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IDENTIFICATION AND PRIORITIZATION OF FACTORS ASSOCIATED WITH
HEALTH WORKFORCE RESILIENCE WITH ANALYTIC HIERARCHY PROCESS

by

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THESIS

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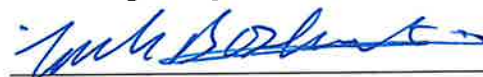
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Dedication

This study is wholeheartedly dedicated to my father (Kotaiah Gadde), my mother (Sandhya Rani Gadde), my Sister (Sindhuja Gadde), and my Brother-in-law (Sachin Balusu), who have been a source of support and inspiration gave me strength, who continually provide their moral, spiritual, emotional, and financial support. It is also dedicated to my professor (Xiaojun Gene Shan), who is behind in making this research possible by guiding the researcher to complete this study.

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Besides my advisor, I would like to thank the rest of my thesis committee, Prof. Ipek Bozkurt and Prof. Ki-Young Jeong, for their encouragement and insightful comments.

ABSTRACT

IDENTIFICATION AND PRIORITIZATION OF FACTORS ASSOCIATED WITH HEALTH WORKFORCE RESILIENCE WITH ANALYTIC HIERARCHY PROCESS

Anuja Gadde
University of Houston-Clear Lake, 2023

Thesis Chair: Xiaojun “Gene” Shan, Ph.D.

This study aims to understand the public health workforce's resilience status by identifying and prioritizing factors associated with health workforce resilience. When not managed effectively, poor performance and, thus, inferior public health could be observed due to high stress levels or elevated adversity in the workplace. I conducted a comprehensive and systematic literature review to understand the influencing factors of public health worker resilience. This paper reports the resilience factors, categorizes whether they are individual characteristics or external environmental factors, and suggests the corresponding interventions that could enhance the resilience of the public health workforce.

To understand the influencing resilience factors of public health workers, I did a comprehensive and systematic literature review. The study analyzed the importance of influencing factors of public health resilience using the analytic hierarchy process (AHP). This paper aims to prioritize resilience factors resource allocation to improve public health workforce resilience.

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CHAPTER I: INTRODUCTION

This paper aims to identify all the factors associated with resilience in public health workers through a comprehensive literature review of some interventions based on those factors. The public is facing an unprecedentedly uncertain ecological environment in which the number of unexpected events is increasing, such as the Indian Ocean tsunami in 2004, the Chilean earthquake in 2010, and the recent pandemic caused by a novel coronavirus first discovered in 2019 (COVID-19) and its variants. During stressful events like disasters, calamities, and disease outbreaks, individuals suffer from mental and psychological disorders if there are no sufficient resilience abilities to cope with events. The health workforce is ready to respond to any emergencies, especially during the pandemic; the importance of the health workforce has been highlighted, so the needs and wellbeing of the workforce must be prioritized (Kuhlmann et al., 2021).

During the COVID-19 pandemic, many workers reported that resilience is a protective factor in the workplace. Some factors, such as peer support, work patterns, etc., will promote resilience among workers during a pandemic (Luu et al., 2021). Training and counselling the workers to improve personality traits like coping skills, problem-solving, and client relations will positively affect health workers (Vesel., 2015). Psychological training and computer-assisted training will also decrease stress and also have an impact on changing behaviours. It is a less expensive and interactive course designed to build resilience in the workers. The public health workforce will address their services during natural disasters and other emerging threats and pandemics. The pandemic increases burnout and anxiety and affects the health of the public health workforce. People must mitigate these stresses and adverse outcomes; resilience needs to be enhanced in the public health workforce (Jackson et al., 2022).

Different external factors exist for different cultures and environments. For example, in some organizational cultures, innovation and openness are key resilience factors (McAllister et al., 2009). In such environments, while these factors are identified outside public health, I can introduce some of those factors to the context of the public health workforce. To build a resilience-oriented workforce, online education and training programs are essential. However, understanding external and internal resilience factors is necessary to develop effective programs. Internal factors include flexibility, adaptability, understanding the changes in the working environment, and adjustments to disturbances, among others (Nelson et al., 2007).

CHAPTER II: LITERATURE REVIEW

Resilience

Resilience is an individual's ability to adapt effectively during adversities and restore equilibrium. In mediating the personal resources among the workers, their core belief challenges relate to their emotional strategies, leading to resilience among the workers (Luu et al., 2021). Resilience is managing stress healthily and adaptively, a vital factor among health workers (Vesel et al., 2015). Resilience is overcoming stress or adversities and having a good outcome after an adverse experience (Maunder et al., 2010). When individuals face significant stresses and difficulties during disasters, pandemics, and crises, resilience is the dynamic process of overcoming all adversities and challenges. With early intervention, access to resources and appropriate guidance will improve health outcomes (Richards et al., 2020).

Importance of Resilience in the Public Health Workforce

A survey was conducted in the United States. It showed that public health workers' intentions to leave work had increased between 2014 and 2021 due to the pandemic, where they experienced high stress due to work overload and burnout (Jackson et al., 2022). During a pandemic, where they might have to complete more tasks, some public health workers might lack time for their health care and other needs. As a result, health issues and burnout due to stress might be observed among health workers. Even public health officials who hold leadership positions resigned due to work overload, critical examination, and pressures over their rights (Jackson et al., 2022). Research in the U.S. shows a positive association between mental and physical health and resilience (Fullerton et al., 2021). Due to these issues, it became critical to manage the stress of public health workers through different strategies and make them resilient (Jackson et al.,

2022). The U.S. public health workforce includes workers from different backgrounds in diverse settings, such as physicians, nurses, community development, etc. To understand the reason behind the decline of the public health workforce in the United States by 20%, the U.S. government surveyed public health professionals to assess their risks and protective factors and health conditions shared through health departments and social media. A diverse group of health workers of different genders, ages, and races participated in the survey. They experienced different adverse outcomes, including depression, anxiety, poor health, and burnout (Stone et al., 2021). There is a need to increase resilience among the workers to safeguard their health physically and mentally. Initiatives and actions must be taken to strengthen their capacities by providing valuable and relevant information and increasing their engagement with others (Stone et al., 2021).

Impacts on Health Workers

In 2020 in the United States, between August- and September, a survey was conducted among public health workers. They are affected by burnout, workload, and stress in public health departments. As per the records, the intentions to leave the jobs and drop increased from 2014 to 2017. Due to the pandemic (COVID-19), it has been further increased to drop out from the positions (Jackson et al., 2022). The U.S. public health workforce includes workers from different backgrounds in diverse settings, such as physicians, nurses, community development, etc. To understand the reason behind the decline of the public health workforce in the United States by 20%, the U.S. government surveyed public health professionals to assess their risks and protective factors and health conditions shared through health departments and social media.

Data will be analyzed using Stata Version 15. A diverse group of health workers of different genders, ages, and races participated in the survey. They experienced different adverse outcomes, including depression, anxiety, poor health, and burnout.

There is a need to increase resilience among the workers to safeguard their health physically and mentally. Initiatives and actions must be taken to strengthen their capacities by providing valuable and relevant information and increasing their engagement with others (Stone et al., 2021).

