

The Social Return on Investment of Hearing loss association of Kaohsiung



社團法人高雄市聾啞協會
Hearing Loss Association of Kaohsiung



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ABSTRACT

The Hearing loss association of Kaohsiung was established in 1987 by a group of dedicated individuals who recognized the scarcity of professional speech pathology resources and educational support for people with hearing loss. The association's goal is to advocate for the welfare and rights of individuals with hearing loss. As times have changed, the needs of people with hearing loss have evolved. There is an increasing demand for promoting barrier-free environments on campuses, cultivating diversity and inclusivity, facilitating the transition to employment and providing employment assistance, as well as offering relevant knowledge and growth courses for Parent. To enhance the quality and content of services for people with hearing loss, the association collaborates with the Hearing Loss Association of R.O.C. to promote more forward-thinking social welfare initiatives. The current focus is on raising awareness of hearing impairment and integrating relevant resources from social welfare, healthcare, workforce development, and education systems to provide necessary services, counseling, and advocacy for people with hearing loss.

To continually assess whether the execution strategies achieve the planned objectives, the Hearing loss association of Kaohsiung (formerly known as the Kaohsiung City Hearing Impaired Association) plans to use Social Return on Investment (SROI) analysis to evaluate the costs of inputs, generated outcomes, and stakeholder feedback. The association has commissioned the Social Enterprise Development & Research Center of National Sun Yat-sen University to conduct research, analysis, and evaluation to quantify the social value and impact created by the Deaf and hard of hearing teens Care Program and Support Employment for People with disabilities.

This SROI evaluation project report examines the social impact and value generated by the Hearing loss association of Kaohsiung through the Deaf and hard of hearing teens Care Program and Support Employment for People with disabilities services. The evaluation period covers one year, from January 1, 2021, to December 31, 2021. The final SROI value calculated for the project is 3.32, with a sensitivity analysis range of 1.64 to 5.00. Throughout the SROI analysis project, the Hearing loss association of Kaohsiung engaged with stakeholders to identify the main outcomes achieved through the Deaf and hard of hearing teens Care Program and Support Employment for People with disabilities services. The outcomes for the Deaf and hard

of hearing teens Care Program include: Increase self-confidence, Improve interpersonal relationship, Improve speaking skills, Better physical health, Improve planning skills , Increase self-achievement, Improve professional skills, Improve work efficiency , Increase empathy, Increase charitable giving, Improve visibility, Improve family relationship , Stress relief, and Improve interpersonal relationship. The outcomes for the Support Employment for People with disabilities service include: Improve interpersonal relationship, Feel frustrated, Increase empathy, Increase income, Increase self-achievement, Feel pressured, Improve professional skills, Stable income, and Achieve self-realization. The results of the report indicate that the current execution strategy and content of the Hearing loss association of Kaohsiung are able to achieve the expected goals of various services.

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Chapter 1: Hearing loss association of Kaohsiung

1.1 Project Overview

In the 1980s, due to a shortage of professionals in speech pathology and a lack of educational resources for individuals with hearing loss, societal understanding of "individuals with hearing impairments" was limited, leading to many misconceptions, such as assuming that hearing-impaired individuals were mute and challenging to communicate with. Moreover, the cost and time associated with speech correction were high, making it difficult for many families to afford. Parents were concerned that their children born with hearing impairments would struggle to integrate into mainstream education, leading to poor interpersonal relationships and social isolation. As a result, the "Kaohsiung Language Impairment Service Association" was established on March 28, 1987, through the collaborative efforts of enthusiastic individuals, with Ms. Lu Wei-hsia as the founding chairperson.

From the 2000s onward, advancements in technology and medicine, including the use of hearing aids, electronic ears, and visual communication systems, enabled some hearing-impaired children who received early treatment to appreciate the beauty of sound. The demand for services for individuals with hearing loss increased and evolved. For example, promoting accessible environments for Deaf and hard of hearing teens on campuses, cultivating diverse orientations, providing guidance for academic transfers and employment, and addressing the need for related knowledge and growth courses for Parents became more urgent. To enhance the content and quality of services for individuals with hearing loss, the "Kaohsiung Language Impairment Service Association" was renamed the "Hearing loss association of Kaohsiung" on March 6, 2004. By combining the strength of hearing-impaired Parents nationwide, the organization provides more comprehensive lifelong services and continues to collaborate with the "Hearing Loss Association of R.O.C." to promote more forward-looking social welfare work.

In 2020, there were 145,110 People with disabilities in Kaohsiung City who received employment guidance, accounting for approximately 5.24% of the city's total population, slightly higher than the national proportion of People with disabilities who received employment guidance (5.03%). Among them, there were 12,355 individuals with hearing loss, accounting for 8.51% of People with disabilities who received employment guidance, making it the fifth-largest group. Hearing loss can significantly reduce an individual's ability and willingness to communicate with others and society (Liu Dian-Zen, 2005). People with hearing impairments cannot establish interpersonal relationships and transmit messages to each other due to sensory damage, leading to social isolation and affecting the quality of family life. Therefore, the Hearing loss association of Kaohsiung aims to promote early diagnosis and early intervention, provide assistance for individuals with hearing loss, improve their communication skills, and reduce the social and emotional impact of hearing loss.

1.2 Scope and Objectives

1.2.1 Evaluation Target

The Hearing loss association of Kaohsiung (formerly known as the Kaohsiung City Hearing Impaired Association) provides employment counseling services, which include supportive employment services for People with disabilities in Kaohsiung City (employment counseling recipients) and employment services for those caring for People with disabilities in remote areas (employment counseling recipients). In addition to employment services for people with hearing impairments, it also covers other disabilities and graduating students with disabilities. Disability categories include: Category 1 - Neurological and mental structure, Category 2 - Eyes, ears, and related structures and sensory functions, and pain, Category 5 - Digestive, metabolic, and endocrine systems, Category 6 - Urinary and reproductive system-related structures and their functions, Category 7 - Nervous, muscle, and skeletal mobility-related structures and their functions, limb disability, and the development of job opportunities for people with moderate multiple disabilities, job matching, accompanied interviews, online counseling, employment-related learning, psychological and life counseling, and referrals. Employment specialists and Vocational rehabilitation Vocational rehabilitation case managers work together to handle the employment problems of individual cases, communicate and coordinate with enterprises, and help individual cases seek and maintain employment smoothly.

The Hearing loss association of Kaohsiung not only provides comprehensive employment counseling services for People with disabilities but also assists Deaf and hard of hearing teens by providing support outside the family and school setting, targeting their cognitive and behavioral development stages, helping them improve the inconvenience caused by hearing impairment from a young age, and ensuring their physical and mental health. The service targets a wide age range, from adult hearing-impaired individuals to elementary school Deaf and hard of hearing teens. A team, Social workers, and hearing-impaired volunteers from the Hearing loss association of Kaohsiung, combined with government, school, institutional groups, and sports teams, provide Deaf and hard of hearing teens care services, advocate for an accessible campus environment for Deaf and hard of hearing teens, and hold summer camps for Deaf and hard of hearing teens.

1.2.2 Evaluation Period

The Hearing loss association of Kaohsiung (formerly known as the Kaohsiung City Association for Deaf and hard of hearing teens) has been providing services to people with hearing loss for 35 years. The anticipated social benefits generated by the individuals with hearing loss who have received assistance during this period are expected to be significant. However, since many resources were not yet in place during the initial stages of service provision, the service projects were not fully developed. As a result, there may be some bias in the calculation of the final value when evaluating the entire SROI period. Additionally, due to the difficulty of data collection in the initial stages and the differences in the nature of the services, the research team, after consulting with the Hearing loss association of Kaohsiung, decided to select 2021 as the evaluation period since it represents the most complete service project with the most complete data available.

1.2.3 Evaluation purpose

Currently, the Hearing loss association of Kaohsiung (formerly known as the "Hearing Impaired Association of Kaohsiung") predominantly presents its records and achievements related to support services and employment counseling for individuals with hearing impairments through qualitative descriptions, such as Key Performance Indicators (KPIs), outcome reports, and photographs. Although the data has been digitized, technologized, and managed through a system, and uploaded to the cloud, stakeholders still cannot obtain specific information on the "input," "output," and "outcomes" of the project, as well as the final financial situation and subsequent benefits of each plan. Furthermore, if the numerical evidence presented by the project results could be more precise and convincing, it would be easier to understand and promote efficiency in future resource allocation.

In light of this, to determine whether the aforementioned public services can bring more benefits to society, the Hearing loss association of Kaohsiung (formerly known as the "Hearing Impaired Association of Kaohsiung") has commissioned the Social Enterprise Development Research Center at National Sun Yat-sen University to conduct a research and evaluation analysis to quantitatively demonstrate the social value and impact it has created. On one hand, this can be used to evaluate the effectiveness of various services as a basis for subsequent improvements. At the same time, the evaluation results can also provide a reference for future international certifications, enhancing opportunities for future cooperation with potential partners. Most importantly, the Hearing loss association of Kaohsiung hopes to enhance its sustainable development by optimizing and replicating successful and innovative service models through academic exchanges and collaborations, diverse training programs, consulting services, and learning from domestic and international experiences in social welfare and public services.

1.2.4 Evaluation items

Through Social Return on Investment (SROI) analysis, we can gain a comprehensive and in-depth understanding of the impact that the Hearing loss association of Kaohsiung has on the assistance provided to individuals with hearing impairments. After multiple discussions between the research team and the association, the service scope was narrowed down to "Care services for Deaf and hard of hearing teens," "Promotion of barrier-free environments for Deaf and hard of hearing teens," "Summer camps for Deaf and hard of hearing teens," "Supportive employment counseling," and "Employment services for People with disabilities (job counseling recipients) in remote areas." The nature and purpose of "Summer camps for Deaf and hard of hearing teens" and "Promotion of barrier-free environments for Deaf and hard of hearing teens" are similar to that of "Care services for Deaf and hard of hearing teens," and the stakeholder definitions are also similar; thus, they were included in the evaluation of "Care services for Deaf and hard of hearing teens." "Supportive employment counseling" and "Employment services for People with disabilities (job counseling recipients) in remote areas" share a similar nature and purpose, as well as stakeholder definitions; therefore, they were integrated into "Employment counseling services for People with disabilities (job counseling recipients)." Ultimately, based on the differences in the nature of the activities and the differences in stakeholders, they were divided into two main evaluation items: "Care services for Deaf and hard of hearing teens" and "Employment counseling services for People with disabilities (job counseling recipients)." The two services have significant differences in terms of target audience, service objectives, and service items.

"Care services for Deaf and hard of hearing teens" primarily involve proactive and continuous care, understanding the needs of Deaf and hard of hearing teens, and providing appropriate resources to address the gap in social and educational resources for hearing-impaired individuals during their youth. It offers a space for developing peer relationships and self-identification of obstacles while providing support outside the family and school. "Employment counseling services for People with disabilities (job counseling recipients)" cover not only employment services for hearing-impaired individuals but also other disabilities and newly graduated People with disabilities. For cases with the ability and motivation to work, it guarantees equal job rights, eliminates social obstacles, and assists People with disabilities (job counseling recipients) in career development that is suitable for their talents, abilities, and positions to achieve economic independence.

A. Care Services for Deaf and hard of hearing teens:

This service provides support for Deaf and hard of hearing teens during their cognitive and behavioral development, as well as personality growth stages. It assists them in developing peer relationships and offers a space for self-identification of obstacles, providing support outside their families and schools. Through active and continuous care, the service addresses the needs of Deaf and hard of hearing teens, furnishing appropriate resources to bridge the gap in social, political, and educational resources during their adolescence. Services encompass case management, peer group activities, Parents-child learning, social participation, campus advocacy, and summer camps. The target age range spans from elementary school to college students.

In the care services for Deaf and hard of hearing teens, case management services primarily assess the overall evaluation of Deaf and hard of hearing teens' psychological and adaptation abilities, family functions and relationships, and school and social relationships using a total of 20 indicators. If 1-2 indicators are rated poorly out of the 20, it signifies a low-level need; 2-3 indicators indicate a moderate need, and more than 3 indicators signify a high-level need. Social workers proactively interview cases, Parent, and teachers from schools through telephone calls, face-to-face interviews, and other means to comprehend the personal relationships between young people, families, and peers, as well as the current complex and multiple needs for studying, medical treatment, and resource use. Subsequently, they provide timely matching of corresponding resources.

B. Employment Counseling Services for People with disabilities (Employment Counseling Recipients):

People with disabilities who have household registration or reside in Kaohsiung City's jurisdiction and are over 15 years old with a disability handbook are the priority service targets for employment counseling services. The service offers general and supportive employment service modes: the general employment service targets People with disabilities (employment counseling recipients) who possess the ability and willingness to work independently in the competitive job market, while the supportive employment service targets those who have the ability and willingness to work but are not yet independent in the competitive job market. The sources of cases include job placement referrals from the disability service window, promotion through

resource classrooms in major colleges and universities, referrals from medical institutions and social welfare agencies, self-referrals from cases seeking assistance from the association, and promotion of employment services and staff public mobile phone LINE windows through the association's website, Facebook, and Instagram. These People with disabilities (employment counseling recipients) necessitate more support, companionship, and resource allocation in terms of employment due to their physical and mental disabilities. The Kaohsiung City Labor Bureau entrusted the Hearing loss association of Kaohsiung to provide employment counseling services for People with disabilities (employment counseling recipients), including professional counseling, skills training, job matching, and follow-up services, to aid them in their job search and employment stability, and promote their social participation and self-worth. The Hearing loss association of Kaohsiung collaborates with various enterprises and employers to furnish internship opportunities and employment matching services, expanding the channels and scope of employment for People with disabilities.

Chapter 2: Research Methodology

2.1 SROI Analysis Framework

This study adopts the Social Return on Investment (SROI) analysis, a tool framework commonly used by non-profit organizations worldwide as a performance evaluation method. It not only allows external observers to clearly understand the social impact generated by the project, but also serves as a reference for internal performance evaluation. It applies to non-profit organizations, social enterprises, for-profit corporations, and the government sector. SROI analysis can be divided into two types: predictive and evaluative. Predictive SROI is for future projects, forecasting the social impact created by the outcomes to enable users to allocate resources effectively and maximize social investment. Evaluative SROI is a retrospective method that evaluates the social impact generated by ongoing projects to allow users to understand the effectiveness and serve as the basis for adjusting the plan. In 2012, the UK government assisted Social Value UK and Social Value International in publishing the "Guide to Social Return on Investment," which is used to measure the changes in the interests of stakeholders affected by intervention activities and calculate the impact and social value brought about by the changes and present the results in monetary value. More importantly, SROI is not just a number. Through further analysis, it could serve as a basis for decision-making, improving the effectiveness of social welfare management as a whole.

2.1.1 Explanation of SROI Analysis Framework and Execution Methodology

When conducting an SROI analysis, it is necessary to follow the six significant steps, as shown in Figure 2-1:

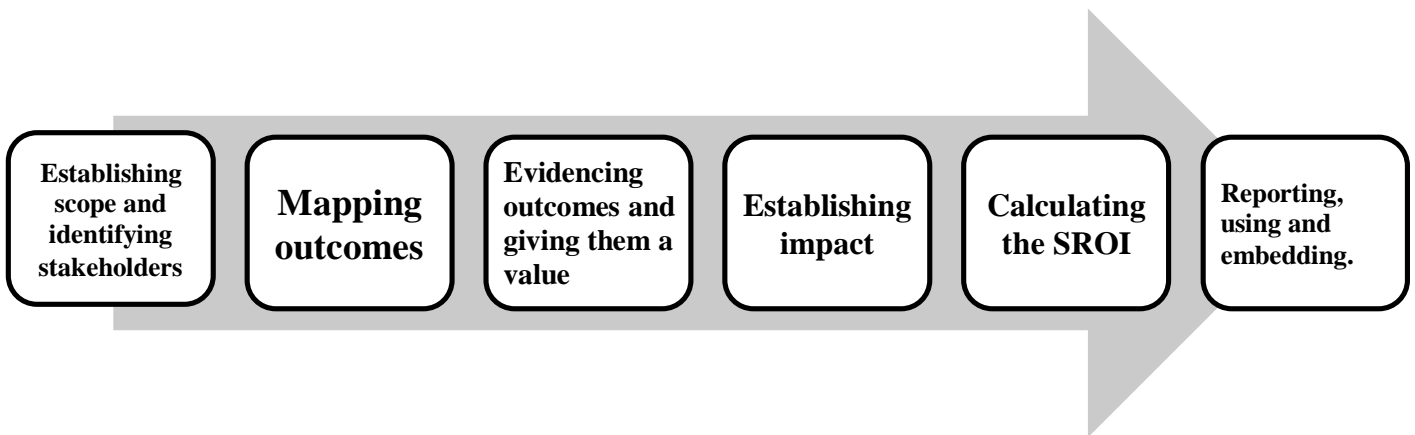


Figure 2-1 : Steps of operating SROI

(1). Step 1: Establishing scope and identifying stakeholders

This step involves determining the scope of SROI analysis and identifying the direct, indirect, and diffuse stakeholders and how they participate. Therefore, before conducting the analysis, it is necessary to understand the project's background and assume the expected and unexpected changes brought about by the project to confirm the feasibility of SROI analysis.

(2). Step 2: Mapping outcomes

This step mainly measures the relationship between stakeholders' input, output, and outcomes. Standard methods to understand this relationship include surveys, focus groups, interviews, questionnaires, and volunteer evaluations. Clearly describe the output directly caused by the input and the impact of the crucial changes that finally occur. Through stakeholder feedback, outline the causal relationship between input, output, and outcomes in a chain of events, and draw a Chain of events. This step is the core of SROI.

(3). Step 3: Evidencing outcomes and giving them a value

Grasping the "outcomes" and measuring them through "indicators," confirming the outcomes' occurrence, then evaluating their value in monetary terms. Quantifying and pricing qualitative and narrative outcomes, setting indicators, and collecting relevant data to prove that results have occurred. Abstract narrative outcomes are monetized by using financial proxy variables in the impact map. Typical considerations for converting results into monetary value include the following examples:

- Traditional economic value (e.g., how many employment opportunities can be created)
- Financial alternative value (e.g., reducing the medical costs of potential risks)

(4). Step 4: Establishing Impact

This step involves sensitivity analysis, using four different analysis factors (Deadweight, Displacement, Attribution, and Drop-off) as measurement standards to avoid overestimating or bias results and increase the credibility of the analysis.

- Deadweight: Indicators of outcomes that would have occurred regardless of the intervention.
- Displacement: The extent to which results are replaced by other results.
- Attribution: The number of results that come from the contributions of other organizations or individuals.
- Drop-off: The gradual decline in effectiveness over time.

(5). Step 5: Calculate the SROI

Based on the data collected in the first four steps, the positive and negative effects are added and discounted to determine the full benefits. The SROI value is calculated by dividing the total benefits by the total investment.

(6). Step 6: Reporting, using and embedding

To effectively use SROI analysis as a management reference, researchers should present the report and discuss with stakeholders whether the analysis is appropriate. This step is crucial but often overlooked.

2.2 SROI Analysis Principles

SROI was developed from Social Accounting and cost-benefit analysis. In an SROI analysis, judgments and assumptions must be made throughout the entire process based on the available information. To ensure that SROI does not become a mere numerical game or a promotional tool, the SROI Guide requires users to adhere to the following eight principles when analyzing and reporting calculations:

- (1). **Involve Stakeholders:** Stakeholders can experience the changes brought about by intervention activities and are the best candidates for describing those changes. Identifying the stakeholders of a project and inviting them to participate in the SROI analysis process enables a better understanding of the people affected by the intervention activity, the value brought by the intervention, and the measurement methods used to quantify that value.
- (2). **Understand What Changes:** Value is created by different stakeholders and enjoyed by various stakeholders. Changes include expected or unexpected changes, as well as positive or negative changes. Corresponding change theories are needed to explain how these changes occur. These changes are the results of intervention behavior contributed by stakeholders and can be classified as social, economic, or environmental outcomes. We need to measure these outcomes to demonstrate that the intervention has brought about changes.
- (3). **Value the Things That Matter:** We can use equivalents to value outcomes, allowing outcomes that cannot participate in market transactions but are generated by non-profit organizations or government intervention activities to be presented.
- (4). **Only Include What is Material:** Information on decisions and outcomes impacting stakeholders' experiences should be analyzed and listed as essential materials. For determining which information is important, reference should be made to institutional policies, peer organizations, social norms, and short-term financial impacts. Therefore, external audits are crucial to ensure that all vital information has been included in the analysis.
- (5). **Do Not Overclaim:** Use trends and existing data to help analyze the changes caused by intervention behaviors and compare them with other factors to eliminate unnecessary elements. Consider the contributions made by other individuals or organizations to match the contributions of the outcomes.
- (6). **Be Transparent:** Record and explain each decision related to stakeholders, outcomes, indicators, and benchmarks, including information sources and collection methods, considerations of different factors, and communication with stakeholders. In SROI analysis, we will analyze how these factors affect outcomes, and the more transparent and open the decision-making process is, the more credible the SROI analysis results will be.
- (7). **Verify the Results:** Although SROI analysis provides an opportunity to understand the value created by intervention behaviors comprehensively, it inevitably includes some subjective analysis. Appropriate independent audits can help stakeholders examine the work of SROI analysts to see if the decisions they made during the SROI analysis are reasonable.

(8). **Be responsive:** Describe how the organization manages its influence and how it can actively amplify the various goals, strategies, and methods of influence based on stakeholder feedback. It can be divided into three aspects:

- Operational : Improving the implementation of existing activities to increase social value.
- Tactical : Choosing activities that can best achieve impact goals.
- Strategic : Setting influence goals based on stakeholder needs and social goals.

Chapter 3: Scope of Research and Stakeholder Identification

3.1 Stakeholder Identification

3.1.1 Stakeholder Survey

During the initial research stage, the research team and the Hearing loss association of Kaohsiung jointly held an SROI workshop, inviting stakeholders primarily of service providers and the core team of the Hearing loss association of Kaohsiung. Through intensive information exchange during the workshop process, the research team obtained oral data and subsequent documents to understand stakeholders' potential roles in the service program.

This study referred to two methods to identify stakeholders. The first step was to use the IRIS+ indicators developed by the Global Impact Investing Network (GIIN) to identify stakeholders. GIIN, a non-profit organization established in 2009 with 330 members in nearly 50 countries/regions, is committed to accelerating the development of the impact investing industry. The organization gathers impact investors, uses innovative methods, provides guidance and support for good practices, and establishes evidence-based for the industry. In GIIN's Impact Measurement and Management (IMM) system, IRIS+ is a recognized system for measuring, managing, and optimizing impact, allowing investors to set impact goals based on impact categories and themes (according to the IRIS+ theme classification) or SDGs.

The second step was differentiating stakeholders based on their contact with the service program. Stakeholders were classified as implementers, direct beneficiaries, and indirect beneficiaries. The following is a detailed explanation:

According to IRIS+, stakeholders can be classified into Planet, Suppliers, Employees, Distributors, Clients, Microenterprises, Small and Medium Enterprises, and Others. The Hearing loss association of Kaohsiung provides various activities such as connecting resources, courses, and external collaborations, so the research team analyzed stakeholders mainly in the categories of clients, suppliers, employees, and partner organizations. As the Hearing loss association of Kaohsiung has contacted many partner organizations, the National Sun Yat-sen University research team included those with close and sustained collaborations in the analysis.

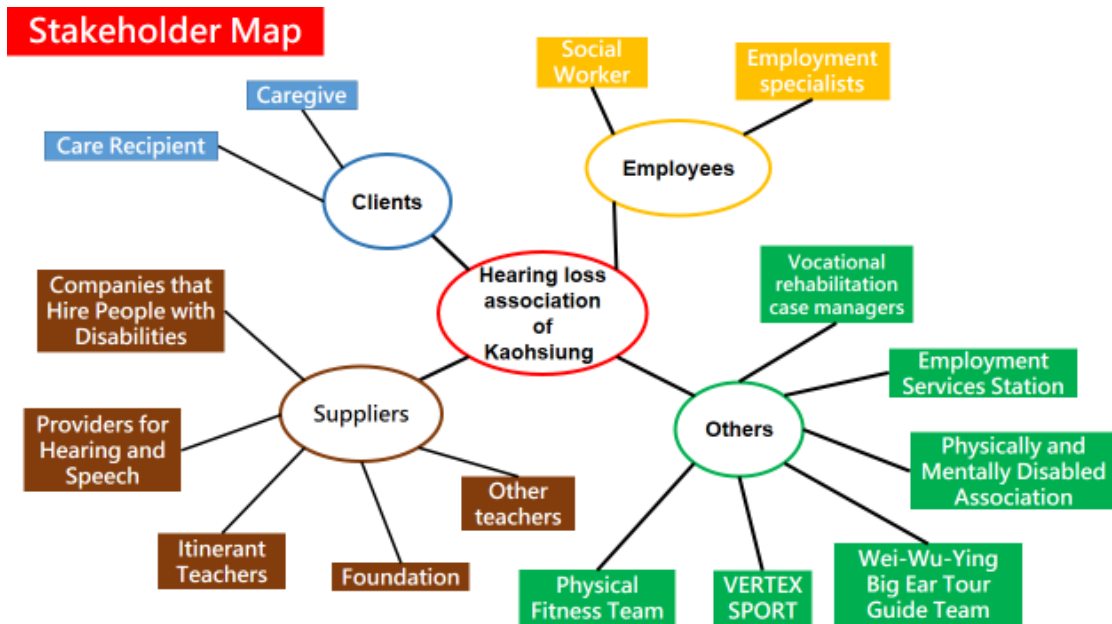


Figure 3-1 : Potential stakeholders under each category based on IRIS+

3.1.2 Stakeholder classification

After a preliminary understanding of the stakeholders, the research team identified that the Hearing loss association of Kaohsiung's stakeholders mainly include service users and service providers. According to the nature of the services, we further classify stakeholders into "Deaf and hard of hearing teens Care Program" and "Support Employment for People with disabilities." The Deaf and hard of hearing teens Care Program primarily focuses on providing proactive and ongoing care to understand the needs of Deaf and hard of hearing teens and provide appropriate resources to bridge the gap in social and educational resources during adolescence. The research team recognizes that the stakeholders involved in the two services differ, and the services' nature also varies. Therefore, we analyze and understand each service's implementers, direct beneficiaries, and indirect beneficiaries separately.

- (1). **Implementer:** The Hearing loss association of Kaohsiung is responsible for the project's operation. The association has two primary services for people with hearing loss: the "Deaf and hard of hearing teens Care Program" and the "Support Employment for People with disabilities."
- (2). **Direct beneficiaries:** The primary beneficiaries of this service are people with hearing loss and other People with disabilities who directly use the resources and services provided. The core service providers are Social workers, deaf and hard-of-hearing volunteers, Employment specialists, vocational rehabilitation Vocational rehabilitation case managers, long-term professional collaborators, and businesses that employ People with disabilities.
- (3). **Indirect beneficiaries:** Indirect beneficiaries are other service beneficiaries whose changes are mainly caused by peripheral stakeholders resulting from implementing the plan. Indirect stakeholders of this project include external cooperating organizations that provide material and assistance to promote the project, including schools, foundations, and other social services.

