliable power supply has improved the learning environment, while the vocational training program has empowered women economically and socially. The increase in trainees' earnings and their growing influence within their families underscore

the success of the program. However, addressing resource limitations and community challenges will be crucial for sustaining these benefits in the long term. Furthermore, by enabling schools to serve as flood shelters during disasters, Eminate's solar projects improve community resilience and reduce vulnerability to energy disruptions during emergencies. This dual focus on providing clean energy and enhancing disaster preparedness illustrates how social businesses can play a pivotal role in reducing energy poverty while fostering sustainable development. Social business also allows women to act as social drivers and contribute to eradicating social issues related to gender inequality. Although social business has been promising in women's empowerment and promoting clean energy access for women, it requires considerable expansion and adoption. Future research could focus on long-term assessment of social business impacts on women's empowerment, income, and environmental sustainability. By addressing the challenges, social businesses can significantly help achieve sustainable development goals and enhance the lives of women in marginalized areas.

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Conflict of Interest

The author declares there is no conflict of interest associated with this research.

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Affordable Health Care for the Bottom Most People

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Abstract

Healthcare is becoming increasingly unaffordable for marginalized people, leaving millions without access to essential quality health services. This paper discusses an innovative, affordable, self-sustaining quality health care system for the poor people at the community level. At the community level, trained health workers will serve as a bridge between patients and medical assistants, medical officers, and specialists. He/she will also provide basic health checks like blood pressure, diabetes, pregnancy test, weight, and height measurement. After the checkup, community health workers connect patients with either a medical assistant or a medical officer, depending on the nature of the disease, through an online platform. This platform also maintains a detailed database on individual patients. The medical officers and medical assistants can issue prescription through this platform instantly. People experiencing poverty will pay less, and the better off will pay full fees for the services, which will make the program sustainable through cross-subsidization. This model can be replicated in the country and abroad for quality health services for people with low incomes.

Keywords: *affordable, cross-subsidy, health Care, marginalized, online platform, quality, sustainability.*

Abstrak

Penjagaan kesihatan kini semakin tidak mampu dinikmati oleh golongan terpinggir; menyebabkan berjuta-juta individu tidak mendapat akses kepada perkhidmatan kesihatan asas yang berkualiti. Kertas ini membincangkan satu sistem penjagaan kesihatan inovatif, mampu milik dan lestari untuk golongan berpendapatan rendah di peringkat komuniti.

Di peringkat komuniti, pekerja kesihatan terlatih akan berperanan sebagai penghubung antara pesakit dengan penolong pegawai perubatan, pegawai perubatan, dan pakar. Mereka turut menjalankan pemeriksaan asas seperti tekanan darah, saringan diabetes, ujian kehamilan, pengukuran berat badan dan ketinggian. Selepas pemeriksaan dijalankan, pekerja kesihatan komuniti akan menghubungkan pesakit dengan penolong pegawai perubatan atau pegawai perubatan melalui satu platform dalam talian, bergantung pada jenis penyakit yang dihadapi.

Platform ini juga menyimpan pangkalan data terperinci tentang setiap pesakit. Pegawai perubatan dan penolong pegawai perubatan boleh mengeluarkan preskripsi secara serta-merta melalui platform tersebut. Golongan miskin akan dikenakan bayaran lebih rendah, manakala golongan berkemampuan akan membayar yuran penuh bagi perkhidmatan tersebut. Kaedah ini menjadikan program berkenaan lestari melalui mekanisme subsidi silang. Model ini berpotensi untuk diperluas dan dilaksanakan di dalam serta luar negara bagi menyediakan perkhidmatan kesihatan berkualiti kepada golongan berpendapatan rendah.

Introduction

Health is an invaluable asset for those who are impoverished, especially for laborers whose physical well-being is essential to their livelihood. In Bangladesh, where a large portion of the population (58.16% in 2023, according to the World Bank's collection of development indicators) is dependent on daily income, being sick can have disastrous financial repercussions. Even a single ill day might cause laborers to lose their wages, further impoverishing them. Furthermore, the lack of affordable healthcare options means that these marginalized families frequently have to spend a significant amount of their income on healthcare, which can cause financial instability.

More than 66% of Bangladeshi live in rural areas, where a significant problem is the lack of uninterrupted access to healthcare services (*J Urban Health*. 2019). Despite challenges such as limited public health facilities and a scarcity of skilled workforce, Bangladesh has made progress in achieving health-related Millennium Development Goals (MDGs), particularly in reducing maternal and child mortality. However, nutritional issues persist, and one-third of children remain stunted. Bangladesh also faces a high burden of tuberculosis and noncommunicable diseases. Common ailments like malnutrition, infectious and noncommunicable diseases, and maternal and infant mortality are more common in rural Bangladesh. Furthermore, the

nutritional status of rural households is highly influenced by their wealth position, which in turn has a substantial impact on health-related outcomes. This is due to the fact that human resources and resources are scarce in rural areas, which exacerbates already existing problems by providing typically insufficient and low-quality healthcare services.

Despite the overall success achieved in the health sector in Bangladesh, there remains a significant challenge in providing affordable, accessible, and quality services for the prevention and management of both communicable and noncommunicable diseases to the impoverished population.

The main aim of this paper is to find a way/model to make quality basic health services accessible to the poor people. The health services include the control of communicable and noncommunicable diseases, improvements in maternal and child health through physical consultation and telemedicine, and addressing the health needs of people with low incomes. The main components of the model are the creation of a comprehensive health service that is adapted to the financial capacities of the underprivileged, the incorporation of digital health technologies to improve data management and service delivery, and a community-based healthcare workforce to offer individualized, direct care. The health

services are- Preventive Healthcare, General Health Services, Communicable & Noncommunicable Diseases, Maternal & Child HealthCare Services, Eye Care, Physiotherapy Services for Hemophilia, and others, and Vaccinations. The quality health services will be delivered by the Health workers, medical assistants, and MBBS medical doctors through both physical and telehealth services to the community people at the community level, union level, Upazila level, and central level. Then, a specialized software will be used for delivering the health services, maintaining patients' database, and providing digital prescriptions to the patients through community health assistants at the community and other levels. Finally, a designated health coordinator will oversee and supervise the entire activity, ensuring smooth coordination and efficient delivery of healthcare services. By focusing on these areas, the model seeks to improve overall health outcomes, prevent diseases, and create a healthier and safer environment for the community.

This conceptual paper lays the foundation for a transformative approach to healthcare delivery in Bangladesh. By combining innovative financing mechanisms, technology-driven solutions, and community-based care, the model seeks to bridge the gap in healthcare access and ensure that the poorest populations receive

the quality care they deserve. The proposed model has the potential to be scaled and replicated in other resource-constrained settings, offering a pathway to more equitable healthcare systems in Bangladesh and beyond.

Objectives

The core objectives of this health model are as follows:

- a. To develop a model for the delivery of quality health services to the poor people, including awareness raising on safe motherhood and child health.
- b. To replicate the model in other unserved/underserved areas if it is piloted successfully.

Literature Review

We have reviewed some literature relating to the above subject, such as the healthcare model for poor people, as discussed briefly below-

The global health literature has examined healthcare availability and cost in great detail, with a focus on low- and middle-income countries (LMICs) such as Bangladesh. Universal health coverage (UHC) is defined by the World Health Organization (WHO) as guaranteeing that everyone has access to necessary health

services without facing financial hardship. Bangladesh's healthcare system still finds it difficult to provide for the requirements of its most vulnerable citizens, especially the impoverished, despite tremendous efforts. Key obstacles that worsen health disparities have been identified by a number of studies, including unequal resource distribution, a deficient healthcare system, and a lack of financial safety nets for the underprivileged.

Theoretical Foundation:

The model is grounded in the Social Determinants of Health (SDH) theory, which posits that health outcomes are influenced by factors such as socioeconomic status, education, and access to healthcare. By targeting underserved populations and integrating telemedicine, the model seeks to address these social determinants and improve health equity. The model also aligns with Universal Health Coverage (UHC) principles, which emphasize the need for access to quality health services without financial hardship, particularly for vulnerable populations.

Overview of the Health System of Bangladesh

Bangladesh's health system heavily relies on government financing and policies but receives less allocation in the budget compared to its population size. In FY 2021-22, the allocation was only BDT 327.31

billion, which was around 5 (five)% of the total budget. This allocation meets only 34% of total health expenditure. Inequity is a significant issue affecting the healthcare system (Public Expenditure for Health Sector: Reviewing Budget 2021-22). As reported by the World Health Statistics 2022, 49% of the people of Bangladesh are not covered according to the universal health coverage index, which means they are not getting quality services when needed. Besides, only 24 percent of people spend 10% of their family income on medical expenses. In a report published on 18 July 2023 (source: The Financial Express), according to a recent study, less than 1% % of the population has a health coverage scheme that protects them against catastrophic health expenditures.

In Bangladesh, 7% or approximately 11413000 people are being pushed into poverty because of out-of-pocket health spending, and 24.7% of people spent more than 10% of their households' total expenditure on healthcare (SEARO, 2016).

Brac Health Model

BRAC Health, Nutrition, and Population Programme (HNPP) is designed to provide essential healthcare services in rural and slum areas of Bangladesh, focusing on maximizing limited resources. The program forms Village Organizations (VOs)

to connect with rural women, who nominate a shasthya sebika (SS) as a community health worker. These workers are trained in maternal, neonatal, and child health, as well as common diseases. They visit households to provide primary healthcare and sell medicine, allowing them to earn income, which serves as a key motivator.

Supervising the SS workers are shasthya karmis (SKs), who are equipped with mobile technology to collect and manage health information. This use of mobile health (mHealth) technology ensures efficient healthcare delivery and knowledge transfer. The integration of a micro-credit system within the model helps sustain the motivation of the healthcare workers by providing them with an opportunity to generate income while serving their communities (BRAC, n.d.).

IDF Health Model

IDF initiated its health program in 1995 with the aim of delivering affordable and accessible health services to all individuals at the community level. To reach remote grassroots, special community health spots are organized by the health workers. A Health Center, overseen by the central office led by the health coordinator and medical team, is managed by MBBS Doctors and senior consultants centrally. IDF provided financial support to the health program to

ensure smooth health services delivery at the community level.

IDF currently operates a network of healthcare facilities, including two specialized clinics (Static clinic & Satellite clinic), and organizes various health camps, such as blood grouping camps, general health camps, diabetes test camps, and eye care camps in the region.

These clinics have provided a wide range of medical services, such as eye care, maternity and child health, vaccinations, and treatment for common ailments, to more than 19 lac individuals since their founding. IDF's physiotherapy program for hemophiliac patients is one of its amazing success stories; it has improved the lives of almost 5000 people (IDF Annual Report 2022).

This initiative of the IDF has created sustainable access to affordable quality healthcare for the grassroots poor through telehealth, reducing the incidence and severity of health problems, and improving the well-being of the grassroots community. This change in health-seeking behavior and improved access to care has led to solving basic health problems and contributing to lower severe diseases in the grassroots community.

DSK Model:

Dushtha Shasthya Kendra (DSK) healthcare model is a comprehensive approach designed to improve healthcare access for underserved populations in Bangladesh, with a particular focus on women and children. The model employs community health workers to provide primary healthcare services directly within communities, ensuring that basic medical care is accessible to those in need. It places a strong emphasis on maternal and child health, offering essential prenatal and postnatal care to enhance health outcomes for mothers and children. A key component of the model is health education and awareness, which empowers communities with knowledge on disease prevention and healthy practices. DSK also ensures access to essential medicines and treatments for common illnesses, making healthcare more available to those who need it most. Collaboration with local NGOs and government entities is integral to the model, enhancing healthcare delivery and optimizing resource sharing. Additionally, DSK invests in capacity building by training health workers and community members to improve the quality of service delivery. The effectiveness of the model is continuously assessed through monitoring and evaluation, allowing for necessary adjustments to ensure that the healthcare services remain

responsive to community needs (DSK Bangladesh, n.d.).

Comparison with Existing Healthcare Models:

BRAC, DSK, and IDF Healthcare Models have successfully addressed healthcare challenges in resource-limited settings in Bangladesh, but they each operate with distinct approaches. The BRAC Health Model leverages community health workers (Shasthya Sebikas) to provide primary care, especially maternal and child health services, with a focus on mobile health (mHealth) technology for data management. However, its reliance on external funding for sustainability and challenges in scalability limit its long-term impact. Similarly, the DSK Model uses community health workers to deliver basic healthcare services, with an emphasis on health education and disease prevention. While it has a strong local engagement model, it also struggles with scaling up and requires ongoing partnerships with NGOs and governments for resource mobilization.

In comparison, the community-based models from BRAC and DSK focus on engaging local populations directly through trained health workers, fostering trust and ensuring accessibility in underserved areas. While the proposed model builds on these existing frameworks, it places a heavier

emphasis on technology, which could be both an advantage and a potential obstacle, depending on the local infrastructure and literacy levels.

The model holds great potential for improving healthcare access for the underprivileged people. Addressing the above challenges will be critical to ensuring its success and sustainability. A phased approach, starting with pilot programs and continuous evaluation, would help refine the model and mitigate these risks.

Proposed Framework/ The Model (Methodology):

Institutional structure:

The model will be implemented with a team of qualified medical officers (MBBS), medical assistants, and health workers, all of whom will be paid employees (Figure 1

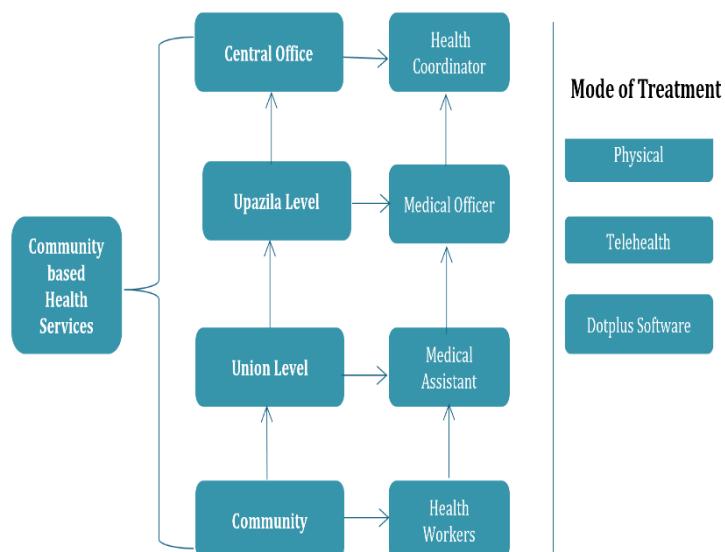


Figure 1: Institutional Structure

The health coordinator from the central office will coordinate the program. To ensure comprehensive healthcare facilities, there will be medical officers, medical assistants, and healthcare workers. The health workers will conduct basic health checkups, including blood pressure, diabetes, pregnancy tests, and weight and height measurements. Based on the outcomes of these assessments, they will determine whether to connect patients to medical assistants or medical officers. The medical assistants will primarily work at the union level, conducting awareness sessions and providing treatment to the local community. The medical officers will handle outdoor patients at the upazila-level health centers, with health workers acting as their assistants. Medical officers will be responsible for treating communicable and noncommunicable cases and will also treat referred cases. Additionally, they will conduct antenatal checkups for pregnant mothers in their catchment population who are referred by medical assistants and health workers. Telehealth services will be provided by medical officers, connected via medical assistants and health workers.

Free medicines (not for chronic diseases) will be provided to patients visiting the health centers. The medical officers will also train the medical assistants on various aspects of healthcare, including maternal and child healthcare, preventive measures for communicable and noncommunicable diseases, focusing on nutrition, lifestyle, food hygiene and safety, sanitation and hygiene practices, and environmental health. The medical assistants will then disseminate this knowledge among the health workers

using a manual specifically designed for them.

Health workers will be selected from the community, specifically individuals who have a minimum qualification of Secondary School Certificate (SSC), own a smartphone, and are willing to work in the healthcare sector at the community level. The health workers will assist the medical assistants and conduct door-to-door visits, performing primary health checkups such as measuring blood pressure, diabetes, height, weight, and connecting with the medical assistants and MBBS doctors as needed.

To support the health workers in their work, soft loans will be provided for the purchase of medical kits containing essential tools for primary health checkups. This financial support will ensure that health workers are well-equipped to carry out their responsibilities efficiently.

DOTPLUS Software developed by "Outreach for all" USA will be used to provide telehealth services, patient information storage, and online prescription services. This software provides various analytical reports along with digital prescriptions, due to which now all doctors

and paramedics are using this digital health software for their daily work. By scanning this health card, a member's detailed health record can be easily obtained within a short period of time.

Interventions

To address the healthcare challenges faced by impoverished populations, this model proposes a series of targeted interventions designed to ensure the delivery of affordable and accessible health services. These interventions are grounded in

community-based care, digital health technologies, and capacity building for health workers. The interventions are outlined as follows:

Customization of Training Module:

The existing training modules from IDF's health program will be customized to meet the specific needs of this initiative. This adaptation will focus on ensuring that the training content aligns with the objectives of delivering quality, affordable health services to poor communities.

Training:

a. Pre-Service Training: Prior to launching the health services, comprehensive training sessions will be conducted for all medical, health, and administrative staff. These sessions will prepare the team to address the healthcare needs of the target population effectively. Training on Preventive healthcare and first aid service delivery will be provided to health workers.

b. In-Service Training: Continuous skill development training will be provided to health workers through ongoing training programs. These sessions will ensure that health workers remain up-to-date with the latest healthcare practices, allowing them to deliver quality care at the community level.

c. Awareness-Raising Campaigns: Community-focused campaigns will be conducted to raise awareness about safe motherhood, child health, and the importance of preventive healthcare. These campaigns will empower the community with knowledge, leading to

improved health behaviors and outcomes.

Provision of Quality Health

Services: A core intervention of the model is the provision of essential health services to the community. These services will be delivered by qualified MBBS doctors, medical assistants, and health workers. The key components of service delivery include:

Physical and Telemedicine Services:

Both in-person consultations and telemedicine will be provided, ensuring that even remote communities have access to healthcare.

- Health Camps:** Regular health camps will be organized to deliver primary health services to underserved populations.
- Eye Camps:** Specialized camps focusing on eye care will be established to address vision-related health issues.
- Referral Services:** A referral system will be created to direct patients to higher-level healthcare facilities when more specialized care is required.
- Provision of Medicines:** Free medicines for primary health services (excluding chronic diseases) will be made available to patients attending the health centers.
- Installation of Health Software:** Digital health solutions will play a crucial role in the delivery of services. Health software will be implemented to generate digital prescriptions, streamline health data management, and enhance the efficiency of service provision. This digital infrastructure will allow for better tracking of patient

records and facilitate telemedicine services.