Characteristics of Resilient Workers

Resilient people typically have such characteristics as an internal sense of control, pro-social behaviors, empathy, a good self-image, optimism, the capacity to plan out daily tasks, neuroticism, coping style, and mindfulness, all of which enhance resilience in the workplace (Friborg et al., 2003). These characteristics help people create enduring bonds with friends and family that they can rely on throughout difficult times. Additionally, resilient people seem better at adapting to changes than sensitive individuals. Resilient people could overcome difficulties using protective resources (Friborg et al., 2003). Resilient workers self-assess themselves to identify their weaknesses and strengths and make themselves resilient by identifying how resilience will empower them during adverse situations (Siebert 2005).

Strategies to Enhance Resilience

There are several recommendations to enhance resilience in healthcare workers in many works of literature. However, many authors suggest that development geared towards interventions will enhance the resilience of healthcare workers through education and training to strengthen the healthcare workers to fight against the mental and psychological consequences. Few authors suggested individual and group skill training, implementation of mindfulness, and good leadership will promote and foster resilience and coping skills in healthcare workers. Coping strategies and social support are the mechanisms that help individuals manage the impacts of potential threats and stress (Labrague et al., 2021). Some factors, such as training, professional identity, and

supervision, contribute to workers' resilience in multiple fields (Joubert et al., 2022). During a year of academic courses for social workers and students, they participated in the longitudinal study to change their characteristics, which were assessed during the course. Among them, many were working in public administrations and social organizations.

This study analyzed that openness, conscientiousness, extraversion, agreeableness, and neuroticism are the personality traits that help students and workers to increase their resilience and also develop the ability to face the adverse situations that they encounter in their professional life (de las Olas Palma-García et al., 2017). Since January 2010, the Boston University School of Public Health has managed the local public health practitioners of the Massachusetts Institute. The Institute staff and advisor committee decided to strengthen the public health workforce and increase their capacity to respond to public emergencies and disasters, so they set a training series with nine principles with the dictating modules. The nine principles include competency, improving quality, free accessibility of the internet, best practices for distance education, reviewing to date, using facilitators' guides in multiple ways, support to public health credentialing, sustainability and specific order of training within each module audio, video, and other assessments. Therefore, it is mandatory to engage the participants actively in the training course which guides their responsibilities, mandate duties and opportunities in the public health (Kenefick et al., 2014).

The U.K. Health Safety Executive (HSE) reports that many health and wellbeing employees and social workers are subjected to stress, anxiety, and depression. They decided to use the Management Standard Indicators Tool (MSIT) to assist them with these stressors. This tool assesses the working conditions and stressors among a variety of populations like police, social workers, and teachers, and then a UK-based social worker.

Survey will be conducted among the social workers through phone interviews and additional ways to know the unanswered questions and then based on the results from those survey majority of the workers included the workload, work patterns, and the work environment has a significant impact on their working conditions. Using the MSIT tool with different percentages for different findings in the survey, local authorities and management create a strategy to reduce the stress and aim for interventions. The intervention includes robust systems of practice and real-time feedback to management and based on this data from the survey, local authorities are aware of which domain of MSIT needs an immediate intervention to promote the wellbeing of social workers (Ravalier et al., 2021). One particular challenge: COVID-19 significantly affects the health workforce subjected to stress due to the lack of training and inadequate organization work. Different literature suggests different factors responsible for the stress of the public health workforce during COVID-19. In addition, some countries like South Africa and Germany suggest developing education programs to improve support and train health workers. Overall, findings show that young health professionals are a vital workforce supporting public health emergencies and global health, so encouraging young professionals and integrating them with public health emergencies will enhance resilience in the future (Kuhlmann et al., 2021).

A project related to health workers was conducted in Sierra Leone to know the psychological interventions that can influence the stress levels of the health workers. I obtained three objectives based on the data on helping health workers in a rural district of Sierra. The first objective is the effect of counselling and psychological training on coping with stress; the second is to examine the change in coping levels and stress levels; the final objective is to identify the qualitative ways to develop coping skills. Individual and group counselling is held for the workers to train in stress management, self-care, and

client care (Vesel et al., 2015). They used a mixed methods approach by conducting in-depth interviews, group discussions, and quantitative surveys to assess the pre- and post-skills of the workers; initially, they trained workers psychologically and then assessed them through surveys. Based on the survey results and the data obtained from the workers, coping skills, social connectedness, and communication skills were higher in the intervention and had a strong correlation with relations with co-workers (Vesel et al., 2015). A study was conducted at Mount Sinai Hospital in Canada among the workers, including the professional and non-professional staff. They conducted a course with modules, self-assessment skills, and feedback, audio, and video sessions. After completing the course, there were many changes in the worker's abilities and skills, and problem-solving skills were applied during adversities. It suggests that interactive computer-assisted training for health workers will facilitate many improvements in the psychological variables in workers (Maunder et al., 2010).

Analytic Hierarchy Process

The analytic hierarchy process is a theory of measuring pairwise comparisons to derive the priority of the scales. The comparisons are made using a scale of different judgments representing the domination of one element over another concerning the given attributes. Decision-making involves the criteria, sub-criteria, alternatives, and significant goals to prioritize the alternatives. To make decisions in an organized way, Saaty developed a hierarchy process to compare elements and prioritize the elements. The scale was developed that indicates different numbers, how many times important, whether they are dominant, critical, etc., and one element concerning the criteria over another. The reciprocals will be taken for the same two elements when the comparison elements are swapped from the numerator to the denominator (Saaty et al., 2008).

CHAPTER III:

PROBLEM STATEMENT

Due to the increase in frequency and intensity of natural and artificial disasters, more people are faced with difficult situations. To reduce human suffering, public health workers play a critical role in those situations. Many public health workers must continuously work in stressful situations for a long time each day (Liu et al., 2020). In such an environment, the workers are severely affected by stress and possibly traumatic experiences; however, some are less affected by those stresses and are called resilient workers. However, the prioritized factors will significantly help public health workers and have more impact on enhancing resilience in stressful situations. This paper aims to find those factors associated with resilience in public health workers through a comprehensive literature review and some interventions based on those factors. The following research questions are addressed in this paper: What are the internal and external factors that increase the resilience of public health workers? What targeted interventions could be used based on those identified factors? What are the prioritized resilience factors?

CHAPTER IV: METHODOLOGY

I conducted a comprehensive literature review to identify the resilience factors for public health workers. To find all the relevant studies, I used the key terms "public health workforce resilient factors" and "public health workforce resilience factors" to search in such major databases as Google Scholar, PubMed, Science Direct, Sage Pub, and Springer Link. After using all these search terms in databases, I found 10,810 search results with the key term "public health resilient factors" and 32,989 search results with the "public health resilience factors". Then, I set inclusion and exclusion criteria to remove some papers that did not meet these criteria after the searches. The inclusion criteria are 1) being related to the public health workforce, 2) publishing year is between 1973 and 2021 (most of the articles are available between these periods in the databases), 3) papers related to identifying the interventions of resilience factors for only public health workforce, 4) peer-reviewed papers, and 5) being published in English. And the exclusion criteria are 1) duplicate papers, 2) from grey literature such as newspaper articles, 3) being related to organizations, nurses, and health disciplines, and 5) academic and professional books. Then, the first author manually screens the titles and abstracts, if appropriate, to exclude irrelevant papers.