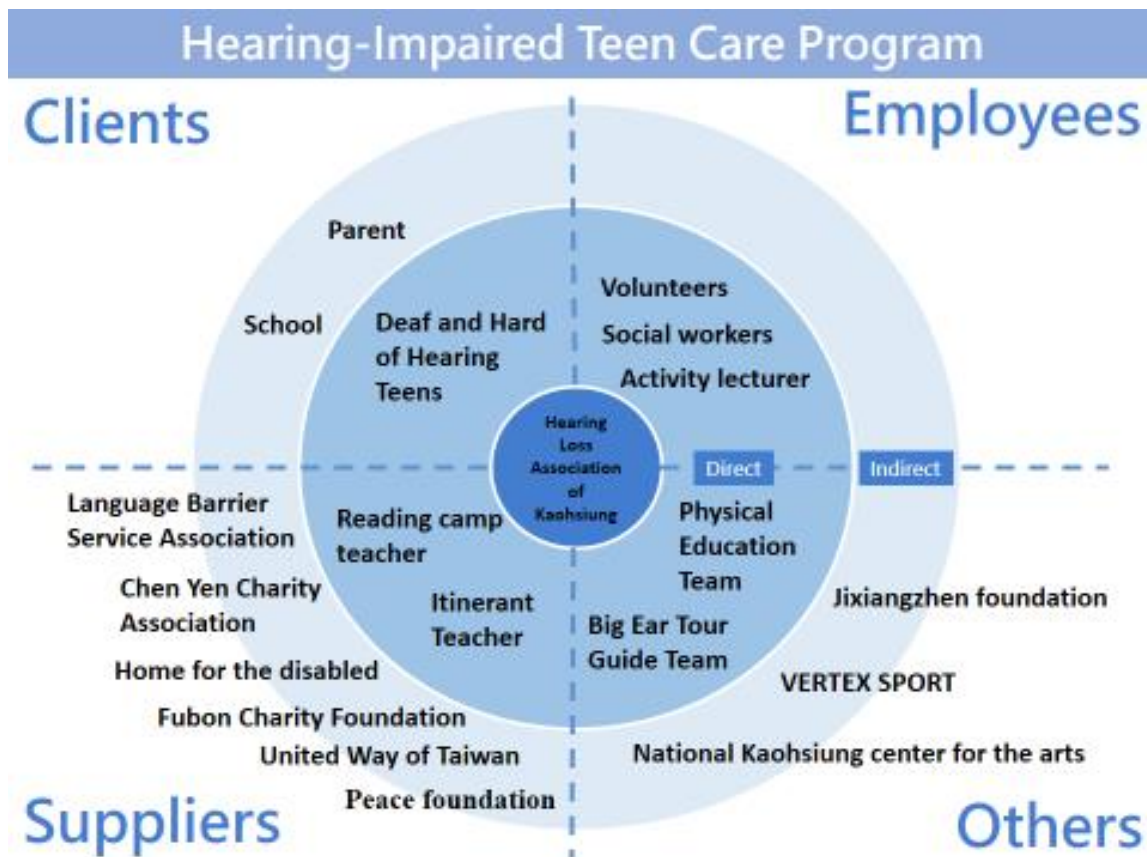


Figure 3-2 : Potential stakeholders of the Deaf and hard of hearing teens Care Program based on IRIS+ categories

Figure 3-2 illustrates the Deaf and hard of hearing teens Care Program stakeholders categorized according to the four IRIS+ categories and further segmented based on direct and indirect beneficiaries. The direct beneficiaries are the stakeholders within the inner circle, which includes different types of Deaf and hard of hearing teens, frontline staff, collaborating organizations, and teachers, many of whom are directly related to the service users. The indirect beneficiaries are the entities that provide assistance or collaboration to the service activities, such as suppliers, foundations, and the Parent and schools of students who benefit from the service.

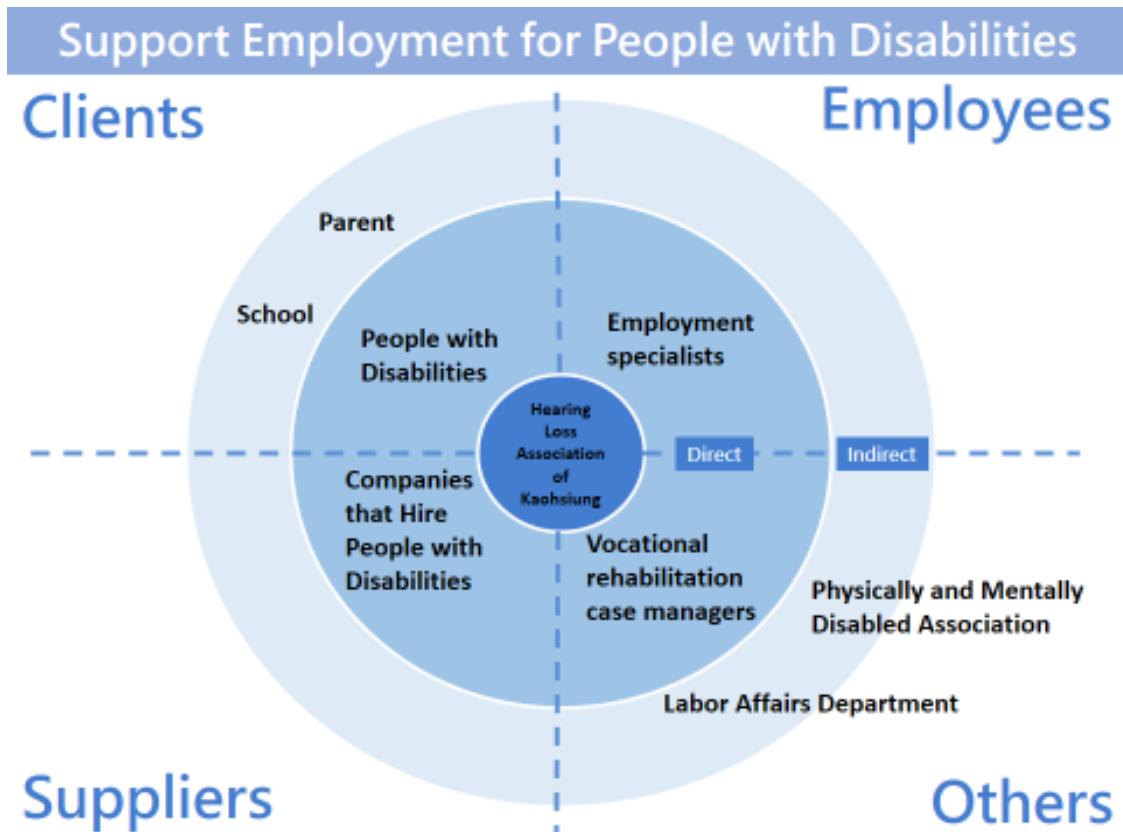


Figure 3-3 : Potential stakeholders of Support Employment for People with disabilities service categorized by IRIS+

Figure 3-3 shows the stakeholders of the Support Employment for People with disabilities service classified according to the four categories of IRIS+, and we further subdivide it according to direct and indirect beneficiaries. Direct beneficiaries are stakeholders in the inner circle, including various types of People with disabilities and disabled graduates, as well as frontline workers and companies that employ People with disabilities, many of whom are directly related to service users. Indirect beneficiaries are partners who receive assistance or cooperate in this service activity and Parent, schools, and employment service units who benefit from it.

In different stages of the assessment, the research team from National Sun Yat-sen University first conducted workshops to explain the stakeholders involved in this assessment to the interviewees from various stakeholder groups and asked them to verify if we excluded any relevant parties and if the impact was consistent with the actual situation. Through interviews, we continuously modified our understanding of the activities and stakeholders.

Table 3-1 and 3-2 show the inclusion, exclusion, and reasons for stakeholders in the Deaf and hard of hearing teens Care Program and Support Employment for People with disabilities. The research team first classified the main categories of stakeholders and then divided them based on the nature of their services and outcomes. Finally, materiality discussion will be conducted through interviews to decide whether to include stakeholders. We evaluate materiality through Relevant and Significant. Relevant to at least one of the following: policies, stakeholders, work of peers, societal norms, short term financial impacts.

Significant means that the real or potential impact of the issue(both positive and negative) has passed a threshold that means it influences decisions and actions

Table 3-1 : Inclusion, Exclusion, and Categorization Results and Reasons for Stakeholders of Deaf and hard of hearing teens Care Program

Stakeholders		Inclusion or exclusion	Reasons
Category	Subgroup		
Deaf and hard of hearing teens	Those who have not volunteered for the activities	Merged inclusion	The primary beneficiaries of this program are the participants of various caring activities provided by the Hearing loss association of Kaohsiung. In the case of services, Social workers assess the needs of Deaf and hard of hearing teens and classify them into low, moderate, and high categories, providing care and assistance according to their specific needs. Deaf and hard-of-hearing volunteers are responsible for planning, designing, and leading activities during summer camps. As fellow deaf and hard-of-hearing individuals, they can better understand their peers' needs and play a role in encouraging them to improve their confidence, a characteristic service provided by the Hearing loss association of Kaohsiung. Interviews with management determined that the nature of services and activities provided is similar since the target audience is primarily hearing-impaired, which conforms the relevance to stakeholders, work of peers, social norms, and has enough impact, and therefore, it is significant. Additionally, after stakeholder interviews, it was found that there is little expected difference in outcomes, and after the statistics analysis, gender and age also don't make obvious difference, with only a few Deaf and hard of hearing teens who serve as volunteers expected to have different results. Overall, the research team believes that the differences in outcomes are insignificant, so it merged stakeholders into one group. Additional effects for Deaf and hard of hearing teens serving as volunteers are investigated separately on subsequent questionnaires to ensure that subgroups can differentiate outcomes.
	Those who have volunteered for the activities		
Social workers		Inclusion	For the main outputs and promoters of the program, the person in charge is responsible for various projects and is the role that most frequently interacts with people with impaired hearing. Currently, there is one dedicated staff member in this position. The stakeholder conforms the relevance to stakeholders, work of peers, social norms, and has a substantial

Stakeholders		Inclusion or exclusion	Reasons
Category	Subgroup		
			impact on policies and decision-making processes, and therefore, Social workers are significant.
Hearing loss association of Kaohsiung		Inclusion	After interviewing members and the chairman, the Hearing loss association of Kaohsiung's effects generated by the activity significantly impacted the company's overall performance, so the program included it in the list of stakeholders. The stakeholder conforms the relevance to stakeholders, work of peers, social norms, and has a substantial influence on policies and decision-making processes, and therefore, Hearing loss association of Kaohsiung is significant.
Activity lecturer		Exclusion	Activity lecturers plan and teach community activities and Parents-child co-learning courses. Their possible outcome are Increase self-achievement and Increase income. However, in the context of the Hearing-Impaired Teen Care Program, their influence on actions and decisions is deemed insignificant due to the infrequent sessions and the minimal impact on guest speakers so this stakeholder is excluded.
Reading camp teacher		Exclusion	The reading camp teacher serves as the instructor for the summer reading program and provides teaching for Deaf and hard of hearing teens. However, in the context of the Summer Reading Camp, the influence on actions and decisions of the stakeholder involved in teaching reading courses to hearing-impaired students is considered insignificant due to the infrequency of the program and the minimal impact caused by the shift to online teaching.the impact on this stakeholder is relatively small, and therefore we excluded it from the analysis.

Stakeholders		Inclusion or exclusion	Reasons
Category	Subgroup		
Parents		Inclusion	During the interviews with Parent, we found that their participation in the program helped to stabilize the development of their Deaf and hard of hearing teens and establish a good family relationship. Although Parent were not direct beneficiaries, their overall impact was significant. The stakeholder conforms the relevance to stakeholders, and has a substantial influence on decision-making processes. so we included them in the analysis. We also observed no significant differences in economic and cultural levels among the participating Parent, as the nature of the activities was similar, and there were no significant differences in the characteristics of the target group.
Itinerant teachers		Inclusion	Itinerant teacher for hearing impairment are responsible for providing one-on-one teaching to Deaf and hard of hearing teens. The stakeholder conforms the relevance to stakeholders, and has a substantial influence on decision-making processes. Additionally, their level of involvement and frequency of participation is similar. There were no subgroups identified.
Homeroom teacher		Exclusion	Homeroom teachers were not the program's main beneficiaries and were only indirectly affected by the program with minimal impact. They may have outcomes like helping class management and making team harmony. However, in the context of the Hearing-Impaired Teen Care Program, the outcome and role of Homeroom teacher is considered less relevant, and their impact on actions and decisions is minimal. Therefore, we excluded them as stakeholders.
Classmates		Exclusion	Although gaining a better understanding of the difficulties and inconveniences faced by Deaf and hard of hearing teens through campus advocacy activities, they are only indirectly affected by the service outcomes, and their impact is relatively small, and their impact on actions and decisions is minimal. Therefore, we excluded them from the stakeholders.

Stakeholders		Inclusion or exclusion	Reasons
Category	Subgroup		
School		Exclusion	While the educational outreach efforts aimed at promoting friendliness toward Deaf and hard of hearing teens within schools helped to mitigate the lack of resources available to these students, the impact on the stakeholders was relatively small and indirect, and their impact on actions and decisions is minimal. resulting in the exclusion from the stakeholders.
Kaohsiung City, for services related to hearing and speech impairment		Exclusion	Kaohsiung City, for services related to hearing and speech impairment, provided transcription services and assisted with promoting the project. However, their impact could have been more minimal when we interviewed them, and their impact on actions and decisions is minimal, and their impact on actions and decisions is minimal. so we excluded them as a stakeholder in this program.
Jixiangzhen Foundation		Exclusion	The Jixiangzhen Foundation was responsible for case referrals in the program, Hearing Loss Association of Kaohsiung is one of their partner. But after interviews, their impact was relatively small, and their impact on actions and decisions is minimal. So we excluded them as stakeholders.
Chen Yen Charity Association		Exclusion	The Chen Yen Charity Association provided material and financial assistance to the program, as well as cooperation in emergency relief. However, the funding amount is not a primary aspect of the collaboration, and the proportion of the funding is not high. Through interviews, it was understood that their impact is relatively small, and their impact on actions and decisions is also not significant. Therefore, we excluded them from the list of stakeholders.
National Kaohsiung Normal University Physical Fitness Team		Exclusion	The National Kaohsiung Normal University Physical Fitness Team provided sports program services for the project. Through interviews, it was found that they have various audiences, with the main audience being elderly people in hospitals. Their involvement with Hearing loss association of Kaohsiung is relatively limited, with at most 1-2 sessions per year. The potential impact on them may be a better understanding of the hearing-impaired, but it is relatively small. Additionally, their impact on actions and decisions is also not significant. Therefore, we excluded them from the analysis.

Stakeholders		Inclusion or exclusion	Reasons
Category	Subgroup		
National Kaohsiung center for the arts		Exclusion	The National Kaohsiung Center for the Arts provided the venue for the project, but its impact on actions and decisions is also not significant. Therefore, this stakeholder will be excluded.
Wei-Wu-Ying Big Ear Tour Guide Team		Exclusion	The Wei-Wu-Ying Big Ear Tour Guide Team provided sports program services in the project, along with the experience provided by Hearing loss association of Kaohsiung in deaf activities. However, its relevance to the outcomes of this specific project is relatively small. Additionally, its impact on actions and decisions is also not significant. Therefore, we excluded them from the analysis.
Home for the Disabled Bureau of Social Affairs Kaohsiung City Government		Exclusion	The Home for the Disabled Bureau of Social Affairs Kaohsiung City Government assisted in lending activity space in the program. Through interviews, their impact was relatively small, it has little impact on actions and decisions, it is not significant, so we excluded them from stakeholders.
VERTEX SPORT		Exclusion	VERTEX SPORT provided sports courses in this program, but according to interviews, their involvement was minimal, and their impact was relatively small, it also has little impact on actions and decisions, so it is not significant. Therefore, we excluded them from stakeholders.
Peace Foundation		Exclusion	In the project, the Peace Foundation assisted in class promotion. It mainly targets younger elementary school students, but its relevance to the outcomes of this specific project is relatively small. Additionally, its impact on actions and decisions is also not significant, and therefore we excluded them from stakeholders.
Social Affairs Bureau		Exclusion	In the project, the Peace Foundation assisted in the class promotion. However, due to its involvement with multiple collaborating units, its significance to the outcomes of the project is not relevant. therefore we excluded it from stakeholders.

Stakeholders		Inclusion or exclusion	Reasons
Category	Subgroup		
Fubon Charity Foundation		Exclusion	Fubon Charity Foundation provided funding for the summer camp's operational expenses, but the amount accounts for a small portion of the overall activity expenses, and it has little impact on actions and decisions. Therefore, it is not significant, we excluded them from stakeholders.
United Way		Exclusion	United Way assisted with personnel expenses in the program as a stakeholder. However, due to its involvement with multiple collaborating units, its relevance to the outcomes of this specific project is relatively small. Therefore, we excluded them from stakeholders.

According to Table 3-1, the Hearing loss association of Kaohsiung has collaborated with a diverse range of organizations to provide assistance and support. Only select assisting and collaborating organizations were evaluated to ensure focus and compliance with SROI principles. While these organizations have had substantial cooperation and support from the Hearing loss association of Kaohsiung, they generally participate only in specific activities, resulting in limited impact on the project. Therefore, we excluded external organizations from the assessment, but still emphasized their importance.

Table 3-2 : The results and reasons of the inclusion, exclusion, and classification of stakeholders in Support Employment for People with disabilities

Stakeholders		Inclusion or Exclusion	Reason
Category	Subgroup		
People with disabilities	Male	inclusion	The main beneficiaries of this project, primarily the first and second categories of disabled persons, come from graduates of schools or referrals to employment service stations and participate in the employment service project for disabled persons provided by the Hearing loss association of Kaohsiung. In terms of service, Employment specialists receive assignments from Vocational rehabilitation Vocational rehabilitation case managers directly match them with general workplaces that comply with the Labor Standards Law. According to individual needs, employment care and assistance are provided to the direct beneficiaries. It can be confirmed that it is relevant to stakeholders, work of peers, and social norms, and its impact is significant. Through discussions with service providers, the nature of services and activities is very similar, and there will not be significant differences in expected results.
	Female		

Stakeholders		Inclusion or Exclusion	Reason
Category	Subgroup		
			Stakeholder interviews also indicate that the expected results are not markedly different. Considering their similar expected outcomes, they were combined and incorporated. Additionally, data analysis was conducted on age and gender, and it was found that gender resulted in the most significant subgroup differences. This was primarily due to variations in the impact of the outcomes. According to the interview, the possible reason is that the nature of employment for persons with disabilities is more suitable for women. As a result, stakeholders will be categorized separately based on gender for inclusion.
Rural Employment specialists of Hearing loss association of Kaohsiung		Integration and inclusion	As the main output and promoters of the project, they are responsible for the implementation of the project and are in the most frequent contact with people with physical and mental hearing impairments. In the early stages of individual employment, intensive visits, supervision, and assistance are provided to help individuals stabilize their employment. Considering their significant impact on the project, it can be confirmed that it is relevant to stakeholders and work of peers, and it has a substantial influence on actions or decisions. Therefore, it possesses significance, and as a result, these stakeholders will be included. After conducting interviews, it was found that their services were similar, but there were slight differences in the salary system. Considering their similar expected outcomes, they were combined and incorporated.
Employment specialists of Hearing loss association of Kaohsiung			
Hearing loss association of Kaohsiung		Inclusion	The board of the Hearing loss association of Kaohsiung is mainly composed of Parents of People with disabilities, whose goal is to help People with disabilities find employment smoothly and obtain better welfare and treatment. As the producers and promoters of the plan, they maintain a good relationship with the relevant cooperative units and continue to help People with disabilities enter the workplace and stabilize employment. This stakeholder has a significant impact on the overall activity as they are the initiators and promoters of the project. After conducting interviews with members and the chairman, it was determined that the effects generated by the activity have a substantial impact on the company as a whole. It can be confirmed that this stakeholder is relevant to policies, stakeholders, work of peers, social norms, and short-term financial

Stakeholders		Inclusion or Exclusion	Reason
Category	Subgroup		
			impacts, and its impact on actions and decisions is considerable, so it is included.
	Family	Exclusion	After interviews, it was found that most of the cases in the job service were relatively independent individuals of older age, so Parents were indirect contacts. After interviewing with the Employment specialists, it was generally found that Parents would not participate in the interaction between the Employment specialists and the individual. The feedback from Parents interviews also showed that the service was more assisted by the Employment specialists, and Parent themselves focused on seeing the changes in the individual. At the same time, due to the contact with the association being less, it was difficult to conduct the survey. Considering the avoidance of overestimating results and the difficulty of the survey, as well as its minimal impact on actions and decisions, it is not significant,so this stakeholder was excluded.
	School	Exclusion	There are teachers at school who provide transition services for graduates to find employment, but the school has been minimally affected by the rural employment reconstruction services, only providing transition services through cross-team cooperation and receiving indirect service effects.Considering that it has little impact on actions and decisions, it is not significant, so this stakeholder is excluded.
External organizations	Vocational rehabilitation Vocational rehabilitation case managers	Inclusion	At the Employment Services Station, the staff is responsible for communicating with People with disabilities to understand their job requirements and to help them evaluate and plan suitable jobs. Subsequently, they refer to Employment specialists for job matching and join with Employment specialists to ensure stable employment for the cases.It can be confirmed that this process is relevant to stakeholders and work of peers, and it has a significant impact on activities and decision-making. Therefore, these stakeholders will be included. This stakeholder is included and confirmed through interviews. The nature of the work of Vocational rehabilitation Vocational rehabilitation case managers is the same, and there is no categorization, so there are no subgroups.
	Physically and Mentally Disabled	Exclusion	The goal of the Physically and Mentally Disabled Association in Taiwan is to help People with disabilities find suitable Employment specialists and assist them with finding job opportunities, so it is a

Stakeholders		Inclusion or Exclusion	Reason
Category	Subgroup		
	Association in Taiwan		cooperative group. After interviews, the number of referrals to the Hearing loss association of Kaohsiung is relatively small, and the impact is relatively small. Considering that it has little impact on actions and decisions, it lacks significance, so this stakeholder is excluded.
	Employment Services Station, Labor Affairs Department, Kaohsiung City Government	Exclusion	Employment Services Station, Labor Affairs Department provides suitable channels for disabled people who are seeking jobs, helping them with job assessment planning and pre-job training resources. Helping disabled people get jobs and stabilize their employment is an indirect impact, and considering that it has little impact on actions and decisions, it is not significant, so this stakeholder is excluded.
	Employers of People with disabilities	Exclusion	Employers of People with disabilities, due to the different motivations of each employer for employing People with disabilities, were interviewed. Most of the employers of People with disabilities benefit from providing salaries in exchange for their services. Therefore, to avoid overestimating the results, and the relevance of the results to social norms is relatively small, this stakeholder will be excluded.

As seen from Table 3-2, the main stakeholders of the Employment Service for People with disabilities in the Hearing loss association of Kaohsiung are People with disabilities, Employment specialists, and vocational rehabilitation Vocational rehabilitation case managers. Additionally, it is specifically mentioned that the duties of Vocational rehabilitation Vocational rehabilitation case managers to conduct job exploration and job evaluation after contacting disabled persons. After determining the direction of their employment, they will be referred to Employment specialists for job opportunity development and job matching services. During the process, Vocational rehabilitation case managers need to cooperate closely with Employment specialists to help disabled clients, so they have a significant impact. Therefore, they should be included. As for the graduates, the school and Parent are not the main beneficiaries, and they have little contact with this project. Most of them do not understand the services the disabled clients receive, so they should be excluded. As for the Hearing loss association of Kaohsiung, although it is included as a stakeholder, the results of the Deaf and hard of hearing teens Care Program and the Employment Support for People with disabilities are the same, and the stakeholders are all the Hearing loss association of Kaohsiung. To avoid overestimation of the results, they will be merged later. The risk of double-counting was eliminated after confirming the stakeholders of the two major activities, with the only mutual stakeholders being the Hearing loss association of Kaohsiung, which will be calculated as a single unit in subsequent calculations, without any concerns of double-counting.

3.2 Stakeholders Engagement

Through stakeholder participation at each stage, we would be able to understand how stakeholders participate in the Hearing loss association of Kaohsiung's Deaf and hard of hearing teens Care Program and Employment Support for People with disabilities. We first held two workshops to enable stakeholders to have a comprehensive understanding of the concept and research methodology of SROI impact assessment. Through stakeholder sharing, we gained insight into their participation in the services of the Hearing loss association of Kaohsiung. We also had an in-depth discussion with the service implementation teams about the process of all activities. This helped us understand the changes in the service process and the links that may be generated in the process. After the workshops, we began interviewing key stakeholders with interviewers who had experienced in-depth interview training. After the interviews, we constructed a complete chain of events and gained a clear understanding of output, input, change, and outcome. The following records the process of the workshop and interviews:

3.2.1 Confirming service process and understanding expected changes

- (1). **Workshop (I) and Interviews:** In the first workshop, the basic concept and steps of SROI were introduced, and five stakeholders participated. A detailed introduction was made on output, input, and outcomes, and stakeholder interview data was collected when the first workshop ended. After the workshop, we obtained preliminary views of stakeholders on input (including time cost), output, and outcomes, and the research team made deductions and analyses according to the content and structured the chain of events and preliminary SROI analysis.



- (2). **Workshop (II) and Interviews:** In the second workshop, we had further discussion of the inputs, outputs, and outcomes identified in the first workshop to see if there are potential areas for consolidation of outcomes in order to confirm the final expected outcomes, and then develop indicators for measuring outcomes and financial proxies for understanding stakeholder feedback on outcomes.



- (3). **Progress discussion and follow-up interviews arrangement:** We discussed the interview arrangements with service providers of the Hearing loss association of Kaohsiung, confirming suitable stakeholder representatives to understand the service processes and ensure diversity was considered as the main pillar. We then arranged related interviews.
- (4). **Outputs and interviews (III):** Through the on-site physical workshop, reviewing and investigating the output data on the record sheet allowed us to show a detailed description of each stakeholder's experience. After understanding the output of each activity, cost and financial figures were confirmed with the Employment specialists, allowing us to comprehend the output data of each activity and conduct in-depth discussions for related reports.
- (5). **Chain of Events:** The research team conducted a report on the chain of events and stakeholders, exchanging views on the chain of events and outcomes. At the same time, further discussions were conducted on the content of the services, and a deeper understanding of stakeholder participation was achieved, confirming the challenges that may be encountered in subsequent investigations. This process contributed to the writing of the chain of events and outcomes, as well as to the subsequent design of the questionnaire.
- (6). **Design value game on financial proxy:** After completing the group discussion and interviews of the value game, the research team completed the preliminary financial proxy of the stakeholders. To ensure no problems were encountered with the sample, a questionnaire was conducted to ask stakeholders about the gifts they would buy for the holiday season, ranging from the lowest valued gifts to the highest valued gifts. This information provided more data for the research team to design the valuation method of the value game.
- (7). **Validation of questionnaire design:** After completing the questionnaire design, an online briefing was arranged for stakeholders to understand the questionnaire design. The goal was to verify and confirm the outcomes and indicators and ensure sufficient understanding of the questionnaire questions to verify the final outcomes.



3.2.2 Stakeholder Interviews and Surveys

To ensure a comprehensive interview process and content, the research team conducted individual interviews with stakeholders. This approach allowed for the most authentic interview results, as stakeholders were not influenced by external factors. Table 3-3 and 3-4 below present the sample period from January to December 2021, summarizing the number of subjects and interviewees for the Deaf and hard of hearing teens Care Program and the Employment Support Service for People with disabilities.

Table 3-3 : Summary of the Number of Respondents and Samples of Stakeholders in Deaf and hard of hearing teens Care Program

Unit: Number of participants

Stakeholders		Research phase		
Category		Population	Number of interviewees	Number of Questionnaires
Deaf and hard of hearing teens	Those who have not volunteered for the activities	37	3	13
	Those who have volunteered for the activities			
Social workers		1	1	1
Parent		6	1	4
Itinerant teachers		3	1	3

Table 3-4 : Summary Table of the Number and Sample Size of Stakeholders in Support Employment for People with disabilities

Unit: Number of participants

Stakeholders				Research phase	
Category		Population		Number of Interviewee	Number of Questionnaires
		Urban	Rural		
People with disabilities	Male	45	29	3	26
	Female	40	14		
Employment specialists of Hearing Loss Association		4	1	5	4
Vocational rehabilitation case managers		16	3	1	6

The sample period for this evaluation ranges from January to December 2021. The primary purpose is to summarize the stakeholder populations in the Deaf and hard of hearing teens Care Program and the Vocational Counseling Services for Persons with Disabilities, as well as the number of people interviewed or sampled at each stage. The details are as follows:

- (1). **Interview Purpose:** The interview aims to understand "how stakeholders participate in the activities of the Hearing-Impaired Association," as well as "the process of change after participation" and "expected and unexpected outcomes." To ensure the feasibility of the interview design and implementation, preliminary interview subjects were less sensitive stakeholders (service providers).
- (2). **Interview Core Structure:**
 - **Preliminary Interview:** In-depth interviews necessitate the establishment of trust. Directly approaching the interviewee may result in insecurity. Therefore, the first half's goal is to build trust, which can enhance the authenticity of the interview content later.
 - **Interview Techniques:** For overly abstract questions, the research team at National Sun Yat-sen University will supplement them with practical case examples to help interviewees describe their experiences more concretely.
 - **Interview Mindset:** Establishing trust is crucial. Interviewers should approach interviewees with a caring attitude, making it easier to establish trust. It is recommended to first explain the reason for the interview, adopt a caring and empathetic approach, and establish common topics and frequencies.

