



IMPORTANCE OF “DIALOGUE CAPACITY” IN SUSTAINABLE DEVELOPMENT GOALS COMMUNITY PRACTICES: FROM THE PERSPECTIVE OF SDGs AND ITS EDUCATIONAL REFLECTIONS

Yuan-Lung Tsai

National Chiayi University, Taiwan

E-mail: tommyorlevis@gmail.com

Abstract

In recent years, universities worldwide have actively embraced University Social Responsibility (USR) to address the Sustainable Development Goals (SDGs). Expanding beyond traditional roles in teaching and research, universities now focus on societal service and national development to enhance their social impact. This study examines how the Nordic Walking Program in Xinwen, Budai Township, Chiayi County, Taiwan, employs “dialogic capacity” to support SDG 3 (Good Health and Well-being) and SDG 5 (Gender Equality) as part of a university’s commitment to USR. The researchers observed classes and interviewed three participants, a coach, and an assistant. These observations and in-depth interviews provide insights into how dialogic capacity aids in achieving SDG 3 and SDG 5.

For SDG 3, the program enhances mental health by fostering emotional support, reducing isolation, and alleviating stress. It also addresses physical health by promoting regular exercise and educating participants on cardiovascular and metabolic risks, motivating healthier behaviors. Personalized coaching and monitoring empower participants to adopt preventive health practices and manage their health more effectively.

The program also advances SDG 5 by creating an inclusive learning environment open to all genders, especially in rural Budai Township, where women often face gender-based limitations. Through awareness and advocacy, the program helps women recognize and overcome discrimination, asserting their right to participate in sports. This inclusive approach not only fosters gender equality but also boosts women’s confidence and engagement in a supportive, non-discriminatory setting.

Keywords: Sustainable Development Goals (SDGs), University Social Responsibility (USR), dialogue capacity, community practice

Introduction

On September 25, 2015, the United Nations General Assembly adopted the “Transforming Our World: The 2030 Agenda for Sustainable Development.” This agenda established 17 Sustainable Development Goals (SDGs) and 169 specific targets. These goals and targets aim to address global environmental, social, and economic challenges through international collaboration, with the goal of promoting sustainable development worldwide (United Nations, 2015; Walker et al., 2019). The SDGs quickly became a central framework for governments, businesses, and educational institutions, covering areas such as poverty eradication, zero hunger, health and well-being, quality education, and gender equality (Allen et al., 2016; United Nations, 2015, 2023). Universities, as key drivers of knowledge creation and social transformation, play a crucial role in advancing the SDGs by enhancing research and teaching, while actively engaging in community service to respond to societal needs and challenges (Gustavo, 2023).

Universities globally have embraced the SDGs and have strengthened collaboration with local communities through the practice of University Social Responsibility (USR) to promote social progress and sustainable development. Universities have evolved from being solely centers of education and research to becoming proactive agents that address social changes and challenges. Through USR, universities significantly contribute to social well-being, environmental sustainability, and economic prosperity, thereby helping to address complex societal issues (Bell, 1976). However, in community practice, the integration of "dialogic capacity" into the SDGs presents a critical challenge due to the need to negotiate with diverse stakeholders, reconcile traditional perspectives, and adjust power dynamics. Effective communication and dialogic capacity can not only enhance community engagement but also foster a deeper understanding and commitment to SDG-related issues.

This study examines the implementation of USR through the case of the Nordic Walking Program, which was initiated by Associate Professor Ding Wen-Chin of the Department of Sports, Health, and Leisure Studies at National Chiayi University in Xinwen, Budai Township, Chiayi County. The program aims to promote regular exercise among older adults in the community by providing professional sports knowledge. It also integrates the goals of SDG 3 (Good Health and Well-being) and SDG 5 (Gender Equality) into the curriculum to enhance self-empowerment, establish healthy lifestyles, and foster lifelong learning attitudes among participants. Specifically, the program focuses on SDG 3.4 (Mental Health), SDG 3.9 (Reducing Health Risks), and SDG 3.D (Health Risk Management) as part of its efforts towards SDG 3. In terms of SDG 5, the program aims to achieve SDG 5.1 (Elimination of Discrimination) and SDG 5.C (Equality of Rights).

This research utilizes in-depth interviews and participant observation to collect data, analyzing how universities use "dialogic capacity" in sports programs to implement the SDGs and fulfill their social responsibilities.

Literature Review

The Concept of Dialogic Capacity and Its Application in USR-Related Research

According to Keyton (2011), communication was the process of exchanging and sharing information through symbols, gestures, language, and other mediums. Feedback serves to confirm understanding. Communication involves more than just transmitting information; it also involves the construction of meaning. Active participation from both parties is essential for successful communication. For example, face-to-face conversations and written exchanges are fundamental forms of interpersonal communication (DeVito, 2019). Therefore, communication is a multi-layered and multi-faceted concept that involves processes such as information transmission, comprehension, and feedback. According to Bohm (1996), dialogue is an open and mutually respectful exchange process in which participants engage in reflective listening and learning to collectively explore and understand issues. This perspective considers dialogue as a specific form of communication that emphasizes deep interaction and joint exploration between parties. The primary goal of dialogue is to achieve mutual understanding and generate new perspectives and insights. The main distinction between communication and dialogue lies in their goals and models of interaction. Communication often focuses on exchanging information and achieving objectives, while dialogue emphasizes mutual respect, cooperation, and collaborative exploration. Therefore, dialogue can be considered a more profound form of communication. It aims not only to solve problems and convey information but also to foster mutual understanding and build relationships.