Monitoring and Reporting:

A robust monitoring and reporting system will be established to track the progress and outcomes of the idea. This will include the collection and analysis of data on service delivery, patient outcomes, and community health indicators. The data will inform program adjustments and ensure that the initiative is meeting its objectives effectively.

Impact Assessment:

An impact assessment will be conducted to evaluate the overall effectiveness of the interventions on the target population. This assessment will measure improvements in health outcomes, access to care, and financial protection for poor households. The findings will help guide future interventions and inform policy recommendations.

These interventions outline a comprehensive approach to addressing healthcare challenges for people experiencing poverty, focusing on capacity building, service provision, and continuous monitoring.

Sustainability

The sustainability of the proposed healthcare model is anchored in a community-driven financial model that ensures both affordability for beneficiaries and the long-term viability of the program. The program's economic sustainability is built on a tiered payment system, where the poorest members of the community pay reduced fees while those who are better off pay full fees for the services they receive. This ensures that healthcare remains accessible to everyone, regardless of their

financial situation, while allowing the program to generate enough revenue to cover operational costs.

The healthcare fees will be used to fund key aspects of the initiative, including the salaries of medical officers, medical assistants, and health assistants, as well as the procurement of medicines, medical supplies, and technology infrastructure. By integrating a small, manageable fee from a large number of community members, the program can ensure financial sustainability through a cross-subsidy manner while keeping services accessible to those in need.

By maintaining a balance between affordability for beneficiaries and financial self-sufficiency, this healthcare model aims to be a sustainable model that can be replicated in other regions facing similar challenges.

Conclusion

Affordable healthcare is therefore not just a matter of public health, but of economic survival for the poorest communities. Access to affordable health services enables laborers and low-income families to prevent and manage illnesses, reducing the economic burden of healthcare costs and ensuring that they can continue to work and support their families. When healthcare is accessible and affordable, it strengthens the resilience of poor populations by preventing the downward spiral of poverty caused by illness and high medical expenses. The conceptual model addresses key challenges in healthcare delivery while offering a replicable framework for implementation in resource-constrained settings and bringing positive changes by providing accessible and

affordable health services to those in the lowest socioeconomic strata.

This model aligns with the Social Business model promoted by Nobel Laureate Prof. Muhammad Yunus. The program will provide healthcare services to the poor grassroots at an affordable cost, addressing a fundamental social issue and contributing to poverty alleviation. By generating surpluses over its expenses and operating on a cross-subsidy basis, the program ensures long-term sustainability.

By implementing a comprehensive program with qualified medical officers, medical assistants, and health assistants, the model demonstrates the specific healthcare needs of the community. By improving access to quality health services, promoting safe motherhood and child health, and developing a skilled healthcare workforce, this initiative aims to make a significant impact on the well-being and quality of life of the targeted population at a low cost.

To achieve its full potential, the proposed model requires practical testing and adaptation to specific regional contexts. Future research should focus on pilot studies to evaluate the model's feasibility, cost-effectiveness, and impact on health outcomes. Recommendations include exploring the integration of emerging digital health technologies and partnerships with local governments and organizations to ensure scalability. By addressing these areas, the model can significantly contribute to improving healthcare access for the poorest populations and serve as a blueprint for equitable healthcare systems worldwide.

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Practices of Entrepreneurial Orientation Among Students in Universities: The Role of the New Entrepreneurs Program

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Abstract

Entrepreneurship education is increasingly recognized as a vital tool for equipping students with the skills to create ventures that deliver both economic and social value. This study aims to examine how the New Entrepreneurs Program (NEP), grounded in Social Entrepreneurship Theory (SET), influences the Entrepreneurial Orientation (EO) of university students in Taiwan. A qualitative multiple-case study was conducted using in-depth interviews with students from Chang Jung Christian University and the National Pingtung University of Science and Technology who participated in the NEP. The findings reveal that NEP participation enhances key EO dimensions—innovativeness, proactiveness, and risk-taking—through academic learning, mentorship, experiential activities, and an emphasis on social value creation. SET helps explain how students develop the capacity to align entrepreneurial opportunity recognition with social mission orientation, leading to ventures that are both economically viable and socially responsible. The study suggests that universities and policymakers should expand programs like the NEP to foster socially aware entrepreneurial capabilities, while future research could investigate the long-term effects of such initiatives across diverse cultural and educational contexts.

Keywords: *Entrepreneurial Orientation (EO); New Entrepreneurs Program (NEP); Social Entrepreneurship Theory (SET); Entrepreneurial Skills; Socially Responsible Entrepreneurship*

Abstrak

Pendidikan keusahawanan kini semakin diiktiraf sebagai alat penting dalam membekalkan pelajar dengan kemahiran untuk membangunkan perusahaan yang memberi nilai ekonomi dan sosial. Kajian ini bertujuan meneliti bagaimana New Entrepreneurs Program (NEP), yang berasaskan Social Entrepreneurship Theory (SET), mempengaruhi Entrepreneurial Orientation (EO) dalam kalangan pelajar universiti di Taiwan. Kajian kualitatif pelbagai kes telah dijalankan melalui temu bual mendalam dengan pelajar dari Chang Jung Christian University dan National Pingtung University of Science and Technology yang menyertai NEP.

Dapatan kajian menunjukkan bahawa penyertaan dalam NEP meningkatkan dimensi utama EO, iaitu inovatif, proaktif, dan keberanian mengambil risiko, melalui pembelajaran akademik, bimbingan, aktiviti berdasarkan pengalaman, serta penekanan terhadap penciptaan nilai sosial. SET membantu menjelaskan bagaimana pelajar membina keupayaan untuk menyelaraskan pengenalpastian peluang keusahawanan dengan orientasi misi sosial, sekali gus mewujudkan perusahaan yang berdaya ekonomi dan bertanggungjawab sosial.

Ajian ini mencadangkan agar universiti dan pembuat dasar memperluas pelaksanaan program seperti NEP bagi memupuk keupayaan keusahawanan yang peka terhadap isu sosial. Penyelidikan masa hadapan disarankan untuk meneliti kesan jangka panjang inisiatif sebegini dalam konteks budaya dan sistem pendidikan yang pelbagai

Introduction

Entrepreneurial Orientation (EO) is a central construct in entrepreneurship research, representing a strategic posture characterized by innovativeness, risk-taking, and proactiveness (Lumpkin & Dess, 1996; Covin & Wales, 2019; Miller, 2011; Miller & Friesen, 1982; Kamal Hossain et al., 2022). EO enables individuals and organizations to identify opportunities, navigate uncertainties, and implement innovative initiatives, thereby enhancing

entrepreneurial outcomes (Al-Mamary et al., 2020; Linton, 2019). Despite its importance, many university students perceive themselves primarily as job seekers rather than prospective entrepreneurs (Peterman & Kennedy, 2003; Wilson et al., 2007; De

Carolis & Litzky, 2019), highlighting the need for educational programs that cultivate entrepreneurial mindsets, develop essential skills, and enable students to contribute meaningfully to both economic

and social development (Bae et al., 2014; Martin et al., 2013; Bonfanti et al., 2024).

To address this educational gap, the New Entrepreneurs Program (NEP), initiated by Nobel Peace Prize laureate Muhammad Yunus, was initially implemented for the children of Grameen Bank borrowers in Bangladesh (Khashru, 2016; Khashru, 2021). NEP represents a structured, socially driven business initiative that integrates practical entrepreneurship education with social value creation (Ahmed et al., 2021; Khashru et al.), (al., 2025; Khashru & Lin, 2019). The program combines mentorship, experiential learning, and financial support to strengthen EO while promoting socially responsible practices. In its original context, participants were encouraged to establish ventures that were economically sustainable and socially beneficial, demonstrating a practical application of social business principles (Khashru, 2016; Ahmed et al., 2021; Yunus, 2017; Santos, 2012; Do Adro et al., 2021; Khashru & Han, 2023).

In this study, the NEP model is examined within a university context, specifically at Chang Jung Christian University (CJCU) and the National Pingtung University of Science and Technology (NPUST) in Taiwan. By applying NEP principles—mentorship, experiential learning, and financial

facilitation—this research investigates how the program fosters EO, skill development, and career aspirations among university students, thereby adapting a social business-oriented entrepreneurship model to a new population (Khashru, 2016; Khashru & Lin, 2019; Do Adro et al., 2021).

Guided by Social Entrepreneurship Theory (SET) (El Ebrashi, 2013; Mair & Martí, 2006; Santos, 2012), the study examines how NEP encourages students to align entrepreneurial activities with social impact. SET provides a theoretical lens for understanding entrepreneurship that explicitly integrates social objectives with economic value creation, making it particularly relevant for programs like NEP that are structured around social business principles (Mair & Martí, 2006; Santos, 2012; Yunus, 2010; Khashru, 2016). The conceptual framework links the program's core components to the development of EO dimensions innovativeness, proactiveness, and risk-taking while fostering socially responsible practices (Lumpkin & Dess, 1996; Kamal Hossain et al., 2022; Santos, 2012; Do Adro et al., 2021).

To address the research question—How does participation in the New Entrepreneurs Program influence university students' entrepreneurial orientation, skill development, and career aspirations while fostering socially responsible

entrepreneurship? qualitative semi-structured interviews were conducted with NEP participants and program mentors, providing rich insights into entrepreneurial skill development and socially responsible business practices (Austin & Sutton, 2014; Gale et al., 2013; Hamed, 2021; McMullin, 2023; Yin, 2018; Khashru et al., 2025).

This study is novel in applying NEP, initially designed for the children of Grameen Bank borrowers, to a university setting (Khashru, 2021; Khashru & Han, 2023). By integrating SET with qualitative insights, the research provides a unique understanding of how socially driven entrepreneurship programs can simultaneously foster EO, skill development, and career aspirations. Consequently, the study contributes both theoretically and practically by demonstrating how social business principles can be operationalized within higher education to generate economic and social value (Santos, 2012; Yunus, 2010; Bonfanti et al., 2024; Khashru et al., 2025; Yunus, 2017; Khashru & Lin, 2019; Bahaw et al., 2024).

The remainder of the paper is organized as follows: Section 2 reviews the literature and presents the conceptual framework; Section 3 outlines the methodology; Section 4 reports the findings; Section 5 discusses

the implications; and Section 6 concludes the study.

Literature Review

Entrepreneurial Orientation (EO) is a foundational concept in entrepreneurship research, encompassing innovativeness, risk-taking, and proactiveness (Kamal Hossain et al., 2022; Lumpkin & Dess, 1996; Covin & Wales, 2019; Miller, 2011; Shuangfa et al., 2023; Naeimah et al., 2024). These dimensions enable individuals to identify opportunities, navigate uncertainties, and pursue innovative ideas, thereby contributing to entrepreneurial success (Mitchell et al., 2002; Ardichvili et al., 2003; Schlichte & Junge, 2024). Despite its importance, many university students primarily see themselves as job seekers rather than job creators, highlighting the need for educational interventions that cultivate entrepreneurial mindsets and enhance relevant competencies (Peterman & Kennedy, 2003; De Carolis & Litzky, 2019; Zmiyak et al., 2020; Bahaw et al., 2024; Bonfanti et al., 2024).

The New Entrepreneurs Program (NEP), developed under the guidance of Nobel Peace Prize laureate Muhammad Yunus, represents an innovative social business initiative addressing this gap. Unlike conventional entrepreneurship programs, NEP explicitly integrates social

business principles with practical entrepreneurship education to foster EO among students (Yunus, 2010; Khashru, 2016; Khashru & Lin, 2019; Do Adro et al., 2021). It combines mentorship, experiential learning, workshops, and financial support, enabling participants—often the second generation of Grameen Bank borrowers—to launch ventures that balance economic sustainability with social impact (Ahmed et al., 2021; Yunus, 2017; Santos, 2012; Shuangfa et al., 2023; Khashru & Han, 2023). By embedding EO traits such as innovativeness, proactiveness, and risk-taking into socially responsible practices, NEP equips students to develop ventures that generate both financial and social value.

Social Entrepreneurship Theory (SET) provides a theoretical lens for understanding how NEP aligns economic and social objectives (El Ebrashi, 2013; Mair & Martí, 2006; Muñoz & Kimmitt, 2019). SET emphasizes that entrepreneurial activity can simultaneously create economic value and address societal challenges. NEP operationalizes these principles by enabling students to apply EO traits in ventures that deliver measurable social impact alongside financial outcomes (Santos, 2012; Do Adro et al., 2021; D'Souza et al., 2022; Ahmed et al., 2021; Khashru & Lin, 2019).

Empirical studies indicate that entrepreneurship education enhances EO

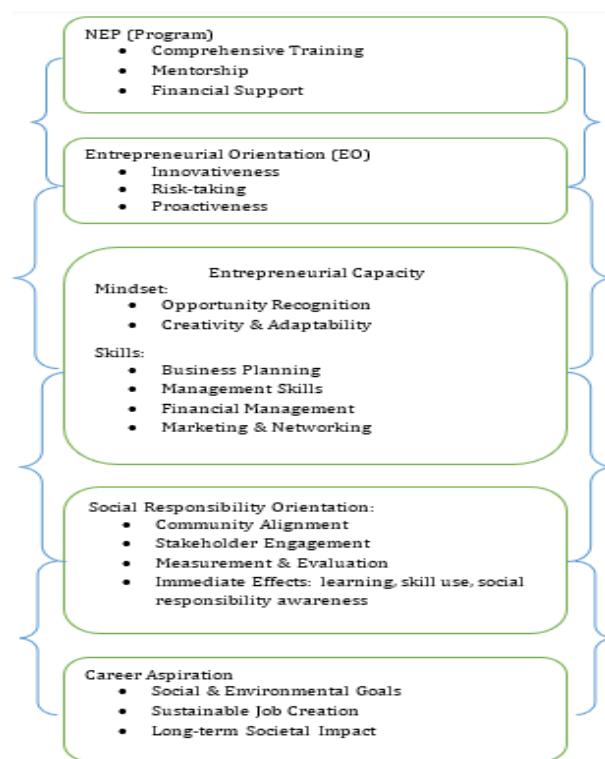
through experiential learning, mentorship, and engagement with real-world problems (Ozaralli & Rivenburgh, 2016; Cho & Lee, 2018; Al-Mamary & Alshallaqi, 2022; Bahaw et al., 2024). Programs like NEP extend this impact by embedding SET principles into practical contexts, equipping students to design ventures that address both economic and social needs (El Ebrashi, 2013; Bonfanti et al., 2024). Participation in NEP fosters EO traits that translate into entrepreneurial capacity encompassing both mindset—opportunity recognition, creativity, adaptability and practical business skills, including planning, management, financial oversight, marketing, and networking (Lumpkin & Dess, 1996; El Ebrashi, 2013; Khashru & Lin, 2019).

This enhanced capacity enables students to engage in socially responsible ventures aligned with community needs and stakeholder expectations (Mair & Martí, 2006; Slaper & Hall, 2011; Pless, 2012). These processes also shape career aspirations, motivating students to pursue ventures that generate economic, social, and environmental value (Yunus et al., 2010; Khashru & Han, 2023; Ahmed et al., 2021).

Building on these insights, this study develops a conceptual framework (Figure 1) integrating NEP activities, EO dimensions, entrepreneurial capacity, social responsibility orientation, and career

aspirations, guided by SET. The framework provides a theoretical and practical lens for assessing how NEP participation fosters sustainable and socially responsible entrepreneurship, offering implications for educators, policymakers, and practitioners (Santos, 2012; Yunus, 2017; Bonfanti et al., 2024; Khashru & Lin, 2019).

Figure 1. Proposed Conceptual Framework



This proposed framework illustrates how the New Entrepreneurs Program (NEP)—through training, mentorship, and financial support—shapes students' Entrepreneurial Orientation (EO) traits (innovativeness, proactiveness, and risk-taking) within the Social Entrepreneurship

Theory (SET) perspective (Lumpkin & Dess, 1996; El Ebrashi, 2013).

New Entrepreneurs Program (NEP)

The NEP is central to this study, providing university students with structured opportunities to develop entrepreneurial skills while addressing social and environmental challenges (Khashru et al., 2023; De Carolis & Litzky, 2019; Anderson et al., 2014). Guided by SET, NEP strengthens EO through comprehensive training, mentorship, and financial support (El Ebrashi, 2013; Santos, 2012; Yunus, 2010). Together, these components foster innovativeness, proactiveness, and strategic risk-taking while embedding social responsibility in students' entrepreneurial practice (Kamal Hossain et al., 2022).

Despite its recognized value, limited research has explored how NEP operationalizes SET principles and the long-term effects of participation on students' EO, skill acquisition, career aspirations, and socially responsible behaviors (Khashru et al., 2025; Ahmed et al., 2021; Shahzada et al., 2023; Bonfanti et al., 2024; Khashru & Han, 2023). This study addresses this gap by examining how NEP participation influences students' entrepreneurial mindset, capabilities, and socially responsible practices, thereby assessing its effectiveness

in promoting sustainable and impactful entrepreneurship.

Comprehensive Training

Training forms the foundation of NEP, enhancing EO by fostering opportunity recognition, creativity, adaptability, and risk management (Santos, 2012; Asare-Kyire et al., 2023; Al-Mamary & Alshallaqi, 2022; Lumpkin & Dess, 1996). In line with SET, training emphasizes the integration of social value creation into entrepreneurial ventures (Ebrashi, 2013; Yunus, 2010).

Experiential and problem-based learning approaches encourage students to translate EO traits into practice while maintaining social responsibility and sustainability as guiding principles (Martin et al., 2013; De Carolis & Litzky, 2019; Chenavaz et al., 2023). Through mentoring, simulations, and collaborative projects, NEP develops both the cognitive and affective dimensions of entrepreneurial learning, enabling students to navigate uncertainty and implement innovative solutions (Mitchell et al., 2002; Eisenhardt & Graebner, 2007; Gumel, 2018).

While training clearly supports EO and social impact orientation, little research has assessed its enduring influence on students' careers, venture creation, and sustained socially responsible behavior (Bae et al., 2014; Oosterbeek et al., 2010;

Shahzada et al., 2023). This study contributes by examining how NEP training shapes long-term entrepreneurial capacity and the ability to translate learned skills into student-led ventures that address societal challenges (Khashru, 2016; Khashru & Lin, 2019; D'Souza et al., 2022).