- (3). **Interview Sample Size:** The three core principles are theoretical sampling, theoretical saturation, and triangulation.¹
- Theoretical Sampling: The research question must be related to the interviewee and have a theoretical perspective (SROI). The interviewee must be related to the theory, which is completed when stakeholders are confirmed.
 - Theoretical Saturation: Unlike quantitative reliability intervals, in qualitative research, each interviewee is interviewed individually. To understand data construction, it is necessary to determine whether new information has emerged from new interviews. If not, interviews will no longer be conducted. Based on actual experience, about 40 hours of interviews will be required. Since case studies are intended to explore uniqueness in-depth, repeat interviews may also be considered if the number of people is small.
 - Triangulation: The authenticity and completeness of the interview content are ensured by verifying other information or content provided by previous interviewees and asking the current interviewee whether they agree.
- (4). **Interview Frequency:** The research team will primarily follow the interviewee's schedule, and previous experience suggests that interviews will be conducted once every 1-2 weeks. If necessary, interviews can be conducted more or less frequently.
- (5). **Timing and Content:** Each interview will last approximately 50 minutes, including a 10-minute buffer for rest and organization. The interviews are divided into two groups: the Deaf and hard of hearing teens Care Program and Supported Employment for People with disabilities. The interviews will be conducted by 1-2 researchers and 1 Hearing Loss Association staff member, with interviews being recorded to ensure data accuracy.
- (6). **Interview Questions:**
- a. When did you first come to the Hearing Loss association? Approximately what year and month?
 - b. How did you learn about the Hearing Loss Association, and why did you decide to come? How many days a week do you visit?
 - c. What services does the Hearing Loss Association provide to you?
 - d. What changes or impacts (in thinking, behavior, health, emotions, life, and relationships) have you experienced for yourself or people around you after participating in Hearing Loss Association activities? Can you provide specific examples of these changes?
 - e. How long have these changes persisted?
 - f. If you hadn't come to the Hearing Loss Association, do you think you would have experienced the same changes?

¹ Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of management review*, 14(4), 532-550.

- g. Have you received services from other organizations besides the Hearing Loss Association? Have they helped you achieve similar outcomes or resources?
- h. Have the services provided by the Hearing Loss Association had any negative or unintended impacts on you personally or people around you?

3.2.3 Confirmation of Sampling Error

The survey was conducted among the primary stakeholders of the "Deaf and hard of hearing teens Care Program" and the "Support Employment for People with disabilities" to investigate their process of change and monetary value. The target sample was selected with a 95% confidence level and a sampling error of $\pm 5\%$, based on the population of each stakeholder group. While statistical errors are inevitable in the process of random sampling from the population, increasing the sample size can reduce the margin of error. Therefore, the team set the confidence level and sampling error at $\pm 5\%$ with consideration of practical factors such as human resources and time. Based on the population of each stakeholder group, the required sample sizes were calculated accordingly. After collecting and organizing the survey responses and removing invalid questionnaires, it was found that the actual number of responses from some stakeholder groups differed from the expected reasonable sample size. The actual sampling error range was calculated and is presented in the table below.

Table 3-5 : Calculation of Sampling Error

Stakeholders	Population	Sample	Recollected	Sampling error
Supported employment receiver	128	96	26	3.34% ~ 17.22%
Vocational rehabilitation case managers	19	18	6	6.77% ~ 34.00%
Employment specialists	5	5	4	4.88% ~ 24.50%
Deaf and hard of hearing teens	37	34	13	4.42% ~ 22.19%
Social Worker	1	1	1	-
Parent	6	6	4	6.17% ~ 30.99%
Itinerant teachers	3	3	3	-
Hearing Loss Association	1	1	1	-

Due to the impact of the pandemic, it was difficult for the staff, researchers, and stakeholders to conduct physical surveys. Some online questionnaires were difficult to complete without assistance, and there were challenges in conducting surveys for individuals with reading disabilities. Interviews were also limited by challenges related to hearing impairment, and the sign language survey funding was insufficient. Therefore, it was decided to use additional questionnaires to ensure that there were no missed outcomes, and to adopt a more rigorous review of the questionnaire content to ensure that the respondents had a complete understanding of the questions. The questionnaires were also subjected to strict scrutiny in the interpretation of valid samples, to ensure that the valid samples were sufficiently representative. The questionnaire results were also repeatedly confirmed with management and stakeholders to ensure accuracy and credibility.

3.2.4 SROI assessment results reported to stakeholders

Presented the SROI assessment results to all members and stakeholders at a general meeting held by Hearing loss association of Kaohsiung. Explaining all the analysis process and outcomes determination, and explaining the results of data analysis. Confirm that the outcomes are in line with the stakeholder descriptions and complete the stakeholder engagement process. The evaluation process is transparent, and the impact is fully disclosed to the stakeholders.



Chapter 4: Change theory and outcomes mapping

4.1 Project Input

The Hearing loss association of Kaohsiung invested resources during the evaluation period, including funds, manpower, materials, and time in both projects. The following describes the investment for each project. In the Deaf and hard of hearing teens Care Program, the total investment value for regular services was 1,214,044 NT dollars, and the total investment value for summer camps was 41,904 NT dollars. In the Support Employment for People with disabilities, the total investment value for supportive employment services for People with disabilities was 2,957,914 NT dollars, and the total investment value for caring for disabled people in rural areas was 1,300,000 NT dollars.

Table 4-1 and 4-2 present the total resource investment for the Deaf and hard of hearing teens Care Program and the Support Employment for People with disabilities, respectively. The data was provided by the Hearing loss association of Kaohsiung. The table explain the items and investment value of resources invested by stakeholders, including time costs, transportation costs, training costs, and activity costs. The costs of internal staff, Jixiangzhen Foundation, Chen Yen Charity Association, National Kaohsiung Normal University Physical Fitness Team have been included in the inputs of the Hearing loss association of Kaohsiung, and therefore it was not counted twice. The investment value was calculated based on the service frequency and is shown in the table.

Table 4-1 : Total resource invested in Deaf and hard of hearing teens Care Program

Stakeholders	Investment subject	Investment items		Financial Value of Investment
Hearing loss association of Kaohsiung	Invested fund	Case Management	Professional personnel related cost	\$554,022
			Supervision cost	\$24,000
		Peer activities	Lecturer cost	\$72,000
		Parents-child learning activities	Lecturer cost	\$9,500
			Material cost	\$500
		Campus campaign	Professional personnel related cost	\$554,022
			Summer Camp	Lecturer cost
		material cost		\$10,000
		Camp T-shirt		\$8,000
Social workers	Time Cost	32 Hours/week		Under the expense of the Hearing loss association of Kaohsiung , the cost would be excluded
Itinerant teachers	Commute Cost	1 Hour/time/person		
	Time Cost	2 Hours/time/person		
Volunteers for Hearing Impaired	Training Cost	5 Hours/person		
	Time Cost	1 Hour/day/person		\$4,704

Table 4-2 : Total resource invested in Support Employment for People with disabilities

Stakeholders	Investment subject	Investment items	Financial Value of Investment		
Hearing loss association of Kaohsiung	Invested fund	Support Employment for People with disabilities	Salary	\$1,871,880	
			Year-end Bonus	\$233,987	
			Employment specialists over-time cost	\$52,980	
			Employment specialists field trip cost	\$96,000	
			Labor Insurance cost	\$153,108	
			Healthcare Insurance cost	\$84,564	
			Second-generation health insurance supplementary premium	\$4,275	
			Labor Pension withdrawal fee	\$114,120	
			Employment specialists' supervision cost	\$96,000	
			Employment specialists commute cost	\$72,000	
			Employment Preparation - Individualized Services and Training Fees	\$11,000	
			Job redesign costs	\$24,000	
			Administrative management cost	\$144,000	
			Support Employment for People with disabilities in Rural Areas	Service fee	\$1,192,750
				Business trip cost	\$71,500
	Administrative management cost	\$35,750			
Employment specialists	Supervision Cost	Support Employment for People with disabilities	Supervision meeting 3 times/month	Under the expense of the Hearing loss association of Kaohsiung , the cost would be excluded	
			Training 4 hours/year		
	Commute Cost	Support Employment for People with disabilities	16 times intensive visits /2 months/per case		

Stakeholders	Investment subject	Investment items		Financial Value of Investment
	Time Cost	Support Employment for People with disabilities in Rural Areas	10 times intensive meeting/1 month/per case	
		Support Employment for People with disabilities	Develop 60 jobs vacancies/year, 44 successful referral/year, 16 times intensive visits /2 months/per case	
		Support Employment for People with disabilities in Rural Areas	Develop 43 jobs vacancies/year, 31 successful referral/year, 10 times intensive visits /1 months/per case	

4.2 Project Output

The Hearing loss association of Kaohsiung offers a wide range of comprehensive and in-depth services. This chapter will provide a complete introduction to the outputs of the "Deaf and hard of hearing teens Care Service" and "Support Employment for People with disabilities" programs. These two major service initiatives each have their own distinct traits and significance. The following sections provide a detailed explanation of each service item:

4.2.1 Activities and Outputs of "Deaf and hard of hearing teens Care Service"

The activities and outputs of the Deaf and hard of hearing teens Care Service are presented in Table 4-3 and 4-4, demonstrating the extensive and comprehensive scope of services provided by the Hearing loss association of Kaohsiung. Each service is well-developed and delivered on time, supporting Deaf and hard of hearing teens and valuing the Parents-child relationship as well. Through Parents-child learning activities, communication and understanding are enhanced, strengthening the bond between Parents and child. In addition, through campus outreach, awareness of Deaf and hard of hearing teens is increased among peers and teachers, promoting greater kindness and inclusiveness towards Deaf and hard of hearing teens among peers and enhancing teachers' ability to respond to Deaf and hard of hearing teens.

Table 4-3 : Description of Deaf and hard of hearing teens Care Service Activities

Activity Name	Activity Content
Case management services	In view of adopting a preventive approach, the service is available to all students with physical and mental disabilities, specifically those with type II hearing impairment certification or unilateral hearing impairment without the certificate, currently enrolled in

Activity Name	Activity Content
	Kaohsiung municipal junior high schools, high schools, and colleges. After an assessment, individualized services are provided based on the degree of need. For adopting a systemic, strengths-based, and social network perspective, the service actively communicates with students, Parent, and schoolteachers through phone calls, face-to-face interviews, and other methods to understand the personal relationships of teenagers with themselves, their families, and peers, as well as their complex and multiple needs such as schooling, medical treatment, and resource utilization. After an assessment, the timely matching of related resources is facilitated.
Peer group activities	Diverse club activities are organized primarily for Deaf and hard of hearing teens, and Deaf and hard of hearing teens are invited to serve as instructors. Through activities, the aim is to cultivate interests outside of academic studies for Deaf and hard of hearing teens and provide them with a means to express their stress. Additionally, through these activities, teenagers can interact socially with their peers, teachers, and workers and enhance their social interaction experience. Gradually, a social support network among Deaf and hard of hearing teens can be established within the activities.
Parents-child learning	The goal is to plan a series of activities based on the needs of Parent and Deaf and hard of hearing teens (initially, starting with the experience of successful education and the pursuit of career of Deaf and hard of hearing teens to provide Parent with different Parentsing methods and awareness of disabilities, and to establish recognition and impressions of the association). Subsequently, through more relaxed activities such as baking and games, a different interaction environment is created to differentiate the unilateral interaction environment at home, improving the quality of interaction. Later, considering that junior and senior high school adolescents are developing self-awareness and peer recognition, they hope to be more independent and keep a distance from their Parent. Consequently, the service population was adjusted to deaf and hard-of-hearing primary school students. Through activity design, Parent and children would experience activities that are different from daily tasks by completing the tasks together and be able to enjoy other stimuli.
Campus campaign	We proactively contact schools, Itinerant teachers, and Parent of Deaf and hard of hearing teens to promote campus advocacy services and introduce association resources. We conduct campus advocacy in elementary, junior high, and high schools in Kaohsiung City to raise awareness among students and teachers about the situation and needs of Deaf and hard of hearing teens, making school environments more friendly and accepting towards Deaf and hard of hearing teens. We also establish networking connections with schools to supplement their scarce resources. With the discussion with Itinerant teachers, they believe that Deaf

Activity Name	Activity Content
	and hard of hearing teens should have more exposure to relevant social resources as well. Therefore, we communicate with schools to arrange a lesson for Itinerant teachers, in which a social worker interacts with students one-on-one and introduces the service context and resources of the association.
Community Engagement	During the winter break, two social gathering events were organized for Deaf and hard of hearing teens to manage administrative tasks. After a brief explanation, the students were instructed to divide themselves into groups and allocate functions independently. Upon completing the tasks, the remaining time was spent playing games and enjoying snacks to build relationships and deepen emotional connections. During the summer break, teenagers were invited to participate in pre-and post-camp meetings for the hearing-impaired reading camp, where they served as leaders and teacher assistants, reviewed personal performance and team collaboration, and learned to take responsibility and Increase self-achievement . These activities were designed to enhance the Deaf and hard of hearing teens' experiences collaborating with different groups, planning and discussing, and learning to take responsibility and Increase self-achievement .
Summer camps	The camp includes various activities, such as reading classes, brain teaser games, baking desserts, painting safety helmets, off-road vehicle adventures, and a challenge game at the National Kaohsiung Center for the Arts. The reading class is the main focal activity of the summer camp, using creative writing teaching methods to increase the interest of Deaf and hard of hearing teens in reading and encourage them to write. Other courses are led by Deaf and hard of hearing teens as instructors, aiming to cultivate the extracurricular interests and secondary skills of Deaf and hard of hearing teens and provide them with a vision for their future development.

Table 4-4 : Description of Deaf and hard of hearing teens Care Service Outputs

Activity Name	Stakeholders	Outputs
Case management services	Social workers	Social workers conducted 87 face-to-face and eight home visits and provided 104 message-based care and support.
	Deaf and hard of hearing teens	
	Hearing loss association of Kaohsiung	
Peer group activities	Deaf and hard of hearing teens	They held 15 events in a total of 25 hours, each lasting 1 to 2 hours, depending on the nature of the activity. The events served 28 individuals with a total of 138 attendances.
	Social workers	
	Hearing loss association of Kaohsiung	

Activity Name	Stakeholders	Outputs
Parents-child learning	Deaf and hard of hearing teens	They organized three events, each lasting 1.5 to 2 hours, depending on the nature of the activity, for a total of 5 hours of service. These events served 16 people, with 41 person-times in attendance.
	Parents	
	Hearing loss association of Kaohsiung	
Campus campaign	Deaf and hard of hearing teens	Social workers conducted 17 class promotion sessions for 19 hours, reaching out to 457 individuals.
	Social workers	
	Itinerant teachers for Hearing Impairment	
	Hearing loss association of Kaohsiung	
Summer camps	Deaf and hard of hearing teens	4-day online course with 16 hours, taught by 4 teachers for Deaf and hard of hearing teens. Three mentors for Deaf and hard of hearing teens led 20 Deaf and hard of hearing teens to participate in a 3-hour outdoor activity.
	Deaf and hard-of-hearing volunteers	
	Hearing loss association of Kaohsiung	

4.2.2 Activities and Outputs of " Support Employment for People with disabilities"

Table 9 and 10 list all the activity contents and outputs of the Support Employment for People with disabilities. The services provided by the Hearing loss association of Kaohsiung for Support Employment for People with disabilities can be distinguished by region, including urban and rural areas. Activities, such as employment opportunity development, matching services, and employment stability guidance, are available in urban and rural areas, but resource inventory is only conducted in urban areas. The Hearing loss association of Kaohsiung provides comprehensive employment guidance services for People with disabilities, including employment opportunity development, employment matching services, resource inventory, and employment stability guidance. The goal is to help People with disabilities find and maintain employment and achieve economic independence.

Table 4-5 : Description of Support Employment for People with disabilities Activities

Activity Name	Region	Activity Content
Employment opportunity development	Urban and rural areas	Employment specialists pay attention to the recruitment information of local businesses (such as flyers, posters, and job postings), use online search keywords to filter potential employers, and register with local employment service

Activity Name	Region	Activity Content
		<p>centers to find job openings. They directly communicate with employers offering job opportunities through visits or phone calls to discuss job responsibilities and the situation of People with disabilities. They also assist in adjusting job requirements to make them suitable for People with disabilities. In the follow-up process, they maintain good relationships with employers offering job opportunities to develop more diverse job positions to meet the different needs of different cases.</p>
Employment matching services	Urban and rural areas	<p>The Employment specialists, under the guidance of the vocational rehabilitation Vocational rehabilitation case managers, seek employment opportunities that meet the needs of individual clients while complying with labor laws and regulations. During the job matching process, the Employment specialists communicate with the clients and employers separately, explaining the clients' situation and characteristics to employers and job details and employer requirements to clients. Subsequently, clients are arranged for job internships or work experiences to familiarize themselves with the work content and environment, build self-confidence, and increase their adaptability in the workplace. Through internships or workplace experiences, employers can also understand the clients' job abilities. The Employment specialists coordinate with employers and clients to solve any problems that arise and help clients gain job opportunities.</p>
Resource inventory	Urban areas	<p>The aim is to assist People with disabilities in job redesign to eliminate job barriers and improve work efficiency. Promoting employment for People with disabilities by improving their workplace environment, work equipment, and work conditions and providing them with the necessary assistive devices and job accommodation measures.</p>
Employment stability consultation	Urban and rural areas	<p>After a successful job placement, the Employment specialists must conduct intensive visits to the client's workplace within a specified time to monitor their job performance and attitude. They assist clients in resolving work-related problems and difficulties and help them integrate into the work environment. They also mediate conflicts or disputes between the client and the employer and ensure that their working conditions comply with labor laws. They aim to help the client maintain a stable job and obtain their rightful benefits.</p> <p>After three months of steady employment, the specialist will conduct regular follow-up visits to continue monitoring the client's employment status and provide assistance in resolving any workplace issues.</p>

Table 4-6 : Description of Support Employment for People with disabilities Outputs

Region	Activity Name	Stakeholders	Outputs
Urban and rural areas	Employment opportunity development	Vocational rehabilitation case managers	Employment specialists in urban areas can develop 60 job vacancies in a year, with each job vacancy development taking approximately 0.78 months. Employment specialists in rural areas can develop 43 job vacancies in a year, with each job vacancy development taking approximately 0.279 months.
		Employment specialists	
		People with disabilities	
		Hearing loss association of Kaohsiung	
Urban and rural areas	Employment matching services	Vocational rehabilitation case managers	Employment specialists in urban areas can successfully refer 44 candidates annually, with each referral taking approximately 1.09 months to complete. Employment specialists in rural areas can successfully refer 31 candidates annually, with each referral taking approximately 0.387 months to complete.
		Employment specialists	
		People with disabilities	
		Hearing loss association of Kaohsiung	
Urban areas	Resource inventory	Vocational rehabilitation case managers	Employment specialists in urban areas assisted in redesigning 19 small-scale job positions, with a total cost of approximately 17,000 NT dollars (up to 2,000 NT dollars per case), which were funded by the association and did not incur any time cost. Two other job redesign cases (one costing approximately 60,000 NT dollars and the other costing about 10,000 NT dollars) had a total cost of roughly 70,000 NT dollars and took 3 to 6 months from application to disbursement.
		Employment specialists	
		People with disabilities	
		Hearing loss association of Kaohsiung	
Urban and rural areas	Employment stability consultation	Vocational rehabilitation case managers	Employment specialists in urban areas conducted 16 intensive visits within two months after a client's employment, followed by monthly visits for the next three months, with adjustments made according to the situation. Employment specialists in rural areas conducted 10 intensive visits within one month after a client's employment, followed by six visits in the next month, with adjustments made
		Employment specialists	
		People with disabilities	
		Hearing loss association of Kaohsiung	

			according to the situation and increasing frequency if necessary.
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4.3 Chain of Events

The chain of events primarily serves to confirm the stakeholders involved, understand the program's implementation process, and clarify the changes before and after the program. The chain of events may be modified according to the understanding of the program. Usually, after interviewing the frontline implementers and participants, the chain of events will be revised again, and some unexpected outcomes will be obtained.

The research team presents the cause-and-effect relationship between the changes in the process through the description of the chain of events and further derives the expected outcomes. This project is divided into four parts according to the stakeholders: providers of the Deaf and hard of hearing teens Care Program, users of the Deaf and hard of hearing teens Care Program, providers of Support Employment for People with disabilities, and users of Support Employment for People with disabilities. Taking the results description of the Social workers as an example, the results description of the other stakeholders will be listed in Appendix 1 and Appendix 2.

Table 4-7 shows the outcomes and change processes that Social workers bring to the service. Social workers play prominent roles in planning and evaluation. Most activities are organized and invited by Social workers and external groups and lecturers to participate, so the results are mostly related to work. During the process, contact with many Deaf and hard of hearing teens Increase empathy outcomes.

Table 4-7 : Summary of Outcomes for Social workers

Expected Outcomes	Chain of Events	Summary of Stakeholders' Feedback
Increase self-achievement	1. Providing services→ improving case situations and accumulating positive success experiences→Services are affirmed→ Increase self-achievement 2. Preparing various services→Services are conducted successfully→ Increase self-achievement	"The positive feedback from Parent and children, such as immediate sign-ups for new activities of the association, made me feel touched and a sense of accomplishment."
Improve professional skills	Providing various services → Accumulating service experience → Understanding the deaf population → Improve professional skills	"In the service process, you can ask your colleagues if you have any questions you don't understand. They are all experts on Deaf and hard of hearing teens, so I have learned a lot from them."
Improve work efficiency	1. Providing various services→ Expanding social welfare cooperation	"I found that the efficiency of understanding the case has been improved. In the beginning, I

Expected Outcomes	Chain of Events	Summary of Stakeholders' Feedback
	network→ Improve work efficiency 2. Providing various services→ Enhancing case inspection ability→ Establishing professional service relationships→ Improve work efficiency	don't have enough contact with children, so my head will have a first impression, but after multiple references, I found it completely different from the initial impression. I used to spend more time getting to know the child, but now I can grasp the child's ability in one or two contacts, including expression, understanding, and interaction ability, so understanding the case has improved.
Increase empathy	Providing various services → Understanding cases → Having a sense of individual cases → Being able to think more from the case's perspective → Increase empathy	"I will constantly observe and think about how to let the hearing-impaired feel more at ease in this situation and not feel embarrassed because they cannot hear or speak clearly."

4.4 Materiality

The research team will discuss the threshold results of the questionnaire with the stakeholders again, adhering to the principle of not exaggerating, confirming its rationality and correctness. Based on internal data, the proportion of the questionnaire, and literature references, after internal discussion and consultation with professionals, it is necessary to confirm that the significant outcomes are correct and complete and included in the final calculation. Figure 4-1 illustrates the process of determining the materiality of outcomes:

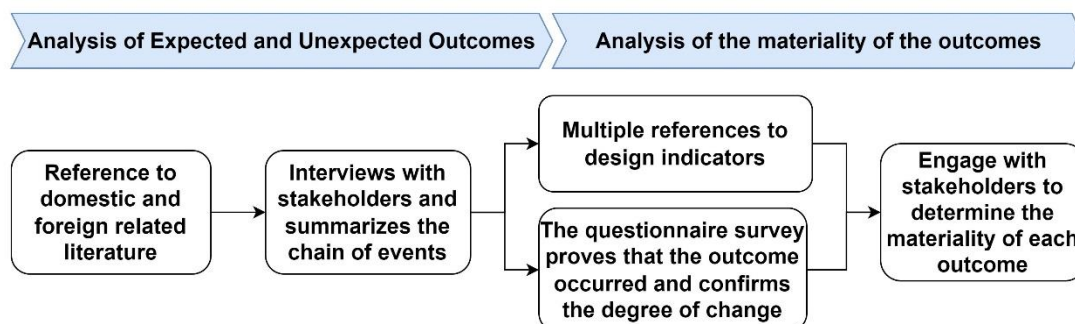


Figure 4-1 : The Process of Determining the Materiality of Outcomes

Determining the materiality of Outcomes

Table 4-8 summarizes whether each outcome meets the important principles of each stakeholder. The SROI uses "Relevant" and "Significant" as the criteria for the

importance of outcomes. Relevant refers to whether the outcome is related to the stakeholders; Significant refers to whether the impact on stakeholders exceeds a threshold sufficient to affect its decision and action. The outcomes in this report are all from stakeholders, which are confirmed by interviews and questionnaires about their Relevant and Significant.

Table 4-8 : Summary of Determining the Materiality of Outcomes

Stakeholders	Outcomes	Relevants	Change in Number (%)	Change in Each Stakeholders (%)
Deaf and hard of hearing teens	Increase self-confidence	✓	92%	72.53%
	Improve interpersonal relationship	✓	92%	72.53%
	Improve speaking skills	✓	85%	71.43%
	Improve planning skills	✓	88%	66.07%
Social workers	Increase self-achievement	✓	100%	100.00%
	Improve professional skills	✓	100%	100.00%
	Improve work efficiency	✓	100%	71.43%
	Increase empathy	✓	100%	100.00%
Hearing loss association of Kaohsiung	Increase charitable giving	✓	100%	67.86%
	Improve visibility	✓	100%	71.43%
	Achieve the purpose	✓	100%	75.00%
Parent	Improve family relationship	✓	100%	96.43%
	Stress relief	✓	75%	89.29%
	Improve physical health	✓	100%	85.71%
	Improve interpersonal relationship	✓	100%	89.29%
Itinerant teachers	Improve professional skills	✓	100%	95.24%
	Increase empathy	✓	67%	61.90%

Stakeholders	Outcomes	Relevants	Change in Number (%)	Change in Each Stakeholders (%)
	Feel pressured	✓	33%	52.38%
People with disabilities (Male)	Increase income	✓	86%	23.09%
	Increase self-achievement	✓	93%	77.55%
	Improve interpersonal relationships	✓	93%	76.53%
	Increase empathy	✓	100%	75.51%
	Feel frustrated	✓	64%	68.37%
People with disabilities (Female)	Increase income	✓	83%	28.80%
	Increase self-achievement	✓	100%	86.90%
	Improve interpersonal relationships	✓	92%	84.52%
	Increase empathy	✓	92%	84.52%
	Feel frustrated	✓	58%	71.43%
Employment specialists of Hearing Loss Association	Feel pressured	✓	100%	89.29%
	Improve professional skills	✓	100%	96.43%
	Increase self-achievement	✓	100%	92.86%
	Stable income	✓	100%	89.29%
Vocational rehabilitation Vocational rehabilitation case managers	Improve professional skills	✓	100%	88.10%
	Achieve self-realization	✓	100%	83.33%

Table 4-8 presents the Materiality of various outcomes for Deaf and hard of hearing teens, Social workers, the Hearing loss association of Kaohsiung, Parent, Itinerant teachers, People with disabilities, Employment specialists of the Hearing Loss Association, and Vocational rehabilitation Vocational rehabilitation case managers following their participation in the program.

Chapter 5: Outcome Verification and Establishment of Financial Proxies

5.1 Indicators

SROI necessitates the establishment of one or more metrics for each outcome to demonstrate its occurrence and to verify its extent and whether the impact is crucial or significant to the stakeholders. In this case study, we referred to relevant literature and analyzed the behavioral indicators of change among stakeholders. During interviews with stakeholders, we established suitable indicators for different stakeholder groups based on their unique characteristics. Each indicator is evaluated using the 7-point Likert scale. Table 5-1 presents the indicators for Social workers and Parent, while the indicators for other stakeholders can be found in Appendix 3.