When "dialogue" is conceptualized as "empowering," it highlights its ability to be executed in practice, which can be seen as a manifestation of agency. Giddens (1984)

described agency as a continuous process of action, emphasizing the centrality of the actor and the individual's awareness and reflection on their environment. Furthermore, action as a form of subjective activity cannot be separated from the subject, as it represents the subject's engagement and intervention in the objective world (Giddens, 1979). According to Adler and Elmhorst (2008), dialogic capacity facilitates effective information exchange, enhances interpersonal interaction, and resolves conflicts during communication. Dialogic capacity, defined as the ability to express oneself clearly and understand others effectively in dialogue, is a core skill for successful communication. Additionally, Robbins and Judge (2013) emphasized that dialogic capacity promotes information flow, reduces misunderstandings, and enhances overall team performance.

The primary distinction lies in their objectives. Communication often aims to transmit information and achieve practical outcomes, while dialogue emphasizes building relationships, mutual respect, and collective problem-solving. Moreover, dialogue incorporates "dialogic capacity," which refers to the ability to engage effectively in reflective exchanges, as noted by Adler and Elmhorst (2008). This capacity facilitates innovation, conflict resolution, and teamwork by ensuring clear information exchange and reducing misunderstandings (Robbins & Judge, 2013). Unlike general communication, dialogue allows participants to collaboratively explore diverse perspectives, fostering consensus and innovation (Fisher et al., 2011; Gordon, 2011). Therefore, while communication serves as a fundamental mechanism for interaction, dialogue elevates this interaction to a level of shared understanding and relationship-building.

Dialogic capacity is essential for fostering innovation and addressing complex challenges. Dialogue enhances collaboration potential by promoting precise information exchange, reducing misunderstandings, and fostering mutual understanding of needs and expectations (Gordon, 2011). Through dialogue, participants can engage with diverse perspectives, enabling them to collaboratively identify solutions. Constructive dialogue plays a critical role in finding common ground, resolving conflicts, and reaching consensus, particularly in situations where stakeholders hold differing views (Fisher et al., 2011). It also helps stakeholders gain a deep understanding of community needs and establish collaborative relationships for addressing local issues.

This connection between dialogue and dialogic capacity is particularly significant in University Social Responsibility (USR) practices. USR initiatives often involve students participating in community service and practical activities, requiring effective face-to-face communication in diverse cultural and social contexts (Vasilescu et al., 2010). These engagements not only improve students' communication and dialogic skills but also empower them to act meaningfully within social contexts (Jacob et al., 2015). Moreover, universities must actively employ comprehensive communication and dialogue with various stakeholders to promote USR effectively. Dialogue serves as a critical tool for building consensus, fostering partnerships, and crafting actionable plans to achieve shared objectives (Leal Filho & Lange Salvia, 2019). In this way, dialogue becomes a foundational element of USR, aligning academic and social endeavors with broader community goals and ensuring the sustainability and impact of university-led initiatives.

The Concept of Sustainable Development Goals (SDGs)

The concept of the Sustainable Development Goals (SDGs) can be traced back to the 1987 report "Our Common Future" by the United Nations World Commission on Environment and Development. This report first introduced the idea of sustainable development, which aimed to meet the needs of the present without compromising the ability of future generations to meet their own needs (World Commission on Environment and Development, 1987). In 1992, the Earth Summit in Rio de Janeiro further advanced this concept by adopting the "Rio Declaration

on Environment and Development" and "Agenda 21." These agreements laid a solid foundation for the eventual establishment of the SDGs (Dodds et al., 2016; United Nations, 1992). The 2000 Millennium Declaration by the United Nations General Assembly marked a significant milestone in global political agreements. It addressed global challenges such as poverty, disease, and inequality, leading to the establishment of eight Millennium Development Goals (MDGs). These goals included eradicating extreme poverty and hunger, achieving universal primary education, promoting gender equality, reducing child mortality, improving maternal health, combating HIV/AIDS, ensuring environmental sustainability, and fostering global partnerships (United Nations, 2000, 2015). The success of the MDGs can be partly attributed to their specific and measurable targets, which provided clear directions for progress in developing countries.

In 2012, Rio de Janeiro once again became the global focus during the United Nations Conference on Sustainable Development (Rio+20). This conference introduced the concept of SDGs, which emphasized balanced development across economic, social, and environmental dimensions (Griggs et al., 2013). After three years of global consultations, the United Nations General Assembly formally adopted the "Transforming Our World: The 2030 Agenda for Sustainable Development" on September 25, 2015. This adoption established 17 core goals and 169 specific targets, while also highlighting the roles and responsibilities of higher education in achieving these goals. As of February 2020, the Talloires Declaration, a significant international indicator for promoting sustainable development in universities, had been signed by 509 universities from 57 countries.

The Connection with Taiwan's University Social Responsibility

In Taiwan, 47 universities participated, demonstrating the active involvement and commitment of Taiwan's higher education to global sustainable development (Su, 2020). Consequently, USR has become an indispensable responsibility of modern universities. It encompasses knowledge transfer, social innovation, policy advocacy, and public engagement. Through the practice of USR, universities can actively respond to societal expectations and promote overall sustainable development and progress.

The Ministry of Education and the National Science Council actively promote university-community collaboration through USR practices. This promotes social innovation, fulfills social responsibility, and integrates higher education into the global sustainable development trend (Yu & Chen, 2024). Since 2017, the Ministry of Education has been promoting the "University Social Responsibility Practice Program." This program encourages universities to establish close connections with local communities, address local issues through humanistic care and innovation, and bridge the gap between academia and practice to achieve international alignment (Ministry of Education, 2018). Since 2013, the National Science Council has implemented the USR Practice Program, which emphasizes the role of universities as drivers of social innovation and facilitates collaboration among students, faculty, and communities to address local development challenges (Yu & Chen, 2024). Universities understand local needs, propose concrete action plans, and assist in problem-solving through social practice, thereby exerting a positive social impact (Song et al., 2022).