Table 1:

Search results with the two key terms in Google Scholar, PubMed, Springer Link, Science Direct, and Sage Pub

Database Name (Publication Year)	Search Results for “Public Health Workforce Resilient Factors”	Search Results for “Public Health Workforce Resilience Factors”
Google Scholar (1973-2021)	20,400	20,400
PubMed (1984-2021)	154 (1992-2021)	371 (1984-2021)
Springer Link (1979-2021)	7,699	7,832
Science Direct (1973-2021)	2,950	4,379
Sage Pub	Seven professional and academic books	Seven professional and academic books

Since only professional and academic books are identified from Sage Pub, I excluded Sage Pub. For Google Scholar, both key terms yield the same search results, which consist of 20,400 papers, among which 5,100 papers are not between the period of 1973-2021, and the remaining 15,302 are not relevant to the resilience of public health workers. For the critical term “public health workforce resilient factors”, 2,950 papers are found in Science Direct. A total of 1,561 papers meet the exclusion criteria, which are professional books or not within the period, and the remaining 1,383 papers are irrelevant. For Pub Med, the search results were in 154 papers. A total of 8 papers are excluded, which includes reports, editorials, and encyclopedias, and the remaining 141 papers are not related to public health workers. In Springer Link, the search results in 7,699 papers, among which 6,565 are outside the period, and the remaining 1,131 papers

are irrelevant. For the critical term "Public health workforce resilience factors", 371 papers are found in Pub Med, 33 of which were excluded since they are not in English and books, and the remaining 338 papers are irrelevant to public health. In Springer Link, a total of 7,832 papers are found. A total of 5,067 papers do not meet the inclusion criteria; some need to be published in English, and the remaining 2,765 papers are not related to public health workers. In Science Direct, 4,379 papers are found; 2,319 are books, records, and not within the period, and the remaining 2,054 papers need to be more relevant. Table 1 lists the number of search results in the electronic databases for the two key terms. Figure 1 shows the flow of methodology.

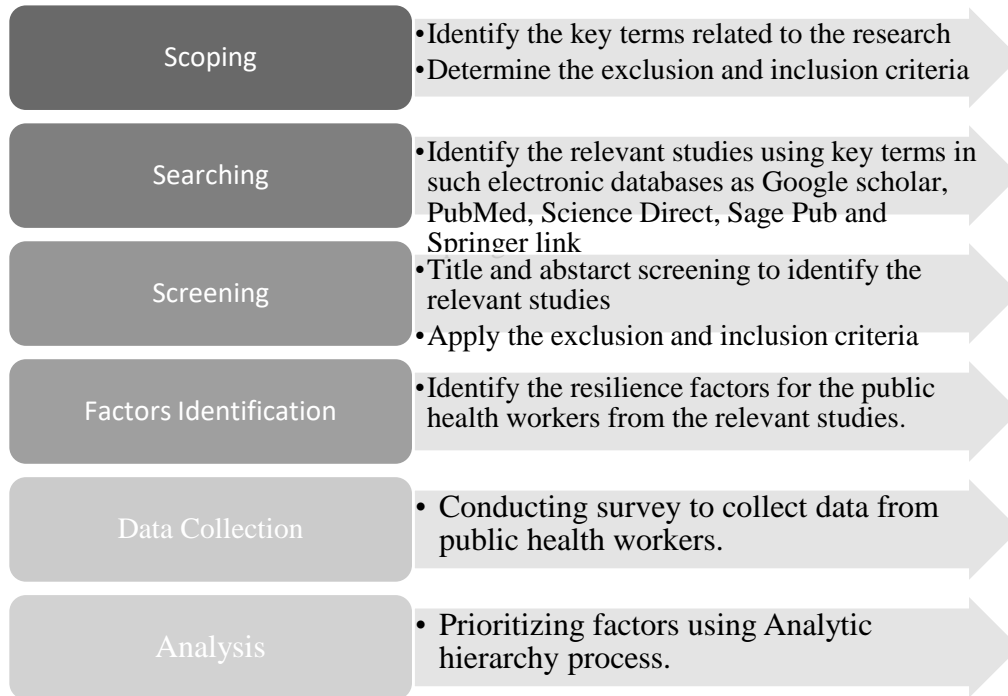


Figure 1:
Research Framework:

Figure 2 shows the process of identifying the papers for review. After identifying the relevant studies, I analyze them in depth to identify the factors that help to develop the resilience of the public health workforce. It might be internal, an individual

characteristic to develop resilience, or external, which supports the development of resilience in the workforce for public health workers

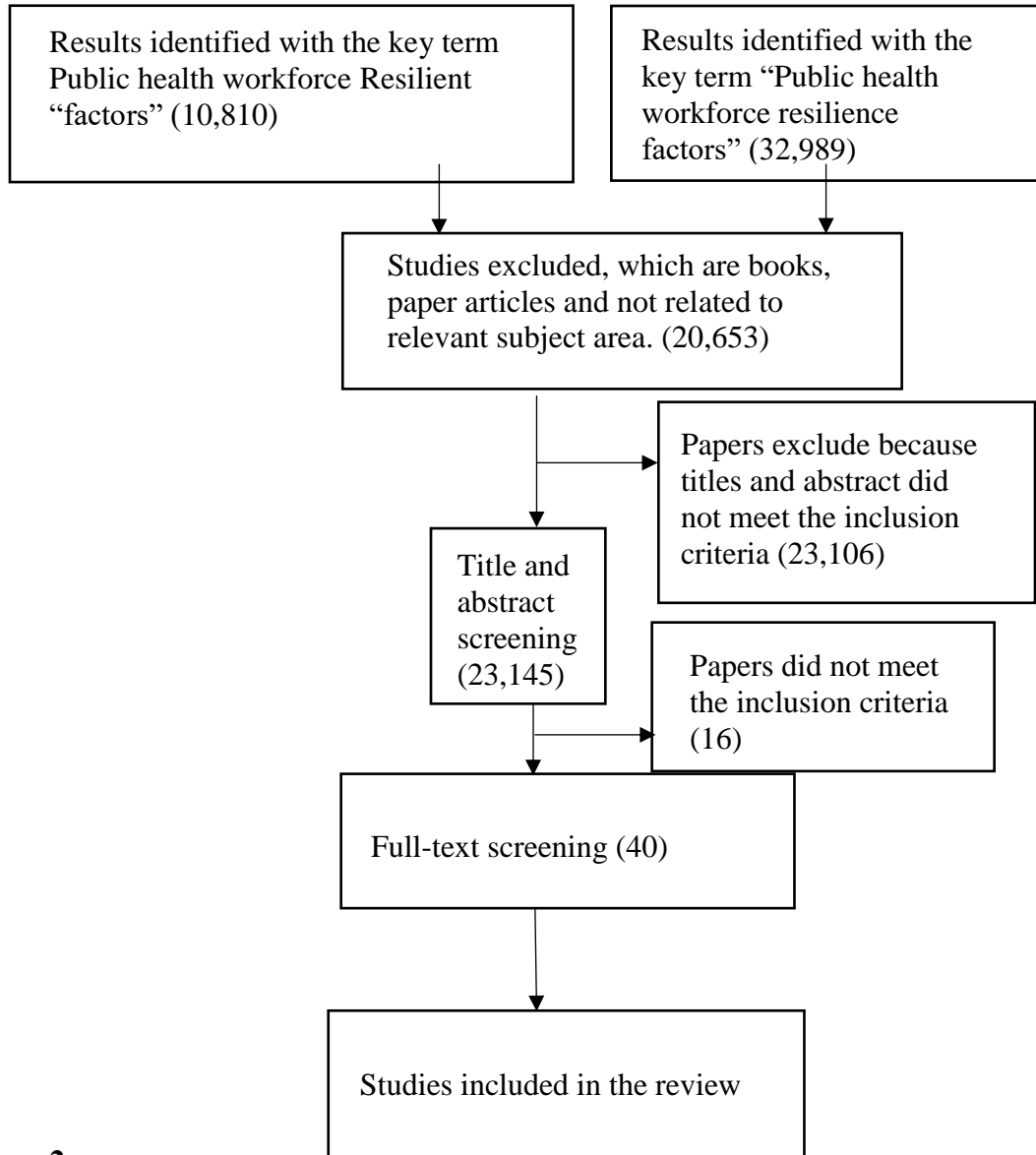


Figure 2:
Flowchart of Paper Exclusion Procedure

To prioritize the resilience factors, I am surveying the resilience factors. A survey will be conducted to the public health workers through Qualtrics to know the views of the