Table 5-1 : Indicators of Stakeholders

Stakeholders	Outcomes	Indicators	Indicators Score
Social workers	Increase self-achievement	I can often see improvements in my work.	6
		I feel that my efforts have not gone to waste.	7
		Understand my work performance.	6
		My work has been acknowledged by others.	7
	Improve professional skills	I understand the physical and mental development, learning characteristics, and educational needs of students with special education needs.	6
		I understand service plans for students with special education needs.	7
		I possess the concept and skills of special education administration operation.	6
		I design courses according to students' individual needs.	6
	Improve work efficiency	Most cases of teenagers contacted show improved social functioning at the end of the functional assessment period.	6
		Most cases of teenagers contacted exhibit a significant decrease in their Social Support Scale at the end of the functional assessment period.	3
		Most cases of teenagers contacted successfully expand their friendship circle during the activities.	6
		Most cases of teenagers contacted can successfully discover their strengths through activities.	6

Stakeholders	Outcomes	Indicators	Indicators Score
		Through campus promotion, a correct understanding of hearing impairment can be established.	7
	Increase empathy	I often describe myself as having a "soft heart."	6
		I often think of my friends and family facing difficulties and want to do something for them.	6
		When I see someone being bullied, I want to protect them.	6
		Many things in life often move me deeply.	7
Parent	Improve family relationship	Family Emotions.	7
		Family members respect each other's decisions.	7
		Family members can get along harmoniously.	7
		Family members pay attention to each other's emotional feelings.	7
		Family members have time to talk to each other every day.	7
	Stress relief	You still have to take care of your children when you are not feeling well	5
		You are exhausted from taking care of your children.	5
		Your health is deteriorating due to taking care of your children.	4
		Taking care of your children affects your relationship with relatives and friends.	5
		You have to pay attention to your children all the time.	5
	Improve physical health	Help cultivate the habit of exercise.	6
		Feel more energetic and reduce fatigue.	6
		Enhance cardiopulmonary function.	6
		Reduce body weight.	4
		Reduce BMI.	4
	Improve interpersonal relationship	My friends respect me greatly.	7
		My family is very concerned about me.	5
		My family is proud of me.	6
		I feel respected by others.	6
		I feel a sense of belonging.	6

This evaluation case involves querying stakeholders via a questionnaire to determine whether a specific outcome has occurred or whether they have perceived a change in the

result. The questions are designed as options, with each indicator item rated and graded. Responses of more than one indicator (including) are used as sample selection and measurement criteria.

In this evaluation case, after referring to relevant research literature and internal evaluation reports of the Hearing Loss Association, indicators for each outcome were formulated according to relevant literature and internal reports. In addition to being confirmed by stakeholders in the workshop and interview process, they were verified through relevant literature. Moreover, multiple confirmations were made through the development of the chain of events and the internal review of the indicators of the Hearing Loss Association to ensure that the indicators formulated by this team were representative. The different indicators and their sources corresponding to each stakeholder are listed in Appendix 4.

In processing indicators in the questionnaire, due to the adoption of a seven-point Likert scale response, this team set the threshold value of each indicator to five. When the answer to the indicator question is greater than or equal to five, it will pass the question. Furthermore, due to the varying number of questions for each indicator in the questionnaire design, to conduct standardized measurement, the sample with significant outcome changes was selected through the pass rate of indicators to enter its outcome monetary value.

5.1.1 Delta change analysis

The analysis in this sub-section measure the ‘delta’ change between baseline and status for relevant outcomes. Each stakeholder's outcomes are measured with different indicators. The table below describes the difference between each indicator and the baseline value, with positive values meaning that the stakeholder's indicator feedback results are above the baseline value, and negative values marked in red meaning that they are below the baseline value. The reasons for indicators below the baseline values are analysed as follows:

Table 5-2 : the ‘delta’ change between baseline and status for relevant outcomes

Delta change analysis																
Stakeholder Feedback																
Stakeholders	Outcomes	Indicator1	Indicator2	Indicator3	Indicator4	Indicator5	Indicator6	Indicator7	Indicator8	Indicator9	Indicator10	Indicator11	Indicator12	Indicator13	Indicator14	Indicator15
People with disabilities (Male)	Increase income	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Increase self-achievement	0.64	0.57	0.57	0.36	-	-	-	-	-	-	-	-	-	-	-
	Improve interpersonal relationships	0.50	0.50	0.29	0.50	0.07	-	-	-	-	-	-	-	-	-	-
	Increase empathy	-0.36	0.07	0.29	-0.21	-	-	-	-	-	-	-	-	-	-	-
People with disabilities (Female)	Feel frustrated	0.29	-0.86	-	-	-	-	-	-	-	-	-	-	-	-	-
	Increase income	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Increase self-achievement	0.75	-0.17	0.75	1.17	-	-	-	-	-	-	-	-	-	-	-
	Improve interpersonal relationships	0.92	0.92	0.92	0.83	0.83	-	-	-	-	-	-	-	-	-	-
Vocational rehabilitation case	Increase empathy	0.75	0.58	0.75	0.83	-	-	-	-	-	-	-	-	-	-	-
	Feel frustrated	0.42	-0.58	-	-	-	-	-	-	-	-	-	-	-	-	-
	Improve professional skills	1.50	1.33	-0.17	0.50	0.50	0.50	0.67	1.17	1.00	1.33	1.17	0.83	1.00	0.33	0.33
	Achieve self-realization	-0.33	0.00	0.17	0.33	-0.17	0.17	-0.33	-	-	-	-	-	-	-	-
Employment specialists	Feel pressured	0.75	0.00	-0.50	1.00	1.00	-	-	-	-	-	-	-	-	-	-
	Improve professional skills	1.25	1.25	2.00	1.00	0.50	-	-	-	-	-	-	-	-	-	-
	Increase self-achievement	1.00	1.00	1.00	0.00	-	-	-	-	-	-	-	-	-	-	-
	Stable income	0.50	1.50	-0.25	-	-	-	-	-	-	-	-	-	-	-	-
Deaf and hard of hearing teens	Increase self-confidence	-0.31	0.08	-0.15	-0.23	-0.69	-	-	-	-	-	-	-	-	-	-
	Improve interpersonal relationships	-0.08	0.00	-0.38	-0.46	-0.62	-	-	-	-	-	-	-	-	-	-
	Improve speaking skills	-1.23	-0.46	-0.23	0.23	-0.31	-	-	-	-	-	-	-	-	-	-
	Improve planning skills	0.25	-0.25	-0.75	-	-	-	-	-	-	-	-	-	-	-	-
Social workers	Increase self-achievement	1.00	2.00	1.00	2.00	-	-	-	-	-	-	-	-	-	-	-
	Improve professional skills	1.00	2.00	1.00	1.00	1.00	-	-	-	-	-	-	-	-	-	-
	Increase empathy	1.00	1.00	1.00	2.00	-	-	-	-	-	-	-	-	-	-	-
	Improve work efficiency	1.00	-2.00	1.00	1.00	2.00	-	-	-	-	-	-	-	-	-	-
Parents	Improve family relationship	1.75	1.50	1.50	1.50	1.75	-	-	-	-	-	-	-	-	-	-
	Stress relief	-0.25	-0.50	-1.25	-0.25	-0.25	-	-	-	-	-	-	-	-	-	-
	Improve physical health	0.50	0.75	0.75	-0.75	-0.75	-	-	-	-	-	-	-	-	-	-
	Improve interpersonal relationships	1.75	0.00	0.50	0.75	1.25	-	-	-	-	-	-	-	-	-	-
Itinerant teachers	Feel pressured	-1.33	-2.00	-2.00	-0.67	-1.33	-	-	-	-	-	-	-	-	-	-
	Improve professional skills	1.33	1.33	1.00	1.00	1.00	-	-	-	-	-	-	-	-	-	-
	Increase empathy	0.67	-1.33	-0.67	0.00	-	-	-	-	-	-	-	-	-	-	-
	Improve visibility	-0.25	0.00	-0.50	0.50	-	-	-	-	-	-	-	-	-	-	-
Hearing loss association of Kaohsiung	Increase charitable giving	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Achieve the purpose	0.25	0.25	0.50	0.25	0.00	0.00	0.00	-	-	-	-	-	-	-	-

From the outcomes of People with disabilities, we can see that the indicator value of Increase empathy is relatively low. Increase empathy mainly comes from the fact that they feel the contribution of others and understand the plight of people with disabilities as being served, and then they can empathize with people around more, disabled or not. This result is an unexpected outcome, and it happened to some disabilities, but for the most of service users, we can see that the indicator shows a relatively low value, suggesting that the result is not that significant, which is consistent with the original analysis, but the outcome is still meaningful and worth recording. We can see that second indicator of the “Feel frustrated” outcome, Feel frustrated at work, is comparably low, specifically, the performance of male is lower than female. On the other hand, another indicator of another outcome for female, Increase self-achievement, also shows a lower value. And the lower value of this indicator means the more they feel the effort they put in may be nothing in the end. According to the follow-up, we know that female disabilities expect more on their work, and so, under the stressful work environment, it is easier for them to feel depressed about the low progress from their input, which explains the value of the indicators.

Regarding the outcomes of vocational rehabilitation case managers, it can be observed that most indicators have surpassed the baseline. However, the third indicator of the outcome, Improve professional skills, falls below the baseline. This indicator primarily focuses on the skills of labor market research, which are predominantly executed by Employment Specialists. Therefore, the lower performance in this indicator aligns with expectations. The indicators under the outcome, Achieve self-realization, demonstrate that stakeholders indeed face diverse tasks. The lower-scoring indicators primarily address challenges related to multitasking, which proves to be more challenging to handle.

Regarding the performance of Employment Specialists, indicator 3 shows a lower value under the outcome, Feel pressured. This indicates that their stress mainly stems from work rather than family-related issues. As for the outcome, Stable income, indicator 3 displays a lower value. This indicator primarily measures job satisfaction for the year, and due to the pandemic during the evaluation period, the perceived performance of Employment Specialists in that year is relatively lower.

All indicators for Deaf and Hard of Hearing Teens show lower values, possibly due to the reduced frequency of activities caused by the pandemic. Most activities had to be conducted online, significantly impacting their effectiveness. In particular, the outcomes, Increase self-confidence and Improve interpersonal relationships, are influenced by group activities, resulting in lower performance. Additionally, "Improve speaking skills" requires substantial investment in medical resources, so the lower effectiveness aligns with expectations. Stakeholders who have not experienced these outcomes will undergo continuous monitoring and counseling to further improve their situation.

Social workers show good performance across all indicators. For parents, the outcome "Stress relief" exhibits poorer performance, which is also influenced by the pandemic. Physical participation in activities was challenging, and the cancellation or shift to online format of most summer programs, which used to alleviate parents' caregiving stress, had an impact. Parents who have not experienced these outcomes will receive ongoing support through parent groups.

The indicators for itinerant teachers do not show significant results, as their level of involvement in activities is relatively low. Deaf and hard of hearing students are also not their primary target group. Therefore, only the indicator under the outcome, Improve professional skills, demonstrates better performance.

For the Hearing Loss Association of Kaohsiung, the indicator of the outcome, Improve visibility, does not exhibit significant results. The organization continues to enhance visibility through marketing and improving community engagement.

5.2 Duration

Duration refers to the period during which the outcomes can be observed and measured, as each outcome has different durations. The individual duration is determined based on stakeholders' subjective predictions and objective judgments derived from the scope of the program and related research literature. This evaluation case features diverse and comprehensive activities, and different stakeholders derive various outcomes from each activity. Considering stakeholders' personal characteristics, family background, and work nature, their subjective predictions of outcome duration also vary. In the questionnaire's calculation results, only stakeholders who have indeed experienced a specific outcome can further evaluate the outcome duration. To value the opinions of each stakeholder, we have statistically listed the questionnaire results using a simple average method, as presented in Table 5-3.

Table 5-3 : Duration of each stakeholder

Stakeholders	Outcomes	Duration (Year)
Deaf and hard of hearing teens	Increase self-confidence	2
	Improve interpersonal relationship	2
	Improve speaking skills	2
	Improve planning skills	2
Social workers	Increase self-achievement	4
	Improve professional skills	4
	Improve work efficiency	3
	Increase empathy	4
Hearing loss association of Kaohsiung	Increase charitable giving	1
	Improve visibility	4
	Achieve the purpose	4
Parent	Improve family relationship	3
	Stress relief	1
	Improve physical health	1
	Improve interpersonal relationship	2
Itinerant teachers	Improve professional skills	2
	Increase empathy	1
	Feel pressured	1
People with disabilities	Improve interpersonal relationship	2
	Feel frustrated	3
	Increase empathy	3

Stakeholders	Outcomes	Duration (Year)
(Male)	Increase income	3
	Increase self-achievement	2
People with disabilities (Female)	Improve interpersonal relationship	4
	Feel frustrated	2
	Increase empathy	4
	Increase income	4
	Increase self-achievement	2
Employment specialists of Hearing Loss Association	Feel pressured	1
	Improve professional skills	1
	Increase self-achievement	2
	Stable income	1
Vocational rehabilitation Vocational rehabilitation case managers	Improve professional skills	2
	Achieve self-realization	2

From the table above, it can be seen that the majority of the stakeholders' durations fall between 1 and 4 years. This shows that the services provided by the Hearing loss association of Kaohsiung are aimed at teaching and assisting them to become self-reliant rather than providing relief, thus enabling them to regain their autonomy. Therefore, the effects can continue for an extended period even after the Hearing loss association of Kaohsiung ceases its services, and the stakeholders also confirm this.

5.3 Outcome Verification

To ensure that the outcomes are final, significant, and devoid of the risk of double counting, outcome verification is conducted. After determining the final outcomes, the chain of events and various values are revisited and discussed to guarantee that the stakeholders' results are accurate and credible.

Table 5-4 : Inclusion or exclusion of outcomes

Stakeholders	Outcomes	Inclusion or Exclusion	Description
Deaf and hard of hearing teens	Increase self-confidence	Inclusion	Based on numerical assessments, the outcomes for Deaf and hard of hearing teens surpass the threshold for indicators, degree, and importance. Increase self-confidence primarily stems from the realization of their potential during the courses, regardless of their hearing impairment, which fosters self-assurance. Improve interpersonal relationship are cultivated through the guidance of Social workers on how to establish connections with
	Improve interpersonal relationship	Inclusion	
	Improve speaking skills	Inclusion	

Stakeholders	Outcomes	Inclusion or Exclusion	Description
	Improve planning skills	Inclusion	others. Improve speaking skills are gradually acquired through speech therapy, hearing training, and group processes. As for Improve planning skills , it is the result of volunteers who participate in the design and implementation of activities. Overall, there is no risk of double counting the outcomes.
Social workers	Increase self-achievement	Inclusion	According to the numerical assessments, the outcomes for the Social workers surpass the threshold for indicators, degree, and importance. Improve professional skills and Improve work efficiency are distinct. Based on stakeholder interviews, professional skills refer to the augmentation of job-related abilities, with an emphasis on the benefits yielded by successful experiences. In contrast, Improve work efficiency pertains to the improvement of work effectiveness due to trust-building and familiarity with work processes when dealing with cases. For stakeholders, both outcomes are significant and distinct; hence, all four outcomes are incorporated into the final analysis.
	Improve professional skills	Inclusion	
	Improve work efficiency	Inclusion	
	Increase empathy	Inclusion	
Hearing loss association of Kaohsiung	Improve visibility	Exclusion	According to interviews and questionnaires with the board members, the importance of the outcome "Improve visibility" has a value of 2.75, which is below the threshold. The Kaohsiung City Hearing Loss Association, primarily composed of Parents groups, mainly focuses on improving the welfare and lives of individuals with hearing impairments. Although increasing visibility is one of their objectives, its importance is not as high as other outcomes, which have distinct differences without the risk of double counting. Therefore, only the outcome "Improve visibility" is excluded.
	Increase charitable giving	Inclusion	
	Achieve the purpose	Inclusion	
Parent	Improve family relationship	Inclusion	Based on interviews and questionnaires with the Parent of Deaf and hard of hearing teens, it is clear that the activities foster Parents-child bonding and Improve family relationship . At the same time, the teens' participation in summer and winter camps alleviates caregiving stress for Parent. Involvement in these activities also improves the Parent' health and allows them to meet other Parent and enhance their interpersonal relationships. The
	Stress relief	Inclusion	
	Improve physical health	Inclusion	
	Improve interpersonal relationship	Inclusion	

Stakeholders	Outcomes	Inclusion or Exclusion	Description
			outcomes do not exhibit double counting, so all are included in the final evaluation.
Itinerant teachers	Feel pressured	Exclusion	According to interviews and questionnaires with the Parent of Itinerant teachers, Feel pressured is not a highly important outcome for them due to the low intensity of their courses and infrequent teaching frequency. The other outcomes have distinct differences, so only two outcomes are included in the final evaluation.
	Improve professional skills	Inclusion	
	Increase empathy	Inclusion	
People with disabilities	Improve interpersonal relationships	Inclusion	Based on interviews and questionnaires with People with disabilities, participation in employment counseling allows them to understand workplace relationships and improve their interpersonal skills. Some interviewees Feel frustrated from unsuccessful job interviews or work-related setbacks. Additionally, they gained a sense of accomplishment during the work process. Unanticipated outcomes include Increase empathy, a better understanding of the assistance received from others, and a higher degree of empathy for themselves and others with disabilities. Considering the distinct differences and the importance and degree of each outcome surpassing the threshold, all five outcomes are included in the evaluation.
	Feel frustrated	Inclusion	
	Increase empathy	Inclusion	
	Increase income	Inclusion	
	Increase self-achievement	Inclusion	
Employment specialists in Hearing Loss Association	Feel pressured	Inclusion	According to interviews and questionnaires with Employment specialists, the process of providing employment counseling allows them to accumulate more case experience and improve their abilities to assist individuals in finding employment. They also Increase self-achievement from their work, while Stable incomes are attributed to the annual performance of the program, which helps secure their future employment. The data reveals that their work indeed causes psychological stress. Considering the distinct differences and the importance and degree of each outcome surpassing the threshold, all four outcomes are included in the evaluation.
	Improve professional skills	Inclusion	
	Increase self-achievement	Inclusion	
	Stable income	Inclusion	
Vocational rehabilitation Vocational rehabilitation	Improve professional skills	Inclusion	According to interviews and questionnaires with Vocational rehabilitation case managers, they gain professional knowledge in their respective fields through the service process. They are responsible for referring People with disabilities to the Kaohsiung City Hearing
	Achieve self-realization	Inclusion	

Stakeholders	Outcomes	Inclusion or Exclusion	Description
case managers			Loss Association for employment counseling. They participate in the initial assessment and training of the cases and consider the successful employment of the cases as achieving their original objectives. Given the distinct differences and the importance and degree of each outcome surpassing the threshold, both outcomes are included in the evaluation.

5.4 Financial Proxy

In this stage, in addition to determining the number of people affected by the key outcomes, the duration of the outcomes, and the evaluation indicators for the project outcomes based on the "Pricing Key Outcomes" principle, financial proxy variables need to be established for the monetization of the outcomes. Wu (2017)⁵ suggests that during the monetization process, researchers often refer to official statistics or internal organizational data. If there are outcomes that cannot be quantified, the Contingent Valuation Method (CVM) can be used to establish financial proxy variables by evaluating the willingness of individuals to pay or compensate for hypothetical goods. Alternatively, the Revealed Preference method can be used to determine prices through the prices of related market-traded goods.

In this evaluation case, the financial proxy variables are based on relevant research literature. For each outcome, two to five items with varying frequencies or degrees are listed, and an open-ended option is reserved, allowing stakeholders to answer according to their situation and best represent the value of each outcome. The reasonableness of the report content is then confirmed through further discussions with stakeholders.

5.4.1 Process for Determining Financial Proxy

Step 1: Determine the Evaluation Method

The research team analyzes the financial valuation methods provided in the certified SROI reports and literature, including monetized and non-monetized valuation methods. Monetized methods include cost-benefit analysis, revealed preference, and welfare valuation methods, while non-monetized methods include the weighting and scoring methods⁶.

Step 2: Elimination of Evaluation Methods

During the interview stage, the team discusses with stakeholders the valuation method to be used for each outcome. Given the challenges in implementing the travel cost method in the revealed preference method, simplifying the journey description is easier for stakeholders to understand but presents challenges in clearly defining transportation modes, travel times, and travel environments. In the hedonic pricing method of revealed preference, it is also difficult to describe the costs incurred to achieve social outcomes.

Step 3: Decision to Adopt the Value Game Evaluation Method

The decision is made to use the more common Stated Preference method. General SROI reports usually adopt the Contingent Valuation or Choice Experiment methods.

However, through interviews and surveys, it is clear that stakeholders served by the Hearing loss association of Kaohsiung generally belong to economically disadvantaged groups, which may result in biased perceptions of value. Therefore, it is difficult to make choices through explicit pricing. After multiple discussions, the Value Game method is adopted for valuation, hoping to help stakeholders perceive value by evaluating things that they can clearly recognize and measure.

Step 4: Financial Proxy Collection

After confirming the use of the Value Game method, the research team begins to search for relevant literature and understand stakeholders' financial proxy indicators and value ranking through group interviews (refer to Table 5-5). More financial proxy indicators are collected through questionnaires to ensure that stakeholders' opinions are fully expressed, which helps understand the value of financial proxy indicators.

Step 5: Financial Proxy Pricing

Finally, after internal team discussions, prices are determined based on different price ranges, using market items selected by stakeholders, and finding the prices of similar items in the market as the basis for subsequent reasonable valuations.

Table 5-5 : Example of Financial Proxy

No.	Value Range	Deaf and hard of hearing teens	Social workers	Parents
1	Less than \$1,000	A cup of Starbucks coffee	A meal in Harbour Buffet	A set of convenience store vouchers
2	\$1,000 - \$5,000	A set of multiplayer board games	A set of LEGO models	SPA voucher for one course of treatment
3	\$5,001 - \$10,000	A 3-day tour of Hualien and Taitung	A trip to the top of Jiaming Lake	A clean dehumidifier
4	\$10,001 - \$20,000	A Switch console + games	A 5-day trip around Taiwan	A new cell phone
5	\$20,001 - \$40,000	An iPhone 14 mobile phone	A 10-day self-driving tour in Kyushu, Japan	A 3-month English major course
6	\$40,001 - \$80,000	An Apple MAC BOOK laptop	A 5-day ski tour in Aomori, Japan	A famous brand boutique bag
7	\$80,001 - \$150,000	A new Gogoro electric scooter	An 11-day trip to three Nordic countries	A 10-day trip to Disneyland in California
8	\$150,001 - \$300,000	A 12-day Mediterranean cruise	A 16-Day Adventure Trip to Central and South America	A SONY 85-inch 4K TV
9	\$300,001 - \$500,000	Old house redecorated 1 time	Dubai	Old house redecorated 1 time

10	More than \$500,001	A 19-Day Antarctic Adventure Tour	A 19-Day Antarctic Adventure Tour	A new car
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Using the Value Game Method for Financial Proxy: A Case Study of Social workers

The survey asked participants, "Please think about whether the following items represent the value of 'professional improvement' to you based on your inner thoughts." The questionnaire included ten options:

- a. A dinner in Harbour Buffett (under \$1,000)
- b. A set of LEGO models (\$1,001-\$5,000)
- c. A 3-day-2-night hiking trip to Jiaming Lake (\$5,001-\$10,000)
- d. A 5-day trip around Taiwan (\$10,001-\$20,000)
- e. A 10-day self-driving tour in Kyushu, Japan (\$20,001-\$40,000)
- f. A 5-day skiing trip in Aomori, Japan (\$40,001-\$80,000)
- g. An 11-day trip to 3 Nordic countries (\$80,001-\$150,000)
- h. A 16-day adventure trip to Central and South America (\$150,001-\$300,000)
- i. An 11-day luxury trip to Dubai and the Maldives (\$300,001-\$500,000)
- j. A 19-day exploration trip to Antarctica (over \$500,001)

To obtain more accurate financial proxies for measuring social value, participants were asked the following question after selecting one of the above gifts: "Based on the item you have chosen, what do you think is a reasonable financial value (in TWD)?"

Step 6: Pretest and Revision of Questionnaire

After completing the initial version of the questionnaire, a pretest of the financial proxy was conducted on a small group of stakeholders at the end of the questionnaire. This allowed the research team to improve the questionnaire and modify the questionnaire and the financial proxy after the pretest, ensuring stakeholders could understand the Value Game Method. The financial proxy for each price range was expanded to three options, and market values were sought to ensure accuracy.

Step 7: Identification and Correction of Invalid Samples

After the survey was distributed, the research team examined the financial proxies provided by the stakeholders. If a stakeholder had limited experience or had difficulty evaluating or understanding different outcomes and, as a result, selected the financial proxy for the highest price range but entered an amount significantly lower than the range, the research team excluded the valuation of the case from the sample to uphold the principle of not exaggerating the value of the outcomes. This situation occurred with two

results: People with disabilities -Feel frustrated and Employment specialists - Stable income.

Additionally, the research team found that for the two outcomes, Deaf and hard of hearing teens - Improve speaking skills and Social workers - Improve professional skills, stakeholders selected the financial proxy for the highest price range but did not enter a subjective amount in the following question. To avoid exaggerating the value of the outcomes, the research team calculated the lowest amount among the three financial proxies of the exact nature found in the range. If the subjective amount entered was slightly higher than the selected price range, the highest of the three financial proxies located was used to calculate the value of the outcome. Conversely, the lowest financial proxies were used if the subjective amount entered was lower than the selected price range. If no subjective amount was entered, the average of the three financial proxies found was used to calculate the value of the outcome. Finally, if the subjective amount was within the selected price range, it was taken as the value of the stakeholder's outcome. The research team followed these methods to reasonably estimate the value of the outcomes and ensure that the principle of not exaggerating the value of the results was carefully observed.

5.4.2 Financial Proxy Valuation Results

The following describes the two valuation methods ultimately adopted. While most outcomes were valued using the Value Game Method, financial results were measured using the Cost-Benefit Approach for accurate financial measurement.

- (1). Value Game: Activities or courses that can generate similar outcomes in the market and have identical properties to the project output are used as financial proxies. Only the names are listed without prices, and stakeholders are asked to fill in activities or courses they believe can achieve the same level.
- (2). Cost-Benefit Approach (CBA): Stakeholders are asked to calculate how much cost savings or benefits are gained because of this project's achievement on this outcome.

Table 5-6 : Market Value of Financial Proxies

Stakeholders	Outcomes	Valuation Method	Outcome number of people	Outcome Weighting	Average Financial Proxy Value
Deaf and hard of hearing teens	Increase self-confidence	Value Game	34	5.38	\$61,169
	Improve interpersonal relationship	Value Game	34	4.92	\$6,884
	Improve speaking skills	Value Game	31	5.23	\$115,319
	Improve planning skills	Value Game	7	4.50	\$9,892
Social workers	Increase self-achievement	Value Game	1	7.00	\$115,567

Stakeholders	Outcomes	Valuation Method	Outcome number of people	Outcome Weighting	Average Financial Proxy Value
	Improve professional skills	Value Game	1	7.00	\$759,000
	Improve work efficiency	Value Game	1	5.00	\$294,967
	Increase empathy	Value Game	1	7.00	\$115,567
Hearing loss association of Kaohsiung	Increase charitable giving	Cost-Benefit Approach	1	4.75	\$60,147
	Achieve the purpose	Value Game	1	5.25	\$1,628,602
Parent	Improve family relationship	Value Game	6	6.50	\$143,750
	Stress relief	Value Game	5	6.00	\$172,834
	Improve physical health	Value Game	6	6.00	\$101,750
	Improve interpersonal relationship	Value Game	6	6.00	\$32,575
Itinerant teachers	Improve professional skills	Value Game	3	6.67	\$107,581
	Increase empathy	Value Game	2	5.00	\$35,228
People with disabilities (Male)	Increase income	Cost-Benefit Approach	63	5.75	\$53,242
	Increase self-achievement	Value Game	69	5.57	\$85,417
	Improve interpersonal relationships	Value Game	69	5.29	\$18,868
	Increase empathy	Value Game	74	5.21	\$56,137
	Feel frustrated	Value Game	48	4.64	(\$6,109)
People with disabilities (Female)	Increase income	Cost-Benefit Approach	45	6.30	\$70,860
	Increase self-achievement	Value Game	54	6.00	\$134,143
	Improve interpersonal relationships	Value Game	50	6.00	\$53,555
	Increase empathy	Value Game	50	6.08	\$167,227
	Feel frustrated	Value Game	32	5.58	(\$13,810)
Employment specialists of Hearing loss association of Kaohsiung	Feel pressured	Value Game	5	5.50	(\$212,700)
	Improve professional skills	Value Game	5	6.75	\$172,745
	Increase self-achievement	Value Game	5	6.25	\$151,200
	Stable income	Value Game	5	6.75	\$390,000

Stakeholders	Outcomes	Valuation Method	Outcome number of people	Outcome Weighting	Average Financial Proxy Value
Vocational rehabilitation	Improve professional skills	Value Game	19	5.08	\$112,243
Vocational rehabilitation case managers	Achieve self-realization	Value Game	19	5.50	\$247,200

5.5 Impact factors

According to the SROI guidance, the four major impact factors on the outcomes should be considered. The four major impact factors are Deadweight factors, Displacement factors, Attribution factors, and Drop-off factors. The assessment of these four factors in this evaluation is based on the results of the questionnaire survey, in which stakeholders evaluated individual outcomes, and the average responses were included in the calculation. The reasonableness of the results was also confirmed by referring to relevant SROI reports and literature.