Taiwan is currently facing health issues among the elderly. The elderly also have limited social interaction within the community. They may encounter problems not only with health issues, but also with a lack of social interaction and effective dialogue, which hinders their ability to rebuild their ideas about proper social interaction and maintain regular exercise. Moreover, they often interrupt their regular exercise due to various factors, such as lack of motivation, low self-confidence, fear of injury, unstable gait, functional decline from illness, financial difficulties, weather conditions, cognitive decline, and lack of exercise partners (Li Wei-Xuan et al., 2009). Therefore, providing a positive class atmosphere and easy access for the elderly is one of the factors that helps them exercise regularly.

Lin (2011) pointed out that the purpose of dialogue is to eliminate misunderstandings and promote mutual understanding and recognition. Dialogic capacity ensures that the voices of diverse groups, particularly those that are marginalized and vulnerable, are adequately expressed and valued (Fraser, 2003). This illustrated how dialogic capacity fostered broad participation among diverse groups, allowing all parties to fully express their needs and opinions (Cornwall & Gaventa, 2001). Nordic walking was widely used in rehabilitation fields globally to improve physical function and enhance functional mobility (Lin et al., 2022; Chang & Lu, 2015; Dalton & Nantel, 2016; Warlop et al., 2017). A lot of studies have shown that regular exercise improves and enhances physiological, psychological, and social functioning in older adults, preventing disease and reducing the risk of disability (Elder, 2002; Young & Dinan, 1994).

Exercise can prevent hypokinetic syndrome, reduce anxiety, stress, and depression, and promote positive emotional development (Brehm, 2000; Thayer, 1996). Evan (1995) noted that regular rhythmic exercise significantly improves health status and physical function in older adults, reducing risk factors for diseases. With the increasing attention on SDGs, the researchers conducted a walking exercise class in the community to make University Social Responsibility possible and practical. The study specifically explores two research questions: (1) How do the coaches and assistants of the Nordic Walking Program use communication skills to implement SDG 3, and what are the outcomes? (2) How do the coaches and assistants apply communication skills to achieve SDG 5, and what are the impacts?

Research Methodology

Background

This study used in-depth interviews, supplemented by participant observation, to explore how course instructors and teaching assistants of exercise classes in Xinwen, Budai Township, Chiayi County, utilize "dialogic capacity" to achieve SDG 3 (Good Health and Well-being) and SDG 5 (Gender Equality), in response to the goals of USR. The detailed research methodology and design are described as follows:

The Walking Class

Xinwen, located in Budai Township, Chiayi County, is an aging community where residents tend to place limited emphasis on physical and mental well-being. Upon learning that National Chiayi University would offer a community exercise program in Budai aimed at promoting the physical and mental health of older adults and providing professional exercise knowledge to advance Sustainable Development Goals (SDGs), the village chief and Budai Township Senior Citizens' Association actively promoted and recruited local participants who were enthusiastic about fitness and contributed to community cohesion. Informed that the program would feature Nordic walking led by a professional coach, community members eagerly registered. A total of 35 participants were selected from Budai's Xincun, Xinmin, Fuxing, and Haomei neighborhoods through a combination of self-assessment and professional physical fitness evaluations.

The Coach and Course Assistants

The lead coach holds certifications as an intermediate national physical fitness instructor from the Sports Administration of the Ministry of Education, as well as a silver-level instructor with the Original Nordic Walking Federation (ONWF) of Finland. In addition, the coach is a graduate student in the Department of Physical Education and Health Leisure Studies at National

Chiayi University, which brings substantial experience in leading Nordic walking classes. The course assistant, an undergraduate student from the same department, has also gained significant practical experience by working as a course assistant in projects led by department faculty.

Sample

The researcher initially participated in and observed seven sessions, interacting with the 35 participants in order to establish a foundation of trust. Through informal dialogues, the researcher identified seven participants who were more active and expressive in expressing their views on the exercise program. After assessing their interaction with the coach and assistant, the researcher employed purposive sampling to select three participants who agreed to participate in interviews.

The study utilized purposive sampling to select participants for interviews. The suitable respondents were identified through the subproject "Healthy Living Together," which is part of the broader project "Culture, Community, and Communication: Ushering in a New Period of Prosperity for the Southern Area of Budai Township by Collaborating with Local Groups." Professor Ding Wen-qin from the College of Education at National Chiayi University leads this project. The exercise class, which focused on Nordic walking, took place from February 27 to May 24, 2024. Sessions were held every Tuesday and Friday from 9:00 to 10:30 a.m., totaling 24 classes in total.

Each participant signed an informed consent form and took part in in-depth interviews. Interview principles and procedures were as follows: Each interview lasted approximately 30 minutes, with times coordinated with the five respondents. Given the subjective and case-specific nature of in-depth interviews, to minimize biases from "recall after the fact," the researchers employed corrective and strategic questioning during interviews. Transcripts were created post-interview, verified by respondents, or triangulation was used to ensure data accuracy. All participant information was anonymized to adhere to research ethics (see Table 1).

Table 1
Basic Information of the Five Respondents

Name	Gender	Age	Occupation before Retirement	Interview Location	Health Status
Mao	Male	65	Aquaculture	Xinwen Elderly Center	Good
Ying	Female	64	Fishermen's Association Staff	Xinwen Elderly Center	Good
Mei	Female	68	Aquaculture	Xinwen Elderly Center	Good
Coach	Female	23	Master's Student, Dept. of Physical Education and Health Leisure Studies, NCYU	Xinwen Elderly Center	Good
Assistant	Male	20	Undergraduate Student, Dept. of Physical Education and Health Leisure Studies, NCYU	Xinwen Elderly Center	Good

Instrument and Procedures

The researcher used both classroom observation and personal interviews. The researcher first informed the interviewees of the questions through a preliminary phone call, then arranged a suitable interview location and time. If permitted by the interviewees, efforts will be made to schedule interviews in the morning, as interviewees tend to be more alert during this time.