Mentorship

Mentorship provides essential guidance for applying SET principles in practice (Ebrashi, 2013; Yunus, 2010). Within NEP, mentors—often experienced practitioners or alums—help students assess the social and environmental implications of business decisions. This guidance ensures ventures remain innovative, proactive, and socially responsible (Ozaralli & Rivenburgh, 2016; Covin & Wales, 2019).

Mentorship reinforces EO dimensions while promoting a responsibility orientation (Lumpkin & Dess, 1996; Al-Mamary & Alshallaqi, 2022; Ahmed et al., 2021). It also develops skills in management, networking, and stakeholder engagement (Jeffery, 2009; D'Souza et al., 2022). By complementing experiential learning, mentorship supports the practical application of NEP training in real-world contexts (Shane, 2000; Martin et al., 2013).

Although mentorship has clear short-term benefits, its long-term role in shaping sustained entrepreneurial behaviors and

socially impactful ventures is underexplored (Carolis & Litzky, 2019; Oosterbeek et al., 2010). This study extends prior research by analyzing how mentor–student interactions contribute to enduring EO development and career aspirations among students engaged in socially responsible entrepreneurship.

Financial Support

Financial support enables students to transform entrepreneurial learning into actionable ventures that integrate profitability with social impact. Grounded in SET (Ebrashi, 2013; Yunus, 2010), funding encourages innovation, opportunity pursuit, and strategic risk-taking, reinforcing EO development (Lumpkin & Dess, 1996; Khashru et al., 2025).

By providing seed resources and sustainable financing mechanisms, NEP equips students to experiment with ideas, develop viable business models, and create measurable social outcomes (Ahmed et al., 2021; Khashru & Lin, 2019).

Although recognized as essential, few studies have examined the long-term influence of financial support on students' EO, skill application, and socially responsible career trajectories (Shinnar et al., 2018; Oosterbeek et al., 2010). This study investigates how NEP's financial mechanisms contribute to entrepreneurial resilience and the capacity to maintain social

commitments while pursuing sustainable ventures.

Entrepreneurial Orientation (EO) Dimensions

Entrepreneurial Orientation (EO) is a foundational concept in entrepreneurship research, representing university students' strategic posture toward entrepreneurial behavior through the dimensions of innovativeness, risk-taking, and proactiveness (Lumpkin & Dess, 1996; Covin & Wales, 2019; Miller, 2011; Kamal Hossain et al., 2022). Within the framework of SET, EO emphasizes the pursuit of ventures that generate both social and economic value, highlighting the importance of aligning entrepreneurial behavior with societal needs (Ebrashi, 2013). Aligned with SET, EO enables students to identify opportunities, navigate uncertainty, and engage in ventures that address social challenges while ensuring sustainable economic returns (Mitchell et al., 2002; Ardichvili et al., 2003; Schlichte & Junge, 2024).

Despite its recognized importance, many university students continue to perceive themselves primarily as job seekers rather than job creators, underscoring the need for educational interventions that cultivate entrepreneurial mindsets, competencies, and a commitment to social

impact (Peterman & Kennedy, 2003; De Carolis & Litzky, 2019; Zmiyak et al., 2020; Bahaw et al., 2024; Bonfanti et al., 2024).

The NEP serves as a structured mechanism to operationalize SET principles by fostering EO among university students. Through comprehensive training, mentorship, and financial support, NEP enables students to translate entrepreneurial orientation into socially responsible ventures, embedding social value creation into their entrepreneurial behaviors across all EO dimensions. By providing experiential opportunities, NEP cultivates students' capacity to pursue ventures that create measurable social impact alongside economic outcomes, highlighting the program's dual objective of education and societal contribution.

Innovativeness

Within the EO framework, innovativeness reflects students' tendency to pursue novel ideas, creative solutions, and unconventional approaches (Lumpkin & Dess, 1996; Covin & Wales, 2019). From a SET perspective, innovativeness enables students to design solutions that simultaneously address social challenges and generate sustainable economic outcomes (Ebrashi, 2013). NEP enhances this EO dimension through training that emphasizes opportunity recognition,

creative problem-solving, and design thinking in social business contexts (Santos, 2012; Asare-Kyire et al., 2023; Al-Mamary & Al-Shallaqi, 2022). Experiential learning, case studies, and collaborative ventures enable students to develop solutions that generate both social impact and economic value (Martin et al., 2013; Chenavaz et al., 2023). Mentorship supports students in prototyping ideas, testing assumptions, and iterating solutions, embedding social responsibility into their innovative practices (Mitchell et al., 2002; Gumel, 2018). This study examines how NEP fosters sustained innovative capacity, illustrating the long-term impact of this EO dimension on socially responsible ventures (Khashru, 2016; Khashru & Lin, 2019; D'Souza et al., 2022).

Risk-taking

Risk-taking, as a core EO dimension, represents students' willingness to engage in entrepreneurial activities under uncertainty, balancing potential rewards and challenges (Miller, 2011; Covin & Wales, 2019). Within SET, risk-taking is essential for launching ventures that pursue social impact alongside economic objectives, encouraging students to experiment with solutions that address societal challenges despite inherent uncertainties (Ebrashi, 2013; Yunus, 2010). NEP cultivates this EO trait by providing opportunities for practical venture

development, resource allocation, and problem-solving in uncertain environments. Workshops, simulations, and mentorship enable students to assess, manage, and mitigate risks while integrating social responsibility into their decisions (Eisenhardt & Graebner, 2007). By combining economic and social objectives, NEP encourages students to take calculated risks that maximize societal impact (Santos, 2012; D'Souza et al., 2022). This study investigates how NEP shapes enduring risk-taking behaviors, demonstrating the importance of this EO dimension for socially responsible entrepreneurship.

Proactiveness

Proactiveness constitutes a key EO dimension, capturing students' ability to anticipate opportunities, act ahead of peers, and initiate ventures that influence markets or social outcomes (Lumpkin & Dess, 1996; Covin & Wales, 2019). Within the context of SET, proactiveness enables students to identify socially relevant opportunities and take early initiative to create ventures that deliver societal benefits while achieving economic sustainability (Ebrashi, 2013). NEP fosters this EO dimension by motivating students to identify unmet social needs, design appropriate solutions, and act decisively in venture creation (Yunus, 2017; Khashru & Lin, 2019). Mentorship, field projects, and collaborative learning cultivate

anticipatory skills, enabling students to implement socially responsible ideas effectively in uncertain environments (Do Adro et al., 2021; D'Souza et al., 2022). This study evaluates how NEP nurtures long-term proactive tendencies, highlighting the significance of this EO dimension in guiding students toward socially responsible entrepreneurial ventures.

Entrepreneurial Capacity

Entrepreneurial capacity encompasses the mindset and skills required to identify opportunities, innovate, take calculated risks, and manage ventures effectively (Mitchell et al., 2002; McMullen & Shepherd, 2006; Lumpkin & Dess, 1996). For university students, building this capacity is essential for translating EO traits into actionable ventures that also address social and environmental challenges (Al-Mamary & Alshallaqi, 2022; Shuangfa et al., 2023; Naeimah et al., 2024).

The NEP cultivates entrepreneurial capacity through structured interventions—comprehensive training, mentorship, and financial support—that foster both entrepreneurial mindset traits and essential skills in line with SET (Ebrashi, 2013; Yunus, 2010, 2017). Experiential and problem-based learning embedded in NEP enables students to integrate social value creation into their ventures while reinforcing

EO traits (Santos, 2012; Asare-Kyire et al., 2023; Ahmed et al., 2021).

Although the importance of NEP is well recognized, little empirical research examines its long-term impact on integrating EO dimensions with socially responsible practices (Shinnar et al., 2018; Oosterbeek et al., 2010; Bae et al., 2014). This study investigates how NEP participation strengthens students' entrepreneurial mindset, skill acquisition, and sustained socially responsible behaviors, offering evidence of its effectiveness in fostering socially impactful entrepreneurship (Khashru et al., 2023; Khashru & Lin, 2019).

Entrepreneurial Mindset

The entrepreneurial mindset encompasses traits such as opportunity recognition, creativity, adaptability, and strategic risk-taking (Kuratko, 2007; Mitchell et al., 2002; McMullen & Shepherd, 2006; Gumel, 2018). It aligns closely with EO—innovativeness, proactiveness, and risk-taking (Lumpkin & Dess, 1996; Kamal Hossain et al., 2022; Covin & Wales, 2019; Shuangfa et al., 2023)—and with SET, which promotes ventures achieving both economic and social goals (Ebrashi, 2013; Santos, 2012; Mair & Martí, 2006; Yunus, 2017).

NEP nurtures this mindset through experiential learning, mentorship, and

entrepreneurial exercises, including ideation workshops, pilot ventures, and community projects. These interventions prepare students to navigate uncertainty and translate opportunities into ventures addressing societal and environmental challenges (Khashru & Lin, 2019; Khashru & Han, 2023; Ahmed et al., 2021; Martin et al., 2013; De Carolis & Litzky, 2019). This study examines how NEP fosters enduring entrepreneurial mindset traits, linking EO with socially responsible entrepreneurship and providing evidence on long-term skill retention and career development (Khashru et al., 2023; Shahzada et al., 2023; Bae et al., 2014; Yi & Duval-Couetil, 2021).

Opportunity Recognition

Opportunity recognition, the ability to identify and leverage potential business opportunities—is a core dimension of EO (Shane & Venkataraman, 2000) and a key aspect of the entrepreneurial mindset. Consistent with SET, it enables students to develop ventures that create both economic and social value (Ardichvili et al., 2003).

Within NEP, opportunity recognition is developed through targeted training, guided exercises, and real-world problem-solving activities that help students align opportunities with social needs and market demands (Khashru & Han, 2023; Khashru et al., 2025). Despite its recognized

importance, limited evidence exists on the long-term effects of entrepreneurship education interventions on opportunity recognition (Oosterbeek et al., 2010; Bae et al., 2014). This study examines how participation in NEP enhances students' ability to identify, evaluate, and act on opportunities, thereby advancing socially responsible entrepreneurship.

Creativity and Adaptability

Creativity and adaptability are essential for entrepreneurial success, enabling students to generate innovative solutions and adjust strategies in dynamic environments. Creativity supports the generation of novel ideas, while adaptability ensures resilience to evolving social and market conditions (Kuratko, 2007; Schlichte & Junge, 2024). From an SET perspective, these traits are critical for ventures that pursue both economic viability and social impact (Ebrashi, 2013; Yunus, 2017).

NEP cultivates creativity and adaptability through problem-based learning, scenario analysis, and experiential exercises that encourage flexible thinking and problem-solving (Khashru, 2021; Khashru & Han, 2023). These interventions help students translate EO traits into practical action, designing ventures that respond effectively to uncertainty while prioritizing social responsibility. However, research on the

long-term effects of such interventions remains limited (Oosterbeek et al., 2010; Shahzada et al., 2023). This study investigates how NEP fosters enduring creative and adaptive behaviors that reinforce EO and support socially impactful entrepreneurship.

Skills

Skills constitute a critical dimension of entrepreneurial capacity, encompassing competencies such as business planning, management, financial management, marketing, and networking (Lumpkin & Dess, 1996; Shane & Venkataraman, 2000; Kotler et al., 2016). These skills provide the operational foundation for translating EO traits into viable ventures that balance economic sustainability with social responsibility (Mair & Martí, 2006).

The NEP fosters these skills through structured training modules, one-on-one mentorship, and experiential learning exercises that integrate SET principles (Khashru, 2021; Yunus, 2017). By emphasizing both technical and soft skills, the program prepares students to manage uncertainty, mobilize resources, and build networks that support financial success and social impact. Research examining the long-term role of NEP-driven skill development in sustaining ventures and reinforcing social outcomes remains limited (Oosterbeek et al.,

2010; Shahzada et al., 2023). This study examines how participation in NEP enhances students' entrepreneurial competencies and their application in socially responsible ventures.

Business Planning

Business planning equips students to design structured, actionable, and socially responsible ventures, aligning EO dimensions with SET principles (Shane & Venkataraman, 2000; Ardichvili et al., 2003; Khashru, 2016; Khashru, 2017). The NEP enhances business planning skills through targeted training, mentorship, and practical exercises that emphasize the integration of social and economic objectives (Khashru & Lin, 2019; Khashru et al., 2025).

This approach enables students to translate EO traits—innovativeness, proactiveness, and strategic risk-taking—into actionable plans that achieve both economic viability and social impact (Kamal Hossain et al., 2022; Ahmed et al., 2021; D'Souza et al., 2022). NEP training further supports implementation in real-world contexts, fostering ventures with measurable social outcomes. Research on the long-term effectiveness of NEP-specific business planning interventions is limited; this study explores how participation develops students' capacity to formulate, execute, and

sustain effective business strategies (Khashru, 2021; Yunus, 2017).

Management Skills

Management skills are vital for coordinating resources, leading teams, and implementing strategic plans, closely linked to EO dimensions such as proactiveness, innovativeness, and strategic risk-taking (Kamal Hossain et al., 2022; Lumpkin & Dess, 1996; Zahra et al., 2009; Khashru et al., 2025). NEP develops these skills through mentorship, experiential exercises, and team-based projects, enabling students to manage socially oriented ventures effectively and address both economic and social objectives in line with SET (Ebrashi, 2013; Yunus, 2017).

Empirical evidence on the long-term development of management skills through NEP remains scarce. This study examines how NEP participation contributes to enduring management capabilities that enhance entrepreneurial success and socially responsible practices.

Financial Management

Financial management is a critical entrepreneurial skill that supports key EO dimensions, particularly risk-taking and proactiveness, by enabling students to make informed decisions under uncertainty (Mitchell et al., 2002; Miller & Friesen, 1982). Within the SET framework, financial

competencies are crucial for striking a balance between economic sustainability and social impact, ensuring that ventures are both viable and socially responsible (Ebrashi, 2013). The NEP equips students with these competencies through targeted training, mentorship, and practical guidance, emphasizing the integration of profitability with social objectives (Khashru & Han, 2023; Khashru et al., 2025). This training enables students to allocate resources effectively, forecast outcomes, and manage budgets to support ventures addressing societal needs. Despite its importance, long-term evidence on NEP-specific financial management training remains limited (Al-Mamary et al., 2020; Bae et al., 2014). This study examines how participation in NEP enhances financial skills and contributes to ventures achieving both economic and social outcomes.

Marketing and Networking

Marketing and networking are essential entrepreneurial skills that underpin EO dimensions such as innovativeness and proactiveness, allowing students to identify opportunities, engage stakeholders, and expand venture reach (Kotler et al., 2016; Khashru et al., 2023). Within SET, these skills facilitate the creation of ventures that generate social value while maintaining economic sustainability (Ebrashi, 2013). NEP develops marketing and networking

competencies through experiential exercises, mentorship, and scenario-based learning, emphasizing strategies that balance economic objectives with social impact (Khashru, 2021). Students acquire the ability to design effective marketing campaigns, establish strategic partnerships, and build networks that enhance both venture viability and social relevance. Although research on the long-term outcomes of NEP marketing and networking training is limited (Al-Mamary et al., 2020; Bae et al., 2014), this study investigates how NEP participation strengthens these skills, supporting the development of ventures that achieve both economic success and measurable social impact.

Social Responsibility Orientation

Social responsibility orientation encompasses social mission alignment, stakeholder engagement, measurement and evaluation, and proximal outcomes (immediate effects), ensuring that ventures pursue societal goals while maintaining economic viability (Ebrashi, 2013; Jeffery, 2009; Yunus, 2010). Within the SET framework, this orientation integrates social objectives into entrepreneurial processes, complementing EO traits—innovativeness, proactiveness, and risk-taking—that operationalize these objectives (Kamal Hossain et al., 2022; Mair & Marti, 2006; Santos, 2012). For students, cultivating

social responsibility during entrepreneurial training shapes the values, mindset, and behaviors necessary for launching ventures that are both economically sustainable and socially impactful.

The NEP facilitates the development of social responsibility orientation through targeted training, mentorship, and resource provision, strengthening students' ability to align social missions, engage stakeholders, and implement evaluation mechanisms (Ahmed et al., 2021; Jeffery, 2009; Khashru et al., 2025). Experiential learning components allow students to observe immediate effects on awareness, attitudes, and behaviors related to socially responsible entrepreneurship. Despite its recognized importance, empirical evidence on the long-term impact of NEP on social responsibility orientation remains limited. This study examines how participation in NEP supports students in integrating social responsibility into their entrepreneurial practice.

Social Mission Alignment

Social mission alignment refers to the extent to which entrepreneurial ventures simultaneously address societal challenges while maintaining financial sustainability. SET emphasizes embedding social objectives into business strategies to achieve meaningful and lasting impact (Ebrashi, 2013; Yunus, 2010). EO traits, particularly

proactiveness and innovativeness, support this alignment by motivating students to integrate social value creation within their ventures (Mair & Marti, 2006; Santos, 2012).

Through the NEP, students receive targeted training and mentorship that enables them to design ventures that combine profitability with a strong social purpose (Ahmed et al., 2021; Khashru et al., 2025). This process reinforces the interplay between EO traits and SET principles, equipping students to operationalize social objectives alongside entrepreneurial goals. Limited research exists on the long-term effectiveness of such training in enhancing students' ability to align profit motives with social missions. This study examines how participation in NEP develops students' capacity to create and sustain socially oriented ventures.

Stakeholder Engagement

Stakeholder engagement is essential for achieving social impact, involving collaborative relationships with beneficiaries, partners, and investors (Hartigan & Elkington, 2008; Jeffery, 2009). SET emphasizes co-creation and responsiveness to stakeholders as critical for attaining social objectives (Ebrashi, 2013), while EO traits, such as innovativeness and adaptability, enable students to respond

effectively and creatively to stakeholder needs (Mair & Marti, 2006; Santos, 2012).

NEP provides students with practical skills in relationship building, negotiation, and collaborative problem-solving, fostering ventures that are socially responsive and strategically innovative (Ahmed et al., 2021; Khashru et al., 2025). Evidence on the long-term outcomes of structured programs, such as NEP, for stakeholder engagement is limited. This study investigates how NEP-facilitated stakeholder engagement shapes students' entrepreneurial practices toward socially responsible outcomes.