practically experienced people and many public health workers. The questionnaire is designed based on Saaty's scale of preference, which ranges from 1 to 9, to rate the relative priorities of two factors simultaneously. A factor is compared to another factor (Pairwise Comparison) in determining which will enhance resilience during disasters for public health workers. The degree of occurrence has been arranged on the right and left sides of Factor 1 and Factor 2. Based on Saaty's scale, if the upper part factor is more significant than the lower part, it will be seven on the left-hand side. If the lower part factor is more significant than the upper part, it will be seven on the right-hand side. However, suppose the two criteria are both likely equally important; in that case, it lies in the central part, which is 1.

Based on their responses in the survey for the resilience factors, the data will be collected and stored in a password-locked device. Then, that data will be used for the Analytic hierarchy process (AHP) multi-decision-making method for pairwise comparisons between the factors. The most prioritized factors will be identified based on the comparisons in a matrix with the data.

CHAPTER V: RESULTS

From the survey on Public Health Workforce Resilience, there were about 207 participants in the public survey questions, where 76% had worked before as public health workers. In contrast, the remaining 24% still need to gain experience. On a scale of 1 to 9, the results involving 207 participants show a pairwise comparison of resilience-promoting workshops with primary and secondary preventive programs, leading with 4. At the same time, the lowest score was communication, with 2. However, the range between variables is low, with an average rating of 2.5, showing that the wellness practices are similar.

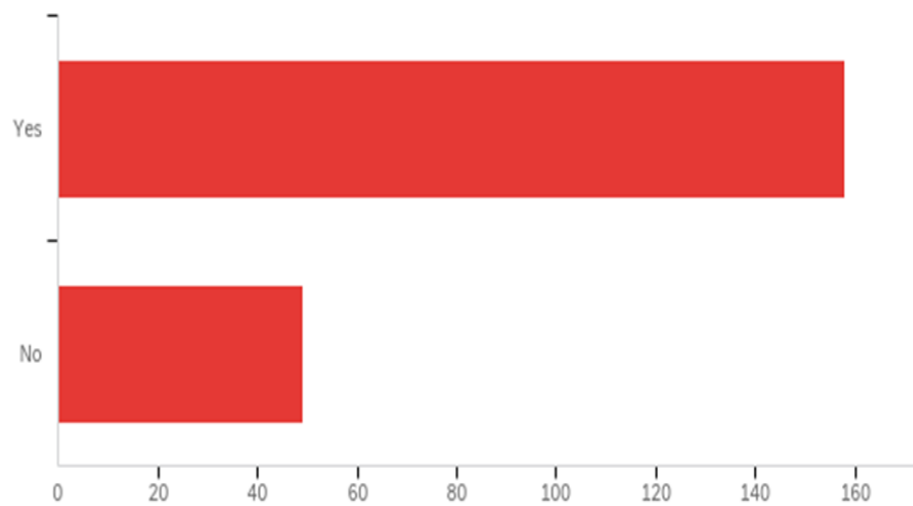


Figure 3:
Experience in Public Health

Table 2:*Descriptive Statistics on Experience in Public Health Question*

#	Answer	%	Count
1	Yes	76.33%	158
2	No	23.67%	49
	Total	100%	207

Table 3:*Responses on whether there is experience as a public health worker*

#	Answer	%	Count
1	Yes	76.33%	158
2	No	23.67%	49
	Total	100%	207

Pairwise Comparison of Resilience promoting workshops

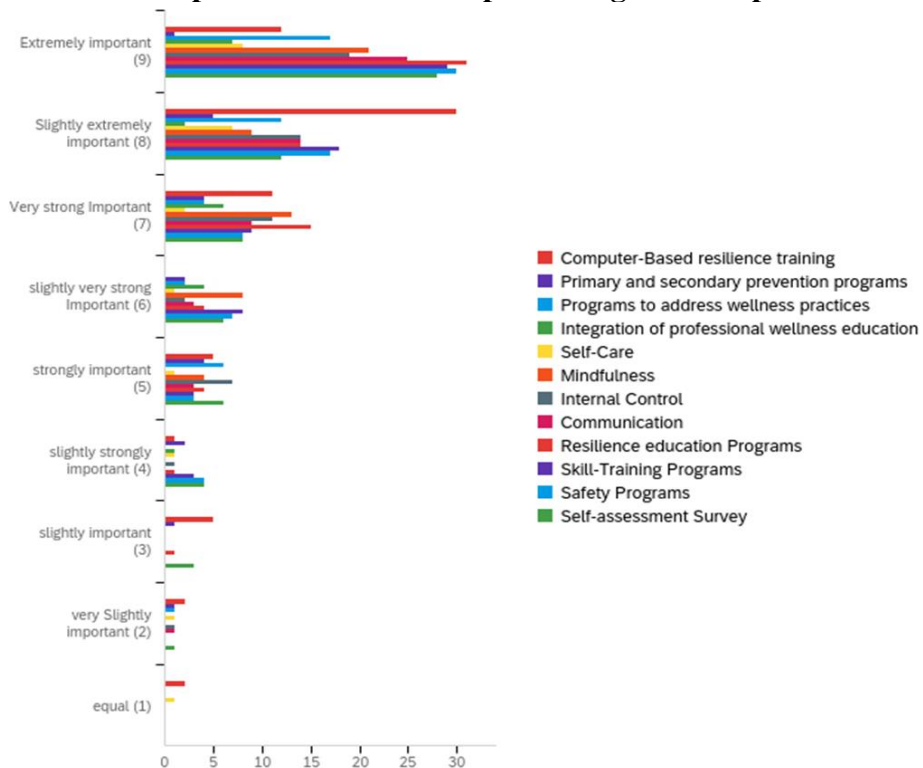


Figure 4:

Pairwise Comparison of Resilience promoting workshops

On the other hand, the secondary and primary comparisons pairwise intervention shows a mean score of 3.9 from 20 participants, meaning that the primary and secondary prevention programs have a high score. Despite the highest score, there is still the need to consider the lower score because people have different tastes and preferences. The methodology involves a pairwise comparison method to rate some resilience techniques on a scale of 1 to 9, effectively measuring how public health workers promote resilience at work. The study had 206 participants who managed to respond to the survey question.