Each interview session was limited to approximately 30 minutes, with the entire process audio-recorded upon the interviewee's consent. Additionally, the researcher developed an interview outline that addressed specific aspects of conversational engagement, aiming to respond to SDG 3.4 (Mental Health), SDG 3.9 (Reducing Health Risks), and SDG 3.D (Health Risk Management), as well as SDG 5 targets, including SDG 5.1 (Elimination of Discrimination) and SDG 5.C (Promoting Equality of Rights).

To ensure depth in data collection, the researcher attended and observed seven sessions before initiating the participant selection process for interviews. The participant-observation approach continued over an additional 14 sessions, allowing the researcher to closely monitor participants' outward behavior and engagement with the course. The researcher systematically recorded observational findings in a reflective journal for further personal insights and note-taking, enabling the collection of additional usable observations. The researcher also made efforts to avoid leading questions, ensuring an objective and neutral presentation of the research findings.

Coding of Interview Data

The interview data was coded based on the roles of the respondents. Participants were assigned code A, while instructors and assistants were assigned code B. Each target was assigned a number based on the targets from SDG 3 and SDG 5. The final digit of each interview indicated a different interview. For example, in the first interview with Mr. Mao and the coach, Mr. Mao was marked as "Mao A-1-1" and the coach was marked as "B-1-1," and so on. When presenting in the paper, the code "Mao A-1-1" would be transferred into dialogue form. For example, *Mr. Mao: (expressing his ideas) (A-1-1)*.

Participant Observation and Reflection on the Phenomenon

This research also uses participant observation as an additional method. The researchers, along with the teaching assistant, actively participated in the exercise classes, observing the behaviors and interactions of the participants. The observations went beyond mere observation; the researchers actively engaged in the social environment and systematically recorded the observations to gain a deeper understanding. For example, an observation record from May 30, 2024, is coded as "20240530 Research Observation," and this coding pattern continues.

Research Results

The Implementation and Effectiveness of "Dialogic Capacity" by Coaches and Assistants in Promoting SDG 3 through Exercise Classes

The Nordic Walking Exercise Class in Xinwen focused on advancing SDG 3 by specifically targeting SDG 3.4 (mental health), SDG 3.9 (reducing health risks), and SDG 3.D (health risk management). The emphasis was on prioritizing mental health, engaging in regular physical activity, and understanding and sharing effective exercise methods for maintaining health. This section explored the process and impact of the coach and assistant using "dialogic capacity" in the exercise classes, based on these three sub-goals:

Implementation of SDG 3.4 (Mental Health) Sub-Goal

Xinwen is a fishing village in Budai with a high population of residents over 60 years old. Initially, the exercise class had low acceptance within the community, resulting in inconsistent

attendance rates. According to research observations (1130530), most elderly participants were skeptical about the benefits of exercise in improving physical function. Initially, residents were reluctant to participate in the exercise program due to a lack of knowledge about regular exercise and its impact on mental health. The project team invested significant time in engaging with community members to enhance their understanding of the importance of healthy exercise. Moreover, the researchers used constructive communication skills to foster new understandings and perspectives through interaction. The following examples demonstrate how coaches and assistants utilized dialogic capacity to encourage Ms. Mei's participation:

Ms. Mei: What's the benefit of exercise? It's tiring—I'd rather go home and rest.

Coach: Joining the class is not just about exercising; it's also a chance to socialize with friends.

Assistant: Exactly! Your friend, Ms. Fang, really hopes you'll join and become healthier together.

Coach: Sweating boosts metabolism, making you feel younger and more vibrant.

Assistant: Look at Ms. Jun—she exercises regularly, and she's become healthier and more lively.

Ms. Mei: Really? I'll give it a try then. (B-1-1) (B-2-1) (A-3-1)

Similar dialogues between the coach and Mr. Mao further highlighted the impact of exercise on mental health:

Mr. Mao: Can exercise really reduce stress?

Coach: Absolutely. Research shows that exercise promotes the release of endorphins, which stabilize mood.

Mr. Mao: Isn't walking boring?

Coach: We've designed group activities to enhance engagement. It's good for your mental and physical health and strengthens bonds with others.

Mr. Mao: Alright, I'll give it a shot this Friday. (A-1-1) (B-1-1)

The dialogue between the assistant and Ms. Ying reflected how exercise can mitigate feelings of loneliness:

Assistant: Engaging with other participants fosters a sense of belonging, which is vital for mental health.

Ms. Ying: My children have moved away. I do feel lonely. Maybe exercising and making friends isn't a bad idea. (A-3-1) (B-2-1)

Successful aging in highly aged societies requires attention to psychological, physical, and social dimensions. Observations confirmed that social interaction, beyond the benefits of exercise, provided significant psychological satisfaction (Research Observation, 1130430). By utilizing their "dialogic capacity," the coach and assistant gradually gained the trust of the community, helping residents recognize the benefits of regular exercise for their physical and mental well-being. As participants' trust in the coach deepened, they actively engaged in Nordic walking classes, achieving not only physical health benefits but also psychological comfort. This led to the adoption of a more positive and optimistic attitude towards exercise to meet their health needs.

Implementation of SDG 3.9 (Reducing Health Risks) Sub-Goal

Therefore, exercise not only benefits physical health but also offers significant psychological benefits. Long-term exercise promotes healthier lifestyles in older adults, reducing the need for medical care and, consequently, health risks. The following dialogue illustrated how the coach used "dialogic capacity" to guide Mr. Mao in understanding how exercise reduced health risks:

Coach: When using walking poles, adjust them according to your height and stride for optimal fitness results.