Measurement and Evaluation

Measurement and evaluation mechanisms enable ventures to assess both social and financial objectives, linking EO traits—innovativeness, proactiveness, and risk-taking—with social impact (Shane & Venkataraman, 2000; Ardichvili et al., 2003; Kamal Hossain et al., 2022). Within NEP, students learn qualitative and quantitative evaluation methods (Creswell, 2013; Yin, 2018) to monitor venture effectiveness. These practices reinforce EO-SET integration, ensuring that projects are assessed for both

economic sustainability and social contributions (Ahmed et al., 2021; Khashru et al., 2023). Empirical evidence on the long-term effectiveness of NEP's evaluation

practices remains limited. This study examines how these processes foster students' ability to balance economic viability with measurable social impact.

Proximal Outcomes (Immediate Effects)

Proximal outcomes refer to short-term, observable effects of NEP participation, such as heightened awareness of social responsibility, enhanced application of entrepreneurial skills, and demonstration of socially responsible attitudes (Ebrashi, 2013; Ahmed et al., 2021; Khashru et al., 2023). Within SET, these outcomes indicate immediate integration of social objectives into entrepreneurial actions.

For students, these effects often manifest in the design of socially conscious business plans, responsible stakeholder engagement, and critical reflection on societal implications. While promising, the sustainability and translation of these outcomes into long-term entrepreneurial behavior remain underexplored (Shane & Venkataraman, 2000). This study investigates how NEP's immediate outcomes provide a foundation for pursuing ventures that are both economically viable and socially responsible, reinforcing and students' development.

Career Aspirations

Career aspirations are a critical dimension of entrepreneurial development, encompassing the pursuit of social and environmental goals, sustainable job creation, and long-term impact orientation. They guide students in envisioning future roles as innovators, job creators, and agents of social change (Ajzen, 1991; Shane & Venkataraman, 2000). Within SET, career goals focus on addressing societal and environmental challenges through innovative and socially responsible solutions (Yunus & Moingeon, 2010; Mair & Marti, 2006; Ebrashi, 2013).

For university students, career aspirations translate entrepreneurial training into future action. NEP fosters these aspirations by embedding social and environmental considerations into career goals, motivating students to pursue ventures that generate both economic and social value (Ahmed et al., 2021; Khashru et al., 2023). Despite its recognized significance, empirical research on how NEP shapes long-term career trajectories aligned with EO and SET principles remains limited. This study investigates NEP's influence on students' socially oriented entrepreneurial aspirations.

Pursuit of Social and Environmental Goals

Integrating social and environmental objectives into career aspirations ensures entrepreneurial ventures pursue sustainability alongside profitability. From an EO perspective, such aspirations reflect proactiveness and innovativeness, while SET emphasizes embedding social missions into entrepreneurial strategies to generate lasting societal impact (Yunus, 2010; Ardichvili et al., 2003).

Through NEP, students receive structured guidance, mentorship, and exercises that align personal ambitions with social and environmental missions. They are encouraged to design ventures that are socially, economically, and environmentally sustainable, translating EO traits into actionable plans that fulfill SET principles (Neumann, 2021; Pless, 2012). Empirical evidence on the translation of these aspirations into enduring entrepreneurial practices is limited. This study examines how participation in NEP shapes students' commitment to ventures that integrate social and environmental objectives.

Sustainable Job Creation

Aspiring to become a job creator represents a core EO dimension, encompassing initiative, opportunity recognition, and risk-taking (Shane & Venkataraman, 2000; Covin & Wales, 2019).

Within SET, job creation extends beyond profit motives to address unemployment and promote community development (Mair & Marti, 2006; Yunus, 2010; Ahmed et al., 2021).

NEP strengthens students' aspirations for sustainable job creation through mentorship, practical training, and financial support to launch ventures generating employment (Khashru & Lin, 2019; Khashru et al., 2025). These interventions position students as drivers of economic growth and social progress. However, limited research examines how NEP-specific interventions influence students' long-term job-creation ambitions or community-level impact (Khashru & Han, 2023; Khashru et al., 2025). This study explores how NEP participation fosters sustainable job creation goals.

Long-term societal impact

Long-term societal impact reflects students' commitment to generating sustained social and economic value beyond immediate outcomes. This entails developing ventures with scalability, resilience, and enduring benefits, which aligns with the EO dimensions of innovativeness and proactiveness, as well as SET principles emphasizing lasting social transformation (Shane & Venkataraman,

2000; Mair & Marti, 2006; Ahmed et al., 2021).

The NEP equips students with tools and frameworks for strategic vision, sustainability planning, and impact-focused ventures (Khashru & Lin, 2019; Khashru et al., 2025). Through experiential exercises, mentorship, and workshops, students learn to translate short-term entrepreneurial activities into long-term commitments to social good.

Despite these programmatic efforts, empirical evidence on NEP's influence in fostering sustained social and economic impact remains limited. This study, therefore, examines how participation in NEP encourages students to develop an enduring orientation toward societal impact.

Research Methodology

Research Design

This study adopts a qualitative multiple embedded case study approach to investigate entrepreneurial orientation (EO) practices among participants of the New Entrepreneurs Program (NEP) at Chang Jung Christian University (CJCU) and National Pingtung University of Science and Technology (NPSTU) in Taiwan. This design facilitates an in-depth exploration of how NEP influences entrepreneurial intentions, skill development, and socially responsible business practices within real-

life contexts (Yin, 2014; Feagin et al., 1994). By analyzing multiple cases and embedded units, the study captures the complex interactions between student behaviors, program interventions, and social impact outcomes (Eisenhardt & Graebner, 2007; Ridder, 2017).

The theoretical framework is grounded in Social Entrepreneurship Theory (SET), which integrates social, environmental, and economic objectives to guide the creation of sustainable social value (Ebrashi, 2013; Slaper & Hall, 2011). SET provides a lens to understand how NEP cultivates social entrepreneurial mindsets and behaviors, promoting ventures that generate meaningful social impact and sustainable development (Ebrashi, 2013; Mair & Martí, 2006; Yunus et al., 2010; Pless, 2012; Ahmed et al., 2021).

NEP presents a distinctive context as it targets students from the second generation of Grameen Bank borrowers, encouraging them to become job creators rather than job seekers. Its structured combination of training, mentorship, and financial support offers an ideal setting to examine the practical application of SET in fostering socially responsible entrepreneurial behaviors (Khashru & Han, 2023; Khashru et al., 2025; Ebrashi, 2013).

Case Selection and Rationale

An embedded case study approach was employed, focusing on two universities that offer the NEP: CJCU and NPSTU. These universities were purposefully selected because they:

- Actively implement NEP with measurable student outcomes (Khashru & Han, 2023)
- Exhibit diversity in student demographics, academic backgrounds, and venture types (Patton, 2015; Ahmed et al., 2021)
- Demonstrate willingness to collaborate with researchers and provide access to program documents and participant data (Yin, 2014; Feagin et al., 1994)

A purposive sampling strategy selected 55 students actively participating in NEP (Patton, 2015), representing diverse levels of engagement, academic majors, and venture types. These students served as embedded sub-units within the cases, enabling comparative insights into how NEP interventions influence entrepreneurial orientation and social business mindset across institutional contexts (Lin et al., 2018; Khashru, 2021; Eisenhardt & Graebner, 2007).

Table 1. Participant Demographics

| University | Number of Participants | Gender (M/F) | Academic Year | Type of NEP Venture |
|------------|------------------------|--------------|---------------|---------------------------------|
| CJCU | 28 | 15/13 | 2nd-4th Year | Food, Technology, Services |
| NPSTU | 27 | 14/13 | 2nd-4th Year | Agriculture, Technology, Retail |
| Total | 55 | 29/26 | 2nd-4th Year | Multiple venture types |

This strategy ensures comprehensive exploration of how NEP fosters social entrepreneurial behaviors, skill development, and long-term impact orientation, consistent with SET and EO principles (Ebrashi, 2013; Mair & Martí, 2006; Khashru & Han, 2023).

Data Collection

Strategy and Rationale

A longitudinal, multi-method qualitative design was employed from July 2022 to September 2023 to capture the evolution of students' entrepreneurial orientation over time (Miles et al., 2014; Patton, 2015; Hamed, 2021). Data were collected through semi-structured interviews, focus group discussions (FGDs), and document analysis, providing multiple perspectives on the NEP's influence (Denzin & Lincoln, 1998; Eisenhardt & Graebner, 2007). Triangulation across these sources enhanced the credibility, validity, and depth of analysis, ensuring a holistic

understanding of how the NEP fosters EO traits and aligns with SET

Data Sources and Methods

Data for this study were collected from multiple sources to ensure methodological triangulation and to provide a comprehensive understanding of the NEP and its influence on students' EO, skill development, and socially responsible practices (Ebrashi, 2013; Khashru et al., 2025). Stakeholders included NEP participants, mentors, program coordinators, faculty, and university authorities, offering complementary perspectives on program processes, outcomes, and institutional contexts. This multi-source approach enhances the credibility, dependability, and confirmability of the findings by capturing both individual and organizational insights (Lincoln & Guba, 1985; Birt et al., 2016).

The data sources, methods, participants, quantities, timeframes, and contributions to trustworthiness are summarized in Table 2.

Table 2. Data Collection Overview

| Data Source | Method | Participants/Materials | Quantity | Timeframe | Contribution to Trustworthiness |
|-------------|-----------------|--|--|---------------------|--|
| Interviews | Semi-structured | NEP participants, Mentors, Program Coordinators, Faculty members, University authorities | NEP Participants: 55; Mentors: 2; Program Coordinators: 4; Faculty & University administrative | Jul 2022 - Sep 2023 | Captures detailed personal experiences and perspectives across multiple stakeholders; supports thematic saturation (Patton, 2015); |

| Data Source | Method | Participants /Materials | Quantity | Timeframe | Contribution to Trustworthiness |
|--------------------------------|-------------------|---|--|---------------------|--|
| | | | staff: 8; NEP Academic Scholars: 6 | | Yin, 2014; Denzin & Lincoln, 1998) |
| Focus Group Discussions (FGDs) | Group interviews | NEP participants | 6 FGDs (8-10 participants per group) | Jul 2022 - Sep 2023 | Captures collective perspectives, validates individual accounts, and highlights group-level insights (Krueger & Casey, 2015; Patton, 2015) |
| Documents | Archival analysis | NEP reports, business plans, policy documents | NEP reports: 10; Business plans: 15; Policy documents: 5 | Jul 2022 - Sep 2023 | Provides contextual depth, cross-verifies program claims, and supports triangulation (Yin, 2014; Eisenhardt & Graebner, 2007) |

Data collection from these multiple sources enabled a rich and nuanced understanding of NEP's impact on students. The combination of interviews, FGDs, and document analysis, as summarized in Table 2, allowed for verification of findings across sources, strengthening the study's methodological rigor and supporting the trustworthiness of results.

Alignment with Research Questions

The data collection methods were purposefully selected to address the study's research questions, ensuring that both individual experiences and program-level insights were captured. The alignment between research questions and data sources is summarized in Table 3.

Table 3. Alignment with Research Questions

| Research Question | Data Source/Method | Rationale |
|---|-------------------------------------|--|
| RQ1: How does NEP influence students' entrepreneurial mindset? | Interviews, FGDs | Individual interviews capture personal reflections and mindset changes, while FGDs provide group-level perspectives on entrepreneurial intentions and behaviors. |
| RQ2: How does NEP enhance skills acquisition and venture capabilities? | Interviews, FGDs, Document Analysis | Combining participant accounts with program documents and business plans enables triangulation to assess the development of practical skills and venture competencies. |
| RQ3: How does NEP promote socially responsible entrepreneurial practices? | Interviews, FGDs, Document Analysis | Integrating multiple sources allows evaluation of both perceived and documented evidence of social responsibility in entrepreneurial actions. |

This alignment ensures that the data collection comprehensively addresses each research question while maintaining methodological rigor. Using multiple sources enhances the credibility, dependability, and confirmability of the findings by triangulating participants' perspectives with program documentation (Patton, 2015; Yin, 2014; Lincoln & Guba, 1985; Birt et al., 2016).

Temporal Structure

Data collection occurred in three waves to track changes over time:

- Wave 1 (Jul–Sep 2022): Exploration of students' prior experience and entrepreneurial intentions
- Wave 2 (Jan–Jun 2023): Observation and interviews capturing skill acquisition and application of NEP learnings.

- Wave 3 (Jul–Sep 2023): Assessment of NEP's impact on entrepreneurial orientation, skills, and social business mindset

This design captures both the continuity and evolution of entrepreneurial practices, enabling rich temporal insights (Saldana, 2016).

Ethical Considerations

Ethical approval was obtained from institutional review boards. Informed consent, confidentiality, and anonymity were strictly maintained (Orb et al., 2001; Rubin & Rubin, 2011). Participation was voluntary, with the right to withdraw at any stage.

Data Saturation and Trustworthiness

Data collection continued until thematic saturation was achieved (Glaser & Strauss, 1967; Hennink et al., 2017). Trustworthiness was ensured through triangulation, peer debriefing, member checking, reflexivity, and prolonged engagement (Lincoln & Guba, 1985; Birt et al., 2016; Nowell et al., 2017).

Data Analysis and Coding

Phase 1: Initial Coding

All interviews, focus group discussions (FGDs), and program documents were imported into NVivo 12 and independently

coded by two researchers to ensure inter-coder reliability (Campbell et al., 2013). Coding focused on key constructs related to EO and skills development within the context of the NEP. Specifically, codes captured:

- Entrepreneurial orientation: Opportunity recognition, creativity, proactiveness, risk-taking, and social impact orientation.
- Skills acquisition: Business planning, financial management, marketing, operational strategies, and stakeholder engagement.

Preliminary codes were iteratively refined to identify patterns across participants, venture types, and institutional contexts. This phase ensured that both individual perspectives and organizational factors were captured, reflecting how students operationalize EO traits in socially responsible entrepreneurial practices.

Phase 2: Deepening and Validation

In the second phase, themes were refined through memoing, team discussions, and alignment with SET principles (Ebrashi, 2013; Mair & Martí, 2006). The analysis distinguished between cognitive aspects of EO, including mindset and opportunity recognition, and behavioral elements, such as practical application of entrepreneurial skills and socially responsible actions.

To enhance credibility, dependability, and confirmability, member checking, peer debriefing, and prolonged engagement with participants and program documents were employed (Lincoln & Guba, 1985; Birt et al., 2016). This process ensured that the coding captured both the development of EO traits among students and their integration with NEP's training and SET-aligned social entrepreneurship practices.

Thematic Synthesis and SET Alignment

In the final phase, data were synthesized and mapped onto SET principles to examine how NEP fosters social entrepreneurship and aligns students' EO with social responsibility. Analytical focus included:

- Economic outcomes: Financial viability, business planning, and venture sustainability.
- Social outcomes: Social value creation, empowerment, and community impact.
- Ethical and environmental outcomes: Responsible practices and sustainability awareness.

Table 4. Themes, Sub-Themes, SET Alignment, and Examples

| Theme | Sub-theme | Description | SET Alignment | Example from Data |
|-------------------------|--------------------------|---|------------------------|--|
| Entrepreneurial Mindset | Opportunity Recognition | Students identify business opportunities | Economic & Social | "I noticed a gap in local food delivery services and planned a tech-based solution." |
| Skill Development | Business Planning | Creation of operational and financial plans | Economic | "Developing the budget helped me understand profit margins." |
| Social Responsibility | Community Impact | Ventures create value for the community | Social & Environmental | "Our eco-friendly packaging benefits both business and environment." |
| Ethical Practices | Sustainability Awareness | Students consider long-term impact | Environmental & Social | "I ensure the farm uses minimal pesticides and recycles waste." |

This synthesis demonstrates that NEP participation cultivates EO traits innovativeness, proactiveness, and risk-taking while embedding SET principles in entrepreneurial practice. Students develop technical, managerial, and strategic competencies while internalizing social and ethical considerations, reflecting integration of economic, social, and environmental outcomes.

Theoretical Integration

The integration of EO, NEP, and SET reveals a dynamic interplay between program components and student development. NEP's comprehensive training, mentorship, and resource support enable students to operationalize EO traits in socially responsible ventures, consistent with SET principles.

For example, innovative thinking allows students to identify unmet social

needs; proactiveness drives early venture initiation; and calculated risk-taking supports decision-making under uncertainty, all while balancing economic sustainability and social impact. This integration highlights that NEP not only strengthens EO traits but aligns them with socially responsible entrepreneurship, ensuring that student ventures contribute meaningfully to society.

Linking Themes to Research Questions

The thematic analysis demonstrates direct alignment between the identified themes and the study's research questions:

- **RQ1:** Themes related to entrepreneurial mindset provide insights into how NEP influences students' EO and cognitive frameworks.
- **RQ2:** Themes on skill development capture the acquisition of practical competencies, enhancement of venture capabilities, and application of entrepreneurial skills.
- **RQ3:** Themes encompassing social responsibility and ethical practices reveal how NEP fosters socially responsible behaviors, integrates SET principles, and promotes ventures generating economic and social value.

This linkage illustrates the coherence between NEP activities, EO dimensions, SET principles, and student development, reinforcing methodological rigor and ensuring that findings are directly connected to the research objectives.

This study employed a rigorous, theory-driven qualitative multiple-embedded case design to examine how NEP—an innovative social business initiative—shapes university students' EO and socially responsible business practices. Data were collected longitudinally through semi-structured interviews, focus group discussions, and document analysis, with methodological triangulation ensuring credibility, dependability, and confirmability (Lincoln & Guba, 1985; Nowell et al., 2017). Coding and thematic analysis were systematically aligned with SET to capture both cognitive (mindset) and behavioral (practical) aspects of EO. This approach demonstrates how NEP cultivates EO traits—innovativeness, proactiveness, and risk-taking—within a social business context, providing a robust foundation for understanding students' entrepreneurial mindset, skill development, and socially responsible practices. The empirical results in Section 5.1 illustrate these effects in detail.

New Entrepreneurs (Ne) Program

The New Entrepreneurs Program (NEP) is an innovative social business initiative launched by Grameen Bank under the leadership of Nobel laureate Professor Muhammad Yunus to address socio-economic challenges such as poverty and unemployment by promoting entrepreneurship (Khashru & Lin, 2019; Yunus, 2010). Initially launched in 2001 as the “Nobin Uddokta” (New Entrepreneurs) Program, it targeted Grameen Bank members and their families, offering entrepreneurship as an alternative to traditional employment.