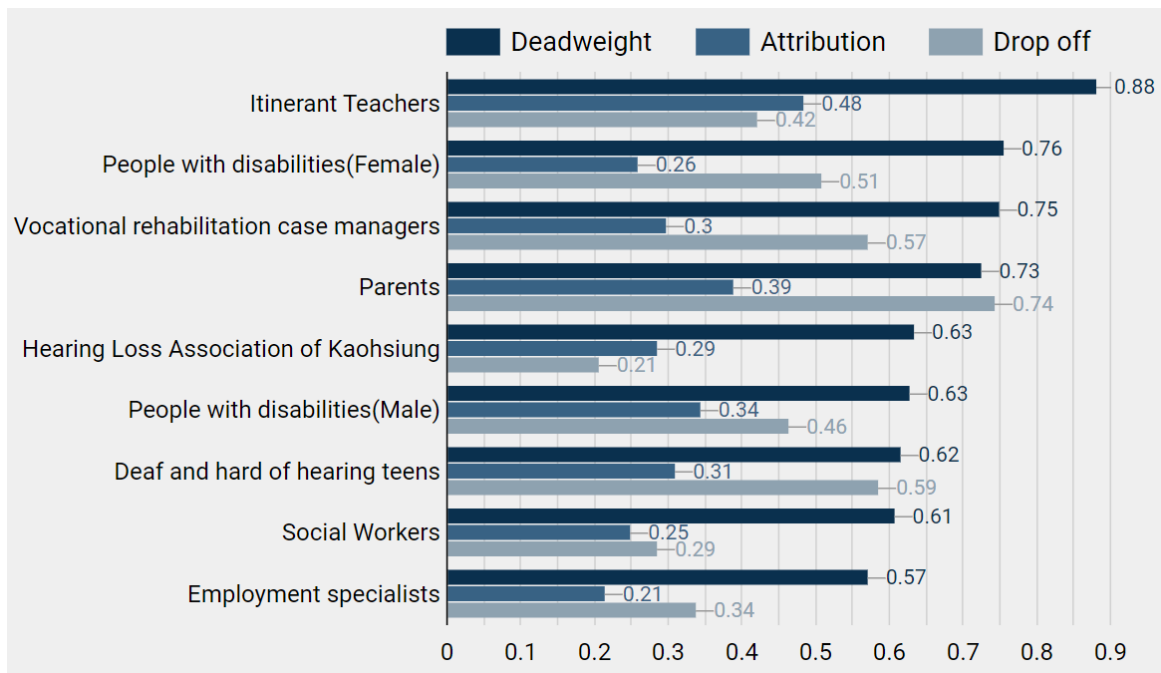


Figure 5-1 : Average Impact Factors of Stakeholders

(1). Deadweight factors:

Refers to the proportion of outcomes that will occur regardless of whether there is an intervention plan. The stakeholder responses showed that Itinerant teachers, vocational rehabilitation Vocational rehabilitation case managers, and Parent had a higher proportion of deadweight factors, averaging about 73% to 80%, consistent with the evaluation expectations. Therefore, these three types of stakeholders participated less in the service. Social workers and Employment specialists averaged 57% to 61%, respectively, as they are the primary service providers and participate the most in the service. Therefore, achieving the same results with their participation is more feasible. The service recipients had an average of about 62% to 70%, which is reasonable.

(2). Displacement Factors:

Refers to the factors that the project's effects will affect other projects or stakeholders outside the project plan. It usually means that negative effects or transfer problems are caused in different places to achieve the program's results. In the SROI guidelines, the negative transfer effect of setting up streetlights in Area A to reduce crime rates but causing crime to transfer to Area B is used as an example. The SROI guidelines also explain that only some projects will have this factor. The plan and activities in this evaluation case are related to supporting employment for People with disabilities and have a substantial impact on activity participants and service providers. In the consultation process with stakeholders, there is no situation where the effect or problem is transferred to other places or stakeholders. After the literature review, it is shown that all the transfer factors of the outcomes are 0%, but the transfer factors will be considered in the sensitivity analysis to ensure the rationality of the analysis.

(3). Attribution Factors:

Refers to the proportion of changes that may be due to other projects or factors; after deducting the influence of external factors, the contribution ratio of the project to the results can be obtained. Through the questionnaire, stakeholders evaluate each outcome and the proportion of results that may be affected by other factors. The attribution factors are about 30%, meaning that most of the effects come from the differentiated and subtle services provided by the Hearing loss association of Kaohsiung. However, the attribution factor of Itinerant teachers is about 48%, which may be due to their less frequent and shorter service; therefore, similar changes may occur through other institutions.

(4). Drop-off factors:

Drop-off outcomes refer to the decrease in benefits over time after the activity ends, the current outcome benefit, and the differences in the benefit each year in the future, which is the essence of the drop-off factor. It was found from the survey results in Table 5-7 that most stakeholders believed that without the service of the Hearing loss association of Kaohsiung, the outcome would gradually decrease over time, but at a slow rate of about 40% per year. The decline in outcome is particularly high for Parent, as most of the outcomes for Parent are difficult to continue after the service ends, such as the relief of stress which immediately returns to the Parent when their children are not cared for and involved in services provided by the Hearing loss association of Kaohsiung.

Table 5-7 : Impact factors

Stakeholders	Outcomes	Deadweight factors	Displacement factors	Attribution factors	Drop-off factors
Deaf and hard of hearing teens	Increase self-confidence	64%	0%	28%	57%
	Improve interpersonal relationship	67%	0%	26%	58%
	Improve speaking skills	67%	0%	31%	59%
	Improve planning skills	63%	0%	31%	63%

Stakeholders	Outcomes	Deadweight factors	Displacement factors	Attribution factors	Drop-off factors
Social workers	Increase self-achievement	71%	0%	14%	29%
	Improve professional skills	71%	0%	14%	29%
	Improve work efficiency	29%	0%	29%	43%
	Increase empathy	71%	0%	29%	14%
Hearing loss association of Kaohsiung	Increase charitable giving	57%	0%	29%	0%
	Achieve the purpose	71%	0%	29%	14%
Parent	Improve family relationship	64%	0%	38%	57%
	Stress relief	76%	0%	43%	90%
	Improve physical health	75%	0%	46%	64%
	Improve interpersonal relationship	75%	0%	86%	86%
Itinerant teachers	Improve professional skills	86%	0%	38%	62%
	Increase empathy	93%	0%	21%	64%
	Feel pressured	86%	0%	86%	0%
People with disabilities (Male)	Increase income	60%	0%	35%	0%
	Increase self-achievement	60%	0%	26%	57%
	Improve interpersonal relationships	71%	0%	29%	57%
	Increase empathy	68%	0%	32%	57%
	Feel frustrated	54%	0%	51%	60%
People with disabilities (Female)	Increase income	67%	0%	31%	0%
	Increase self-achievement	73%	0%	24%	65%
	Improve interpersonal relationships	78%	0%	26%	61%

Stakeholders	Outcomes	Deadweight factors	Displacement factors	Attribution factors	Drop-off factors
	Increase empathy	87%	0%	12%	55%
	Feel frustrated	73%	0%	37%	73%
Employment specialists of Hearing Loss Association	Feel pressured	50%	0%	21%	0%
	Improve professional skills	71%	0%	18%	68%
	Increase self-achievement	68%	0%	25%	68%
	Stable income	39%	0%	21%	0%
Vocational rehabilitation Vocational rehabilitation case managers	Improve professional skills	79%	0%	33%	52%
	Achieve self-realization	71%	0%	26%	62%

Chapter 6: Impact map

6.1 Section1 SROI analysis results

The aforementioned identified stakeholders' change processes and outcomes and found Indicator, Financial Proxy, and impact factors for measuring outcomes. Next, the value of outcomes for each stakeholder will be calculated.

The discount rate (1.75%) used in this report is based on the prevailing interest rate in Taiwan during the project period. In projects with a long period, it is more likely to be affected by external factors and follows the eight principles of SROI. We also conducted a sensitivity analysis in this analysis to ensure its rationality. Finally, the SROI calculation method is the total present value of outcomes divided by the total input value, and the social return on investment (SROI) of this assessment case is 3.32.

Table 6-1 : SROI calculation

Total value	\$ 18,308,780.52
Total input	\$ 5,513,862
SROI	\$ 3.32

SROI Value Map SROI

Stage 1 Who and how many?		Stage 2 At what cost?		Stage 2 What changes?		Stage 3 How much?			Stage 3 How long?			Stage 4 How valuable?			Stage 4 How much caused by the			Still material?	
Stakeholders	Inputs	Outputs	Outcomes		Indicator and source	Quantity (scale)	Amount of change per stakeholder (depth)	Duration of outcomes	Outcomes start	Express the relative importance (value) of the outcome			Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation		
			Outcome description	Composite outcome indicators, 7 Point Likert Scale (interview results and literature support)						Weighting	Valuation approach (monetary)	Monetary valuation							
People with disabilities (Male)	74	service recipients	Employment opportunity development · Employment matching services · Resource inventory · Employment stability consultation	Increase income	63	23.09%	2	Period after	5.75	CBA	\$53,242	60%	0%	35%	0%	888,951			
				Increase self-achievement	69	77.55%	3	Period after	5.57	Value Game	\$85,417	60%	0%	26%	57%	1,716,670			
				Improve interpersonal relationships	69	76.53%	3	Period after	5.29	Value Game	\$18,868	71%	0%	29%	57%	265,689			
				Increase empathy	74	75.51%	3	Period after	5.21	Value Game	\$56,137	68%	0%	32%	57%	898,388			
People with disabilities (Female)	54	service recipients	Employment opportunity development · Employment matching services · Resource inventory · Employment stability consultation	Feel frustrated	48	68.37%	2	Period of activity	4.64	Value Game	(\$6,109)	54%	0%	51%	60%	-66,422			
				Increase income	45	28.80%	4	Period after	6.30	CBA	\$70,860	67%	0%	31%	0%	718,434			
				Increase self-achievement	54	86.90%	2	Period after	6.00	Value Game	\$134,143	73%	0%	24%	65%	1,511,160			
				Improve interpersonal relationships	50	84.52%	4	Period after	6.00	Value Game	\$53,555	78%	0%	26%	61%	437,632			
Vocational rehabilitation case managers	19	Under the expense of the Association	Employment opportunity development · Employment matching services · Resource inventory · Employment stability consultation	Increase empathy	50	84.52%	4	Period after	6.08	Value Game	\$167,227	87%	0%	12%	55%	958,970			
				Feel frustrated	32	71.43%	2	Period of activity	5.58	Value Game	(\$13,810)	73%	0%	37%	73%	-74,173.55			
				Improve professional skills	19	88.10%	2	Period after	5.67	Value Game	\$112,243	79%	0%	33%	52%	304,659			
				Achieve self-realization	19	83.33%	2	Period after	5.50	Value Game	\$247,200	71%	0%	26%	62%	990,481			
Employment specialists	5	Under the expense of the Association	Employment opportunity development · Employment matching services · Resource inventory · Employment stability consultation	Feel pressured	5	89.29%	1	Period of activity	5.50	Value Game	(\$212,700)	50%	0%	21%	0%	-417,803.57			
				Improve professional skills	5	96.43%	1	Period after	6.75	Value Game	\$172,745	71%	0%	18%	68%	202,711			
				Increase self-achievement	5	92.86%	2	Period after	6.25	Value Game	\$151,200	68%	0%	25%	68%	182,250			
				Stable income	5	89.29%	1	Period after	6.75	Value Game	\$390,000	39%	0%	21%	0%	930,230			
Deaf and hard of hearing teens	37	\$ 4,704	Case management services · Peer group activities · Parents-child learning · Campus campaign · Community Engagement · Summer camps	Increase self-confidence	34	72.53%	2	Period after	5.38	Value Game	\$61,169	52%	0%	32%	56%	672,030			
				Improve interpersonal relationships	34	72.53%	2	Period after	4.92	Value Game	\$6,884	64%	0%	27%	58%	60,705			
				Improve speaking skills	31	71.43%	2	Period after	5.23	Value Game	\$115,319	66%	0%	34%	57%	799,515			
				Improve planning skills	7	66.07%	2	Period after	4.50	Value Game	\$9,892	63%	0%	31%	63%	17,651			
Social Workers	1	Under the expense of the Association	Case management services · Peer group activities · Parents-child learning · Campus campaign · Community Engagement · Summer camps	Increase self-achievement	1	100.00%	4	Period after	7.00	Value Game	\$115,567	71%	0%	29%	29%	23,585			
				Improve professional skills	1	100.00%	4	Period after	7.00	Value Game	\$759,000	71%	0%	14%	29%	185,878			
				Increase empathy	1	100.00%	4	Period after	7.00	Value Game	\$294,967	71%	0%	29%	14%	60,197			
				Improve work efficiency	1	71.43%	3	Period after	5.00	Value Game	\$115,567	29%	0%	29%	43%	58,963			
Parents	6	service recipients	Parents-child learning	Improve family relationship	6	96.43%	3	Period after	6.50	Value Game	\$143,750	64%	0%	29%	57%	220,026			
				Stress relief	5	89.29%	1	Period after	6.00	Value Game	\$172,834	76%	0%	38%	90%	127,372			
				Improve physical health	6	85.71%	1	Period after	6.00	Value Game	\$101,750	75%	0%	43%	64%	87,215			
				Improve interpersonal relationships	6	89.29%	2	Period after	6.00	Value Game	\$32,575	75%	0%	46%	86%	26,176			
Itinerant Teachers	3	Under the expense of the Association	Campus campaign	Improve professional skills	3	95.24%	2	Period after	6.67	Value Game	\$107,581	86%	0%	38%	62%	28,542			
				Increase empathy	2	61.90%	1	Period after	5.00	Value Game	\$35,228	93%	0%	21%	64%	3,954			
Hearing Loss Association of Kaohsiung	2	\$ 5,509,158	All	Increase charitable giving	1	67.86%	1	Period after	4.75	CBA	\$60,147	57%	0%	29%	0%	18,412			
				Achieve the purpose	1	75.00%	4	Period after	5.25	Value Game	\$1,628,602	71%	0%	29%	14%	332,368			
		\$ 5,513,862															Total	12,170,412	
																		Present value of each	
																		Total Present Value	18,308,780.52
																		Net Present Value (PV	12,794,918.52
																		Social Return (Value	3.32

Calculating Social Return						
Discount rate	1.750%					
0.00	888,951.25	144,702.38	0.00	0.00	0.00	
0.00	1,716,670.25	735,715.82	315,306.78	0.00	0.00	
0.00	265,688.63	113,866.56	48,799.95	0.00	0.00	
0.00	898,388.07	385,023.46	165,010.05	0.00	0.00	
-66,422.26	-26,358.04	0.00	0.00	0.00	0.00	
0.00	718,433.63	199,878.72	199,878.72	199,878.72	199,878.72	
0.00	1,511,160.08	521,710.03	0.00	0.00	0.00	
0.00	437,631.60	170,505.82	66,430.84	25,882.14	0.00	
0.00	958,970.23	435,895.56	198,134.34	90,061.07	0.00	
-74,173.55	-19,678.70	0.00	0.00	0.00	0.00	
0.00	304,658.67	145,075.56	0.00	0.00	0.00	
0.00	990,480.96	377,326.08	0.00	0.00	0.00	
-417,803.57	0.00	0.00	0.00	0.00	0.00	
0.00	202,710.97	0.00	0.00	0.00	0.00	
0.00	182,250.00	58,580.36	0.00	0.00	0.00	
0.00	930,229.59	0.00	0.00	0.00	0.00	
0.00	672,030.13	296,013.27	0.00	0.00	0.00	
0.00	60,705.26	25,293.86	0.00	0.00	0.00	
0.00	799,514.50	342,649.07	0.00	0.00	0.00	
0.00	17,650.55	6,483.87	0.00	0.00	0.00	
0.00	23,585.03	16,846.45	12,033.18	8,595.13	0.00	
0.00	185,877.55	132,769.68	94,835.49	67,739.63	0.00	
0.00	60,197.28	51,597.67	44,226.57	37,908.49	0.00	
0.00	58,962.59	33,692.91	19,253.09	0.00	0.00	
0.00	220,025.51	94,296.65	40,412.85	0.00	0.00	
0.00	127,371.75	0.00	0.00	0.00	0.00	
0.00	87,214.50	0.00	0.00	0.00	0.00	
0.00	26,176.34	3,739.48	0.00	0.00	0.00	
0.00	28,541.99	10,873.14	0.00	0.00	0.00	
0.00	3,954.18	0.00	0.00	0.00	0.00	
0.00	18,412.35	0.00	0.00	0.00	0.00	
0.00	332,367.77	284,886.66	244,188.57	209,304.49	0.00	
-558,399	12,682,774	4,587,423	1,448,510	639,370	0.00	
-558,399	12,464,643	4,430,982	1,375,050	596,505	0.00	
						18,308,780.52
						12,794,918.52
						3.32

Figure 6-1 : SROI Value Map

If categorized by stakeholders, the results and details are as follows. Table 6-2 shows the discounted social value created by each stakeholder group, and the total is added up.

Table 6-2 : Stakeholder Social Value Calculation

Stakeholder	Outcomes	Social Value
Deaf and hard of hearing teens	Increase self-confidence	\$946,390.43
	Improvement interpersonal relationship	\$84,092.47
	Improve speaking skills	\$1,116,727.62
	Improve planning skills	\$23,609.73
Social workers	Increase self-achievement	\$58,893.17
	Improve professional skills	\$464,146.77
	Increase empathy	\$186,350.70
	Improve work efficiency	\$108,769.06
Hearing loss association of Kaohsiung	Increase charitable giving	\$18,095.67
	Achieve the purpose	\$1,028,899.78
Parents	Improve family relationship	\$345,685.53
	Stress relief	\$125,181.08
	Improve physical health	\$85,714.50
	Improve interpersonal relationship	\$29,338.08
Itinerant teachers	Improve professional skills	\$38,553.43
	Increase empathy	\$3,886.17
People with disabilities (Male)	Increase income	\$1,013,429.87
	Increase self-achievement	\$2,697,087.57
	Improve interpersonal relationships	\$417,427.58
	Increase empathy	\$1,411,471.59
	Feel frustrated	(\$92,326.97)
People with disabilities (Female)	Increase income	\$1,275,360.16
	Increase self-achievement	\$1,989,088.17
	Improve interpersonal relationships	\$682,004.73
	Increase empathy	\$1,635,616.69
	Feel frustrated	(\$93,513.79)
Employment specialists	Feel pressured	(\$417,803.57)
	Improve professional skills	\$199,224.54
	Increase self-achievement	\$235,698.12
	Stable income	\$914,230.56
Vocational rehabilitation Vocational rehabilitation case managers	Improve professional skills	\$439,546.99
	Achieve self-realization	\$1,337,904.09

6.2 Sensitivity analysis

In order to ensure the objectivity and verifiability of the research results, the SROI guide requires sensitivity analysis and related information disclosure in each analysis report. Therefore, in order to pursue rigor and comply with the eight principles of SROI, sensitivity analysis was performed on various indicators. The main analysis items include interest rate, screening conditions, financial multipliers, factor adjustment, outcome value, and costs.

Table 6-3 : Sensitivity Analysis Table

Adjustment items	Explanation of adjustment items	Adjustment value	Adjusted SROI
Interest rate	To observe the impact of interest rates on SROI, the annual interest rate is adjusted to 0.5% and 2%.	0.75%	3.37
		2.75%	3.27
Condition One screening	To observe the effect of the strictness of the screening mechanism on SROI, condition one (whether there is a change in the case) was used as a filter. The screening value was changed to 4 and 6, with the following results.	4	3.39
		6	2.70
Condition Two and Three screening	To observe the effect of the strictness of the screening mechanism on SROI, conditions two and three (whether outcomes meeting materiality) were used as a filter. The screening value was changed to 3 and 5, with the following results.	3	3.32
		5	3.11
		0.8 times	3.63

Adjustment items	Explanation of adjustment items	Adjustment value	Adjusted SROI
Drop-off factor multiplier	Sensitivity analysis was conducted by magnifying and diminishing the drop-off factor, when the factor was multiplied by 0.8 and 1.2 times. The results are as follows.	1.2 times	3.04
Deadweight factor multiplier	Sensitivity analysis was conducted by magnifying and diminishing the deadweight factor, when the factor was multiplied by 0.8 and 1.2 times. The results are as follows.	0.8 times	5.00
		1.2 times	1.64
Attribution factor multiplier	Sensitivity analysis was conducted by magnifying and diminishing the attribution factor, when the factor was multiplied by 0.8 and 1.2 times. The results are as follows.	0.8 times	3.57
		1.2 times	3.07
Displacement factor	Through interviews and questionnaires, it was found that the displacement factors of all outcomes being almost 0. In order to adhere to the principle of not exaggerating, the displacement factors were set to 10%, 20%, and 30%. The results are as follows.	10%	2.99
		20%	2.66
		30%	2.32
		-2 terms	2.42

Adjustment items		Explanation of adjustment items	Adjustment value	Adjusted SROI
increase or decrease in duration		Sensitivity analysis was conducted by lengthening and shortening the duration, when the period is adjusted to plus or minus two terms. The results are as follows.	+2 terms	3.89
Financial proxy indicator multiplier	Cost multiplier	Under a fixed value, a sensitivity analysis is conducted by increasing or decreasing the cost multiple by 10%, and the multiple is adjusted to 0.9 or 1.1 times. The results are as follows.	0.9 times	3.69
			1.1 times	3.02
	Average value multiple		0.9 times	3.00
			1.1 times	3.64
SROI multiplier		Sensitivity analysis is conducted by increasing or decreasing the SROI multiple by 10%, and the multiple is adjusted to 0.9 or 1.1 times. The results are as follows.	0.9 times	2.99
			1.1 times	3.65

According to the data from Table 6-3, the SROI value after sensitivity analysis ranges from 1.64 to 5.00. From the analysis data, it can be seen that the variation of the deadweight factor has a greater overall effect on the SROI of the Hearing loss association of Kaohsiung. Taking into account the above values, the evaluation results fall within a reasonable range.

Chapter 7: Conclusion and Recommendations

7.1 Conclusion

This outcome report describes in detail the influence assessment of the services provided by the Hearing loss association of Kaohsiung, including its Deaf and hard of hearing teens Care Program and Supported Employment for People with disabilities, and the process of completing the six steps of the SROI analysis method, presenting the input, output, change, outcome, and impact, as well as calculating the SROI impact value. The six steps are: Establishing Scope and Identifying Stakeholders, Mapping Outcomes, Evidencing Outcomes and Giving them a Value, Establishing Impact, Calculating the SROI, Reporting, Using, and Embedding. This project mainly assesses the impact of the service project in 2021, hoping to reveal the strategies and effectiveness of Hearing loss association of Kaohsiung's various services through the rigorous SROI analysis process and survey of stakeholders' influence.

This report describes the complete steps of SROI analysis. After determining the scope of the analysis, the study first established respondents by identifying stakeholders, and then performed data collection. Workshops and stakeholder engagement were conducted to strengthen the accuracy and completeness of the data. In the initial estimation of resource inputs, most of the inputs of stakeholders were covered in the project budget of the Hearing loss association of Kaohsiung, and the costs of other stakeholders were not included to avoid duplication. The only cost that needs to be calculated separately is the time cost of volunteers because it is a voluntary input, and it needs to consider time cost. In the description of outputs, the research team fully understood the contents and stages of each activity through multiple interviews and clearly understood the changes. At the same time, through data collection, the number of participants, frequency, duration, tables, and data of outputs were obtained to make the outline of outputs clearer. In the presentation of changes, the research team ensured the expected results achieved by stakeholders through understanding the output process and interviewing stakeholders.

After intensive interviews, the outline of the chain of events has taken shape. To fully understand the expected and unexpected changes and outcomes, the research team continued to use physical visits and telephone interviews to ensure that the sampling interviews could reach the theoretical saturation of qualitative research depth, and to

ensure that the chain of events could completely describe the participation experiences of stakeholders.

Upon determining the final outcomes for stakeholder groups through interviews, a comprehensive questionnaire survey was conducted based on the analyzed outcomes to understand the verification of stakeholders' outcomes, duration, four major factors (drop-off factor, deadweight factor, attribution factor, displacement factor), and financial proxy indicators. After collecting the questionnaire survey, the SROI value was calculated, and the final mapping of the impact map was completed. As shown in Figure 8, after calculating the SROI impact value, the research team conducted a sensitivity analysis to calculate the interval of the SROI value, ensuring the rationality of all parameters affecting the SROI.

After completing all analyses, the research team will further understand the service effectiveness and feasible impact strategies, fully disclosing the impact of the Hearing loss association of Kaohsiung's Deaf and Hard-of-Hearing Teen Care Program and Supported Employment for People with disabilities to stakeholders, and exploring the output of outcomes, as well as the unexpected benefits for stakeholders. After summarizing and analyzing, this will assist the Hearing loss association of Kaohsiung in implementing subsequent applications and promotions, with the expectation that through this analysis, the effectiveness of various services can be evaluated as a basis for future improvement. At the same time, the evaluation results can also provide a reference for future international certification applications to enhance opportunities for collaboration with potential partners. Most importantly, it is hoped to transform the service into a concept of a supply chain system, including the supply chain and the users of the service.

According to the six-step SROI analysis, the SROI value was calculated, and a reasonable range of 1.64 to 5.00 was obtained from the sensitivity analysis in Table 6-3. This project's SROI analysis of the Hearing loss association of Kaohsiung is comprehensive, in-depth, complete, and reasonable. Through this analysis, benefits across different dimensions were also identified in detail, as described below:

7.1.1 Basic Analysis of Social Value Calculation Results:

Figure 7-1 displays the social value allocation calculated by the Hearing loss association of Kaohsiung's SROI, emphasizing the differences in social value obtained

by various stakeholders, with People with disabilities and Deaf and hard of hearing teens being the primary beneficiaries and having a larger stakeholder group.

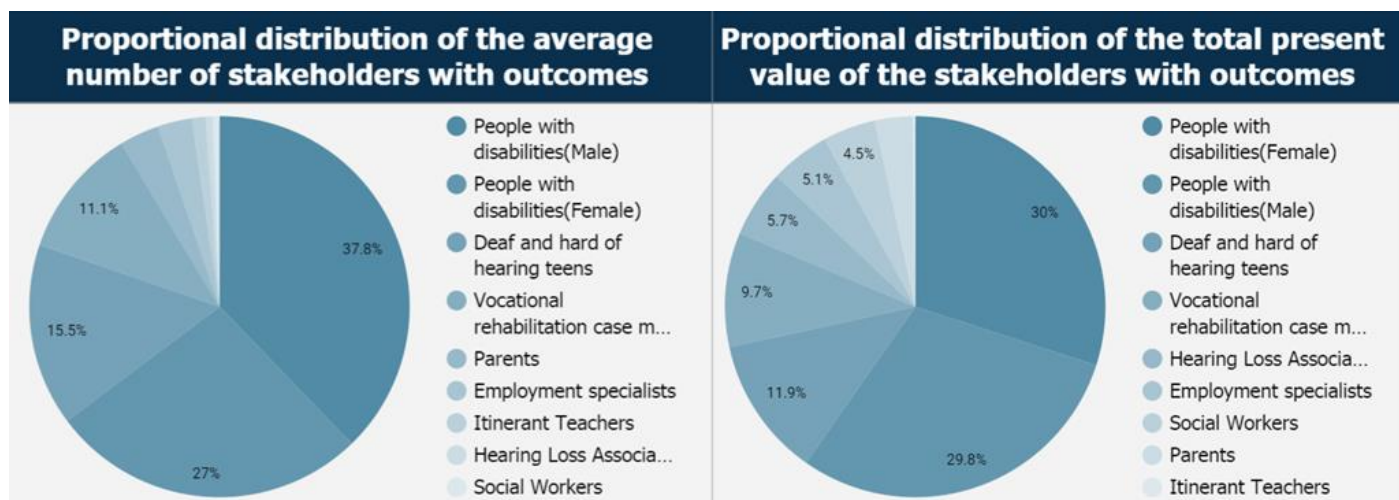


Figure 7-1 : The social value allocation of Hearing loss association of Kaohsiung

Service recipients usually generate the most significant social benefits because services can help improve their welfare, increase their skills and knowledge, and enhance their ability to participate in society and the economy. For example, supported employment can help People with disabilities acquire the skills and knowledge needed for employment, including interview skills and necessary documents. They assist People with disabilities in becoming productive members of society and contribute to economic growth. Similarly, they provide care and learning opportunities for youth that can improve their mental health and interpersonal skills, and relieve the burden on their families and society. In terms of comprehensive benefits, the services provided by the Hearing loss association of Kaohsiung can indeed generate substantial social benefits for People with disabilities, bringing about more changes in society.