Mr. Mao: You're right—I've had fewer falls since I started using walking poles.

Coach: Remember when you doubted the poles? You thought they were just sticks with no real purpose.

Mr. Mao: Now I see the poles increase arm movement and reduce knee pressure, easing joint strain. (A-1-1) (B-1-1)

Example Dialogue: Coach, Assistant, and Ms. Mei:

Coach: Regular rhythmic exercise can significantly improve older adults' health, enhancing physical function and reducing disease risk.

Assistant: That's right! For seniors, consistent exercise is especially crucial.

Ms. Mei: But I've had a leg injury—won't using walking poles add stress?

Coach: Not at all. Nordic walking with poles strengthens core muscles and reduces knee pressure while effectively burning calories.

Ms. Mei: Really? That sounds like a win-win for exercise without knee strain.

Assistant: Nordic walking poles are widely used in rehabilitation to improve physical function.

Ms. Mei: That's great! I want to join the Nordic walking sessions. (B-1-1) (B-2-1) (A-3-1)

Example Dialogue: Coach and Ms. Ying

Coach: Participating in the exercise class helps prevent sedentary behaviors that lead to obesity and negative emotions.

Ms. Ying: I usually watch TV after meals, which makes me anxious and snack a lot—resulting in fatty liver.

Coach: Medical reports suggest that 30 minutes of exercise a day effectively reduces fat and maintains a healthy weight.

Ms. Ying: I must attend the class and learn the correct techniques to stay healthy. (A-3-1) (B-1-1)

Observations indicated that using walking poles reduces physical strain, encouraging participants to explore how assistive tools can enhance exercise outcomes in a relaxed manner (Research Observation, 1130430). Regular exercise enhanced the awareness of physical capabilities for older adults, helping them understand the importance of appropriate exercise and gradually establishing long-term exercise habits that promoted overall health. In classes, the coach and assistant use guided discussions and dialogues to help participants realize that irregular exercise could lead to negative health outcomes.

Implementation of SDG 3.D (Health Risk Management) Sub-Goal

These challenges were also prevalent in the Budai Xinwen area. In response, the coach and assistant actively encouraged participants to engage in outdoor activities during classes to prevent functional decline due to illness and reduced the risk of injury caused by an unstable gait. The following dialogue illustrated how the coach and assistant employed their "dialogic capacity" to guide participants Ms. Ying and Ms. Mei in assessing their health risks:

Ms. Ying: I often feel numbness in my hands and feet recently.

Coach: You might want to try joining the brisk walking class; more activity can improve blood circulation.

Ms. Mei: It really helps! Since joining the walking class, my hands and feet have become more flexible, I feel more energetic, and I get sick less often.

Assistant: I've noticed Ms. Mei progress too. When she first came, her movements were uncoordinated, but with continued participation, she has shown significant improvement and can even assist as an instructor now.

Ms. Ying: Really? Then I want to join too! Ms. Mei, let's go together.

Coach: Ms. Mei, why don't you show Ms. Ying some basic movements?

Ms. Mei: No problem. Let's exercise together to prevent functional decline. (B-1-1) (B-2-1)

(A-2-1) (A-3-1)

Elderly individuals often avoid exercise due to a lack of confidence in their abilities, as they fear that injury could impact their daily lives. The coach and assistant helped participants gradually enhance their self-management of health risks through professional guidance and accompaniment. The following dialogue illustrated how the coach and assistant utilized "dialogic capacity" to assist participant Mr. Mao in self-assessing his health risks.

Mr. Mao: I had knee surgery, so exercise isn't suitable for me. I'm afraid of getting injured.

Coach: Having had surgery means you need moderate exercise even more to prevent muscle atrophy.

Mr. Mao: But I'm worried my knees won't handle it, and it might weaken my calves.

Assistant: Don't worry. Just adjust according to your physical capacity and avoid strenuous activities.

Coach: Exactly. If your joints are weak, slow down, and prioritize safety during exercise.

Mr. Mao: I see now that I can adjust the intensity based on my condition rather than avoiding exercise altogether. (B-1-1) (B-2-1) (A-1-1)

The interviews with Sheng-ge and three other participants, as well as the coach and assistant, revealed that the coach emphasized safety in the exercise classes. The researchers showed the participants an open attitude, active listening, and respect for their viewpoints during interviews. The coach also continually reminded participants to be mindful of their condition. The study observation noted that during exercise encouragement, the coach and assistant frequently reminded each other, and participants self-assessed and adjusted their exercise routines accordingly (Research Observation, 1130503). Observations showed that participants highly recognized the professional guidance and health assurance provided by the coach. Communication between the coach and participants was free of hierarchical distinctions (Research Observation, 1130430).

The Implementation and Effectiveness of "Dialogic Capacity" by Coaches and Assistants in Promoting SDG 5 through Exercise Classes

The Nordic Walking class in Budai Xinwen promoted SDG 5 goals, specifically SDG 5.1 (eliminating discrimination) and SDG 5.C (ensuring equal rights), by fostering gender equality education and equal participation rights. This section explored how the coach and assistant implemented and utilized "dialogic competence" in these exercise classes, and evaluated its effectiveness based on the subgoals mentioned.

Implementation of Subgoal of SDG 5.1 (Eliminating Discrimination) Sub-Goal

In the Budai area, traditional patriarchal views were deeply rooted, in addition to an aging population. Generational differences often lead to communication barriers across generations. Therefore, the coach and assistant proactively communicated with participants to eliminate discrimination when encouraging them to join the Nordic Walking class. In conflict resolution, dialogic capacity also plays a crucial role. The following dialogue demonstrated how the coach and assistant utilizes "dialogic capacity" to assist participants in overcoming gender biases associated with exercise.