Since 2013, the program has been supported by the Yunus Center in Dhaka, Bangladesh, in collaboration with the Grameen Social Business Fund (GSBF). NEP provides participants, including university students, with structured training, mentorship, business incubation, and access to funding, enabling the development of ventures that are both economically viable and socially responsible (Khashru et al., 2021; Yunus et al., 2010). Guided by Social Entrepreneurship Theory (SET), the program fosters key Entrepreneurial Orientation (EO) traits, innovativeness, proactiveness, and risk-taking while embedding social responsibility into entrepreneurial practice (Lumpkin & Dess, 1996). Through experiential learning and

support, students acquire essential skills, including business planning, management, financial management, and marketing, equipping them to launch ventures that create both economic and social value (Khashru & Lin, 2019).

Despite its success, empirical research on NEP's impact on university students' EO, skill development, and career aspirations remains limited. In particular, how participation integrates EO traits with socially responsible practices is underexplored. This study addresses this gap by examining NEP's influence on students' entrepreneurial mindset, capabilities, and social impact orientation. Future enhancements, such as sector diversification and strengthened support systems, are essential to scale the program sustainably while maintaining its focus on socially responsible entrepreneurship (Khashru & Lin, 2019; Yunus et al., 2010).

Empirical Results And Discussion

Qualitative interviews with NEP participants at CJCU and NPSTU indicate that the program effectively cultivates key EO traits—innovativeness, proactiveness, and risk-taking—among university students (Lumpkin & Dess, 1996; Khashru & Han, 2023). These traits enable participants to design ventures that are financially viable while generating meaningful social impact,

consistent with SET (Ebrashi, 2013; Mair & Martí, 2006).

The NEP's combination of structured mentorship, business incubation, and access to funding bridges academic learning with practical entrepreneurship (Khashru et al., 2025; Khashru & Lin, 2019). This integrated approach equips students to identify opportunities, develop innovative solutions, take calculated risks, and embed social objectives within their ventures. Findings demonstrate that EO traits and SET principles mutually reinforce each other, fostering outcomes that are both economically sustainable and socially transformative (Pless, 2012; Ahmed et al., 2021).

These results underscore the importance of university-led programs in fostering socially responsible entrepreneurs (Khashru et al., 2021; Ridder, 2017). By integrating EO and SET frameworks into entrepreneurship education, NEP equips students with the mindset, skills, and ethical orientation necessary to pursue ventures that are sustainable, socially conscious, and capable of long-term impact (Yunus, 2010; Slaper & Hall, 2011).

New Entrepreneurs Program (NEP)

The New Entrepreneurs Program (NEP) is designed to cultivate university students' entrepreneurial mindset, skills, and

career aspirations through a combination of comprehensive training, mentorship, and financial support. Longitudinal, multi-method data collected from semi-structured interviews, focus group discussions (FGDs), and program documents (July–September 2022; January–June 2023; July–September 2023) indicate that participation in NEP consistently strengthens students' Entrepreneurial Orientation (EO) traits while operationalizing Social Entrepreneurship Theory (SET) principles. The program promotes ventures that integrate economic, social, and environmental objectives. The following subsections detail how NEP fosters each EO dimension in practice.

Comprehensive Training

The NEP provides comprehensive training that equips university students with the mindset, skills, and strategies needed to develop socially responsible and economically viable ventures. This component operationalizes EO traits—innovativeness, proactiveness, and risk-taking—while reflecting SET principles of creating sustainable social value.

Theme 1: Clarifying Entrepreneurial Intentions and Career Goals

Training helped students clarify their entrepreneurial goals and transform intentions into actionable business plans:

“Entrepreneurial intentions are central to starting a business. The NEP helps us clarify our goals and turn our ideas into viable business plans.” — C-5; C-25; C-27; C-31; C- 52; C-55

Mentors reinforced this process by linking mindset development with practical, career- oriented skills:

“Supporting participants in defining and pursuing their entrepreneurial intentions is key. NEP provides the mentorship and tools needed to crystallize these intentions into successful ventures.” — Mentor

This approach enables university students to translate entrepreneurial intentions into concrete plans, fostering EO proactiveness and supporting SET’s goal of creating social impact.

Theme 2: Translating EO Traits into Practical Skills

Experiential exercises and problem-based learning enabled students to apply EO traits in real-world contexts, aligning ventures with market demands and social needs:

“Having a clear entrepreneurial intention is the first step. NEP focuses on helping us set specific goals and develop plans that align with our business aspirations.” — C-31

This approach operationalizes EO traits—innovativeness, proactiveness, and

risk- taking—into practical skills while encouraging ventures that generate social value, consistent with SET.

Theme 3: Fostering Socially Responsible Entrepreneurship

Students were motivated to design ventures that balance financial viability with social and environmental benefits: “NEP encourages us to think beyond profits and design ventures that benefit our community while remaining sustainable.” — C-52

This approach develops students’ awareness of social and environmental responsibility, fostering sustainable entrepreneurship aligned with EO and supporting SET principles of long-term social value creation.

Mentorship

The NEP provides mentorship to university students, offering personalized guidance and support that strengthens entrepreneurial skills, aligns career goals with venture strategies, and fosters socially responsible entrepreneurship. This component operationalizes EO traits—proactiveness, risk-taking, and innovativeness—while reflecting SET principles of sustainable social impact.

Theme 1: Personalized Guidance and Skill Development

Mentors provided tailored advice that refined students' strategies and helped develop essential entrepreneurial skills:

"Mentorship is crucial for guiding new entrepreneurs. NEP provides us with the journey." — C-14; C-17; C-37

This approach enhances university students' strategic thinking and practical skill development, supporting EO proactiveness and risk-taking while fostering SET-aligned social value creation.

Theme 2: Aligning Mentorship with Career Goals

Mentorship guided students in aligning entrepreneurial intentions with actionable strategies:

"Coordinating mentorship involves understanding participants' needs and matching them with mentors who can provide relevant support. NEP excels in this by aligning mentorship with individual entrepreneurial goals." — Program Coordinator.

This approach ensures that students' ventures are goal-oriented and strategically planned, reflecting EO-informed decision-making and SET-based social impact objectives.

Theme 3: Promoting Social and Environmental Responsibility

Mentors encouraged students to integrate social and environmental considerations into their ventures:

"Mentors guide us to think beyond profits and design ventures that benefit our *community while remaining sustainable.*" — C-37

This approach cultivates university students' awareness of social and environmental responsibility, supporting sustainable entrepreneurship in line with EO innovativeness and proactiveness and SET principles.

Financial Support

The NEP encourages universities to provide financial support to graduates who aim to launch ventures in their home countries. This support enables venture initiation, growth, and sustainable operation. Funding is complemented by guidance on financial management and alignment with entrepreneurial goals. This component operationalizes EO traits—risk-taking, proactiveness, and innovativeness—while supporting SET principles of socially responsible and sustainable value creation.

Theme 1: Enabling Venture Launch and Growth

Financial support helps graduates overcome funding barriers and implement their business ideas:

“Access to financial support through NEP has been instrumental in turning our business ideas into reality. It provides the necessary capital to start and grow our ventures.” — C-12; C-15; C-19; C-22; C-24; C-28; C-33; C-35; C-39.

This approach empowers graduates to take calculated risks and operationalize business plans, supporting EO risk-taking and proactiveness and fostering SET-aligned social and economic impact.

Theme 2: Guidance in Financial Management

Mentors provide guidance on budgeting, resource allocation, and investment decisions:

“Financial support is more than just funding; it’s about using it wisely. NEP mentors guide us on how to manage and utilize financial resources to maximize our impact.” — NEP Mentor

This approach develops graduates’ financial management skills, enabling responsible resource use while promoting EO-informed decision-making and sustainable outcomes in line with SET principles.

Theme 3: Tailoring Support to Entrepreneurial Goals

Financial resources are aligned with graduates’ venture objectives to maximize impact:

“Coordinating financial support involves assessing participants’ needs and aligning financial resources with entrepreneurial goals, maximizing the impact of the investment.” — Program Coordinator.

This approach ensures that funding directly supports strategic and socially responsible entrepreneurship, thereby reinforcing the EO goal orientation and SET-based societal value creation.

Theme 4: Promoting Socially Responsible Entrepreneurship

Support enables graduates to design ventures that balance economic viability with social and environmental responsibility:

“Financial resources empower us to not only grow our business but also create ventures that benefit our community and environment.” — C-28

This approach strengthens graduates’ awareness of social responsibility, integrating EO innovativeness and proactiveness with SET’s goal of sustainable social impact.

The findings indicate that comprehensive training, mentorship, and financial support work synergistically to

enhance university students' entrepreneurial mindset, practical skills, and career aspirations (Khashru & Lin, 2019; Khashru et al., 2021; Lumpkin & Dess, 1996). Training clarifies entrepreneurial intentions and translates EO traits—innovativeness, proactiveness, and risk-taking—into actionable skills, enabling students to design ventures that address both market opportunities and social needs (Khashru & Han, 2023; Kamal Hossain et al., 2022; Patton, 2015). Mentorship provides personalized guidance, aligns strategies with career goals, and reinforces social and environmental responsibility. Financial support facilitates venture launch and growth, complemented by practical guidance in resource management (Ebrashi, 2013; Yunus et al., 2010; Ahmed et al., 2021).

These NEP components operationalize EO and SET principles, equipping university students to develop ventures that integrate economic viability with meaningful social and environmental impact, thereby fostering sustainable and socially responsible entrepreneurship (Mair & Martí, 2006; Slaper & Hall, 2011; Pless, 2012).

Entrepreneurial Orientation (EO) Dimensions

The NEP is designed to cultivate university students' entrepreneurial

orientation, with a focus on innovativeness, risk-taking, and proactiveness. Analysis of multi-method data, including semi-structured interviews and focus group discussions (FGDs), indicates that NEP equips participants with the mindset and skills necessary to develop ventures that generate both economic and social value. This approach aligns with the dimensions of EO and the principles of SET, supporting ventures that achieve sustained social and economic impact. The following subsections illustrate how NEP fosters each EO dimension in practice.

Innovativeness

Innovativeness is a central dimension of EO, reflecting the ability to generate novel ideas and identify opportunities. Within the NEP, university students are encouraged to apply creative problem-solving to address social and economic challenges through comprehensive training, mentorship, and experiential learning. This approach not only strengthens individual entrepreneurial capacity but also aligns with SET, emphasizing ventures that generate sustainable social and economic value. The following themes illustrate how NEP participation fosters innovativeness among students in practice.

Theme 1: Enhancing Creativity and Opportunity Recognition

Students reported that comprehensive training enhanced their ability to generate novel ideas and recognize entrepreneurial opportunities:

“NEP helped me think creatively about social problems and turn ideas into viable business solutions.” — C-19; C-22.

Mentors and faculty highlighted that experiential learning and collaborative ventures fostered sustained innovativeness:

“Through hands-on projects and mentoring, students learn to prototype and iterate ideas with both economic and social value.” — Mentor.

Academic scholars noted that NEP’s structured integration of social business principles supports long-term innovative capacity:

“NEP uniquely bridges theoretical learning and practical innovation, aligning students’ creative problem-solving with social objectives.” — Academic Scholar.

This approach demonstrates that NEP’s combination of training, mentorship, and collaborative learning effectively enhances university students’ creative problem-solving skills, enabling them to translate innovative ideas into ventures that generate both economic and social value. By

fostering sustained innovativeness, NEP aligns with EO dimensions and SET principles, preparing students to develop ventures with lasting societal impact (Martin et al., 2013; Chenavaz et al., 2023).

Risk-taking

Risk-taking is a key dimension of EO, reflecting the willingness to engage with uncertainty and make strategic decisions under conditions of ambiguity. The NEP encourages university students to develop calculated risk-taking skills through experiential exercises, simulations, and mentorship. This approach not only strengthens students’ confidence in decision-making but also aligns with SET by promoting ventures that pursue socially responsible outcomes while navigating uncertainty. The following themes illustrate how NEP fosters risk-taking among participants.

Theme 1: Calculated Risk Engagement

Participants emphasized that NEP encouraged calculated risk-taking in uncertain situations:

“I learned to assess risks carefully before implementing my ideas, balancing potential rewards with social impact.” — C-10; C-15; C-26; C-36

Mentors and faculty reinforced this observation:

“Workshops and simulations allow students to experience uncertainty safely, fostering their confidence to take entrepreneurial risks.” — Faculty.

Academic scholars noted that combining practical experience with mentoring strengthens students’ ability to make decisions that maximize societal benefit:

“Experiential approaches in NEP enhance students’ willingness to take informed risks while pursuing socially responsible ventures.” — Academic Scholar.

This approach demonstrates that NEP’s structured risk management activities enable university students to confront uncertainty in controlled settings, promoting informed decision-making. By integrating experiential exercises and mentoring, NEP operationalizes EO risk-taking while fostering ventures that align with SET principles, supporting both economic viability and social impact (Bae et al., 2014; Oosterbeek et al., 2010).

Proactiveness

Proactiveness is a critical dimension of EO, reflecting the ability to anticipate opportunities, act early, and initiate ventures ahead of others. The NEP fosters proactiveness among university students through experiential learning, field projects, and mentorship, encouraging them to

identify unmet social needs and implement solutions proactively. This approach aligns with SET, supporting ventures that generate sustained social and economic value. The following themes illustrate how NEP cultivates proactive behaviors in participants.

Theme 1: Anticipating Opportunities and Acting Early

NEP participants demonstrated proactive behaviors, identifying unmet social needs and initiating ventures ahead of peers:

“NEP motivated me to act early, design solutions, and implement projects that make a real difference.” C-28; C-33; C-35; C-39

Mentors and faculty emphasized that field projects and collaborative learning strengthened anticipatory skills:

“Students learn to anticipate challenges, take early action, and integrate social value into their ventures.” — Mentor.

Academic scholars confirmed that fostering proactiveness aligns with SET principles and positively influences career choices:

“Proactive tendencies nurtured through NEP have long-term effects on students’ entrepreneurial engagement and societal impact.” — Academic Scholar.

This approach demonstrates that NEP's integration of anticipatory skills into project-based learning enables university students to act decisively and responsibly in uncertain contexts. By fostering proactiveness, NEP operationalizes EO traits while reinforcing SET principles, preparing students to launch ventures that generate both economic and social value (El Ebrashi, 2013; Do Adro et al., 2021).

These findings demonstrate that NEP effectively operationalizes EO and SET principles, equipping university students to develop ventures that integrate economic viability with social and environmental impact. The program fosters sustained innovativeness, calculated risk-taking, and proactive behaviors, supporting long-term socially responsible entrepreneurship and career development. NEP participants not only acquire entrepreneurial skills but also show the potential for these behaviors to persist beyond the program, confirming the efficacy of integrating experiential learning, mentorship, and financial support in higher education entrepreneurship initiatives (Khashru & Lin, 2019; Lumpkin & Dess, 1996; Mair & Martí, 2006; Santos, 2012).

Entrepreneurial Capacity

Mindset

The entrepreneurial mindset is a core dimension of university students'

entrepreneurial capacity and a central focus of the NEP, encompassing opportunity recognition and creativity & adaptability. Longitudinal, multi-method data collected between July and September 2022, January and June 2023, and July and September 2023—including interviews, focus groups, observations, and document analysis—indicate that NEP participation strengthens EO traits, enhances skill acquisition, and promotes socially responsible practices. This section illustrates how NEP cultivates students' entrepreneurial mindset, highlighting its influence on EO dimensions, including opportunity recognition and creativity & adaptability. Participants included NEP students, academic scholars, mentors, program coordinators, and university administrative staff.

Opportunity Recognition

Opportunity recognition enables students to identify and capitalize on market gaps while addressing social needs. NEP participants reported that the program sharpened their ability to perceive challenges as opportunities:

“The NEP has helped me see opportunities where others see problems. It's about looking beyond the obvious and finding value where others haven't.” — C-7; C-9; C-10; C-12; C-23.

Mentors and academic scholars emphasized that creativity and strategic thinking are essential for identifying opportunities:

“Identifying opportunities is about being creative and thinking strategically. The NEP gives us the tools to do both.” — C-15; C-27.

This approach demonstrates that NEP strengthens opportunity recognition (EO) while embedding social objectives (SET), equipping university students to develop ventures that balance profit with social impact and supporting their future-oriented entrepreneurial aspirations (Ebrashi, 2013; Mair & Martí, 2006; Yunus et al., 2010).

Creativity and Adaptability

Creativity and adaptability are essential dimensions of university students' entrepreneurial mindset and critical for navigating uncertainty and innovating solutions. Participants highlighted that NEP's experiential learning was central to developing these traits:

“Entrepreneurship is unpredictable, and you have to be adaptable to navigate uncertainties. The NEP has taught us to embrace change and pivot when necessary.” — C-19; C-28; C-32; C-40

“Creativity allows us to generate new ideas, while adaptability enables us to refine those ideas based on feedback and changing circumstances.” — C-22; C-31

Mentors emphasized applying creativity and adaptability to ventures that generate social and economic value:

“Creativity and adaptability are vital for designing ventures that meet both economic and social objectives. NEP encourages students to integrate these traits with a social mission.” — Mentor

This approach shows that the NEP cultivates creativity and adaptability among university students, reinforcing EO traits and guiding them to address social challenges in line with SET principles. As a result, students are prepared to design ventures that are economically viable, socially responsible, and aligned with their entrepreneurial career aspirations (Ebrashi, 2013; Mair & Martí, 2006; Lumpkin & Dess, 1996; Khashru & Lin, 2019).

This discussion demonstrates that the NEP cultivates a transformative entrepreneurial mindset by enhancing university students' opportunity recognition, creativity, and adaptability. These EO traits, embedded within SET principles, enable students to identify challenges as opportunities, develop innovative and sustainable solutions, and remain resilient in

uncertain contexts (Lumpkin & Dess, 1996; El Ebrashi, 2013; Mair & Martí, 2006; Yunus & Moingeon, 2010). Consequently, NEP equips students not only to create ventures that balance economic viability with social and environmental responsibility but also to envision themselves as future entrepreneurs committed to long-term social change (Ahmed et al., 2021; Khashru & Lin, 2019; Khashru et al., 2025).

Skills

The NEP develops practical entrepreneurial skills for university students, encompassing business planning, management, financial management, and marketing & networking. These skills translate EO traits—innovativeness, risk-taking, and proactiveness—into actionable competencies while fostering socially responsible practices in alignment with SET principles. By cultivating these skills, NEP equips students to design and manage ventures that generate both economic and social value, supporting long-term entrepreneurial engagement and societal impact.