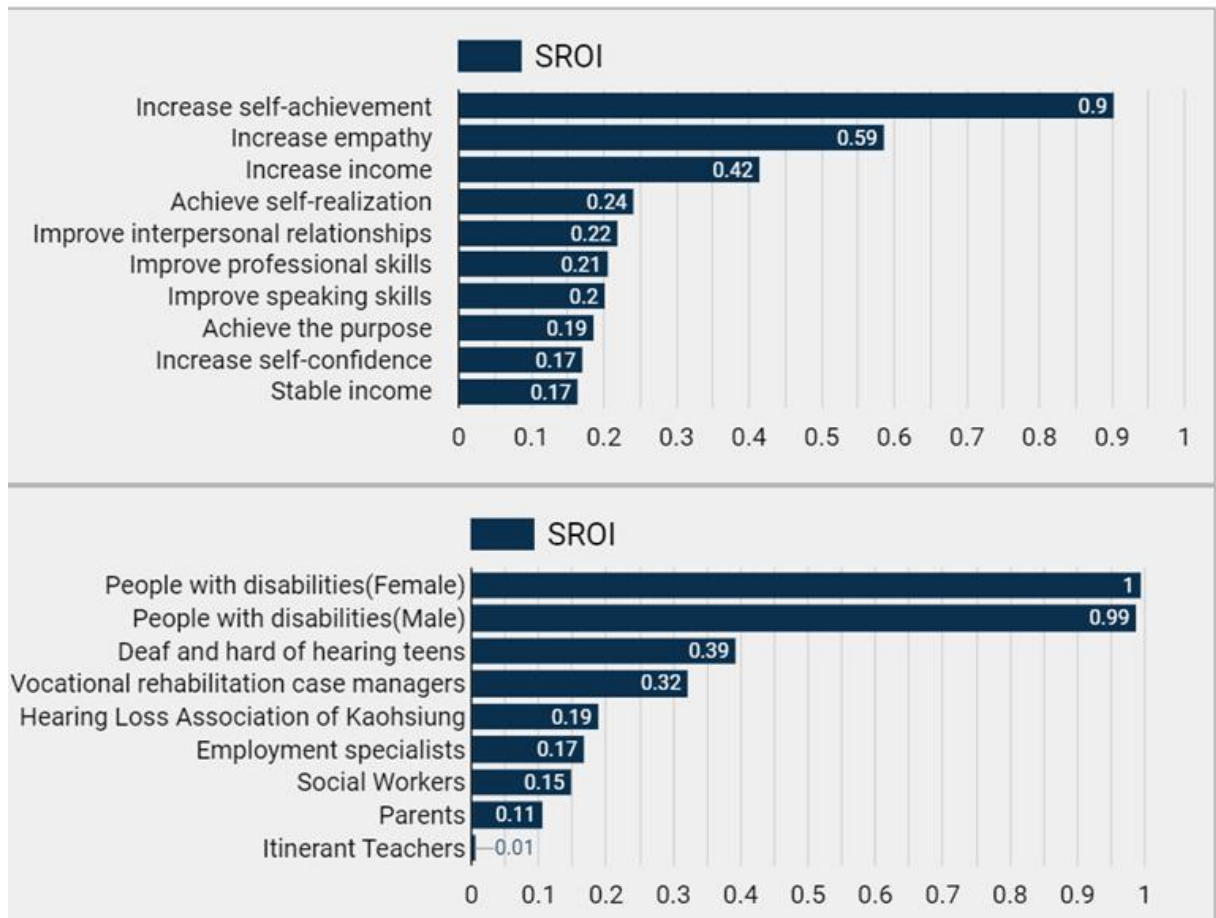


Figure 7-2 : Bar chart of SROI ratio allocation

According to the analysis in Figure 7-2, supported employment can indeed increase self-achievement and help build confidence. Through counseling, their skills, interests, and values can be further understood, as well as how to align with potential career paths, which can bring them a sense of direction and enhance their self-esteem and confidence. In addition, supported employment can also help individuals develop skills, acquire the tools and confidence needed for employment, and become an essential source of personal achievement. Caring for People with disabilities can also help build empathy in society. By providing support for People with disabilities to fully utilize their potential, their abilities and strengths can be effectively demonstrated, overturning the general stereotypes and misunderstandings about People with disabilities, promoting better understanding, sympathy, and inclusion. Through programs that provide care and training for People with disabilities, they can understand the challenges faced by different disabilities and be more willing to work harder to accept the challenges that limit their development opportunities.

7.1.2 Impact of Average Value and Number of Beneficiaries:

To ensure the reasonableness of the valuation, the impact of the total number of people and the average value on the SROI value was explored by examining the changes in these variables. Figure 7-3 shows that the total number of stakeholders does indeed increase the SROI value, which is a common finding in SROI evaluations. However, the average value of financial proxy variables has little impact on the SROI value. Therefore, it can be inferred that the perceived outcome value of stakeholders is still within a reasonable range and there is no case where the number of stakeholders is high, and the average value is too high.

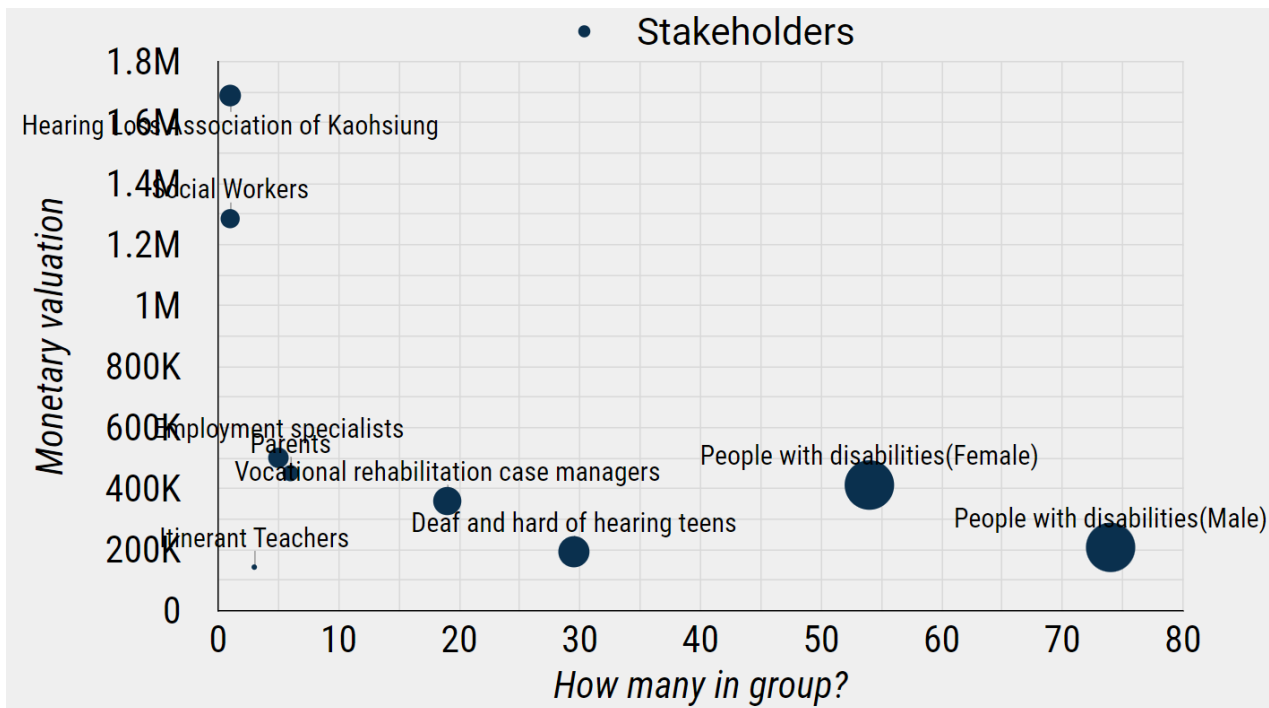


Figure 7-3 : The impact of average value of outcomes and number of beneficiaries on SROI value

As for People with disabilities, including service recipients and Deaf and hard of hearing teens, their valuation is generally lower. People with disabilities often face many challenges, which limit their access to employment opportunities and may lead to lower incomes. These challenges include a lack of accessible transportation, inadequate accessibility in the workplace, and negative attitudes and discrimination towards them. In addition to external barriers, People with disabilities may also face internal barriers, such as low self-esteem and a lack of confidence in their abilities, which may make it harder for them to succeed in the workplace.

The valuation method of The Value Game selects market goods that stakeholders can recognize as the judgment criteria. The generally lower income and spending habits

of People with disabilities may result in a lower perceived market value of goods, thus leading to this result. In order not to exaggerate the evaluation results and to ensure that the stakeholders' perception can be accurately presented, the market value judgment has not been adjusted. This approach faithfully presents the evaluation report, ensuring the adequacy and transparency of the information, and helps to better understand the generation of social benefits.

7.1.3 Deaf and hard of hearing teens Achieving Confidence and Communication Skills

From Figure 7-4, it can be seen that the social benefits for Deaf and hard of hearing teens have had good results in improving self-confidence and communication skills. Building self-confidence for Deaf and hard of hearing teens can improve their mental health and willingness to express and showcase themselves, which can help them achieve their goals and lead happy, fulfilling lives. In addition, being able to express their ideas can effectively help them overcome the challenges they face. Overall, self-confidence can help Deaf and hard of hearing teens establish healthy relationships with others in their personal and professional lives. Improving communication skills for Deaf and hard of hearing teens can also help them develop their abilities, as effective communication is essential for independence and self-sufficiency, making it easier for Deaf and hard of hearing teens to handle their daily lives with confidence. Furthermore, communication is a key factor in human interaction and connection, and good communication skills can improve learning outcomes. Deaf and hard of hearing teens can fully participate in class more, understand and express their ideas, and establish good relationships with peers and teachers. In summary, improving communication skills can help Deaf and hard of hearing teens establish and maintain meaningful relationships, ultimately cultivating a sense of belonging and developing more social skills.

In addition, for teens, improving self-confidence and communication skills are the two most important outcomes, with the factor of improving self-confidence performing better. The Hearing loss association of Kaohsiung has made significant contributions in building confidence for teenagers. As for the deadweight factor, it was 54%, while the attribution factor was 28%, indicating that it is difficult for teenagers to generate the same level of self-confidence through their own efforts or with assistance from other

units. This shows that the Hearing loss association of Kaohsiung has had a significant and positive impact on them.

7.1.4 People with disabilities can Increase self-achievement through Work

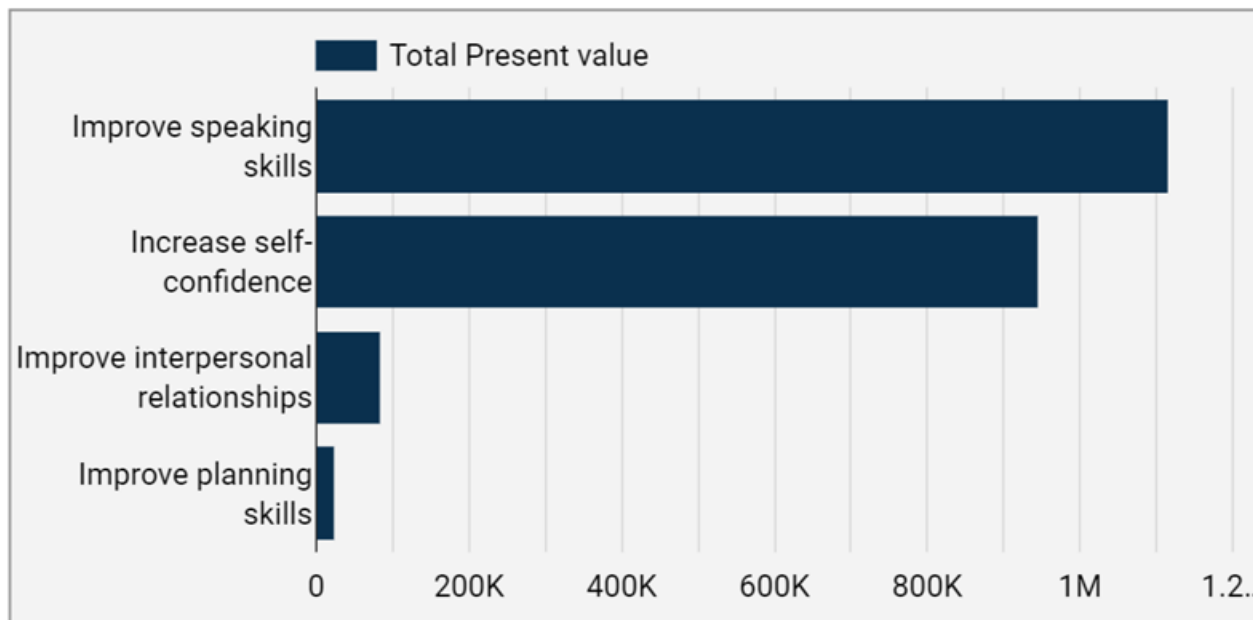


Figure 7-4 : Outcomes present value of Deaf and hard of hearing teens

Work can bring many benefits. It not only provides financial stability but also opportunities for personal growth and development, establishing a sense of purpose and identity, social interaction, community participation, and mental stimulation. By meeting these needs, work can promote overall happiness. In addition, work can also establish a sense of achievement through various means. When tasks or projects are successfully completed, a sense of pride is felt, which helps to create a sense of achievement. As mentioned in the interview cases, the ability to complete work faster and with more accuracy allows individuals to be proud of their progress. Therefore, they feel that they are contributing to society and fulfilling meaningful roles, establishing a sense of mission and identity. Moreover, learning new skills, accepting new challenges, and improving oneself can make people feel fulfilled and happy. In summary, work can become a source of achievement, satisfaction, and meaningful contribution to society. Figure 7-5 shows that the highest social value is generated by Increase self-achievement, followed by Increase empathy.

Establishing empathy refers to the process of developing and strengthening a person's ability to understand and share the feelings, experiences, and perspectives of others. Empathy is the ability to think from the perspective of others and experience the world from their viewpoint. Through the education and training programs provided by

the Hearing loss association of Kaohsiung, as well as the counseling assistance provided before and after employment, it is possible to stimulate personal reflection of stakeholders. Establishing empathy can improve a person's relationship with others, increase emotional intelligence, and promote greater understanding and sympathy for society or others. From the interviews, it can be seen that stakeholders can achieve this result during the service process and can apply it to subsequent interactions with others. This is one of the unexpected and important results. In addition, the increase in income is one of the important results. A cost-benefit analysis is adopted here to actually calculate the changes in income and the potential future salary growth space. This further shows that People with disabilities can indeed find more suitable jobs and obtain better salary conditions with the assistance of the Hearing loss association of Kaohsiung.

To avoid exaggerating the results, Feel frustrated that may arise from job loss or work that does not meet expectations, or discomfort during the work process, are also calculated. The numbers show a higher decline factor, as the main setback occurs during the job search process. After successful employment or other development directions, there are fewer negative outcomes. Overall, the supported employment provided by the Hearing loss association of Kaohsiung can help People with disabilities establish a more complete life in many aspects, guiding and assisting them in finding work that matches their abilities and interests, and improving their social skills and income.

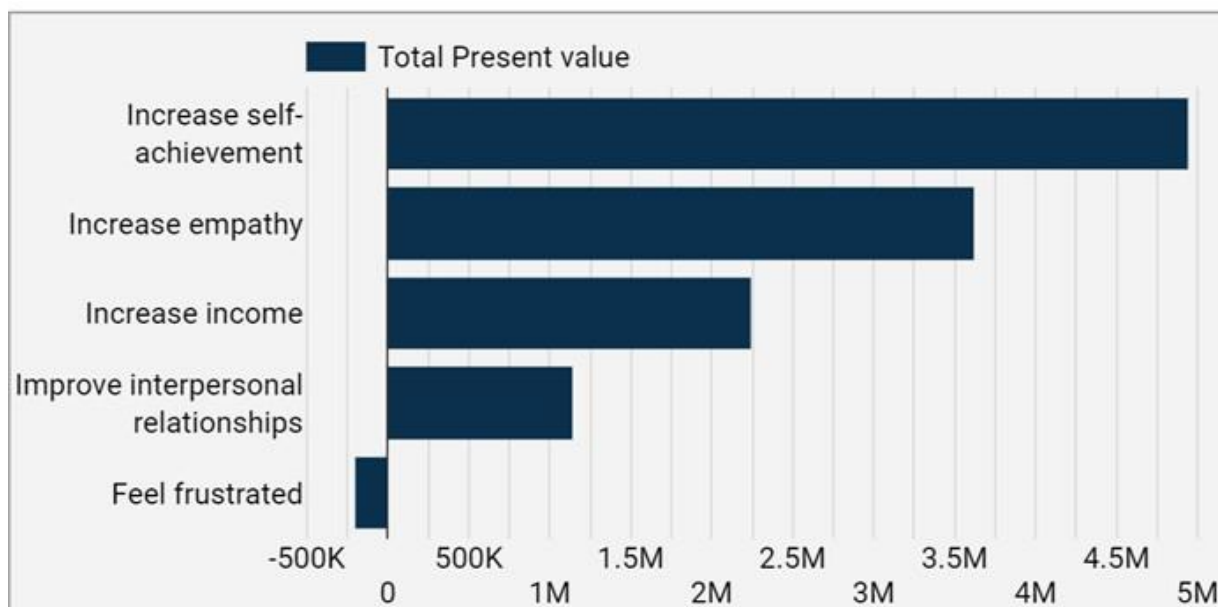


Figure 7-5 : Outcomes present value of People with disabilities(All Gender)

7.2 Recommendation for Project Improvement

7.2.1 Quantitative Data to Support Qualitative Decision-Making

Qualitative Decision-making Quantitative data can assist in the validation or questioning of qualitative findings. For example, survey results can provide a quantitative representation of attitudes and opinions, which can then be compared with qualitative data collected through interviews or focus groups. This can help identify inconsistencies between the two. In short, combining qualitative and quantitative data can provide a more comprehensive and detailed understanding of a situation, leading to wiser decisions. SROI (Social Return on Investment) analysis can capture impact data in social welfare services and provide the necessary evidence for qualitative analysis. From this analysis, the effectiveness of the services provided by the Kaohsiung Sound Association is evident, with many consistent results achieved both qualitatively and quantitatively, proving the positive impact on stakeholders.

Moreover, this study effectively utilized the performance indicators identified in the research literature. Performance indicators can contribute to the management efficiency of services, and by using SROI analysis, the connection between outputs and outcomes can be understood. This helps to refine outputs based on specific performance indicators and ultimately improves the decision-making process. It is suggested that a well-established system and regular evaluation mechanism be implemented, with appropriate performance indicators incorporated to assist decision-making. This will enable better control over the generation of impact, gradual improvement in performance indicators, and the raising of benchmark thresholds to understand whether outcomes have improved.

7.2.2 Refining Service Offerings to Expand Impact

Employment counseling services still face some challenges in successfully matching certain cases, possibly due to unsatisfactory matching processes or differing career expectations. More resources may need to be invested in counseling or psychological consultation. Some People with disabilities have work and skill experiences before their physical/psychological disabilities arise but are unable to continue in their previous positions afterward. This setback poses a significant challenge to their self-confidence and motivation to work. It is necessary to consider adding different service offerings to help them find new career identities and build a sense of accomplishment in new jobs. Furthermore, interpersonal relationships during

the employment process are also crucial for People with disabilities. Relationships with colleagues and supervisors' attitudes are key factors for stable employment. For example, people with hearing impairments may struggle in noisy work environments, and People with disabilities might have difficulty maintaining the same work efficiency in some tasks. In these situations, better communication with employers and understanding from colleagues are essential. This relies heavily on employment service staff, who through their visits and relationship building, can create a more suitable work environment for People with disabilities. Additionally, enabling People with disabilities to proactively request assistance from supervisors and colleagues during the work process is an important goal. This can reduce the risk of accidents or inefficiency resulting from unfamiliarity with the work environment or misunderstanding job responsibilities. Employment service staff's close assistance is needed, and it is recommended that they be supported with diverse courses or technological aids to better grasp individual cases and improve their assistance skills.

Regarding youth services, well-designed activities can help young people build self-confidence. Services should allow Deaf and hard of hearing teens to understand the challenges they face and learn how to communicate and interact with others, leading to significant improvements in self-confidence and communication skills. However, in terms of interpersonal relationships, it may be difficult for young people to maintain lasting connections due to the short duration of services. It may be worth trying to increase small-scale gatherings to strengthen communication and connections between individuals, helping young people develop interpersonal skills and preparing them for future challenges. Additionally, youth volunteers' involvement in activity design is relatively shallow, posing challenges to their development. It is suggested to match more course designs and resources to enhance youth teaching and leadership abilities, providing new options for diverse development and expanding their potential based on self-confidence and communication skills.

7.2.3 Promotion of Service Model and Resource Allocation

From the perspective of the service model and data provided by the Hearing loss association of Kaohsiung, it is evident that the team's persistence and efforts are noteworthy. The staff is able to provide timely assistance to service recipients when needed. The service process involves extensive documentation and record-keeping, as well as commuting time. Moreover, staff members identify potential risks from small details during the visitation process, and assist in removing obstacles in the work environment. In the realm of youth care, the activities provided by Social workers

effectively cultivate self-confidence in young people, and improve their communication skills through activities and courses. In view of the value of the Hearing loss association of Kaohsiung's services from various aspects, the research team suggests that more resources should be allocated to increase efficiency in providing services for People with disabilities. For example, digitizing paper records or providing more teaching materials and human resources would offer more room for service providers to thrive and indirectly offer more diverse activities and training for service recipients. It is hoped that through the publication of the SROI report, more people will see the efforts of the Hearing loss association of Kaohsiung and participate in providing assistance, enabling the expansion of the association's resource network and promoting comprehensive services.

7.2.4 Securing Social Support and Assistance from Public and Private Sectors

Through interviews with stakeholders involved in the employment services of the Hearing loss association of Kaohsiung, the research team witnessed the dedication and enthusiasm of People with disabilities in their work. However, their job choices are often limited to simple labor tasks, despite the fact that the research team believes that these individuals have more potential. Due to their physical and mental challenges, adapting to complex tasks may be difficult, resulting in less-than-ideal work efficiency. As a result, some companies redesign jobs for People with disabilities, redefining responsibilities and tasks, changing work methods, providing assistive technologies or adaptive equipment, and reorganizing the work environment. The goal of job redesign is to enable People with disabilities to effectively fulfill their job responsibilities, ensure their right to equal employment opportunities is protected, and maintain productivity. However, such solutions are often overlooked. It is hoped that both public and private sectors can collaborate to help People with disabilities unleash their potential and encourage companies to adopt relevant measures, assisting People with disabilities and ultimately achieving a common good for society.

As technology advances and evolves, the innovation of public welfare services also requires more resources and guidance. To stay in line with future developments and address the challenges faced by individuals with hearing disabilities, such as the impact of automated transcription devices on transcription services, greater social attention is needed to ensure the continuation of excellent services. The scope of services provided by the Hearing loss association of Kaohsiung is extensive, and this SROI calculation focuses solely on youth care services and employment counseling

services, which have already achieved significant social benefits. With an SROI value of \$3.32, it is evident that stakeholders are deeply influenced by the assistance provided by the Hearing loss association of Kaohsiung. By uniting Parent, supervisors, and service personnel, the association has built a significant milestone in its services. The association's efforts contribute to social stability and deserve to be recognized. It is hoped that the service capacity can be expanded in the future to provide more high-quality services for People with disabilities, assist them in living more complete lives and achieving personal development, and devote efforts to connecting the importance and joy of self-essence for people with hearing disabilities from a life context perspective. As the association's mission statement says, "Simple and happy life is an achievable state, and we also optimistically believe in it." The Hearing loss association of Kaohsiung will continue to create an impact and bring about more changes in the future.

Appendix

Appendix I Summary of Outcomes for Deaf and hard of hearing teens Care Program

Appendix 1-1: Summary of Outcomes for Deaf and hard of hearing teens Care Program

Expected Outcomes	Chain of Events	Extract of Stakeholder Feedback
Increase self-confidence	<p>1. Participating in activities →Interacting with instructors →Experiencing the charm of instructors →Understanding even with physical defects, we can become an attractive/competent person→Increase self-confidence→Seeing successful cases→Believing in self-ability to complete the goal → Increase self-confidence</p> <p>2. Participating in the planning and designing of summer camp activities → Taking full responsibility for course design and leadership → Success in the event → Obtaining positive feedback from students and Parent → Gaining successful experience → Feeling a sense of accomplishment → Believing in self-ability to complete the goal→Increase self-confidence</p>	<p>Parents: "It can increase the child's self-confidence because my daughter cannot participate in general activities and thus does not receive the sense of accomplishment or encouragement. Hearing loss association of Kaohsiung provides Deaf and hard of hearing teens with the opportunity to freely participate in various activities."</p>
Improve interpersonal relationship	<p>1. Participating in various activities → Carrying out teamwork according to the activities → Recognizing the</p>	<p>"Participating in activities is less stressful for me. In addition to being fun and interesting, some</p>

Expected Outcomes	Chain of Events	Extract of Stakeholder Feedback
	<p>importance of teamwork → Improving teamwork capabilities → Improve interpersonal relationship</p> <p>2. Participating in various activities → Getting to know more Deaf and hard of hearing teens → Establishing contact channels → Maintaining contact to cultivate friendships → Improve interpersonal relationship</p> <p>3. Receiving individual case services → Communicating with Social workers → Fostering rapport and understanding each other → Establishing a sense of trust with Social workers → Sharing in-depth descriptions of difficulties and thoughts with Social workers → Obtaining relevant help and advice → Understanding how to navigate interpersonal relationships → Learning positive ways of expression → Improved behavioral abilities → Improve interpersonal relationships</p>	<p>acquaintances also participate, and I have made many friends at the association."</p>
<p>Improve speaking skills</p>	<p>1. Participating in listening to Itinerant teachers' course → Receiving correct pronunciation and listening training → Strengthening language expression ability → Learning</p>	<p>"I attended the course with the Itinerant teachers, which improved my pronunciation accuracy, and my classmates could understand better what I was saying."</p>

Expected Outcomes	Chain of Events	Extract of Stakeholder Feedback
	<p>correct communication skills → Mastering the language and self-collection technology for communicating with people → Improve speaking skills</p> <p>2. Accepting individual case services→Communicating with Social workers→Cultivating tacit understanding and getting to know each other→Building a sense of trust with Social workers→Describing in-depth difficulties and thoughts to Social workers→Obtaining relevant help and advice→Understanding interpersonal relationships and dealing with advances and retreats→Learning how to express positively→ Improving behavioral ability → Improve speaking skills</p>	
<p>Improve planning skills</p>	<p>Participating in the planning and design of summer camp activities → Taking responsibility for course design and leadership → Success in the event → Learning practical skills in the review process after the event → Being able to design appropriate courses from the perspectives of students → Improve planning skills</p>	<p>"Some students will serve as team assistants, participating in the design or assistance of activities so they would learn teaching methods."</p>

Appendix 1-2: Summary of Outcomes for Social workers

Expected Outcomes	Chain of Events	Extract of Stakeholder Feedback
Experiencing a Sense of Accomplishment	<p>1. Providing services→ improving case situations and accumulating positive success experiences→Services are affirmed→ Increase self-achievement</p> <p>2. Preparing various services→Services are conducted successfully→ Increase self-achievement</p>	<p>"For example, the positive feedback from Parent and children, as soon as there are new activities in the association, they immediately sign up to participate, which makes me feel very touched and accomplished."</p>
Improve professional skills	<p>Providing various services → Accumulating service experience → Understanding the hearing-impaired community → enhancing professional abilities</p>	<p>"During the service process, I can ask colleagues about any questions I have. They are experts in the field of hearing impairment, so I have learned a lot from them."</p>
Increased Service Efficiency	<p>1. Providing various services→ Expanding social welfare cooperation network→ Improve work efficiency</p> <p>2. Providing various services→ Enhancing participants inspection ability→ Establishing professional service relationships→ Improve work efficiency</p>	<p>"My understanding of the cases has become more efficient. At first, there were not enough children to interact with, so my initial impression was limited. However, after multiple interactions, I found that it was completely different from my initial impression. It used to take more time to get to know the children, but now after one or two interactions, I can grasp the child's abilities, including expression, understanding, and interaction. So, I think the efficiency in understanding</p>

Expected Outcomes	Chain of Events	Extract of Stakeholder Feedback
		cases and situations has improved."
Increase empathy	Providing various services → understanding individual cases → Having a sense of empathy of individual cases → Being able to think more from the perspective of the individual cases → Increase empathy	"I constantly observe and think about how to make the hearing-impaired feel more comfortable in this environment, so they won't feel embarrassed because they can't hear or speak clearly."