Ms. Ying: Traditionally, men work outside, and women stay at home. After work, we should focus on family. There's no way we can go to an exercise class.

Ms. Mei: Exactly. Someone would gossip about you for joining a class after work.

Coach: Not at all! Social views or stereotypes have changed. Exercising after work is beneficial, especially in our professionally organized classes by National Chiayi University, where you can also learn about health. Exercise isn't gender-specific—you see, I'm also a woman.

Assistant: That's right! Our coach is professionally certified and also female, which shows women's capabilities shouldn't be underestimated.

Ms. Mei: Really? I never expected the coach to have such credentials; it's impressive. I want to learn more!

Ms. Ying: I thought women couldn't teach very well, but now I can tell that her teaching is very professional. (B-1-1) (B-2-1) (A-2-1) (A-3-1)

The following conversation with Mao-ge further highlighted the importance of overcoming gender stereotypes:

Mr. Mao: In rural areas, women go home after work to cook and do chores, making it hard for them to exercise. It's usually men who do. We're conservative here.

Assistant: Taking care of the family is good, but why not bring your wife along to exercise?

Mr. Sheng brings Ms. Hui, and they've both become healthier. Wouldn't that be good for your wife too? Why not take her to the exercise class? Exercise shouldn't be limited by gender. Health is what matters most.

Mr. Mao: You are right. I'll ask my wife if she'd like to join the class.

Assistant: We look forward to seeing both of you! (B-1-1) (B-2-1) (A-1-1)

The interviews with Mr. Sheng and other participants revealed that the coach and assistant communicated with empathy and respect. According to the study observation, participants resonate with the coach and assistant's perspectives, embracing the value of gender-neutral exercise, and effectively overcoming gender discrimination (Research Observation, 1130503). This highlighted the significant contribution of "dialogic capacity" in fostering understanding and respect, thereby contributing to the realization of SDGs.

Implementation of Subgoal of SDG 5.C (Equal Rights) Sub-Goal

True equality should consider these individual differences and provide diverse and extensive learning opportunities to meet the varied needs of the elderly. However, as previously mentioned, traditional patriarchal attitudes still persisted in the Budai area, resulting in lower educational levels for females in this fishing village and a long-standing neglect of their learning rights. The following dialogue illustrates how the coach and assistant used "dialogic capacity" to help Ms. Mei and Ms. Ying overcome their biases towards participating in the exercise class.

Ms. Ying: We used to think that this exercise class was only for wealthy people or men. Women like us rarely participated in community recreational activities.

Ms. Mei: Exactly. I also thought you had to pay a high fee to join. In our rural Budai area, women's rights to learning are not highly valued.

Assistant: Nowadays, gender equality is emphasized, and learning opportunities are not restricted by gender. Everyone can choose exercises that fits their interests, including both of you. Your decision to join the walking exercise class shows your interest in fitness, which reflects the concept of equality.

Coach: Modern society advocates for gender equality, and exercise has no gender or age boundaries. As long as it benefits health, everyone can participate.

Ms. Ying: Indeed, it's a privilege for women to join these exercise classes, suggest techniques to the coach, and meet new and old friends. In the past, women couldn't go out much due to patriarchal norms.

Ms. Mei: That's right. Through the exercise classes, we genuinely feel the progress toward gender equality. Otherwise, our rural community would still be dominated by male voices. (B-1-1) (B-2-1) (A-2-1) (A-3-1)

Mr. Mao and the coach had a dialogue on gender equality, particularly from a male perspective.

Mr. Mao: In our rural areas, the traditional mindset still prioritizes men over women, so these exercise classes rarely encourage female participation.

Coach: Mao, gender equality is the norm today! It's not just about you exercising; it's about couples working out together, which not only benefits your health but also strengthens your relationship. If your wife's health suffers, it will affect her quality of life too. Exercising with her is good for health and provides a chance to chat—it's a win-win situation.

Mr. Mao: That makes sense. I'll encourage my wife to join me, and I'll also encourage my sister. After all, exercise benefits everyone.

Coach: Exactly, exercise is something everyone can do together, and it helps improve overall health. (B-1-1) (A-1-1)

The coach and assistant utilized "dialogic capacity" to foster multicultural understanding, enhance communication, and promote exchange. According to research observations, "Ms. Ying and Ms. Mei were very excited and grateful to actively participate in the walking exercise class, demonstrating the empowerment effects of dialogic capacity (1130503 Research Observation)." The SDGs emphasize cultural understanding, and in USR practice, "dialogic capacity" has become a critical tool in promoting this understanding. Through effective dialogue, Chiayi University's exercise program can better understand and respect the culture and needs of the community, thus building a more inclusive social environment.

Discussion

The findings of this study demonstrate the critical role of dialogic capacity in advancing the Sustainable Development Goals (SDGs), particularly SDG 3 (Good Health and Well-being) and SDG 5 (Gender Equality), through a Nordic Walking Class in Taiwan. This discussion contextualizes these findings within the existing literature to explore their implications and relevance.

Dialogic Capacity and Health Promotion (SDG 3)

The study shows that dialogic capacity fosters trust and participation among community members, which, in turn, supports mental and physical health outcomes. Regular exercise in this program reduces isolation and enhances self-confidence, aligning with SDG 3 objectives (World Health Organization, 2015). These findings echo Brehm's (2000) emphasis on the psychological benefits of exercise, which include reduced anxiety and stress. Furthermore, the use of walking poles in the program aligns with studies such as those by Dalton and Nantel (2016), which highlight the rehabilitative benefits of Nordic walking in improving physical function among older adults.

However, initial resistance to participation was observed, which is consistent with the findings of Li et al. (2009) that older adults often struggle with motivation and confidence in physical activities. Dialogic methods were used to mitigate this barrier, emphasizing interpersonal connections and fostering an inclusive environment. According to Bohm (1996), dialogue promotes mutual understanding, and this approach proved effective in overcoming skepticism about the benefits of exercise.