Business Planning

The NEP develops practical entrepreneurial skills encompassing business planning, management skills, financial management, and marketing & networking, translating EO traits into

actionable competencies while fostering socially responsible practices. Participants included NEP students, academic scholars, mentors, program coordinators, faculty, and administrative staff. The following subsections illustrate how the NEP cultivates these skills in alignment with EO dimensions and SET principles.

Participants emphasized structured business planning as foundational to venture success:

"Effective business planning is crucial for the success of any venture. The NEP has provided us with a systematic approach to develop detailed plans that guide our business journey." —C-3, C-8, C-18, C-21.

"Business planning is not just about theory; it's about creating a practical and flexible plan that can adapt to changing circumstances." —C-26

Mentors and program coordinators highlighted that guiding students through structured planning strengthens their strategic decision-making:

"Business planning training equips students to design ventures that are both profitable and socially responsible, applying practical skills to real-world challenges." — Mentor.

This approach demonstrates that NEP strengthens business planning skills (EO) while embedding social objectives (SET), enabling students to develop ventures

that are strategically sound, socially impactful, and aligned with long-term entrepreneurial aspirations (Khashru & Lin, 2019).

Management Skills

Management skills equip students to organize and lead ventures effectively. Participants highlighted hands-on practice as essential:

"Effective management is vital for the success of any business. The NEP provides us with essential tools and techniques to manage our ventures effectively." — Student C- 2, C-4, C-16

"Management skills are not just about theory; they are about applying what we learn to real-life situations. The NEP helps us practice these skills through hands-on experience." —C-20

'Academic scholars, mentors, and program coordinators emphasized that management skill development ensures alignment of operational execution with social goals:

"Through NEP mentorship, students learn to manage resources efficiently, lead teams, and integrate social impact into daily operations." — Program Coordinator

This approach develops management skills (EO) that align with SET, enabling

students to lead ventures that achieve both economic success and social impact.

Financial Management

Financial management enables students to allocate resources effectively, mitigate risk, and ensure venture sustainability:

"Understanding budgeting, investment, and cash flow is critical. NEP provides guidance that helps us use financial resources responsibly and strategically." —C-12, C-22

Mentors reinforced the importance of responsible financial practices:

"Financial management training equips students to make informed decisions, balancing profitability with social objectives." — Mentor

This approach strengthens students' financial management skills (EO) while promoting SET-aligned social responsibility, supporting ventures that are economically viable and socially conscious.

Marketing & Networking

Marketing and networking skills enable students to identify target markets, build partnerships, and enhance venture visibility:

"NEP taught us how to reach our audience and create meaningful connections that

support business growth and community impact." —C-5, C-28

Faculty and program coordinators highlighted that collaborative learning and networking activities foster strategic relationships that extend social impact:

"Marketing and networking exercises encourage students to engage stakeholders, align ventures with community needs, and scale impact responsibly." — Academic Scholar.

This approach cultivates marketing and networking competencies (EO) while embedding SET principles, helping students build ventures that are both economically and socially sustainable.

The findings indicate that NEP develops university students' entrepreneurial skills by translating EO traits—innovativeness, proactiveness, and risk-taking—into actionable competencies while integrating SET principles. Through structured training, experiential learning, mentorship, and guidance, students acquire practical skills in business planning, management, financial management, and marketing & networking, enabling them to design and operate ventures that are economically viable, socially responsible, and aligned with long-term entrepreneurial aspirations.

Social Responsibility Orientation

Social responsibility orientation is a central dimension of university students' entrepreneurial capacity, encompassing alignment with community social mission, stakeholder engagement, impact measurement, and immediate outcomes such as learning, skill application, and social responsibility awareness. The NEP emphasizes ventures that achieve both economic success and positive social impact. Longitudinal, multi-method data collected between July and September 2022, January and June 2023, and July and September 2023—through interviews, focus groups, observations, and document analysis—indicate that NEP participants, mentors, program coordinators, faculty, and academic scholars developed a stronger orientation toward social responsibility. This discussion illustrates how NEP cultivates students' social responsibility orientation, integrating EO traits with SET principles (Patton, 2015; Yin, 2014; Denzin & Lincoln, 1998).

Alignment with Community Social Mission

Aligning ventures with a social mission ensures that entrepreneurial activities contribute to societal well-being while achieving business objectives. NEP emphasizes integrating social missions into business models, guiding students to

develop ventures with broader social objectives:

"Aligning our business with a social mission ensures that our ventures contribute positively to society while achieving business success." — Participants (C-41; C-44; C- 45)

Mentors, program coordinators, and faculty reinforced the importance of embedding social objectives within entrepreneurial strategies:

"The NEP helps students ensure that their business practices reflect social objectives, balancing profitability with societal impact." — Mentor.

This approach demonstrates that by embedding SET principles within EO traits—such as strategic planning, proactiveness, and innovativeness—NEP equips students to design ventures that address societal challenges while maintaining economic viability (Ebrashi, 2013; Mair & Martí, 2006).

Stakeholder Engagement

Effective stakeholder engagement is vital for sustaining social ventures and ensuring responsiveness to community needs. NEP trains university students to identify, involve, and collaborate with key stakeholders, fostering partnerships that support mutual benefit:

"Stakeholder engagement is crucial for ensuring that our ventures have a lasting impact. NEP teaches us to involve those affected by our business decisions." — Participants (C-8; C-10; C-16)

Mentors, program coordinators, and faculty emphasized co-creation and relationship-building:

"Successful ventures are built on strong relationships with stakeholders. NEP helps students develop strategies for collaboration that enhance both social and economic outcomes." — Mentor

This approach develops EO traits such as opportunity recognition, networking, and strategic decision-making, while embedding SET principles focused on the co-creation of social value (Slaper & Hall, 2011; Pless, 2012). NEP equips students to design ventures that are both economically viable and socially impactful, thereby strengthening long-term entrepreneurial effectiveness and community engagement.

Measurement and Evaluation

Tracking both social and financial outcomes is crucial for evaluating the impact of a venture. NEP trains university students to implement measurement and evaluation systems, enhancing accountability, strategic decision-making, and continuous learning:

"Evaluating our social impact helps us understand the effectiveness of our work. NEP shows us how to track progress using relevant metrics." — Participants (C-24; C-34; C-45)

Mentors, program coordinators, and faculty supported students in integrating evaluation practices into venture management:

"Good evaluation practices allow entrepreneurs to track progress and make informed decisions. NEP ensures students can measure both financial and social outcomes." — Mentor

This approach strengthens EO traits such as strategic planning, continuous learning, and adaptability, while embedding SET principles by promoting the assessment of social value creation alongside economic performance. NEP equips students to manage ventures that achieve sustained social impact and economic viability (Khashru et al., 2021; Lumpkin & Dess, 1996).

Immediate Effects: Learning, Skill Application, and Social Responsibility Awareness

NEP participation fosters observable learning outcomes in social responsibility orientation. Participants demonstrated the ability to:

- Apply EO traits—creativity, opportunity recognition, and strategic planning—to ventures with social impact.
- Engage stakeholders effectively, ensuring alignment with community needs.
- Implement evaluation systems to monitor both social and financial outcomes.

"Through NEP, we have learned to integrate social objectives into our business planning and engage stakeholders strategically, ensuring our ventures make a meaningful difference." — Participants (C-41; C-44; C-45)

This approach illustrates how NEP operationalizes EO traits while embedding SET principles, enabling university students to translate entrepreneurial skills into socially responsible actions. By combining experiential learning, mentorship, and structured guidance, NEP equips students to create ventures that achieve economic viability, generate positive social impact, and demonstrate long-term sustainability (El Ebrashi, 2013; Mair & Martí, 2006; Ahmed et al., 2021; Khashru & Han, 2023; Yunus, 2010).

The findings indicate that NEP effectively cultivates students' social responsibility orientation, equipping them to

develop ventures that balance economic viability with positive social impact. By integrating EO traits—such as creativity, opportunity recognition, strategic planning, and proactiveness—with SET principles, NEP enables participants to align their ventures with community social missions, engage stakeholders effectively, and implement robust measurement and evaluation systems. Immediate effects include enhanced learning, skill application, and awareness of social responsibility. Experiential learning, mentorship, and structured guidance collectively support students in applying entrepreneurial skills in socially responsible ways, fostering ventures that are economically sustainable, socially impactful, and positioned for long-term success (El Ebrashi, 2013; Mair & Martí, 2006; Ahmed et al., 2021; Khashru & Han, 2023; Yunus, 2010).

Career Aspiration

Career aspiration within the NEP focuses on university students' intentions to pursue ventures that integrate economic, social, and environmental objectives, encompassing the pursuit of social and ecological goals, sustainable job creation, and long-term societal impact. Longitudinal, multi-method data collected between July and September 2022, January and June 2023, and July and September 2023—including interviews, focus groups,

observations, and document analysis—indicate that NEP participation cultivates students' entrepreneurial intentions, professional goals, and commitment to socially responsible ventures. This section illustrates how NEP shapes students' career-oriented thinking and long-term professional objectives, reflecting the integration of EO traits and SET principles (Patton, 2015; Yin, 2014; Denzin & Lincoln, 1998).

Pursuit of Social and Environmental Goals

NEP encourages students to align their career aspirations with social and environmental objectives, enabling them to design ventures that achieve both economic viability and positive societal impact:

“NEP has inspired me to focus on not just profit, but on how my business can make a positive impact on the community and the environment.” — (C-36; C-39; C-42; C-47; C-49)

Mentors, program coordinators, and academic scholars emphasized embedding social and environmental missions into students' entrepreneurial strategies:

“Entrepreneurship should go hand-in-hand with social responsibility. At NEP, we encourage students to include environmental and social missions in their business plans to make a lasting impact.” — Mentor.

Students reported that integrating social and environmental missions into career planning provides purpose, fulfillment, and long-term societal contribution:

“My goal isn’t just to run a business, but to run a business that makes a difference. NEP showed me how I can integrate social and environmental goals into my work.” — (C-42; C-32; C-36; C-39; C-46; C-48)

This approach demonstrates that NEP operationalizes EO traits—strategic planning, proactiveness, and innovativeness—while embedding SET principles, equipping students to pursue entrepreneurial careers that balance economic success with sustainable social and environmental impact (Ebrashi, 2013; Mair & Martí, 2006; Yunus et al., 2010).

Sustainable Job Creation

Building on the integration of social and environmental goals, NEP emphasizes sustainable job creation, reflecting students’ commitment to economic growth and community development. Students explicitly promised their mentors and program coordinators that they would start ventures that generate meaningful employment in their communities, demonstrating accountability and social commitment.

University students are motivated to prioritize job creation as a central objective of their ventures:

“Creating jobs is not just about building a business; it’s about making a difference in the community by providing employment opportunities.” — (C-26; C-33; C-36; C-50)

Mentors guide students in scaling ventures effectively to achieve tangible employment outcomes:

“Effective job creation requires strategic planning and execution. The NEP equips participants with the knowledge and tools needed to expand their businesses and create jobs.” — Mentor.

Students recognize that job creation aligns with broader economic objectives, enabling ventures to address unemployment and promote local economic development:

“Focusing on job creation helps align our business goals with broader economic needs. NEP teaches us how to build enterprises that contribute to job growth and economic development.” —(C-36)

This focus reflects the integration of SET principles, emphasizing social ventures that address employment needs, and EO traits, highlighting strategic planning, proactiveness, and innovativeness in creating economic opportunities (Shane & Venkataraman, 2000; Mair & Martí, 2006).

NEP equips students to develop ventures that achieve both business success and meaningful contributions to sustainable job creation in their communities (Khashru & Lin, 2019).

Long-term Societal Impact

Long-term societal impact is a cornerstone of sustainable entrepreneurship, emphasizing the creation of enduring social value. The NEP encourages students to adopt a forward-looking perspective, integrating sustainability into venture design and execution:

“Entrepreneurship isn't just about immediate success; it's about making a lasting difference. NEP teaches us to plan for long-term impact and sustainability.” — Students (C-21; C-31; C-43; C-45; C-50; C-51; C-55)

Faculty and university administrative staff reinforce the importance of maintaining a long-term perspective:

“Successful entrepreneurs must plan for the long term. The NEP guides participants in setting long-term goals and creating strategies to achieve them.” — University Administrative Staff.

Program coordinators emphasize embedding long-term objectives into venture planning, ensuring sustainability and measurable societal outcomes:

“Focusing on long-term impact is essential for sustainable entrepreneurship. NEP helps us align our business goals with long-term societal benefits.” — Program Coordinator

This approach demonstrates that NEP operationalizes EO traits—strategic planning, proactiveness, and innovativeness—while embedding SET principles, enabling students to develop ventures that generate lasting economic, social, and environmental value. By fostering both mindset and skills for forward-looking entrepreneurship, NEP prepares students to create ventures capable of achieving enduring societal impact (El Ebrashi, 2013; Lumpkin & Dess, 1996).

The findings indicate that NEP effectively cultivates university students' career aspirations by integrating economic, social, and environmental objectives. Participation in the program inspires students to pursue ventures that balance personal professional goals with meaningful societal impact. Students demonstrate a strong commitment to embedding social and environmental missions into their business plans, reflecting alignment with SET, while employing EO traits such as strategic planning, proactiveness, and innovativeness to achieve these objectives.

NEP students actively prioritize sustainable job creation, recognizing the role

of their ventures in addressing unemployment and promoting local economic development. Mentorship, program guidance, and structured experiential learning enable students to translate EO traits into practical actions that generate economic opportunities while meeting community needs. Furthermore, the program emphasizes long-term societal impact, equipping students with the mindset and skills necessary to develop ventures that deliver enduring economic, social, and environmental benefits.

However, NEP fosters career aspirations that are socially responsible, strategically oriented, and future-focused. By operationalizing EO traits within SET principles, the program prepares students not only to launch successful ventures but also to contribute meaningfully to sustainable social and economic development in their communities (El Ebrashi, 2013; Mair & Martí, 2006; Yunus et al., 2010; Khashru & Lin, 2019).

Theoretical Contribution

This study advances SET by elucidating how university students cultivate EO through participation in the NEP at Chang Jung Christian University and National Pingtung University of Science and Technology, Taiwan (El Ebrashi, 2013; Mair & Martí, 2006). It provides empirical

evidence of how SET's focus on social value creation can be operationalized within a structured educational program that integrates entrepreneurial skills, socially responsible practices, and career-oriented aspirations.

The findings indicate that NEP reinforces key EO dimensions—innovativeness, proactiveness, and risk-taking—while embedding social and environmental objectives (Khashru, 2021; Kamal Hossain et al., 2022). Through comprehensive training, mentorship, and financial support, students translate EO traits into practical competencies, design ventures that balance economic viability with social impact, and develop a socially responsible mindset (Khashru & Lin, 2019; Lumpkin & Dess, 1996; Ahmed et al., 2021).

By highlighting the interplay between EO and SET, this research demonstrates how higher education programs can effectively bridge theoretical learning with applied social business practices. The longitudinal, multi-method design provides robust evidence of students' evolving entrepreneurial capacity, encompassing skill acquisition, opportunity recognition, stakeholder engagement, and alignment with social missions (Patton, 2015; Glaser & Strauss, 1967; Hennink et al., 2017).

Overall, this study extends SET by confirming its relevance in higher education and offering a model for fostering socially responsible entrepreneurial behavior. NEP's mechanisms—training, mentorship, and financial support—illustrate how educational programs can operationalize social entrepreneurship principles, directly addressing the research question regarding the influence of NEP participation on EO, skill development, social responsibility orientation, and career aspirations (Khashru, 2021; Pless, 2012; Slaper & Hall, 2011).

These theoretical contributions provide a foundation for practical and policy implications, guiding universities, educators, and policymakers in designing entrepreneurship programs that promote economic, social, and environmental outcomes, while preparing students to become socially responsible entrepreneurs.

Practical Implications

The findings underscore the value of integrating SET and EO into university-level entrepreneurial education (El Ebrashi, 2013; Mair & Martí, 2006). The NEP at Chang Jung Christian University and National Pingtung University of Science and Technology demonstrates how structured programs can simultaneously cultivate entrepreneurial skills, social responsibility, and career-oriented aspirations among

students (Khashru & Lin, 2019; Khashru, 2021).

For universities, embedding EO traits—such as innovativeness, risk-taking, and proactiveness—into entrepreneurship curricula equips students to navigate the complexities of launching and sustaining ventures (Lumpkin & Dess, 1996; Kamal Hossain et al., 2022; Ahmed et al., 2021). Programs like NEP provide experiential learning opportunities that enable students to translate EO traits into practical competencies, develop socially responsible business models, and pursue ventures that balance economic viability with social impact (Pless, 2012; Slaper & Hall, 2011).

For policymakers, supporting initiatives like NEP through funding, mentorship, and university-industry partnerships enhances the effectiveness of entrepreneurship education (Patton, 2015; Khashru & Han, 2023). Access to resources and structured guidance enables students to create ventures that achieve both economic and social objectives, fostering a generation of socially conscious entrepreneurs capable of addressing pressing community challenges (Yunus, 2010; Ebrashi, 2013).

Limitations and Directions for Future Research

This study has several limitations that warrant consideration. First, the

research focused exclusively on two Taiwanese universities implementing the New Entrepreneurs Program (NEP), which may limit the generalizability of findings to other educational or cultural contexts (Patton, 2015; Hennink et al., 2017). Second, although the longitudinal, multi-method design captured the evolving nature of entrepreneurial orientation (EO) and Social Entrepreneurship Theory (SET) practices over time, the study primarily relied on qualitative data, which may constrain the ability to quantify program impacts on economic, social, and environmental outcomes (Miles et al., 2014; Glaser & Strauss, 1967). Third, participant demographics, including gender, socio-economic background, and prior exposure to entrepreneurship were not experimentally controlled, potentially influencing individual responses and venture outcomes.

Future research could address these limitations by adopting mixed methods approaches that integrate qualitative insights with quantitative measures of social impact, venture performance, and career progression (Ahmed et al., 2021; Slaper & Hall, 2011). Longitudinal studies tracking NEP alumni would provide deeper evidence of sustained skill development, social responsibility orientation, and long-term career trajectories. Comparative studies across diverse countries or cultural contexts could

illuminate factors influencing the effectiveness of EO and SET-based programs, supporting the adaptation of NEP principles to different educational environments.

Additionally, future studies should investigate how demographic factors—including gender, socio-economic status, and prior entrepreneurial experience—affect program outcomes. Such insights would inform the design of inclusive and tailored entrepreneurship programs that maximize both practical skill development and the creation of socially responsible ventures. Addressing these areas will enhance understanding of how structured educational programs like NEP foster entrepreneurial capacities that integrate economic, social, and environmental objectives.