Appendix 1-3: Summary of Outcomes of Hearing loss association of Kaohsiung

Expected Outcomes	Chain of Events	Extract of Stakeholder Feedback
Increase charitable giving	Providing various services → Fundraising and advocating for welfare → Promoting its ideology to the public → Increasing funding and collaborating with public agencies → Acquiring more resources for assistance → Reducing cost expenditures → Increasing the financial income of the association → Increase charitable giving	"Like schoolteachers, some are more familiar with the Hearing loss association of Kaohsiung, such as Itinerant teachers. I have also visited many schools for advocacy, so they have become more familiar with the Hearing loss association of Kaohsiung. Recently, I have received many invitations for school advocacy."
Improve visibility	Management and strategic planning → Organizing events to assist the hearing-impaired → Resolving and improving the situation of hearing-impaired issues → Enhancing social performance → Gaining recognition for the association's capabilities →	"In the process of assisting, it was realized that improving certain behavioral issues among People with disabilities can be very challenging. Therefore, it was recognized that preventive measures from a young age are needed to help them. This project has

Expected Outcomes	Chain of Events	Extract of Stakeholder Feedback
	Improving association visibility	expanded its target audience to include more youth in its service."

Appendix 1-4: Summary of Outcomes of Parent

Expected Outcomes	Chain of Events	Extract of Stakeholder Feedback
Improve family relationship	1.Participating in Parents-child learning activities → Increasing topics and quality time between Parent and children → Improve family relationship 2.Involving Deaf and hard of hearing teens in individual case services → Social workers help to resolve conflicts between Deaf and hard of hearing teens and their Parent → Improve family relationship	"When dad participated in gymnastics or classes, his body was stiff, and he couldn't perform the movements as required. But the children would always remember and laugh about it. Those memories will stay in the minds of the children and the adults, and the kids find it very enjoyable."
Stress relief	Deaf and hard of hearing teens participate in individual case services → Social workers help to solve various issues faced by these teens → Reducing worries and burdens for the Parent → Stress relief	"Actually, my Parent are apprehensive about me. With the help of Social workers, my behavior problems are improved, my Parent are less worried and feel more at ease with me."
Improve physical health	Participating in Parents-child shared learning activities → Engaging in sports with Deaf and hard of hearing teens at home → Increasing the frequency of exercise → Developing a healthy exercise habit	"Participating in yoga activities has motivated the children to request doing yoga at home every day. They find it amusing when I cannot do some of the poses, and it encourages us to lead a healthier lifestyle."

Improve interpersonal relationship	Participating in Parents-child learning activities → Meeting and communicating with other participants → Interacting and become friends → Keeping in touch → Improve interpersonal relationship	"Participating in Parents-child activities, I have the opportunity to meet other Parent and have a greater sense of identity with each other. I can understand each other's situations and will keep in touch in the future."
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Appendix 1-5: Summary of Outcomes of Itinerant teachers

Expected Outcomes	Chain of Events	Extract of Stakeholder Feedback
Improve professional skills	Participating in itinerant courses → Accumulating relevant teaching experience for Deaf and hard of hearing teens → Improve professional skills	"I will know better how to design courses for Deaf and hard of hearing teens and help them."
Increase empathy	Participating in itinerant courses → Understanding information about Deaf and hard of hearing teens → Actively participating in lectures for Deaf and hard of hearing teens → Learning new knowledge → Better understanding the situation of Deaf and hard of hearing teens → Increase empathy	"Participating in the activities of the Hearing loss association of Kaohsiung has been very helpful to me in gaining new knowledge. I had no prior experience with Deaf and hard of hearing teens, but through these activities, I have become more proactive in understanding them and attending the lectures organized by the Hearing loss association of Kaohsiung."
Feel pressured	Participating in itinerant courses → Increasing the number of courses according to the different situations of Deaf and hard of hearing teens → Increasing the workload → Feel pressured	"Because each deaf and hard-of-hearing teen's situation is different, the frequency of adjusting the curriculum needs to be based on their individual needs, which has increased much workload."

Appendix II Summary of Outcomes of "Support Employment for People with disabilities"

Appendix 2-1: Summary of Outcomes of People with disabilities

Expected Outcomes	Chain of Events	Extract of Stakeholder Feedback
<p>Improve interpersonal relationship</p>	<p>Confirming suitable competency→Employment matching→Lack of skills→Participating in skills training and activities→Contacting other partners→Increasing interpersonal communication skills→Improving interpersonal relationships</p>	<p>"During pre-employment training or internship, I can interact with colleagues who also have disabilities, which helps me gradually improve my communication skills and allows me to get to know more colleagues."</p>
<p>Feel frustrated</p>	<p>1. Confirming suitable competency→Employment matching→Conducting workplace experience→Confirming that the direction of the casework is consistent→Assisting in the interview→Failing the interview→Doubting about self-ability→Feel frustrated 2. Confirming suitable competency→Employment matching→Conducting workplace experience→Confirming that the direction of the casework is consistent→Assisting in the interview→Successful interview→Accompanied by Employment specialists to work to assist colleagues in communication and</p>	<p>"Feel frustrated when it's challenging to find a job within a short time."</p>

Expected Outcomes	Chain of Events	Extract of Stakeholder Feedback
	<p>coordination→Obtaining a safer workplace environment→Establishing a good workplace ability→Failing to stabilize employment→Doubting about self-ability→Feel frustrated</p>	
<p>Increase empathy</p>	<p>Through job redesign→Accompanied by Employment specialists to work and assist colleagues in communication and coordination→Parent give encouragement and mention the assistance of Hearing loss association of Kaohsiung→ Increase empathy</p>	<p>"After receiving assistance from Employment specialists, when applying for other subsidies later on, I decided to leave the opportunity for those who are more in need, as I am currently able to support myself."</p>
<p>Increase income</p>	<p>1. Confirming suitable competency→Employment matching→Conducting workplace experience→Confirming that the direction of the casework is consistent→Assisting in the interview→Successful interview→Accompanied by Employment specialists to work and to assist colleagues in communication and coordination→Obtaining a safer workplace environment→Establishing a good workplace ability→Stable employment → Increase income</p>	<p>"After achieving job stability in my current job, I have seen a slight increase in income compared to my previous job, and the overall working environment is more friendly and stable."</p>

Expected Outcomes	Chain of Events	Extract of Stakeholder Feedback
	<p>2. Through job redesign→Accompanied by Employment specialists to work and to assist colleagues in communication and coordination→Obtaining a safer workplace environment→Establishing a good workplace ability→Stable employment → Increase income</p>	
<p>Increase self-achievement</p>	<p>Confirming suitable competency→Employment matching→Conducting workplace experience→Confirming that the direction of the casework is consistent→Assisting in the interview→Successful interview→Accompanied by Employment specialists to work and to assist colleagues in communication and coordination→Obtaining a safer workplace environment→Establishing a good workplace ability→Stable employment → Being Familiar with the work content → Improving work efficiency → Increase self-achievement</p>	<p>"Although I have been working in the cleaning industry, my current job has a larger workload than my previous jobs. I am satisfied that I can complete the tasks independently."</p>

Appendix 2-2: Summary of Outcomes of Employment specialists

Expected Outcomes	Chain of Events	Extract of Stakeholder Feedback
Feel pressured	<p>1. Developing job opportunities → providing case references → assisting in failed interviews → spending more time assisting cases → annual performance pressure → Feel pressured</p> <p>2. Developing job opportunities → Providing case reference → Assisted interview successfully → The case gets a job → Visiting and counseling for 3 months closely → Writing a large number of reports about visiting and counseling → Workload increase → Feel pressured</p> <p>3. Developing job opportunities → Providing case reference → Assisted interview successfully → The case gets a job → Communicating with the employer on the follow-up cooperation mode → Assisting the case to apply for the required resources → The case has been employed for 3 months → Preparing case records and annual evaluation → Increasing work pressure → Feel pressured</p>	<p>"When the case continuously fails in interviews and cannot obtain job opportunities, more time and energy need to be spent, which creates some pressure."</p>
Improve professional skills	<p>1. Developing job opportunities → Providing case reference → Assisted interview successfully → The case gets a job → Communicating with the employer on the follow-up</p>	<p>"After successfully securing a job, ongoing communication and coordination with the employer regarding the work status of the individual case</p>

Expected Outcomes	Chain of Events	Extract of Stakeholder Feedback
	<p>cooperation mode→Learning how to effectively communicate with the employer → Improving field knowledge → Improve professional skills</p> <p>2.Developing job opportunities→Providing case reference→Assisting interview successfully→The case gets a job→Communicating with the employer on the follow-up cooperation mode→Learning more about Labor Law→Establishing employment guidelines for People with disabilities→Enhancing field knowledge→Improve professional skills</p>	<p>may still be needed. Each communication experience can be helpful for future cases in terms of improving communication skills and facilitating coordination."</p>
<p>Increase self-achievement</p>	<p>Developing job opportunities → Providing case reference → Assisting interview successfully →The case gets a job → Communicating with the employer on the follow-up cooperation mode → Assisting the case to apply for the required resources → The case has been employed for 3 months → Preparing case records and annual evaluation→ Seeing the case changes→Increase self-achievement</p>	<p>"When preparing annual evaluations, as long as I can see the progress and changes in the case, I feel quite happy."</p>
<p>Stable income</p>	<p>Develop job opportunities→Provide case reference → Assist interview</p>	<p>"As long as the performance of the annual results report meets the target, the project</p>

Expected Outcomes	Chain of Events	Extract of Stakeholder Feedback
	successfully → The case gets a job → Communicate with the employer on the follow-up cooperation mode → Assist the case to apply for the required resources → The case has been employed for 3 months → Prepare case records and annual evaluation → The number of referrals reaches the target → Winning next year's project's bid → Stable income	bids for the next year can be secured, continuing the same plan work."

Appendix 2-3: Summary of Outcomes of Vocational Rehabilitation Vocational rehabilitation case managers

Expected Outcomes	Chain of Events	Extract of Stakeholder Feedback
Improve professional skills	1. Developing cases that need work → Confirming Hearing loss association of Kaohsiung can load → Providing information to Hearing loss association of Kaohsiung for reference → Referring to Hearing loss association of Kaohsiung after discussion → Tracking up the case status → The case cannot successfully find a job → Adjustment based on the type of job and obstacle → Redrafting strategy or job introduction on service station → Increasing field knowledge → Improve professional skills	"Through assisting each case, I have gained valuable insights and experiences that can help me serve future cases."

Expected Outcomes	Chain of Events	Extract of Stakeholder Feedback
	<p>2.Developing cases that need work→Confirming Hearing loss association of Kaohsiung can load→Providing information to Hearing loss association of Kaohsiung for reference→Referring to Hearing loss association of Kaohsiung after discussion→Track up the case status→The case successfully finds a job→Continuing to track the case→Confirming the workplace status of the case with Employment specialists → Continuously handling the case based on the situation of each case→Increasing field knowledge→Improve professional skills</p>	
<p>Achieve self-realization</p>	<p>Developing cases that need work→Confirming Hearing loss association of Kaohsiung can load→Providing information to Hearing loss association of Kaohsiung for reference→Referring to Hearing loss association of Kaohsiung after discussion→Track up the case status→The case successfully finds a job→Continuing to track the case→Confirming the workplace status of the case with Employment specialists</p>	<p>"Every time I successfully assist a case in finding employment or resolving their issues and see them secure, stable employment, I feel happy and fulfilled, knowing that I have been able to help them."</p>

Expected Outcomes	Chain of Events	Extract of Stakeholder Feedback
	→Continuously handling the case based on the situation of each case→Seeing that the case has stabilized employment and Increase self-confidence→Accomplishing the job mission→Achieve self-realization	

Appendix III Summary of Indicators

Stakeholders	Outcomes	Indicators	Indicators Score	
Deaf and hard of hearing teens	Increase self-confidence	I feel that I am a person with value, at least I am with others.	5	
		I feel that I have some strengths.	5	
		I can do things that others can do?	5	
		I am reviewing myself positively.	5	
		Overall, I am satisfied with myself.	4	
	Improve interpersonal relationships	My friends respect me greatly.	5	
		My family is very concerned about me.	5	
		My family is proud of me.	5	
		I am valued by others.	5	
		I feel a sense of belonging.	4	
	Improve speaking skills	I can understand conversations in noisy environments.	4	
		I can recognize speech errors in others/myself.	5	
		I increase the frequency of communication with others.	5	
		I understand the differences in tone of others.	5	
		I can express my views clearly.	5	
	Improve planning skills	The structure can be organized and systematic.	5	
		The time for each session of teaching can be allocated appropriately.	5	
		Multiple assessment activities can be designed.	4	
	Social workers	Increase self-achievement	I can frequently see changes in my work.	6
			I think my hard work was not in vain.	7
I understand my work performance.			6	
My work results are recognized by others			7	
Improve professional skills		I understand the physical and mental development, learning characteristics,	6	

Stakeholders	Outcomes	Indicators	Indicators Score	
		and educational needs of students with special education needs.		
		I understand the service plans for students with special education needs.	7	
		I am equipped with the concept and skills of special education administrative operations.	6	
		I can design courses according to the individual needs of students.	6	
	Improve work efficiency	For most of the adolescent cases contacted, their social functioning improved at the end of the assessment period.	6	
		Most of the adolescent cases contacted showed a significant decrease in their social support scale at the end of the assessment period.	3	
		For most of the adolescent cases contacted, their social circle expanded successfully during the activities.	6	
		In most cases, teenagers contacted can successfully discover their advantages through activities.	6	
		Through campus publicity, a correct understanding of hearing impairment can be established.	7	
	Increase empathy	I often describe myself as having a soft heart.	6	
		I often think of my friends and family facing difficulties and want to do something for them.	6	
		When I see someone being bullied, I want to protect them.	6	
		Many things in life often make me very moved.	7	
	Parent		Family emotion	7

Stakeholders	Outcomes	Indicators	Indicators Score
	Improve family relationship	Family members respect each other's decisions.	7
		Family members can get along well with each other.	7
		Family members pay attention to each other's emotional feelings.	7
		Family members have time to talk to each other every day.	7
	Stress relief	You still have to take care of your children when you are not feeling well.	5
		You are exhausted from taking care of your children.	5
		Your health is deteriorating due to taking care of your children.	4
		Taking care of your children affects your relationship with relatives and friends.	5
		You have to pay attention to your children all the time.	5
	Improve physical health	Help cultivate the habit of exercise.	6
		Feel more energetic and reduce fatigue.	6
		Enhance cardiopulmonary function.	6
		Reduce body weight	4
		Reduce BMI	4
	Improve interpersonal relationship	My friends respect me greatly.	7
		My family is very concerned about me.	5
		My family is proud of me	6
		I am valued by others	6
		I feel a sense of belonging.	6
	Itinerant teachers	Improve professional skills	I understand the physical and mental development, learning characteristics, and educational needs of students with special education needs.
I understand the service plans for students with special education needs.			6

Stakeholders	Outcomes	Indicators	Indicators Score	
		I am equipped with the concept and skills of special education administrative operations.	6	
		I can design courses according to the individual needs of students.	6	
	Increase empathy	I often describe myself as having a soft heart.	6	
		I often think of my friends and family facing difficulties and want to do something for them.	4	
		When I see someone being bullied, I want to protect them.	4	
		Many things in life often make me very moved.	5	
	Feel pressured	Workload	4	
		Interpersonal relationships	3	
		Family and work balance	3	
		Personal responsibility	4	
		Work matters	4	
	People with disabilities (Male)	Improve interpersonal relationship	My friends respect me greatly.	6
			My family is very concerned about me.	6
My family is proud of me.			5	
I am valued by others.			6	
I feel a sense of belonging.			5	
Feel frustrated		I rarely feel discouraged when completing my work to the best of my ability.	5	
		Generally, I do not feel discouraged in my work.	4	
Increase empathy		I often describe myself as having a soft heart.	5	
		I often think of my friends and family facing difficulties and want to do something for them.	5	

Stakeholders	Outcomes	Indicators	Indicators Score	
		When I see someone being bullied, I want to protect them.	5	
		Many things in life often make me very moved.	5	
	Increase income	Difference in salary compared to previous job (or if no previous job, compared to basic salary)	-	
	Increase self-achievement	I can frequently see changes in my work.	6	
		I think my hard work was not in vain.	6	
		I understand my work performance	6	
		My work results are recognized by others.	5	
	People with disabilities (Female)	Improve interpersonal relationship	My friends respect me greatly.	6
			My family is very concerned about me.	6
			My family is proud of me.	6
I am valued by others.			6	
I feel a sense of belonging.			6	
Feel frustrated		I rarely feel discouraged when completing my work to the best of my ability.	5	
		Generally, I do not feel discouraged in my work.	4	
Increase empathy		I often describe myself as having a soft heart.	6	
		I often think of my friends and family facing difficulties and want to do something for them.	6	
		When I see someone being bullied, I want to protect them.	6	
		Many things in life often make me very moved.	6	
Increase income		Difference in salary compared to previous job (or if no previous job, compared to basic salary)	-	

Stakeholders	Outcomes	Indicators	Indicators Score
	Increase self-achievement	I can frequently see changes in my work.	6
		I think my hard work was not in vain.	5
		I understand my work performance	6
		My work results are recognized by others.	6
Employment specialists of Hearing Loss Association	Feel pressured	Workload	7
		Interpersonal relationships	7
		Family and work balance	7
		Personal responsibility	7
		Work matters	7
	Improve professional skills	Do you have a deeper understanding of Labor Law?	6
		Do you apply Labor Law properly in your work?	6
		Are stakeholders willing to assist the individual in advocating for employment opportunities with their employer?	7
		Is the assistance provided effective in enhancing the individual's relationship with their colleagues?	6
		Is it possible to promptly detect the individual's intention to leave their job?	6
	Increase self-achievement	I can frequently see changes in my work.	6
		I think my hard work was not in vain.	6
		I understand my work performance.	6
		My work results are recognized by others	5
	Stable income	How many cases have you completed so far this year?	6
		Are you worried about the status of next year's projects?	7
		Has your annual performance been smoothly achieved?	5
Vocational rehabilitation	Improve professional skills	The impact of functional limitations on employment	7

Stakeholders	Outcomes	Indicators	Indicators Score
Vocational rehabilitation case managers		Employment preparation, including job-seeking and job maintenance skills	6
		Technical aspects of labor market research	5
		Occupational and labor market information	6
		Employment matchmaking strategies	6
		Employer development, relationship building, and maintenance skills	6
		Employment support services	6
		Various workplace environments	6
		The influence of employer practices on the employment or reemployment of People with disabilities	6
		Promotion of vocational rehabilitation services and government incentive subsidy policies to employers	6
		The ability to educate employers on issues related to disabilities	6
		Prevention and management strategies for disabilities	6
		Occupational and job analysis skills	6
		Job adjustment, redesign, and restructuring, including the ability to assess ergonomics.	5
		Resource and strategies for job reinforcement	5
		Achieve self-realization	Able to achieve most of the set goals
	Believe in oneself to accomplish difficult tasks		5
	Work hard to achieve success after making a decision		5
	Successfully overcome many challenges		5
	Effectively complete various tasks		5
	Compared to others, I am able to complete most tasks well.		5

Stakeholders	Outcomes	Indicators	Indicators Score
Hearing loss association of Kaohsiung	Improve visibility	You are able to perform well even in difficult situations.	5
		The memberships of the Hearing Loss Association increase.	4
		The number of people participating in the Hearing Loss Association's activities has increased.	4
		The Hearing Loss Association has the ability to integrate more resources.	4
		The Hearing Loss Association has received more invitations for activities.	4
	Achieve the purpose	The association will be able to achieve most of goals.	4
		The association can accomplish difficult tasks.	4
		The association can work to achieve success after making up their minds.	4
		The association can successfully overcome many challenges.	4
		The association can effectively complete various tasks.	4
		Compared to others, the association can complete most tasks well.	4
		Even in difficult situations, the association can still perform well.	4

Appendix IV Stakeholders' Questionnaire Design

Stakeholders	Outcomes	Questionnaire Content
Deaf and hard of hearing teens	Increase self-confidence	<p>According to Yeung, K.C. (1998) and using a 7-point Likert scale to measure the following indicators:</p> <ol style="list-style-type: none"> 1. Do you agree that you are a valuable person compared to others? 2. Do you agree that you have some strengths? 3. Do you agree that you can do things that others can do? 4. Do you agree that you can see yourself in a positive light? 5. Do you agree that you are generally satisfied with yourself?
	Improve interpersonal relationship	<p>According to internal indicators and using a 7-point Likert scale to measure the following indicators:</p> <ol style="list-style-type: none"> 1. Do you agree that your friends respect you? 2. Do you agree that your family and friends are very concerned about you? 3. Do you agree that your family and friends are proud of you? 4. Do you agree that you feel valued by others? 5. Do you agree that you have a sense of belonging?
	Improve speaking skills	<p>Based on Adult Functional Communication Skills Assessment (ASHA-FACS) and adopting a 7-point Likert scale for measuring indicators:</p> <ol style="list-style-type: none"> 1. Do you agree that you can understand conversations in noisy environments? 2. Do you agree that you can spot errors in others or your speech? 3. Do you agree that you increase the frequency of communication with others? 4. Do you agree that you can understand differences in intonation? 5. Do you agree that you can clearly express your views?

Stakeholders	Outcomes	Questionnaire Content
	Improve planning skills	<p>Based on the assessment of teaching practice abilities for teacher candidates in secondary schools and adopting a 7-point Likert scale for measuring indicators:</p> <ol style="list-style-type: none"> 1. Do you agree that you can allocate time appropriately for different teaching sessions? 2. Do you agree that you can plan activities efficiently? 3. Do you agree that you can design an organized structure?
Social workers	Increase self-achievement	<p>According to Super (1973) and using a 7-point Likert scale to measure the following indicators:</p> <ol style="list-style-type: none"> 1. Do you agree that you often see changes in your work? 2. Do you agree that your efforts have not been in vain? 3. Do you agree that you can understand your job performance? 4. Do you agree that others recognize your work achievements?
	Improve professional skills	<p>Based on the "Special Education Journal - Professional Competency Indicator Appropriateness Survey" and adopting a 7-point Likert scale for measuring indicators:</p> <ol style="list-style-type: none"> 1. Do you agree that you understand the physical and mental development, learning characteristics, and educational needs of students with special education needs? 2. Do you agree that you understand the service plans for students with special education needs? 3. Do you agree that you understand the concepts and skills of the administrative operations of special education? 4. Do you agree that you can design a curriculum based on individual student needs? 5. Do you agree that you understand the critical points of the transition work of students with unique education needs at each stage?
	Increase empathy	<p>Based on the "National Chengchi University Master's Thesis - Interpersonal Response Scale" and adopting a 7-point Likert scale for measuring indicators:</p>

Stakeholders	Outcomes	Questionnaire Content
		<ol style="list-style-type: none"> 1. Do you agree that you have a soft heart? 2. Do you agree that you often worry about your friends and family facing difficulties and try to help them? 3. Do you agree that you have a protective feeling when others are bullied? 4. Do you agree that many things in life move you?
	Improve work efficiency	<ol style="list-style-type: none"> 1. Do you agree that most youth cases contacted show improved social functioning in the end-of-term functional assessment period? 2. Do you agree that most youth cases contacted have a significant decrease in their Social Support Scale during the end-of-term functional assessment period? 3. Do you agree that most youth cases contacted successfully expand their social circles through activities? 4. Do you agree that most youth cases contacted can discover their strengths through activities? 5. Do you agree that campus promotion can establish correct awareness of hearing impairment?
Parents	Improve family relationship	<p>According to Super (1973) and using a 7-point Likert scale to measure the following indicators:</p> <ol style="list-style-type: none"> 1. Do you agree that the relationships within your family have improved? 2. Do you agree that family members respect each other's decisions? 3. Do you agree that your family members can live in harmony? 4. Do you agree that family members care about each other's emotional feelings? 5. Do you agree that family members have time to talk to each other every day?
	Stress relief	<p>Based on the "Taiwan Association of Family Caregivers" and using a 7-point Likert scale to measure the following indicators:</p> <ol style="list-style-type: none"> 1. Do you agree that you often still need to care for your children when you feel unwell?

Stakeholders	Outcomes	Questionnaire Content
		<p>2. Do you agree that you feel exhausted from taking care of your children?</p> <p>3. Do you agree that your physical health has deteriorated due to taking care of your children?</p> <p>4. Do you agree that your social relationships with family and friends have been affected due to taking care of your children?</p> <p>5. Do you agree that you have to constantly focus on your children's well-being?</p>
	<p>Improve physical health</p>	<p>According to the interviews, the following 7-point Likert scales were used for measurement:</p> <p>1. Do you agree that you have developed good exercise habits?</p> <p>2. Do you agree that you feel more energetic and less fatigued?</p> <p>3. Do you agree that your cardiovascular endurance has improved?</p> <p>4. Do you agree that you have lost weight?</p> <p>5. Do you agree that your BMI has decreased?</p>
	<p>Improve interpersonal relationship</p>	<p>According to the “internal indicators” and using a 7-point Likert scale to measure the following indicators:</p> <p>1. Do you agree that your friends are very respectful of you?</p> <p>2. Do you agree that your friends are very concerned about you?</p> <p>3. Do you agree that your friends are proud of you?</p> <p>4. Do you agree that you feel valued by others?</p> <p>5. Do you agree that you feel a sense of belonging?</p> <p>6. How many new friends have you made through participating in the activities of the Hearing loss association of Kaohsiung?</p>

Stakeholders	Outcomes	Questionnaire Content
Itinerant teachers	Feel pressured	<p>Based on " Group Differences in Work Stress and Strains" and measured with a 7-point Likert scale:</p> <ol style="list-style-type: none"> 1. Do you agree that you feel stressed about your workload? 2. Do you agree you feel stressed about your interpersonal relationships at work? 3. Do you agree that you feel stressed about balancing work and family? 4. Do you agree that you feel stressed about personal responsibilities? 5. Do you agree that you feel stressed about work-related matters?
	Improve professional skills	<p>According to the " Special Education Journal - Professional Competence Indicator Appropriateness Survey" and using a 7-point Likert scale:</p> <ol style="list-style-type: none"> 1. Do you agree that you understand special education students' physical and mental development, learning characteristics, and educational needs? 2. Do you agree that you understand special education students' needs and can provide appropriate service plans? 3. Do you agree that you have a conceptual understanding and skills in the administrative operation of special education? 4. Do you agree that you can design a curriculum according to students' needs? 5. Do you agree that you understand the critical points of the transition process for special education students at each stage?
	Increase empathy	<p>Based on " National Chengchi University master's Thesis - Interpersonal Response Scale " and measured using a 7-point Likert scale:</p> <ol style="list-style-type: none"> 1. Do you agree that you have a soft heart? 2. Do you agree that you often worry about friends and family facing difficulties and try to help them? 3. Do you agree that you want to protect others when bullied?

Stakeholders	Outcomes	Questionnaire Content
		4. Do you agree that many things in life move you emotionally?
People with disabilities	Increase income	<p>Based on internal indicators:</p> <ol style="list-style-type: none"> 1. How long did the situation of unemployment last before finding a job successfully? 2. Before participating in the employment services provided by the Hearing loss association of Kaohsiung, what was your previous job's monthly income (excluding labor and health insurance)? 3. After participating in the Hearing loss association of Kaohsiung's employment services and finding a job, what is your current monthly income (excluding labor and health insurance) from your new job? 4. What is the annual salary growth rate in your new job?
	Increase self-achievement	<p>Based on Super (1973) and using a 7-point Likert scale:</p> <ol style="list-style-type: none"> 1. Do you agree that there have been positive changes in your job performance? 2. Do you agree that you feel your efforts pay off? 3. Do you agree that you can understand your job performance? 4. Do you agree that others have recognized your work accomplishments?
	Improve interpersonal relationships	<p>According to the internal indicators and using a 7-point Likert scale to measure the following indicators:</p> <ol style="list-style-type: none"> 1. Do you agree that your friends are very respectful of you? 2. Do you agree that your friends are very concerned about you? 3. Do you agree that your friends are proud of you? 4. Do you agree that you feel valued by others? 5. Do you agree that you feel a sense of belonging?
	Increase empathy	<p>Based on " National Chengchi University master's Thesis - Interpersonal Response Scale" and measured using a 7-point Likert scale:</p> <ol style="list-style-type: none"> 1. Do you agree that you have a soft heart? 2. Do you agree that you often worry about friends and family facing difficulties and try to help them?