Table 4:*Descriptive Statistics on Pairwise Comparison of Resilience Promoting Workshops*

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Computer-Based resilience training	1.00	9.00	3.01	2.13	4.54	68
2	Primary and secondary prevention programs	1.00	8.00	3.90	1.87	3.49	20
3	Programs to address wellness practices	1.00	8.00	2.36	1.64	2.71	42
4	Integration of professional wellness education	1.00	6.00	2.55	1.40	1.95	20
5	Self-Care	1.00	9.00	2.73	2.26	5.11	22
6	Mindfulness	1.00	5.00	2.36	1.31	1.72	55
7	Internal Control	1.00	8.00	2.49	1.59	2.54	55
8	Communication	1.00	8.00	2.09	1.40	1.97	55
9	Resilience education Programs	1.00	7.00	2.19	1.40	1.95	70
10	Skill-Training Programs	1.00	6.00	2.24	1.42	2.01	70
11	Safety Programs	1.00	6.00	2.25	1.49	2.21	69
12	Self-assessment Survey	1.00	8.00	2.69	1.94	3.77	68

Table 5:*Responses on Pairwise Comparison of Resilience promoting workshops.*

	Extremely important (9)	Slightly extremely important (8)	Very strong Important (7)	slightly very strong Important (6)	strongly important (5)	slightly strongly important (4)	slightly important (3)	very Slightly important (2)	equal (1)	Weights
Computer-Based resilience training	4.17%	14.97%	7.99%	0.00%	7.75%	3.65%	40.41%	14.71%	39.25%	0.147680
Primary and secondary prevention programs	1.18%	8.48%	9.88%	10.10%	21.09%	24.85%	27.49%	25.03%	0.00%	0.142330
Programs to address wellness practices	9.57%	9.69%	4.70%	4.81%	15.07%	0.00%	0.00%	11.91%	0.00%	0.061948
Integration of professional wellness education	8.27%	3.39%	14.82%	20.19%	0.00%	12.43%	0.00%	0.00%	0.00%	0.065670
Self-Care	8.59%	10.79%	4.49%	4.59%	4.80%	11.31%	0.00%	22.77%	60.75%	0.142334
Mindfulness	9.02%	5.55%	11.68%	14.69%	7.67%	0.00%	0.00%	0.00%	0.00%	0.054012
Internal Control	8.17%	8.63%	9.88%	3.67%	13.43%	4.52%	0.00%	9.11%	0.00%	0.063794
Communication	10.74%	8.63%	8.08%	5.50%	5.75%	0.00%	0.00%	9.11%	0.00%	0.053132
Resilience education Programs	10.47%	6.78%	10.59%	5.76%	6.02%	3.55%	7.86%	0.00%	0.00%	0.056714
Skill-Training Programs	9.79%	8.72%	6.35%	11.54%	4.52%	10.66%	0.00%	0.00%	0.00%	0.057326
Safety Programs	10.28%	8.36%	5.73%	10.24%	4.59%	14.41%	0.00%	0.00%	0.00%	0.059557
Self-assessment Survey	9.73%	5.99%	5.81%	8.90%	9.30%	14.61%	24.24%	7.36%	0.00%	0.095503

Table 4 presents a comprehensive set of summary statistics for 12 distinct fields related to programs and practices.

These fields encompass a wide array of topics, including computer-based resilience training, primary and secondary prevention programs, and wellness practices, among others. The summary statistics furnish vital information about the central tendencies and variability within each field, offering insights into the dataset's distribution. In the context of Table 4, the minimum and maximum values signify the range of responses within each field. For instance, computer-based resilience training exhibits a range from 1.00 to 9.00, showcasing considerable variability in the responses. The mean, which represents the average score within each field, serves as a crucial measure of central tendency. In this regard, fields like primary and secondary prevention programs (mean = 3.90) and self-care (mean = 2.73) reveal varying levels of importance attributed to respondents.

The standard deviation measures the dispersion of data points around the mean. A higher standard deviation suggests greater variability, while a lower standard deviation indicates more uniform responses. Fields such as computer-based resilience training (standard deviation = 2.13) and self-care (standard deviation = 2.26) manifest substantial dispersion, signifying divergent opinions among respondents.

The variance, a square of the standard deviation, provides an additional perspective on data spread. Computer-based resilience training exhibits a relatively high variance of 4.54, indicative of the broad range of opinions expressed by the participants. Conversely, the field of integration of professional wellness education displays a lower variance of 1.95, suggesting a more concentrated set of responses. The count in Table 4 signifies the number of responses received for each field, shedding light on the sample size for the analysis. Notably, fields like resilience education programs (count = 70) and

skill-training programs (count = 70) have larger samples, enhancing the robustness of their statistical summaries.

In Table 5, respondents rated the importance of each field on a scale from 1 to 9, with 9 denoting "Extremely Important" and 1 representing "Equal" importance. The table showcases the distribution of responses, allowing for an assessment of the perceived significance of the various fields. For instance, using AHP the weights of each pair-wise comparison have been calculated using respondent responses and the cumulative sum of the responses.

Pairwise Comparison of computer-based resilience training

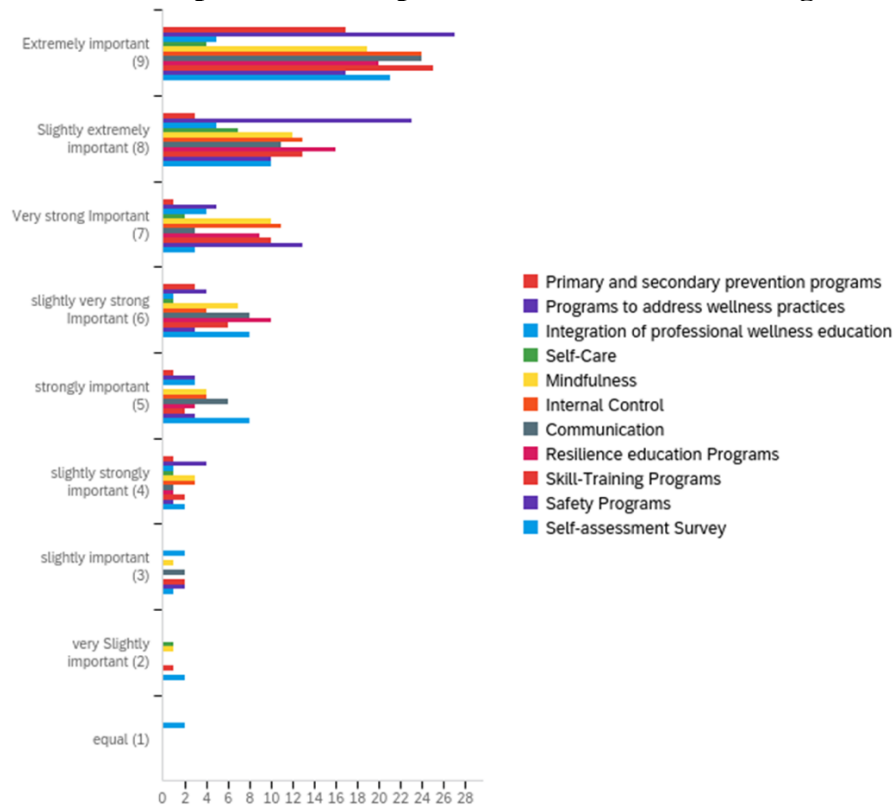


Figure 5:
Pairwise Comparison of computer-based resilience training

Table 6:*Descriptive Statistics on Pairwise Comparison of computer-based resilience training*