Conclusion

This study highlights the pivotal role of SET in shaping university-level entrepreneurial education, using the NEP at Chang Jung Christian University and National Pingtung University of Science and Technology as a focal case (El Ebrashi, 2013; Mair & Martí, 2006). NEP operationalizes SET by cultivating EO traits—innovativeness, proactiveness, and risk-taking—while embedding social and environmental objectives (Kamal Hossain et al., 2022).

Through comprehensive training, mentorship, and financial support, students translate entrepreneurial knowledge into actionable skills, develop socially responsible mindsets, and design ventures that strike a balance between economic viability and social impact (Khashru & Lin, 2019; Lumpkin & Dess, 1996; Ahmed et al., 2021). The program enhances opportunity recognition, skill acquisition, stakeholder engagement, and alignment with social missions, demonstrating how structured university interventions can foster socially impactful, student-led ventures.

Overall, NEP provides a practical and replicable model for integrating SET principles into higher education. By bridging theory with experiential learning, it equips students to launch ventures that promote both economic and societal well-being, underscoring the potential for similar programs to cultivate socially responsible entrepreneurship across diverse educational contexts (Pless, 2012; Slaper & Hall, 2011).

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Promoting Mental Health Stability for Victims of Cyberbullying Through a Service-Learning Methodology

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Abstract

Cyberbullying is the action of causing harm, humiliation, fear, and despair in the victims. It is behavior that occurs repeatedly and systematically against someone who is unable to defend themselves, and until what is said by the victim is proven, contact with the victimizer is inevitable, since it virtually lends itself to be an omnipresent situation. The objective of this social business proposal is to improve self-esteem and self-concept through actions focused on improving the mental health of the young female community. This social business is of a qualitative type, under a learning and service methodology, with the Social Business, Empathy, and Active Compassion approach. What is expected is the creation of an association that promotes not only the eradication of cyberbullying but also the empowerment of women through the development of self-esteem and self-concept, benefiting mental health through specific and personalized services. It is considered that social businesses of this type, in addition to promoting social and economic development, encourage society to strengthen values such as resilience, dignity, and empathy. In addition to fostering stronger and more peaceful ties between communities.

Keywords: *Cyberbullying, businesses, virtuality, victims, mental health*

Abstrak

Buli siber ialah tindakan yang menyebabkan kemudaratan, penghinaan, ketakutan, dan berputus asa terhadap mangsa. Ia merupakan tingkah laku yang berlaku secara berulang dan sistematik terhadap individu yang tidak mampu mempertahankan diri. Selagi kenyataan mangsa belum dibuktikan, hubungan dengan pembuli tidak dapat dielakkan, kerana dalam ruang maya, interaksi ini bersifat hampir sentiasa hadir dan sukar diputuskan.

Objektif cadangan perniagaan sosial ini ialah untuk meningkatkan harga diri dan konsep kendiri dengan melaksanakan tindakan yang memberi tumpuan kepada penambahbaikan kesihatan mental dalam kalangan wanita muda di komuniti. Perniagaan sosial ini bersifat kualitatif dan beroperasi berdasarkan kaedah pembelajaran melalui perkhidmatan, dengan penekanan kepada pendekatan Perniagaan Sosial, Empati, dan Belas Kasihan Aktif.

Hasil yang diharapkan ialah penubuhan sebuah pertubuhan yang bukan sahaja mempromosikan pembasmian buli siber, tetapi juga memperkasa wanita melalui pembangunan harga diri dan konsep kendiri, sekali gus memperkuuh kesihatan mental melalui perkhidmatan khusus dan secara peribadi. Perniagaan sosial seperti ini bukan sahaja menggalakkan pembangunan sosial dan ekonomi, malah mendorong masyarakat memperkuuh nilai-nilai seperti ketahanan diri, maruah, dan empati, serta memupuk hubungan yang lebih kukuh dan harmoni antara komuniti

Introduction

Research on bullying began in the seventies of the twentieth century (Olweus, 1978) and since then has continued to grow, supported by different theoretical perspectives, bullying can be defined as a phenomenon of intentional aggression by one or more schoolchildren against another or others, repeatedly and over time, in which there is an imbalance of power between the aggressor and the victim, in this case the victim (Olweus, 1993). An ethical dimension is also recognized in this phenomenon, where bullying is considered a moral transgression, acknowledged by the aggressor and direct observers as unfair behavior (Ortega-Ruiz et al., 2016). Bullying and cyberbullying are currently considered public health problems (Craig et al., 2009) and a serious threat to the

development, well-being, and mental health of school children and adolescents (Currie et al., 2012; Tippett & Dieter, 2014). Numerous studies have shown that its occurrence is associated with social and psychological maladjustment, isolation, low self-esteem, depression, anxiety, anger, truancy, and poor academic performance.

Research Methods

In the present project, being of an educational nature, aimed at adolescents and young people, through a service that sought to meet a need found in this niche of the population, it was considered that the appropriate methodology to work with is service learning (APS). For Puig, Batlle, Bosch, and Palos (2011), APS is a methodology oriented to education for citizenship, inspired by active pedagogies, being compatible with other educational

strategies, in which participants are trained by getting involved in the real needs of the environment in order to improve it. This methodology allows taking advantage of all the resources that life offers and that eventually will help to reach, with greater ease, the established goals since it gives clear and rational guidelines for behavior. In addition to organizational, planning, and decision-making strategies that were useful and brought benefits, such as analysis, planning, organization, choice, and decision-making, that could be applied to improve all areas of the project. The service-learning process has been reflected in the institutions more; however, the provision of a social service achieves a great dynamism, achieving greater awareness of the understanding of content in a very practical way for society, where the methodology forms people, where awareness, respect, and dedication to the subject is a practical service to society (Chiva-Bartoll et al., 2018).

Some of the blunt challenges that the methodology would have would be to begin to consider the acquisition of new knowledge, as many people in the community or ethnicities may have their ideologies well entrenched, more importantly, realizing the personal development that they acquire, and the empathetic participation they gain. It structures the methodology at a high level of

organization, and this is considered for the needs of the community, thus deriving a high level of civic responsibility; deep reflection of the lived experience, for all participants (Rubio & Escofet, 2018). The program to be implemented offers a training and coaching model for female participants aged 12 to 25 years, in order to support, guide, and share with them topics associated with cyberbullying, as well as prevention, during and after having gone through the identified social problem. With this, it is intended to undertake the social business; in addition, they will be trained through the methodology described above.

Analysis of Results

During the master's degree in social business we were asked to comply with certain hours of intervention stays which are truly rewarding and of great value from this comes the recovery of the experience that was truly rewarding in the first instance we collaborated with a foundation in Tijuana Baja California in which different topics that they requested were presented since they were working on a specific program and wanted to complement it that program was inclined in cybersecurity for all girls, I had the opportunity to share with the girls between the ages of 15 and 16, likewise the parents were present and the teachers of the group in charge, first hand we had a response that even the parents commented that in

other times cyberbullying had no name and that it happened to them from time to time, some cried and others laughed, of the most touching sessions, they were so satisfied and the mother-daughter bond was so close that the session seemed to have been 5 minutes. In the satisfaction surveys at the end of the three months of practice, of the 15 girls in the group, all 15 commented that they would take the workshops, conferences, and the retreat again. The whole session was online, and it was so emotional, and we connected in the same way. Two cases of cyberbullying were detected, and all the girls concluded that what they liked the most was the part about loving themselves or looking for something good in them that made them shine.

Anonymous testimony 17 years old:
They made us feel confident from the first moment, and to love myself as I am."

In the second intervention, the dynamics were very different since we participated in different conferences at a university in Ciudad Obregón, and the ages of attention were mainly between 20 and 23 years old.

In the same way, the teachers of the area and all those involved in the different events of the university were satisfied with the values instilled, and the education that provided them with the social and emotional skills

necessary to help young people develop the resilience necessary to cope with the issue or to be able to make it known.

Research on bullying began in the seventies of the twentieth century (Olweus, 1978) and since then has continued to grow, supported by different theoretical perspectives, bullying can be defined as a phenomenon of intentional aggression by one or more schoolchildren against another or others, repeatedly and over time, in which there is an imbalance of power between the aggressor and the victim, in this case the victim (Olweus, 1993).

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The excessive and uncontrolled use of social networks since this century has triggered serious problems of cyberbullying globally and nationally, mainly in young adolescents and even more in women aged 12 and older, altering their mental health. Despite the existence of legal regulatory frameworks for digital violence, such as the Olimpia Law, there are quite a few cases that fail to achieve justice, since the virtuality and social networks make it easy to hide the identity of the aggressor and continue attacking.

In Mexico, since 2017 the percentage of cyberbullying has been higher for women than for men, being in this year 23.5% of the female population that received some type of cyberbullying, increasing in 2019 to 24.2%, and, although in 2020 it decreased to 20.6%, the victims increased to 22.8% in the year 2021, being the equivalent of 9.7 million women this last year, maintaining a greater number of female victims than male victims these four years in cyberbullying (Figure 1).

In addition, regarding the forms of cyberbullying received in 2019 by women, 40.3% received sexual advances or proposals, 35.3% were contacted through false identities, and 23.7% were provoked to react negatively, compared to the same situation with men, that was more number of women received these forms of cyberbullying (Figure 2).

On the other hand, it is noteworthy that the measures to be taken were as follows: 69.2% of women aged 12 years and older who used the Internet in 2019 and were victims of cyberbullying took the action of blocking people, accounts, or pages. 26.6% of women preferred to ignore or not answer harassment aggressions (Figure 3). In 2021, 16.5% of women decided to ignore messages, and 71.5% chose to block users (Figure 4).

Also, INEGI (2021) shows that 71.5% of women aged 12 years and older who used the Internet in 2021 and were victims of cyberbullying took the action of blocking people, accounts, or pages. Likewise, 58.2% of the population aged 12 to 17 experienced a situation of cyberbullying by aggressors who were of the same age.

Analyzing the environment of Sonora, in 2020, 98 cases of cyberbullying were registered in Iniciativa Civil Sonora Cibersegura, of which 62% were in minors, i.e., 37 reports to adults and 61 to children. Cases of cyberbullying, fraud, or pedophilia are a clear example. Children are lured by promises, which end up being deceptive, to force them to do something. José Manuel Acosta, director of the Civil Initiative Sonora Cibersegura, reported that during this month of January 2021, 11 cases were reported, of which three victims were

minors, an increase of 83 percent compared to the same month in 2020, where six reports were counted, with two of them to minors (Gonzales, 2021).

The creation of this social business is relevant because there is a wide market niche that needs help in this problem in Mexico and undoubtedly in the northwest of the country, extending gradually and even internationally being viable because of the services offered in this educational space and prevention of cyberbullying and emotional support, as well as the educational aspect that through conferences, workshops and retreats virtually and in person, can serve and cover more women in the way in which they feel more comfortable.

Methods

In the present project, being of an educational nature, aimed at adolescents and young people, through a service that sought to meet a need found in this niche of the population, it was considered that the appropriate methodology to work with is service learning (APS). For Puig, Batlle, Bosch, and Palos (2011), APS is a methodology oriented to education for citizenship, inspired by active pedagogies, being compatible with other educational strategies, in which participants are trained by getting involved in the real needs of the environment in order to improve it. This

methodology allows taking advantage of all the resources that life offers and that eventually will help to reach, with greater ease, the established goals since it gives clear and rational guidelines for behavior. In addition to organizational, planning, and decision-making strategies that were useful and brought benefits, such as analysis, planning, organization, choice, and decision-making, that could be applied to improve all areas of the project.

The service-learning process has been reflected in the institutions more; however, the provision of a social service achieves a great dynamism, achieving greater awareness to the understanding of content in a very practical way for society, where the methodology forms people, where awareness respect and dedication to the subject is a practical service to society (Chiva- Bartoll et al., 2018). Some of the challenges that the methodology would present are to begin considering the acquisition of new knowledge, as many people in the community or ethnicities may have their ideologies well entrenched. More importantly, it involves realizing the personal development that they acquire and the empathetic participation they gain.

It structures the methodology at a high level of organization, and this is considered for the needs of the community, thus deriving a high level of civic responsibility;

deep reflection of the lived experience, for all participants (Rubio & Escofet, 2018). The program to be implemented offers a training and coaching model for female participants aged 12 to 25 years, in order to support, guide, and share with them topics associated with cyberbullying, as well as prevention, during and after having gone through the identified social problem. With this, it is intended to undertake the social business; in addition, they will be trained through the methodology described above.

Results and Discussion

Transcending as a society implies a constant effort from each member. For this, it is important to contribute to the possibilities of each one of us to those around us. "What if I decide to give a click?" tries to generate that small impact through large actions that address the ravages of cyberbullying, attending woman by woman, generating a network that manages to expand more and more, where the community of women feels welcomed, understood, and valued.

This work seeks to provide the basis to be able to take a first step towards its realization. It is important to emphasize the importance of the financial and administrative part to achieve long-term stability in the social business, being able to

maintain this attention to the needs without neglecting the sustainability of the business.

Likewise, the social aspect is fundamental, since it is where the organization's objective lies. As founders, we are aware of maintaining a vision aimed at the welfare of the community, in this case, the welfare of women, whether affected by cyberbullying or simply preventing these consequences. This issue is delicate and difficult to deal with, since we are talking about a problem where the aggressor is invisible and the consequences are just as catastrophic. For this reason, we consider it of great importance not only the level of preparation of our team on issues of cyberbullying, but also the same consideration and attention that we know how to give to the women participants so that they feel welcomed and safe by us at all times.

In the future, it is expected that "What if I decide to click?" will reach a regional and even national positioning, thanks to its personalized and sincere work with the participants, where a change in their self-esteem is truly noticeable, perhaps not in the short term, but in the medium term, understanding the value of constant attention and the details involved in each of the actions carried out, since identifying the different thinking and experience of each woman, and knowing how to work on it, is

what will help us to generate that confidence.

The improvements to be considered are the constant preparation and training of the team in various topics to connect with more women, the adequate analysis and development of the financial plan to keep the organization stable, and the same innovation in the services to generate that attraction that leads to meeting, at the end of the day, that social need.

We trust in a community where wellbeing can prevail, human value, and as a woman is recognized and not surpassed, a community where we can collaborate so that a person affected by cyberbullying can develop her self-esteem and trust in herself again. We rely on all this because in the end we are human beings, where the sense of care and belonging is part of our nature, our work is to reach out to touch that part of the people, both affected and those who are not, so that everyone can recognize their own value, making this problem of today's society weaker and weaker.

Limitation

Lack of financial resources:

Financial sustainability: A social business may face challenges in raising sufficient resources to cover operating costs, as profitability may be limited compared to traditional businesses.

Dependence on donations: There may be a high dependence on donations, grants or government funds, which may jeopardize the stability of the project if these sources of funding are reduced.

Stigma and social perception:

Stigmatization: Youth experiencing cyberbullying may feel ashamed or afraid to seek help, which may limit their participation in programs.

Perception of services: Services offered may be seen as insufficient or unspecialized, which could reduce youth confidence and participation.

Legal and privacy challenges:

Data protection: Working with personal and sensitive information of minors involves a high standard of data protection and legal compliance, which can be costly and complicated to implement.

Legal liability: There are legal risks associated with counseling or intervention, especially if cases are not handled properly.

Difficulties in measuring impact:

Quantification of impact: Measuring the social impact of the project can be complicated, especially when it involves changes in mental health and well-being, which could make it difficult to attract funding and stakeholder support.

Long-term effectiveness: Changes in behavior and mental health can take time, making it difficult to show immediate results.

The journey of creating a social business focused on combating cyberbullying has been both challenging and rewarding. It has provided invaluable insights into the complexities of this modern issue, particularly its impact on young women. As the research indicates, cyberbullying is not merely a fleeting concern but a profound public health issue that affects mental well-being, academic performance, and social adjustment. The insights gleaned from this project emphasize the importance of a multifaceted approach to addressing this issue, one that combines education, support, and community engagement.

The implementation of service-learning (APS) as the primary methodology for this project has proven to be particularly effective. This approach, which emphasizes real-world engagement and community-based learning, has allowed participants to acquire not only theoretical knowledge but also practical skills in combating cyberbullying. The success of the program is evident in the positive feedback from participants, who expressed a renewed sense of self-worth and empowerment. This suggests that the service-learning model not

only meets the educational objectives but also fosters a deeper connection between the participants and the broader community.

One of the primary advantages of this social business model is its ability to adapt to the specific needs of its target demographic. By focusing on young women aged 12 to 25, the program is able to address the unique challenges they face in the digital world. The program's emphasis on personalized support and coaching has been particularly effective in building trust and fostering a safe space for participants to share their experiences. Moreover, the program's flexible approach—offering both online and in-person sessions—ensures accessibility for a wider audience.

Despite its successes, the project has faced certain limitations. One of the main challenges has been the deeply ingrained cultural and ideological beliefs that some participants bring with them. These beliefs can sometimes hinder the acceptance of new ideas and the development of new skills. Additionally, the reliance on service-learning as a methodology requires a high level of organization and civic responsibility, which can be difficult to maintain consistently. Furthermore, the project's sustainability depends heavily on the financial and administrative stability of the social business, which remains an ongoing concern.

The insights gained from this project have several practical applications. Firstly, the service-learning model can be replicated in other regions or adapted to address different social issues. The program's success in engaging young women in discussions about cyberbullying also suggests its potential for expansion into other areas of digital literacy and online safety. Additionally, the program's focus on fostering self-esteem and resilience among participants could be applied to broader mental health initiatives targeting young people.

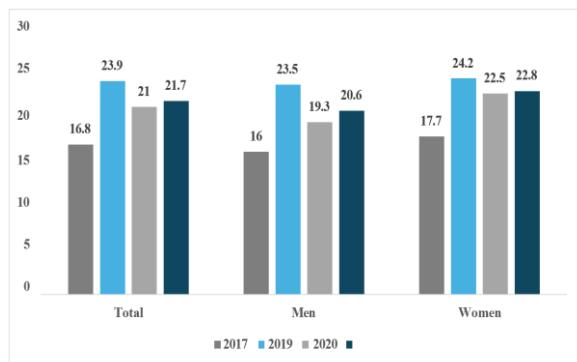
The creation of this social business has been driven by a deep commitment to addressing the issue of cyberbullying, particularly as it affects young women. The positive outcomes observed thus far underscore the importance of continuing this work and expanding its reach. As the program evolves, it is hoped that it will contribute to a broader cultural shift in how society views and addresses cyberbullying, ultimately leading to a safer and more supportive online environment for all.