Stakeholders	Outcomes	Questionnaire Content
		<p>3. Do you agree that you want to protect others when bullied?</p> <p>4. Do you agree that many things in life move you emotionally?</p>
	Feel frustrated	<p>Based on C Liu, PE Spector, L Shi (2007) and using a 7-point Likert scale:</p> <p>1. Do you agree that you do not feel frustrated at work when you have tried your best to complete your work?</p> <p>2. Do you agree that, in general, you rarely feel frustrated at work?</p>
Employment specialists of Hearing loss association of Kaohsiung	Feel pressured	<p>Based on " Group Differences in Work Stress and Strains" and measured with a 7-point Likert scale:</p> <p>1. Do you agree that you feel stressed about your workload?</p> <p>2. Do you agree you feel stressed about your interpersonal relationships at work?</p> <p>3. Do you agree that you feel stressed about balancing work and family?</p> <p>4. Do you agree that you feel stressed about personal responsibilities?</p> <p>5. Do you agree that you feel stressed about work-related matters?</p>
	Improve professional skills	<p>According to the internal indicators and using a 7-point Likert scale to measure the following indicators:</p> <p>1. Do you agree that you understand Labor Standards Act?</p> <p>2. Do you agree that you use Labor Standards Act appropriately in your work?</p> <p>3. Do you agree that you are willing to help clients fight for job opportunities with their employers?</p> <p>4. Do you agree that you can help clients improve their relationships with colleagues?</p> <p>5. Do you agree that you can promptly detect clients' intentions to quit?</p>

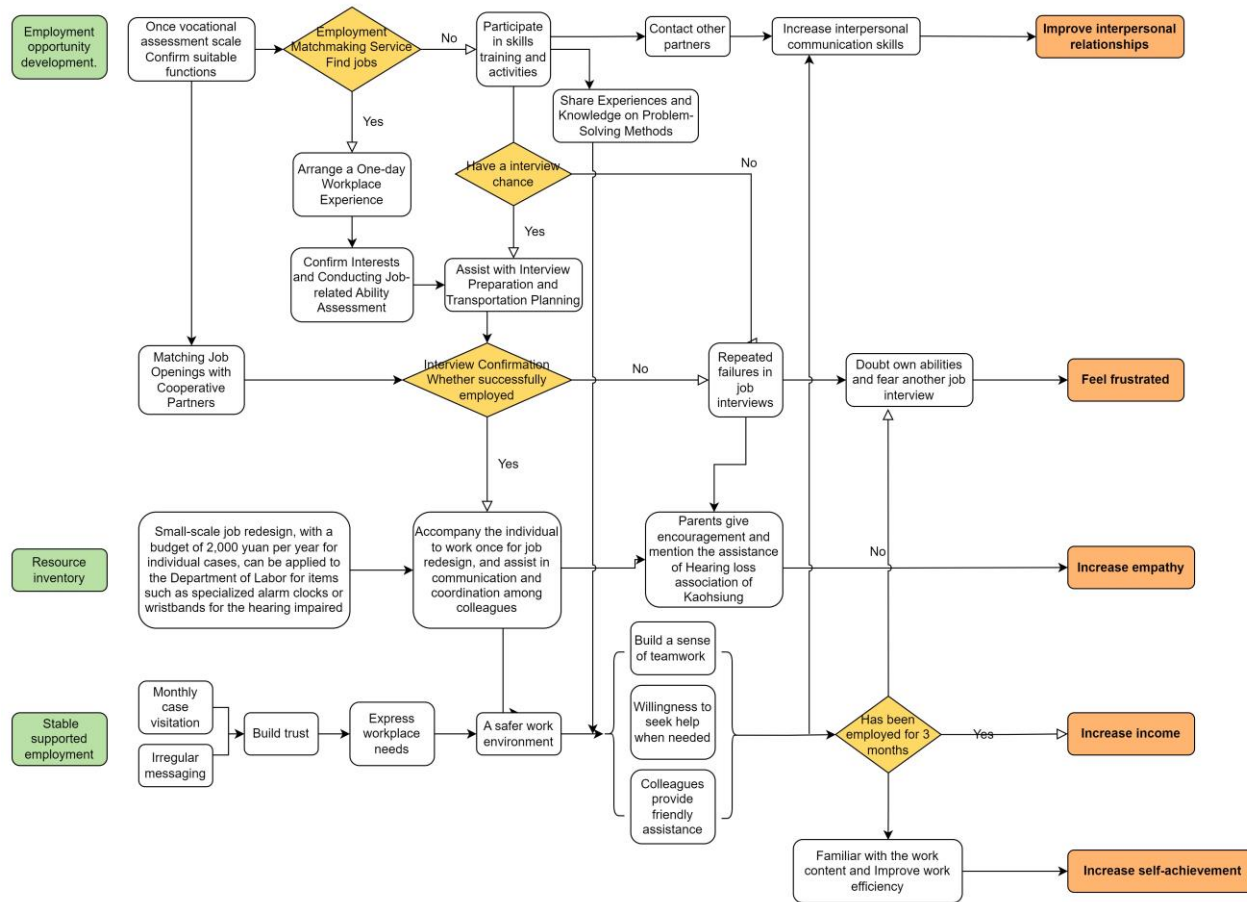
Stakeholders	Outcomes	Questionnaire Content
	Increase self-achievement	<p>Based on Super (1973) and using a 7-point Likert scale:</p> <ol style="list-style-type: none"> 1. Do you agree that there have been positive changes in your job performance? 2. Do you agree that you feel your efforts pay off? 3. Do you agree that you can understand your job performance? 4. Do you agree that others have recognized your work accomplishments?
	Stable income	<p>According to the internal indicators and using a 7-point Likert scale to measure the following indicators:</p> <ol style="list-style-type: none"> 1. Do you agree that you are satisfied with the number of cases completed this year? 2. Do you agree that you are worried about the status of the grant applications for next year? 3. Do you agree that you feel the performance for the year is smooth?
Vocational rehabilitation Vocational rehabilitation case managers	Improve professional skills	<p>Based on the "Importance and Proficiency of Professional Knowledge of Vocational rehabilitation Vocational rehabilitation case managers and Supported Employment Service Providers for People with disabilities" and using a 7-point Likert scale:</p> <ol style="list-style-type: none"> 1. Do you agree that you understand the impact of physical disabilities on employment? 2. Do you agree that you understand job preparation (including job search and maintenance skills)? 3. Do you agree you have technical skills in labor market research? 4. Do you agree that you understand occupations and the labor market information? 5. Do you agree that you understand job matching strategies? 6. Do you agree that you have skills in developing employers and establishing and maintaining relationships with them? 7. Do you agree that you can provide employment support services? Such as supportive employment, job adaptation, training, training by co-workers, follow-

Stakeholders	Outcomes	Questionnaire Content
		<p>up/job maintenance, and support services after employment placement.</p> <p>8. Do you agree that you have knowledge of various types of workplaces, such as competitive, supportive, and sheltered employment, and can provide vocational advice and services to employers?</p> <p>9. Do you agree that you understand the impact of employer practices on the employment or return to work of People with disabilities?</p> <p>10. Do you agree that you would advocate vocational rehabilitation services and government incentives and subsidies to employers?</p> <p>11. Do you agree that you can educate employers about issues related to disabilities, which can help them create a workplace culture and environment that accepts People with disabilities and comply with disability rights protection laws and regulations?</p> <p>12. Do you agree that you understand the prevention and management strategies of physical and mental disabilities?</p> <p>13. Do you agree that you can perform job and work analysis?</p> <p>14. Do you agree that you can adjust, redesign, and restructure job duties, including the ability to conduct ergonomic evaluations?</p> <p>15. Do you agree that you have knowledge of resources and strategies for job strengthening?</p>
	Achieve self-realization	<p>Based on "The Strengths Self-Efficacy Scale" and using a 7-point Likert scale:</p> <p>1. Do you agree that you will be able to achieve most of the goals you set for yourself?</p> <p>2. Do you agree that you believe you can accomplish difficult tasks?</p> <p>3. Do you agree that you believe you can work hard and succeed once you have made up your mind?</p> <p>4. Do you agree that you can overcome many challenges?</p>

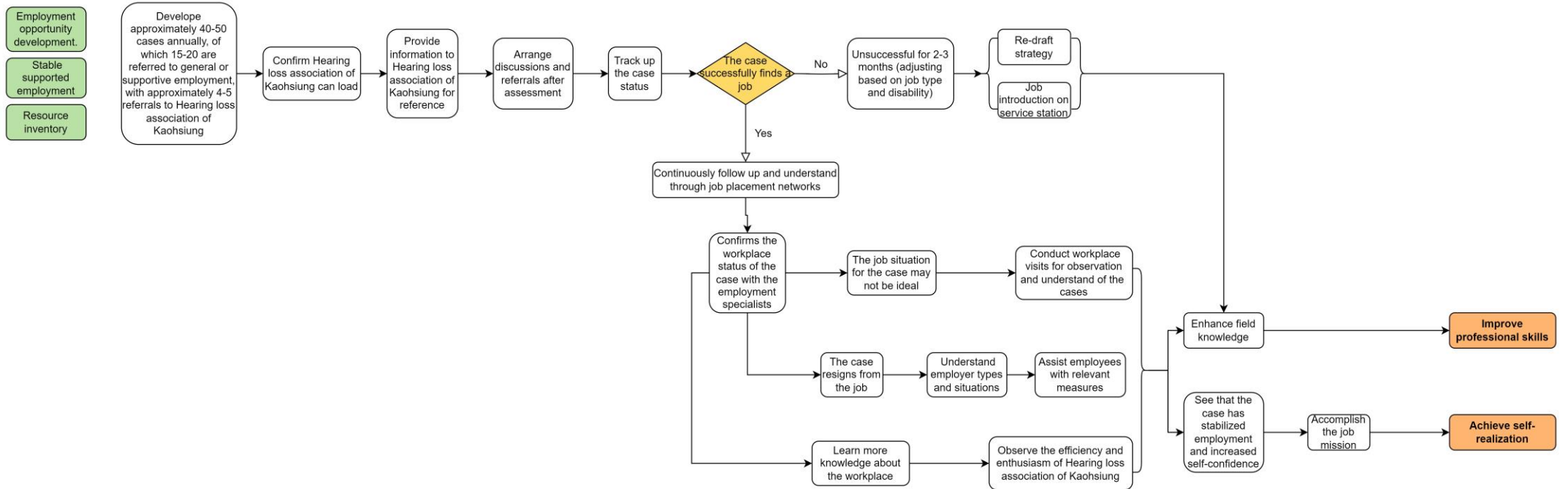
Stakeholders	Outcomes	Questionnaire Content
		<p>5. Do you agree that you can effectively complete many different tasks?</p> <p>6. Do you agree that you can perform better on most tasks than others?</p> <p>7. Do you agree that you can still perform well even when it is difficult?</p>
Hearing loss association of Kaohsiung	Improve visibility	<p>According to the interviews, the following 7-point Likert scales were used for measurement:</p> <p>1. Do you agree that the number of members of the Hearing loss association of Kaohsiung has increased?</p> <p>2. Do you agree that the number of participants in the Hearing loss association of Kaohsiung's activities has increased?</p> <p>3. Do you agree that the Hearing loss association of Kaohsiung is able to integrate more resources?</p> <p>4. Do you agree that the Hearing loss association of Kaohsiung has received more invitations for activities?</p>
	Achieve the purpose	<p>According to the interviews, the following 7-point Likert scales were used for measurement:</p> <p>1. Do you agree that the association will be able to achieve most of its goals?</p> <p>2. Do you agree that you believe the association can accomplish difficult tasks?</p> <p>3. Do you agree that you believe the association can work hard and achieve success after making up its mind?</p> <p>4. Do you agree that the association can overcome many challenges?</p> <p>5. Do you agree that the association can effectively complete many tasks?</p> <p>6. Do you agree that the association can perform better in completing most tasks than others?</p> <p>7. Do you agree that the association can perform well even in difficult situations?</p>

Appendix IV Chain of Events

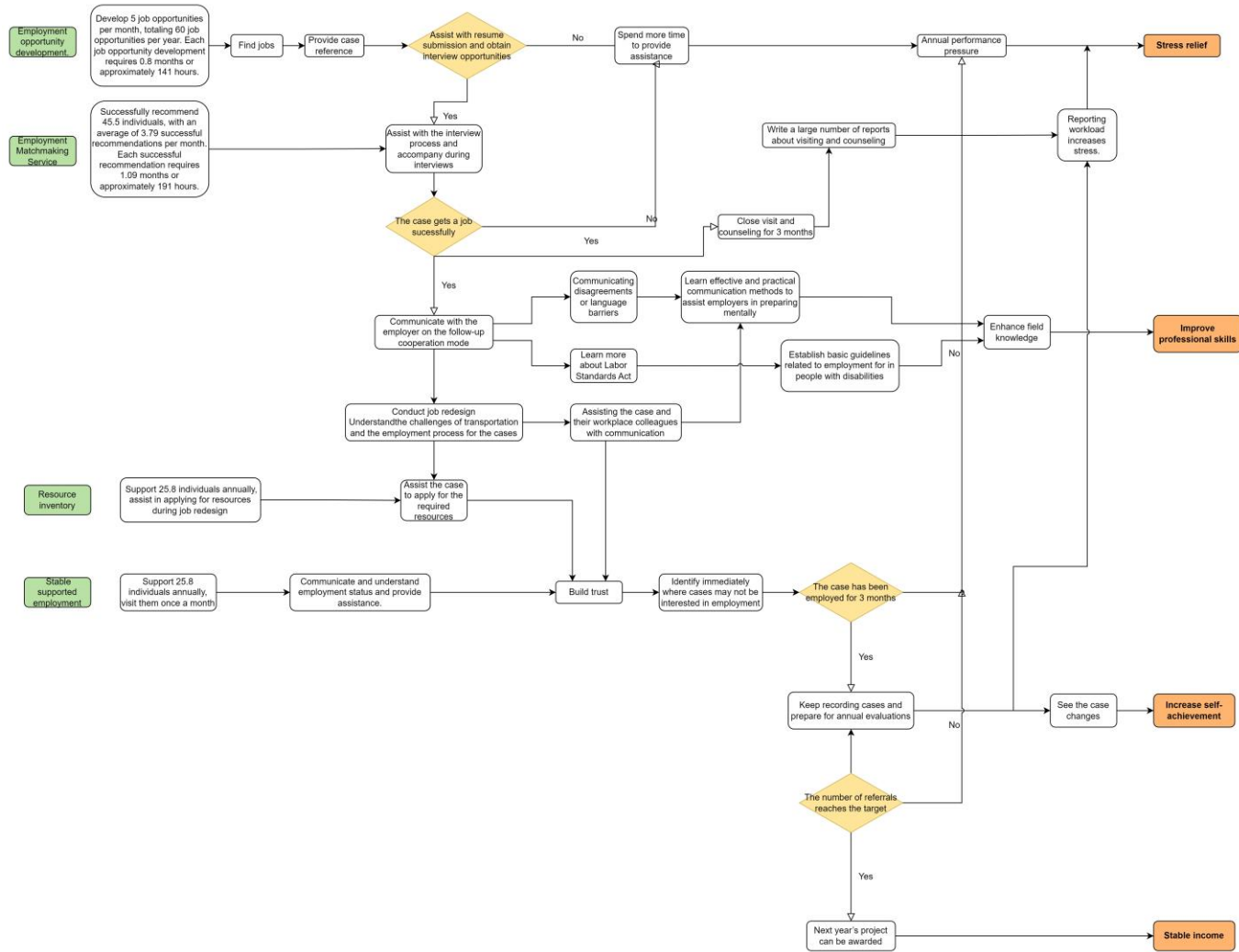
People with disabilities



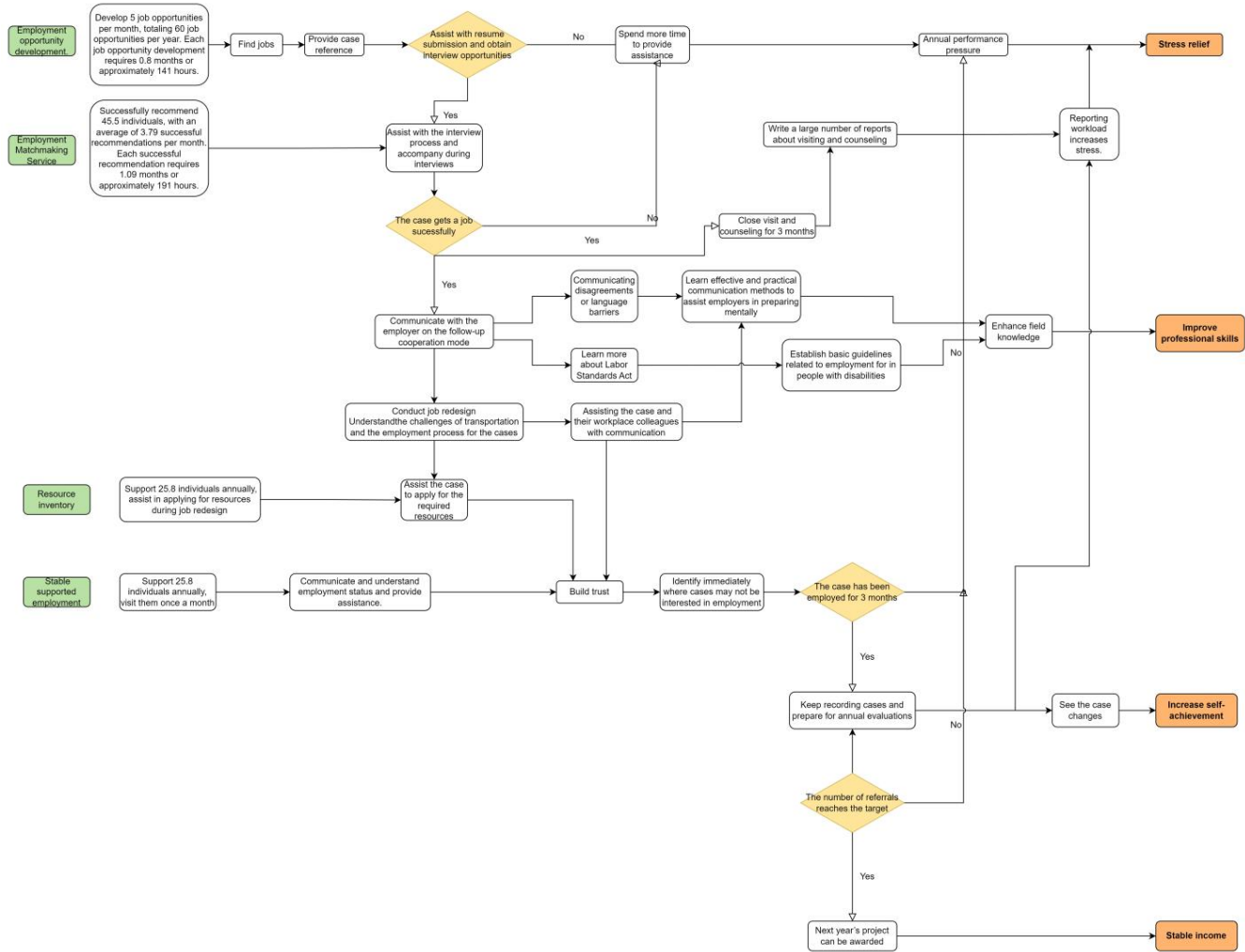
Vocational rehabilitation case managers



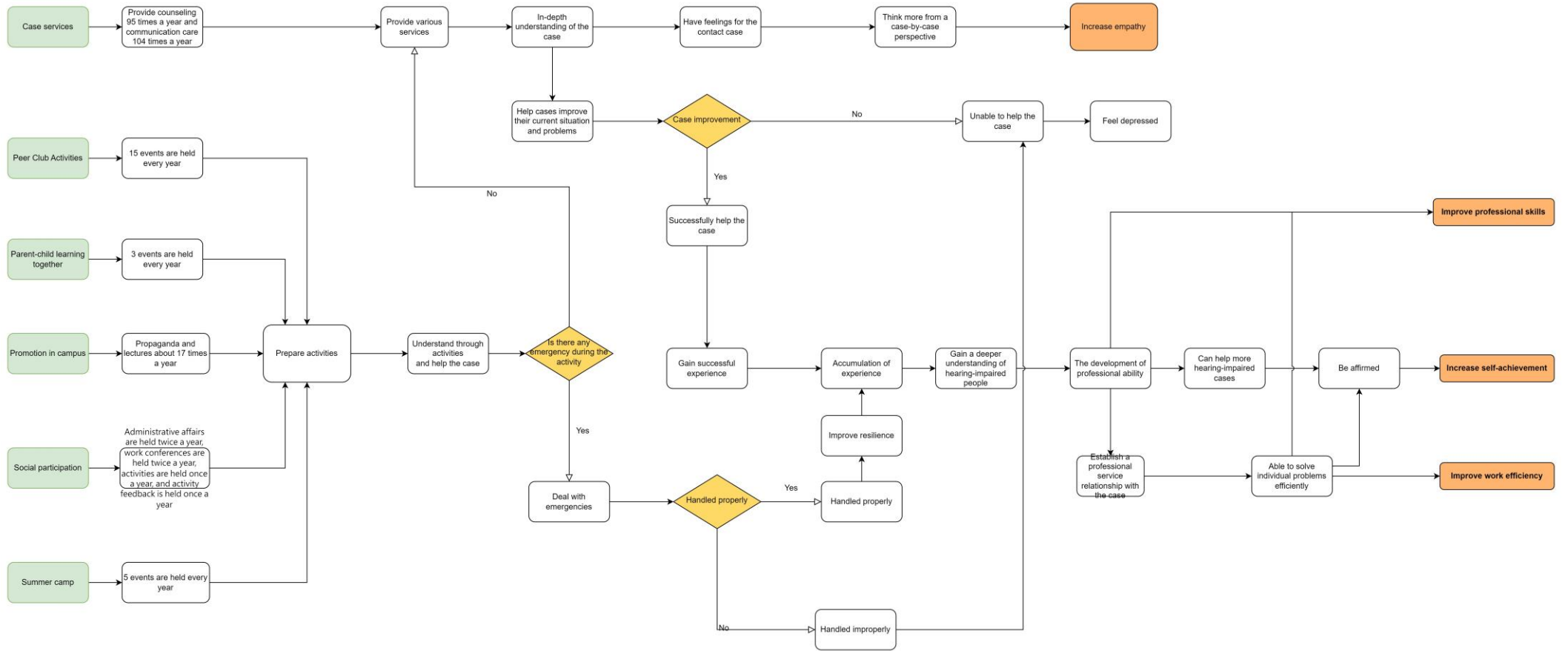
Employment specialists



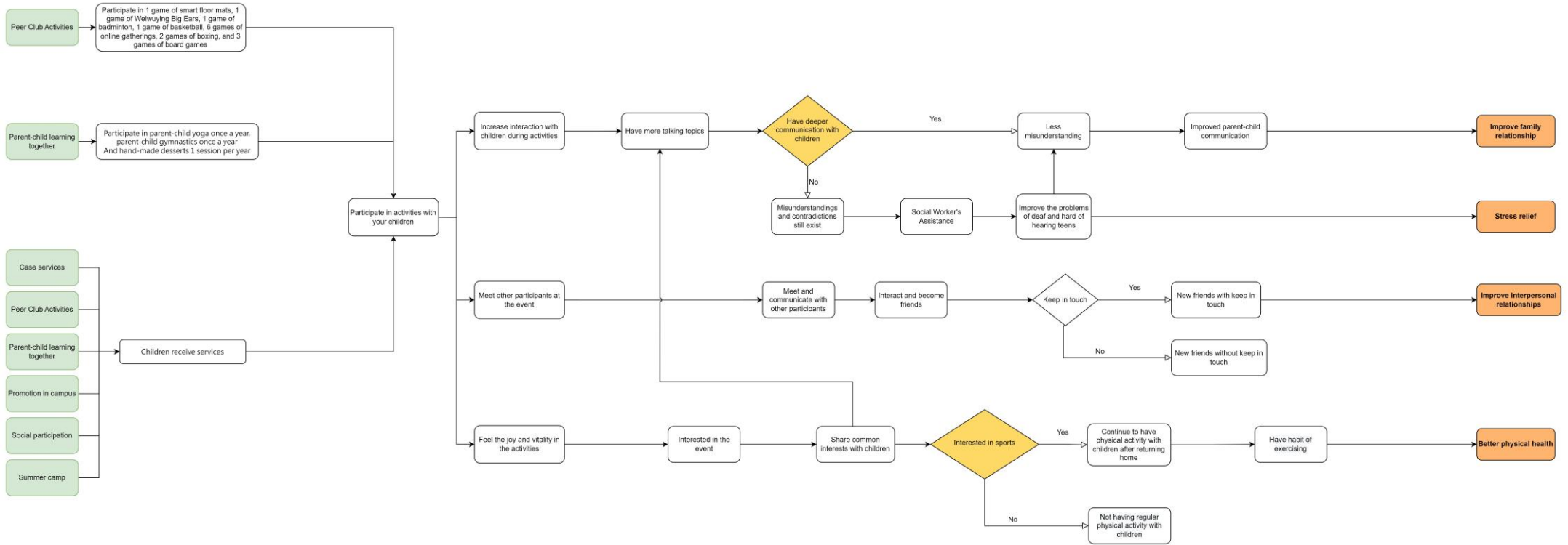
Deaf and hard of hearing teens



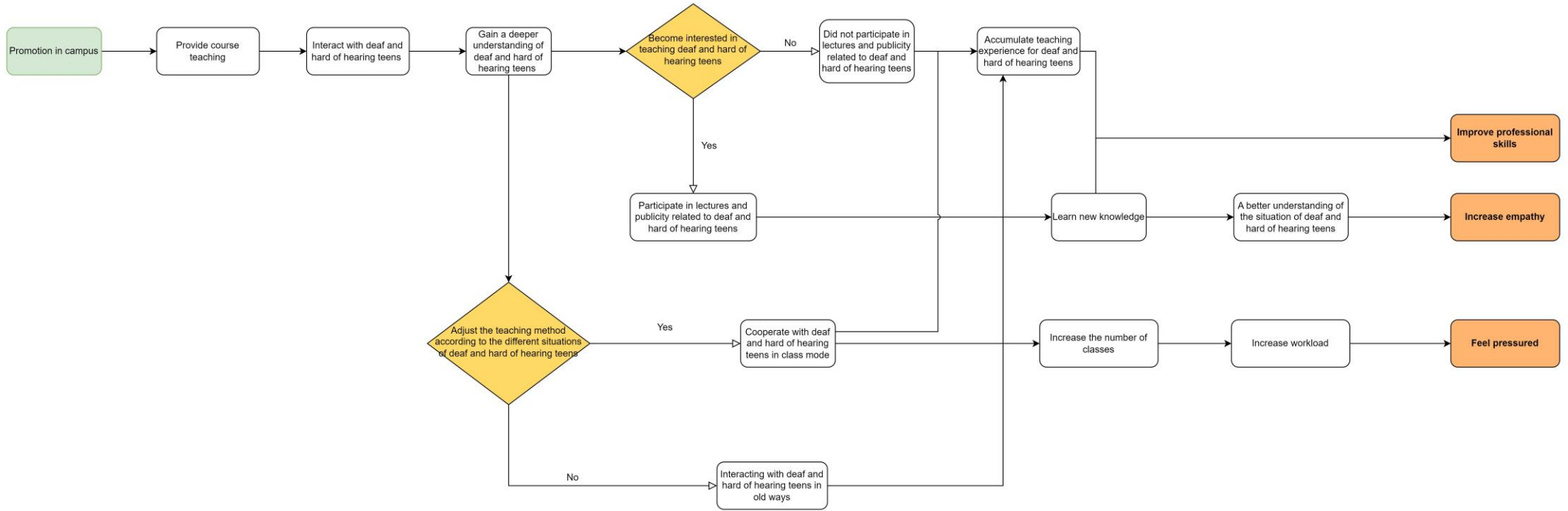
Social workers



Parents



Itinerant teachers



Hearing Loss Association