Dialogic Capacity and Gender Equality (SDG 5)

The Nordic Walking Class successfully addressed gender biases, allowing both men and women to equally participate in health-promoting activities. Participants challenged traditional patriarchal views that restricted women's involvement, supporting Fraser's (2003) theory on the transformative impact of inclusive dialogue. Utilizing dialogic capacity to dismantle gender stereotypes aligns with the focus on promoting equal participation in the SDG 5 framework (United Nations, 2015).

The coach's role in demonstrating female competence as a leader challenges existing biases, supporting Robbins and Judge's (2013) assertion that dialogic capacity can shift power dynamics and promote equality. Additionally, this study supports Cornwall and Gaventa's (2001) findings that participatory methods empower marginalized groups by ensuring their voices are heard and valued.

Linking Findings to Broader Literature

These results align with the growing recognition of universities' roles as agents of social change, as outlined by Vasilescu et al. (2010). By integrating community engagement into academic frameworks, universities can simultaneously address societal challenges and fulfill their commitments to University Social Responsibility (USR). This case study reaffirms the potential of dialogic capacity as a tool for promoting sustainable health and social equity.

While these findings are promising, future research should investigate the long-term impacts and scalability. As highlighted by Griggs et al. (2013), achieving SDGs requires sustained efforts and adaptation to local contexts. Therefore, examining how dialogic strategies evolve over time could enhance their effectiveness in broader settings.

Conclusions and Implications

This study highlights the important role of dialogic capacity in promoting the achievement of Sustainable Development Goals (SDGs), specifically SDG 3 (Good Health and Well-being) and SDG 5 (Gender Equality), through University Social Responsibility (USR) initiatives. The Nordic Walking Program in a rural Taiwanese community serves as an example of how dialogic engagement promotes trust, increases participation, and tackles health and gender challenges in underserved settings.

The findings suggest that dialogic capacity encourages inclusive interactions, promotes regular exercise, and mitigates isolation, thereby contributing to improved mental and physical health (SDG 3). Simultaneously, the program also challenges traditional gender biases, fosters equitable participation, and reinforces gender equality (SDG 5). However, these conclusions are context-specific and should be interpreted cautiously when applied to other settings.

Implications

1. **Community Health Enhancement:** Universities can empower individuals to adopt healthier lifestyles and reduce health disparities by fostering trust and addressing community-specific barriers.
2. **Gender Equality Advocacy:** USR initiatives can effectively address deeply rooted cultural biases by leveraging dialogic methods. Encouraging gender-equitable participation in community activities can foster broader societal change and support SDG 5.
3. **Strengthening University-Community Partnerships:** To maximize their relevance and impact, future programs should adapt dialogic methods to diverse contexts. Feedback: The revised sentence reorders the sentence to emphasize the importance of adapting dialogic methods to diverse contexts.

Limitations and Future Research

The scope of this study was limited to one program and community, which restricts its generalizability. Future research should explore the long-term impacts of dialogic capacity and its scalability in various cultural and socioeconomic contexts. Quantitative data and longitudinal studies could provide a more comprehensive evaluation of dialogic approaches in achieving Sustainable Development Goals (SDGs) through University Social Responsibility (USR) practices. By highlighting the transformative potential of dialogic capacity, this study underscores the significance of fostering sustainable, inclusive, and health-focused communities, affirming the crucial role of universities as agents of social change.