In conclusion, while the challenges are significant, the potential impact of this social business is immense. By continuing to refine and expand the program and by remaining committed to the core values of empathy, education, and community, there is great potential to make a meaningful

difference in the lives of countless young women.

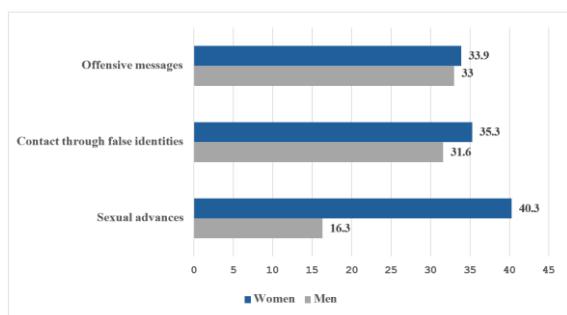
Figures and Tables

Figure 1. Percentage of population aged 12 years and older, who experienced cyberbullying by year.



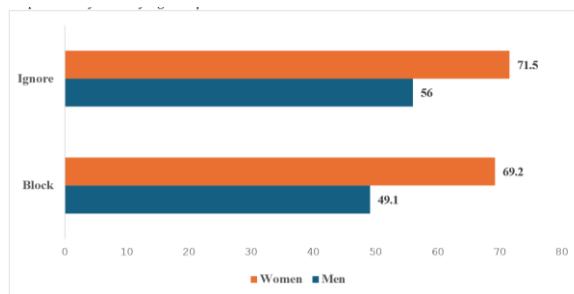
Source: Own elaboration. INEGI. Module on cyberbullying, 2019 and 2021.

Figure 2. Comparison between men and women of forms of cyberbullying in 2019.



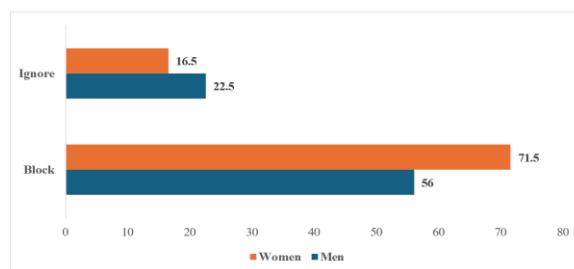
Source: Own elaboration. INEGI. Module on cyberbullying, 2019 and 2021.

Figure 3. Percentage of actions taken in response to cyberbullying 2019



Source: Own elaboration. INEGI. Module on cyberbullying, 2019.

Figure 4. Percentage of actions taken in response to cyberbullying 2021.



Source: Own elaboration. INEGI. Module on cyberbullying, 2021.

Conclusion

Key findings are presented below, along with a discussion of advantages, limitations, potential applications, and recommendations for future research.

Key Findings

Empowerment of Young Women: A positive impact on the empowerment of young women has been achieved, improving their ability to handle and resist cyberbullying. The creation of a support network has allowed participants to feel accompanied and understood, which has contributed to rebuilding their self-esteem.

Team Training and Preparation: Ongoing training of the team has been essential to ensure an informed and sensitive approach when dealing with cases of cyberbullying. This has allowed us to provide personalized and effective support, which is critical to the success of the program.

Financial and Administrative Sustainability: The development of a sound financial plan has been key to ensuring the long-term viability of the social business. A balance has been achieved between the social objectives and the need to maintain a sustainable financial structure.

Advantages

Significant Social Impact: The personalized approach and the creation of support networks have proven to be effective in addressing cyberbullying, improving the lives of affected women.

Replicable Model: The methodology used is scalable and can be adapted to different contexts and regions, facilitating its expansion.

Awareness and Prevention: By providing training and support, awareness of cyberbullying has been increased, and preventive practices have been fostered among participants and their communities.

Limitations

Limited Scope: Although the impact has been positive, the program's reach remains limited at the regional level. Expanding the initiative to a broader level will require additional resources and planning.

Financial and Human Resources: The sustainability of the social business is highly dependent on the availability of financial and human resources. Lack of these could limit the expansion and effectiveness of the program.

Long-Term Impact Measurement: Although a positive change in participants' self-esteem and resilience has been observed, measuring these long-term impacts remains a challenge.

Potential Applications

National and International Expansion: The methodology used can be adapted for implementation in other regions and countries, which could amplify the impact of the initiative.

Strategic Alliances: Collaborations with like-minded organizations in both the public and private sectors could leverage resources and enhance the program's reach.

Development of Digital Platforms: The creation of online platforms could facilitate access to resources and support, allowing more women to benefit from the

program, regardless of their geographic location.

Recommendations for Future Research

Long-Term Impact Evaluation: Longitudinal studies are recommended to evaluate the long-term impact of interventions on participants' lives and on cyberbullying prevention.

Diversification of Services: Explore the implementation of new services that respond to the emerging needs of participants, such as ongoing psychological support and legal counseling.

Innovation in Methodologies: It is suggested to investigate new methodologies and technologies that can complement existing programs, such as the use of artificial intelligence to proactively detect and prevent cyberbullying.

Comparative Analysis: Compare the effectiveness of different approaches in the prevention and management of cyberbullying to identify best practices and adapt the program accordingly.

In summary, social business focused on cyberbullying presents a viable and necessary model to address this growing problem in society. However, work must continue on expanding outreach, sustainability, and impact evaluation to maximize the benefits of the initiative. The

recommendations presented here can serve as a guide for future research and continued program development.

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The development and success of the social business focused on cyberbullying would not have been possible without the support, inspiration and collaboration of several key individuals and organizations. We would like to express our deepest gratitude to all those who have contributed significantly to the realization of this project, which seeks to address one of the most complex challenges of the digital age: cyberbullying.

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Similarly, we would like to highlight the valuable support of the Surf Smart program, which has provided an essential educational and training framework to

address issues related to cyberbullying. This program has been instrumental in training our team and raising awareness among participants, allowing us to offer a more comprehensive and effective approach.

A special acknowledgement full of gratitude goes to two exceptional women who have been the main motivation behind this project. Dr. Martha Cecilia Jaramillo Cardona and Alexia María Gómez Amarillas have been beacons of guidance and support throughout the process. Their vision, passion and commitment to the cause have inspired each of our steps. Their tireless work in promoting justice and well-being for women affected by cyberbullying has motivated us to work harder and with more dedication. They have not only been leaders in their respective areas, but also mentors and partners in this common mission to create a safer and more supportive environment for all.

In this sense, this social business stands not only as a response to a pressing need, but also as a tribute to the contributions of all the individuals and organizations that have believed in the importance of this work. We will continue to strive to honor their trust and move forward in the fight against cyberbullying, in the hope that our actions will contribute to a future where all women feel safe, valued and empowered.

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Making Technical & Vocational Education Accessible to the Grassroots Students through Digital Learning

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Abstract

This paper explores the integration of digital learning platforms into technical and vocational education to enhance accessibility for grassroots students. Addressing the limitations of the traditional vocational system, this system struggles to meet the growing demand for skilled workers. To address these challenges, the proposed model leverages digital platforms, such as YouTube, to deliver theoretical knowledge in essential vocational areas, including welding, General Electrical, Electronics, Dressmaking, Civil Construction, and IT. This approach delivers free, accessible content enhanced with interactive 3D models and live sessions, increasing the flexibility of vocational education. Classes are designed in clear, easily understandable language and uploaded to YouTube to reach a broad audience. Upon completing the courses, students undertake an open-book examination. This online assessment will serve to measure their credibility and ensure they have grasped the material. The methodology combines online and offline learning to deliver comprehensive, industry-aligned education, incorporating partnerships with technical institutions for advanced training and certifications. Additionally, the paper highlights how the model itself operates as a social business, integrating financial sustainability with social impact. This model bridges the vocational education gap in remote areas, offering accessible learning opportunities to all students. By offering these courses, it aims to reduce unemployment and contribute to national economic growth.

Keywords: *Accessibility, digital learning, online education, vocational education, social business, and sustainability.*

Abstrak

Kertas ini membincangkan integrasi platform pembelajaran digital dalam pendidikan teknikal dan vokasional bagi meningkatkan penglibatan pelajar akar umbi. Sistem vokasional tradisional kini berdepan kekangan untuk memenuhi permintaan yang semakin meningkat terhadap tenaga kerja berkemahiran. Bagi menangani cabaran ini, model yang dicadangkan memanfaatkan platform digital seperti YouTube untuk menyampaikan pengetahuan teori dalam bidang vokasional utama termasuk kimpalan, elektrikal am, elektronik, jahitan, pembinaan awam dan teknologi maklumat (IT). Pendekatan ini menyediakan kandungan percuma dan mudah diakses yang diperkaya dengan model 3D interaktif serta sesi langsung, sekali gus meningkatkan fleksibiliti pendidikan vokasional. Kelas disampaikan dalam bahasa yang jelas dan mudah difahami, kemudian dimuat naik ke YouTube untuk menjangkau khalayak yang lebih luas. Setelah menamatkan kursus, pelajar akan menjalani peperiksaan buku terbuka dalam talian sebagai penilaian terhadap kefahaman dan kebolehpercayaan mereka.

Kaedah ini menggabungkan pembelajaran dalam talian dan luar talian bagi menyediakan pendidikan menyeluruh yang selaras dengan keperluan industri, termasuk kerjasama dengan institusi teknikal untuk latihan lanjutan dan pensijilan. Selain itu, kertas ini turut menyoroti bagaimana model ini berfungsi sebagai sebuah perniagaan sosial yang menggabungkan kelestarian kewangan dengan impak sosial. Model ini merapatkan jurang pendidikan vokasional di kawasan terpencil, menawarkan peluang pembelajaran yang boleh dicapai oleh semua pelajar. Dengan menyediakan kursus ini, ia suatu inisiatif bertujuan mengurangkan kadar pengangguran dan menyumbang kepada pertumbuhan ekonomi negara.

Introduction

There's a lack of appreciation for practical abilities since vocational education is sometimes seen as a poorer alternative to academic education. In Bangladesh, an estimated 14 percent of students receive technical vocational education, which is very low compared to many developed and even some developing countries (Dr Kamal

Uddin Ahmed/The Financial Express, 2020). Approximately, there are only 20 vocational institutes in Bangladesh. Moreover, 379,381 students are studying at the SSC (Vocational) level in Bangladesh

(The Business Post, 2022). However, this is a small quantity given the current, rising demands of the domestic and international

labour market. There have been notable changes in the tools and modalities of learning, evaluation, and certification, as well as in career advising, job matching, and labour market services, due to the growing usage of digital technologies, especially after the COVID-19 pandemic (ILO, 2021c). TVET and skills systems around the world need to change with the times to meet the external demand for new skills coming from our increasingly digital society and businesses. Forecasting the supply and demand for skilled labour, as well as revising TVET certification programs, curriculum design, and delivery are also necessary to satisfy these demands.

On the contrary, Traditional educational systems have frequently had limitations on their accessibility and capacity to offer quality education to all people. The Bangladeshi government has placed a strong focus on technical education as a way to promote economic development and progress, provide low-wage workers with jobs that pay market wages, reduce poverty, and contribute to the prosperity of the nation. Furthermore, not everyone has easy access to vocational education because of regional limitations or a dearth of training facilities. Therefore, it is imperative to move technical vocational education to digital platforms in order to make it accessible to everyone. Individuals can take short breaks

from learning because of the much greater flexibility of digital learning.

This paper proposes a model for making technical and vocational education accessible to grassroots students through digital learning. It explores the potential of digital platforms to deliver comprehensive vocational training in various fields. The model aims to enhance educational accessibility, provide practical learning experiences, and align with industry standards, ultimately addressing the existing skills gap and contributing to economic development.

Objectives

This paper discusses a model that provides access to technical and vocational education through digital platforms to the grassroots students, improving their skills and economic opportunities.

Literature Review

A study shows that, in Bangladesh, technical and vocational education is provided across four levels: secondary (SSC), higher secondary (HSC), diploma, and short-term training courses. Approximately 87% of these institutions are in the private sector. The courses are offered by vocational training institutes, polytechnics, commercial institutes, technical training centres, and specialized institutes. The Directorate of Technical

Education (DTE) and the Bangladesh Technical Education Board (BTEB) oversee the formal vocational and technical education at the SSC, HSC, and diploma levels, as well as some of the training courses.

Over the past two decades, there has been a notable increase in both the number of institutions and student enrolment. According to the Bangladesh Education Statistics (2019), several key trends have emerged from 2000 to 2019:

- The number of technical and vocational institutions has significantly increased. Private sector institutions dominate the field, accounting for 87.3% of the total, while government institutions make up 12.7%.
- The number of students enrolled in TVET programs has risen, surpassing one million in 2019.
- Despite these advances, the proportion of female students remains low, with females constituting slightly over 25% of the total student body in 2019, indicating a persistent gender disparity in technical and vocational education.

Education is a continuous process that evolves over time. For students facing

quarantine, e learning presents a viable alternative to postponing their education. However, many so-called distance learning platforms merely distribute lectures, documents, and videos, falling short of achieving educational goals.

Another study found that in Bangladesh, the current state of learning is concerning. Implementing e-learning technologies effectively poses a significant challenge for a country with limited resources. Several factors contribute to the limited success of e-learning at the secondary, higher secondary, and tertiary levels in Bangladesh. E-learning necessitates the use of computers or smartphones, which are supported by reliable internet access. Unfortunately, a large portion of students in Bangladesh lack the financial means to purchase these devices or access the internet, leading to educational dropout.

Digital learning platforms have emerged as a transformative solution for expanding access to education. Studies by UNESCO (2020) demonstrate that digital platforms can enhance educational accessibility, flexibility, and engagement. The use of online resources, such as YouTube tutorials and MOOCs, has been shown to provide students with valuable theoretical knowledge and practical skills. Digital learning also enables remote and underserved communities to access high-

quality educational content, bridging the gap created by geographic and infrastructural constraints.

The integration of digital learning into vocational education offers several benefits, including the ability to deliver up-to-date content, accommodate diverse learning styles, and provide flexible learning schedules. According to a study, digital platforms can support the delivery of vocational training by offering interactive and engaging content, such as videos, simulations, and live sessions. Additionally, digital learning allows for real-time updates and alignment with industry standards, ensuring that educational content remains relevant and practical.

The impact of digital learning on accessibility and employability is profound. By making vocational education available online, students in remote or underserved areas can gain access to the skills and knowledge needed to improve their job prospects. It is found that online vocational training enhances job readiness and provides learners with the skills necessary to succeed in the workforce. Additionally, the flexibility of digital learning allows students to balance their education with other responsibilities, making it a viable option for a broader demographic. A study highlights that online education can lead to improved employability, as students can acquire

certifications and skills that are directly relevant to current job market demands.

Implementation Modalities

Initially, our methodology integrates practical learning on a digital platform, offering free theoretical knowledge through YouTube tutorials and the facility to enroll in comprehensive free courses. Live sessions featuring 3D models are recorded for perpetual access, leading to certifications upon successful completion. We facilitate student referrals to various technical institutions for advanced education, and affordable hands-on training is available at affiliated institutes.

The platform seamlessly combines online and offline learning for a complete educational experience. In the context of implementing vocational and technical education, this includes conducting a needs assessment, aligning the curriculum with industry standards, and delivering engaging content across various digital platforms such as Facebook, Instagram, etc.

To ensure effective utilization of the platform, instructors undergo training. The courses encompass a blend of pre-recorded videos, live sessions, forums, and assignments. Progress is measured through regular assessments and certifications, with a commitment to continuous improvement based on feedback and industry

collaboration. Our goal is to enhance education and skills by providing relevant, accessible, and industry-aligned learning experiences.

The vocational education initiative offers comprehensive courses on YouTube across key areas: Welding, General Electrical, General Electronics, Dressmaking, Civil Construction, and Computer & IT. Each curriculum module covers essential topics, from theoretical foundations to practical skills. The project includes recruiting instructors, developing content, creating a website, establishing a YouTube channel, and implementing continuous assessments. This approach aims to deliver accessible, high-quality vocational training, addressing skills gaps and boosting employability.

Sustainability

Our vocational education project, guided by the principles of Nobel Laureate Prof. Dr. Yunus, implements a social business model aimed at achieving both impactful social change and long-term sustainability. The model incorporates a modest fee for certification, which contributes to covering the costs of the program while maintaining affordability for students. This approach ensures that the program remains financially viable and accessible, addressing fundamental social

challenges and providing valuable vocational training to those who need it.

In addition to certification fees, the project will diversify its revenue streams through partnerships, sponsorships, and grant funding. These varied sources of income will provide a stable financial foundation and reduce reliance on any single revenue channel. By leveraging these diverse streams, the project can ensure continuous operation and support its expansion efforts without compromising its mission or accessibility.

The financial model also emphasizes strategic profit allocation to support growth and development. Profits generated will be used to repay investors their initial contributions, encouraging ongoing investment and support. Furthermore, a portion of the profits will be reinvested into the project to enhance its activities and broaden its reach. Competitive salaries will be offered to employees, fostering a motivated workforce and a positive work environment, while also instilling a strong sense of social impact in their roles. This comprehensive approach ensures the project's sustainability and its ability to effect meaningful change in the community.

Conclusion

The implementation of vocational education through a social business model,

inspired by the principles of Nobel Laureate Prof. Dr. Yunus, represents a transformative approach to addressing both educational and social challenges. By offering basic vocational training to students while adhering to the principles of social entrepreneurship, this project aims to provide accessible education that combats poverty and fosters economic development. The use of modest certification fees, alongside diverse revenue streams such as sponsorships, partnerships, and grants ensures the project's financial sustainability. This strategic approach not only maintains the affordability of education but also secures the long-term viability of the program. Additionally, the reinvestment of profits into expanding and improving project activities, combined with competitive salaries for staff, ensures a motivated workforce dedicated to delivering high-quality education with a significant social impact.

The integration of vocational education within a social business framework offers a promising pathway to overcoming the systemic challenges in traditional educational models. By blending the principles of social responsibility with effective business strategies, this model can address the disparities in access to education and contribute to a more equitable system. The project's commitment to inclusivity,

combined with its sustainable financial practices, positions it as a vital tool for empowering underserved communities and promoting economic growth. Ultimately, this approach not only provides valuable skills and opportunities for students but also establishes a resilient and socially responsible educational enterprise, paving the way for a more inclusive and sustainable future.

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