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Primary and secondary prevention programs	1.00	6.00	1.88	1.45	2.10	26
2	Programs to address wellness practices	1.00	6.00	2.17	1.44	2.08	66
3	Integration of professional wellness education	1.00	9.00	3.65	2.48	6.14	23
4	Self-Care	1.00	8.00	2.63	1.87	3.48	16
5	Mindfulness	1.00	8.00	2.70	1.75	3.05	57
6	Internal Control	1.00	6.00	2.32	1.48	2.18	59
7	Communication	1.00	7.00	2.49	1.74	3.01	55
8	Resilience education Programs	1.00	6.00	2.37	1.33	1.76	59
9	Skill-Training Programs	1.00	8.00	2.44	1.73	3.00	61
10	Safety Programs	1.00	7.00	2.51	1.58	2.49	49
11	Self-assessment Survey	1.00	8.00	2.85	1.99	3.94	55

Table 7:*Responses on Pairwise Comparison of computer-based resilience training*

	Extremely important (9)	Slightly extremely important (8)	Very strong Important (7)	slightly very strong Important (6)	strongly important (5)	slightly strongly important (4)	slightly important (3)	very Slightly important (2)	equal (1)	Weights
Primary and secondary prevention programs	15.63%	4.40%	2.63%	10.56%	5.12%	8.89%	0.00%	0.00%	0.00%	0.052473
Programs to address wellness practices	9.78%	13.30%	5.17%	5.55%	6.05%	13.99%	0.00%	0.00%	0.00%	0.059820
Integration of professional wellness education	5.20%	8.30%	11.86%	3.98%	17.35%	10.04%	37.39%	0.00%	100.00%	0.215681
Self-Care	5.97%	16.70%	8.53%	5.72%	0.00%	14.43%	0.00%	47.06%	0.00%	0.109348
Mindfulness	7.97%	8.03%	11.97%	11.24%	9.34%	12.14%	7.52%	13.18%	0.00%	0.090426
Internal Control	9.72%	8.41%	12.72%	6.20%	9.02%	11.73%	0.00%	0.00%	0.00%	0.064220
Communication	10.43%	7.63%	3.72%	13.32%	14.51%	4.20%	15.64%	0.00%	0.00%	0.077170
Resilience education Programs	8.10%	10.35%	10.40%	15.51%	6.76%	3.90%	0.00%	0.00%	0.00%	0.061143
Skill-Training Programs	9.79%	8.13%	11.18%	9.01%	4.36%	7.57%	14.10%	12.35%	0.00%	0.084994
Safety Programs	8.29%	7.79%	18.10%	5.60%	8.14%	4.71%	17.53%	0.00%	0.00%	0.077962
Self-assessment Survey	9.12%	6.94%	3.72%	13.32%	19.35%	8.40%	7.82%	27.41%	0.00%	0.106761

Table 6 provides an array of summary statistics for 11 distinct fields, encompassing a diverse range of programs and practices. These statistics offer valuable insights into the characteristics of the data, allowing for a deeper understanding of the central tendencies and variability within each field.

Regarding the minimum and maximum values, these signify the range of responses within each field. For instance, the field of "Integration of professional wellness education" displays a broad range, spanning from 1.00 to 9.00, indicating substantial variation in the responses. On the other hand, "Primary and secondary prevention programs" have a narrower range, extending from 1.00 to 6.00, implying less variability in the opinions expressed by respondents.

The mean, serving as a critical measure of central tendency, reveals the average score within each field. Fields such as "Integration of professional wellness education" exhibit a relatively higher mean of 3.65, implying a generally favorable evaluation by participants. In contrast, "Primary and secondary prevention programs" have a lower mean of 1.88, suggesting less pronounced importance attributed by respondents on average.

The standard deviation, a measure of data dispersion around the mean, provides insights into the variability of responses. Higher standard deviations, such as the one observed for "Integration of professional wellness education" (standard deviation = 2.48), suggest substantial dispersion, indicating a wide range of opinions. Conversely, lower standard deviations, such as in "Self-Care" (standard deviation = 1.87), reflect less variation in responses.

The variance, a square of the standard deviation, offers an additional perspective on the spread of data. Notably, "Integration of professional wellness education" has a high variance of 6.14, signifying substantial diversity in responses. Conversely, fields

like "Resilience education Programs" exhibit a lower variance of 1.76, indicating more uniform responses.

The count signifies the number of responses received for each field, which has an impact on the reliability of the statistical summaries. Fields with larger sample sizes, such as "Mindfulness" (count = 57) and "Internal Control" (count = 59), benefit from increased robustness in their statistical summaries.

Table 7 presents the importance ratings for each field, offering insights into the perceived significance of these fields as determined by the respondents. Respondents rated each field on a scale from 1 to 9, with 9 representing "Extremely Important" and 1 representing "Equal" importance. The table illustrates the distribution of responses, facilitating an assessment of the relative importance attributed to the various fields. For instance, using AHP the weights of each pair-wise comparison have been calculated using respondent responses and the cumulative sum of the responses.

Pairwise Comparison of primary & secondary prevention programs

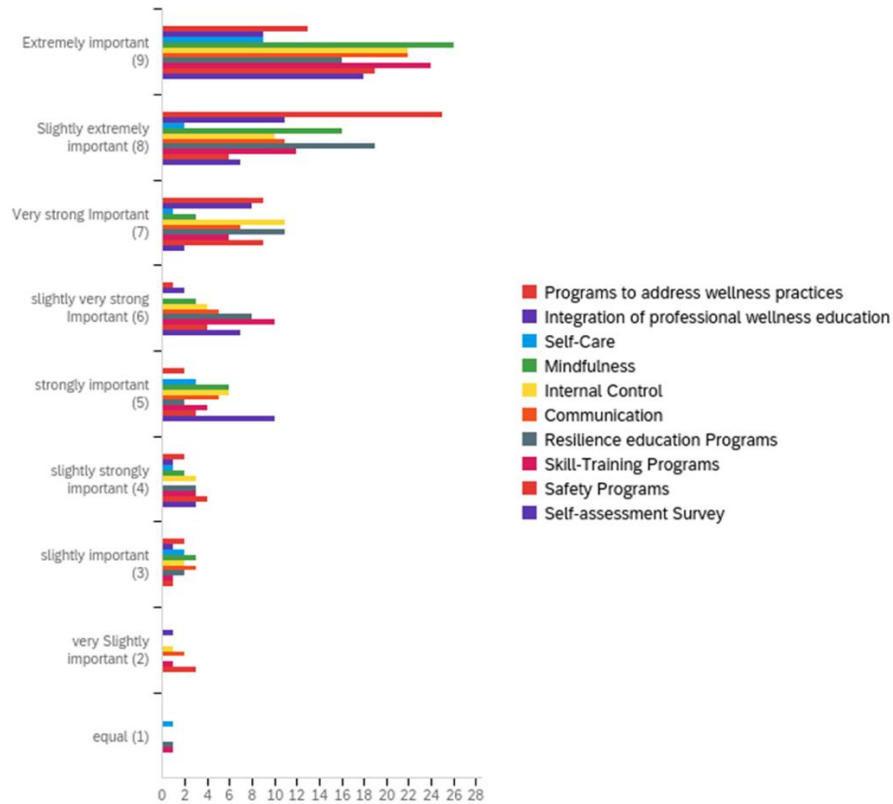


Figure 6:

Pairwise Comparison of primary & secondary prevention programs

Table 8:

Descriptive statistics on Pairwise Comparison of primary & secondary prevention programs

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Programs to address wellness practices	1.00	7.00	2.41	1.47	2.17	54
2	Integration of professional wellness education	1.00	8.00	2.55	1.67	2.79	33
3	Self-Care	1.00	9.00	3.16	2.58	6.66	19
4	Mindfulness	1.00	7.00	2.41	1.81	3.26	59
5	Internal Control	1.00	8.00	2.73	1.87	3.49	59
6	Communication	1.00	8.00	2.67	1.98	3.93	55
7	Resilience education Programs	1.00	9.00	2.74	1.75	3.06	62
8	Skill-Training Programs	1.00	9.00	2.71	1.94	3.75	62
9	Safety Programs	1.00	8.00	2.94	2.14	4.59	49
10	Self-assessment Survey	1.00	6.00	2.85	1.80	3.23	47

Table 9:

Responses on Pairwise Comparison of primary & secondary prevention programs

	Extremely important (9)	Slightly extremely important (8)	Very strong Important (7)	slightly very strong Important (6)	strongly important (5)	slightly strongly important (4)	slightly important (3)	very Slightly important (2)	equal (1)	weights
Programs to address wellness practices	6.66%	20.01%	12.57%	2.29%	4.30%	8.28%	9.72%	0.00%	0.00%	0.070914
Integration of professional wellness education	7.54%	14.41%	18.27%	7.49%	0.00%	6.78%	7.96%	18.83%	0.00%	0.090309
Self-Care	13.10%	4.55%	3.96%	0.00%	18.36%	11.77%	27.67%	0.00%	62.03%	0.157158
Mindfulness	12.19%	11.72%	3.83%	6.28%	11.83%	7.59%	13.35%	0.00%	0.00%	0.074192
Internal Control	10.31%	7.33%	14.05%	8.38%	11.83%	11.37%	8.91%	10.50%	0.00%	0.091854
Communication	11.06%	8.64%	9.60%	11.23%	10.57%	0.00%	14.32%	22.62%	0.00%	0.097825
Resilience education Programs	7.14%	13.25%	13.37%	15.94%	3.76%	10.83%	8.49%	0.00%	18.99%	0.101949
Skill-Training Programs	10.70%	8.36%	7.30%	19.93%	7.50%	10.83%	4.23%	10.01%	18.99%	0.108718
Safety Programs	10.72%	5.29%	13.85%	10.08%	7.12%	18.26%	5.36%	38.04%	0.00%	0.120796
Self-assessment Survey	10.59%	6.44%	3.21%	18.40%	24.74%	14.28%	0.00%	0.00%	0.00%	0.086285

Table 8 presents a set of summary statistics for ten distinct fields, which encompass a variety of programs and practices. These statistics provide a comprehensive overview of the dataset, offering key insights into the central tendencies and variability within each field.

The minimum and maximum values in this table represent the range of responses within each field. For example, the field "Self-Care" has a range from 1.00 to 9.00, indicating a wide variation in the responses. Conversely, the "Programs to address wellness practices" field has a narrower range from 1.00 to 7.00, implying less variability in the opinions expressed by respondents.

The mean, which serves as a central measure of tendency, reveals the average score within each field. Fields like "Self-Care" have a relatively high mean of 3.16, suggesting a generally positive evaluation by participants. On the other hand, "Programs to address wellness practices" exhibit a lower mean of 2.41, indicating less pronounced importance attributed by respondents on average.

The standard deviation is a measure of the dispersion of data points around the mean. Higher standard deviations, such as those observed for "Self-Care" (standard deviation = 2.58), suggest substantial variation in responses. Conversely, lower standard deviations, as in "Programs to address wellness practices" (standard deviation = 1.47), indicate less variation in responses.

The variance, which is the square of the standard deviation, provides an additional perspective on the spread of data. Fields like "Self-Care" have a higher variance of 6.66, signifying considerable diversity in responses. In contrast, fields such as "Integration of professional wellness education" exhibit a lower variance of 2.79, suggesting more uniform responses.

The count represents the number of responses received for each field, influencing the reliability of the statistical summaries. Fields with larger sample sizes, such as "Resilience Education Programs" (count = 62) and "Skill-Training Programs" (count = 62), benefit from increased robustness in their statistical summaries. Table 9 presents the importance ratings assigned by respondents to each of the ten fields. Participants rated the importance of these fields on a scale from 1 to 9, with 9 representing "Extremely Important" and 1 representing "Equal" importance. For instance, using AHP the weights of each pair-wise comparison have been calculated using respondent responses and the cumulative sum of the responses.

Pairwise Comparison of programs to address wellness practices

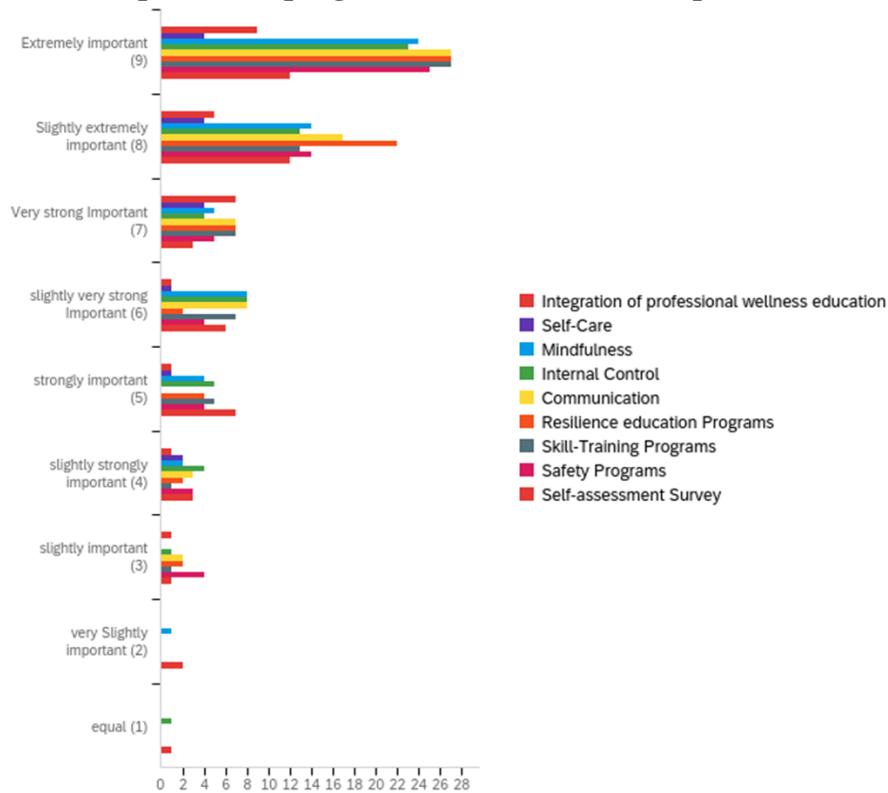


Figure 7:
Pairwise Comparison of programs to address wellness practices

Table 10:*Descriptive statistics on Pairwise Comparison of programs to address wellness practices.*