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References

- Adler, R. B., & Elmhurst, J. M. (2008). *Communicating at work: Principles and practices for business and the professions*. McGraw-Hill.
- Allen, C., Metternicht, G., & Wiedmann, T. (2016). National pathways to the sustainable development goals (SDGs): A comparative review of scenario modelling tools. *Environmental Science & Policy*, 66, 199–207. <https://doi.org/10.1016/j.envsci.2016.09.008>
- Bell, D. (1976). *The cultural contradiction of capitalism*. BasicBooks.
- Bohm, D. (1996). *On dialogue*. Routledge.
- Brehm, B. A. (2000). Maximizing the psychological benefits of physical activity. *Acsm's Health and Fitness Journal*, 4(6), 7–11.
- Chen, B. H. & Lu, S. S. (2015). The effect of Nordic Walking on functional fitness in the elderly adults. *Journal of Chungchou*, 29, 143–155.
- Cornwall, A., & Gaventa, J. (2001). From users and choosers to makers and shapers: Repositioning participation in social policy. *IDS Bulletin*, 31(4), 50–62. <http://dx.doi.org/10.1111/j.1759-5436.2000.mp31004006.x>
- Dalton, C., & Nantel, J. (2016). Nordic walking improves postural alignment and leads to a more normal gait pattern following weeks of training: A Pilot Study. *Journal of Aging and Physical Activity*, 24(4), 575–582. <http://dx.doi.org/10.1123/japa.2015-0204>
- DeVito, J. A. (2019). *The interpersonal communication book* (15th ed.). Pearson Education.
- Dodds, F., Donoghue, D., & Roesch, J. L. (2016). *Negotiating the sustainable development goals: A transformational Agenda for an Insecure World*. Routledge.
- Elder, B. M. (2002). Measuring physical fitness of adults in the primary care setting. *The American Journal for Nurse Practitioners*, 6(4), 9–13.
- Evans, W. J. (1995). Effects of exercise on body composition and functional capacity of the elderly. *The Journal of Gerontology: Biological and Medical Sciences* 50A, Special Issue, 147–150. http://dx.doi.org/10.1093/gerona/50A.Special_Issue.147
- Fisher, R., Ury, W., & Patton, B. (2011). *Getting to yes: Negotiating agreement without giving in*. Penguin Books.
- Fraser, N. (2003). Social justice in the age of identity politics: Redistribution, recognition and participation. In N. Fraser, & A. Honneth (Eds.), *Redistribution or recognition? A political-philosophical exchange* (pp. 7–109). Verso. <http://dx.doi.org/10.4135/9781446218112.n2>
- Giddens, A. (1979). *Central problems in social theory: Action, structure, and contradiction in social analysis*. University of California. <http://dx.doi.org/10.2307/2107414>
- Giddens, A. (1984). *The constitution of society: Outline of the theory of structuration*. Polity.
- Gordon, T. (2011). *Leader effectiveness training: L.E.T*. Berkley.
- Griggs, D., Stafford-Smith, M., Gaffney, O., Rockström, J., Öhman, M. C., Shyamsundar, P., Steffen, W., Glaser, Gisbert., Kanie, N., & Noble, I. (2013). Policy: Sustainable development goals for people and planet. *Nature*, 495, 305–307. <http://dx.doi.org/10.1038/495305a>
- Gustavo, G. C. (2023). Social responsibility as a strategy in university management. *Centro Sur*, 7(1), 73–80. <https://doi.org/10.37955/cs.v7i1.305>
- Jacob, W. J., Sutin, S. E., Weidman, J. C., & Yeager, J. L. (2015). *Community engagement in higher education: Policy reforms and practice*. Sense Publishers.
- Keyton, J. (2011). *Communication and organizational culture: A key to understanding work experiences* (2nd ed.). SAGE Press.
- Leal Filho, W., & Lange Salvia, A. (2019). *Handbook of sustainability science and research*. Springer. <https://doi.org/10.1007/978-3-319-63007-6>
- Li, W. S., Luo, Y. Y., & Tu, J. Y. (2009). Exercise prescription for the elderly. *Primary Medical Care & Family Medicine*, 24(1), 8–13. https://www.airitilibrary.com/Common/Click_DOI?DOI=10.6965%2fPMCFM.200901.0008
- Lin, M. T., Fang, I. Y., Chung, C. W., Chang, C. C., Shao, H. P., & Liu, Y. C. (2020). Effects of different Nordic walking training frequencies on gait performance in elderly adults. *Journal of Sports Performance*, 9(2), 93–106. https://www.airitilibrary.com/Common/Click_DOI?DOI=10.53106%2f240996512022090902003

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- Lin, W. C. (2011). Seeking the contrary and achieving understanding through dialogue: Gadamer's hermeneutics. *Tunghai Journal of Philosophy*, 16, 149–156. https://www.airitilibrary.com/Common/Click_Doi?DOI=10.29725%2fTJP.201107.0005
- Ministry of Education. (2018). University social responsibility: Connecting with the community to drive change. *Government Audit Quarterly*, 38(2), 13–16. <https://doi.org/10.3389/fpsyg.2021.617300>
- Robbins, S. P., & Judge, T. A. (2013). *Organizational behavior*. Pearson education.
- Song, W. Y., Li, X. Q., & Liu, W. H. (2022). Strategies and practices of USR & CSR Co-creating the value of fish village revitalization: Take Pingtung fish villages as an example. *Journal of Actional Development Studies*, 22(1), 133–170.
- Su, S. J. (2020). SDGs and university social responsibility: Opportunities for implementing interdisciplinary learning and research. *Student Affairs and Guidance Counseling*, 58(4), 1–7. [https://www.airitilibrary.com/Common/Click_Doi?DOI=10.6506%2fSAGC.202003_58\(4\).0001](https://www.airitilibrary.com/Common/Click_Doi?DOI=10.6506%2fSAGC.202003_58(4).0001)
- Thayer, R. E. (1996). *The origin of everyday moods: Managing energy, tension, and stress*. Oxford University Press. <http://dx.doi.org/10.1093/oso/9780195087918.001.0001>
- United Nations. (1992). *Agenda 21: Earth Summit - The United Nations Programme of Action from Rio*. United Nations.
- United Nations. (2000). *Millennium Development Goals*. <https://www.un.org/millenniumgoals/bkgd.shtml>
- United Nations. (2015). *Transforming our world: the 2030 Agenda for Sustainable Development*. United Nations General Assembly.
- United Nations (2023). *The sustainable development goals report 2023 (Special edition)*. The Department of Economic and Social Affairs (DESA).
- Vasilescu, R., Barna, C., Epure, M., & Baicu, C. (2010). Developing university social responsibility: A model for the challenges of the new civil society. *Procedia-Social and Behavioral Sciences*, 2(2), 4177–4182. <https://doi.org/10.1016/j.sbspro.2010.03.660>
- Walker, J., Pekmezovic, A., & Walker, G. (2019). *Sustainable development goals: Harnessing business to achieve the SDGs through finance, technology and law reform*. Wiley.
- Warlop, T., Detrembleur, C., Buxes Lopez, M., Stoquart, G., Lejeune, T., & Jeanjean, A. (2017). Does Nordic Walking restore the temporal organization of gait variability in Parkinson's disease? *Journal of Neuroengineering and Rehabilitation*, 14(1), 17. <https://doi.org/10.1186/s12984-017-0226-1>
- World commission on environment and development. (1987). *Our common future*. Oxford University Press.
- Young, A., & Dinan, S. (1994). ABC of sports medicine: Fitness for older people. *BMJ*, 309, 331–334. <https://doi.org/10.1136/bmj.309.6950.331>
- Yu, H. L., & Chen, D. S. (2024). Daily life practices and innovations of universities in local communities. *Humanities and Social Sciences Bulletin*, 25(3), 6–11.

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Yuan-Lung Tsai

Postdoctoral Research Fellow, Teachers College, National Chiayi University, Chiayi, Taiwan.
E-mail: tommyorlevis@gmail.com