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Integration of professional wellness education	1.00	7.00	2.48	1.60	2.57	25
2	Self-Care	1.00	6.00	2.81	1.63	2.65	16
3	Mindfulness	1.00	8.00	2.40	1.64	2.69	58
4	Internal Control	1.00	9.00	2.68	1.91	3.64	59
5	Communication	1.00	7.00	2.28	1.58	2.48	64
6	Resilience education Programs	1.00	7.00	2.21	1.54	2.38	66
7	Skill-Training Programs	1.00	7.00	2.30	1.53	2.34	61
8	Safety Programs	1.00	7.00	2.54	1.90	3.60	59
9	Self-assessment Survey	1.00	9.00	3.28	2.16	4.67	47

Table 11:*Responses on Pairwise Comparison of programs to address wellness practices.*

	Extremely important (9)	Slightly extremely important (8)	Very strong Important (7)	slightly very strong Important (6)	strongly important (5)	slightly strongly important (4)	slightly important (3)	very Slightly important (2)	equal (1)	Weights
Integration of professional wellness education	10.69%	9.02%	24.08%	4.75%	6.50%	8.41%	8.41%	0.00%	0.00%	0.079860
Self-Care	7.43%	11.28%	21.50%	7.43%	10.15%	26.29%	26.29%	0.00%	0.00%	0.122626
Mindfulness	12.29%	10.89%	7.41%	16.39%	11.21%	7.26%	7.26%	28.76%	0.00%	0.112742
Internal Control	11.58%	9.94%	5.83%	16.11%	13.76%	14.26%	14.26%	0.00%	44.24%	0.144425
Communication	12.53%	11.98%	9.41%	14.85%	0.00%	9.86%	9.86%	0.00%	0.00%	0.076117
Resilience education Programs	12.15%	15.04%	9.12%	3.60%	9.85%	6.37%	6.37%	0.00%	0.00%	0.069452
Skill-Training Programs	13.15%	9.62%	9.87%	13.64%	13.32%	3.45%	3.45%	0.00%	0.00%	0.073886
Safety Programs	12.59%	10.71%	7.28%	8.06%	11.02%	10.68%	10.68%	0.00%	0.00%	0.078907
Self-assessment Survey	7.58%	11.52%	5.49%	15.17%	24.19%	13.42%	13.42%	71.24%	55.76%	0.241985

Table 10 provides a comprehensive summary of summary statistics for nine distinct fields representing various programs and practices, as well as Table 2, shows the importance ratings provided by respondents for these fields. This information allows for a detailed assessment of the data, its distribution, and the perceived significance of each field.

The minimum and maximum values in Table 1 indicate the range of responses within each field. For example, the field "Self-assessment Survey" demonstrates a wide range, ranging from 1.00 to 9.00, suggesting significant variability in the responses. On the other hand, "Self-Care" exhibits a narrower range from 1.00 to 6.00, indicating less variability in the opinions expressed by respondents.

The mean, serving as a central tendency measure, reveals the average score within each field. Fields such as "Self-assessment Survey" have a relatively high mean of 3.28, indicating a favorable evaluation by participants, while "Integration of professional wellness education" has a mean of 2.48, suggesting a relatively lower level of importance attributed by respondents on average.

The standard deviation measures the dispersion of data points around the mean, providing insights into the variability of responses. Fields with higher standard deviations, such as "Self-assessment Survey" (standard deviation = 2.16), indicate substantial variation in responses, whereas lower standard deviations, as observed in "Integration of professional wellness education" (standard deviation = 1.60), suggest less variation.

The variance, which is the square of the standard deviation, provides an additional perspective on the spread of data. Fields with higher variances, like "Self-assessment Survey" (variance = 4.67), indicate substantial diversity in responses, while fields with lower variances, such as "Integration of professional wellness education" (variance = 2.57), suggest more uniform responses.

Table 11 showcases the importance ratings assigned by respondents to each of the fields, offering insights into the perceived significance of these fields. Participants rated the importance on a scale from 1 to 9, with 9 representing "Extremely Important" and 1 indicating "Equal" importance. The table presents a breakdown of the distribution of responses, allowing for an assessment of the relative importance attributed to each field.

For instance, using AHP the weights of each pair-wise comparison have been calculated using respondent responses and the cumulative sum of the responses.

Pairwise Comparison of integration of professional wellness education

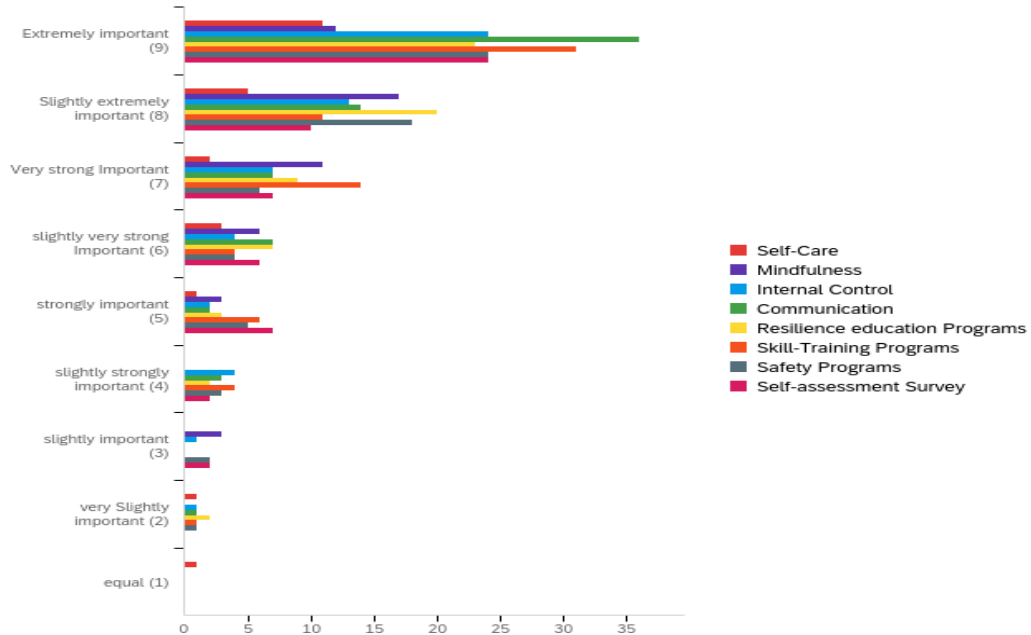


Figure 8:

Pairwise Comparison of integration of professional wellness education

Table 12:

Descriptive statistics on Pairwise Comparison of integration of professional wellness education

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Self-Care	1.00	9.00	2.54	2.16	4.66	24
2	Mindfulness	1.00	7.00	2.67	1.55	2.41	52
3	Internal Control	1.00	8.00	2.43	1.79	3.21	56
4	Communication	1.00	8.00	2.13	1.57	2.45	70
5	Resilience education Programs	1.00	8.00	2.44	1.64	2.70	66
6	Skill-Training Programs	1.00	8.00	2.44	1.68	2.84	71
7	Safety Programs	1.00	8.00	2.52	1.82	3.30	63
8	Self-assessment Survey	1.00	7.00	2.59	1.76	3.10	58

Table 13:*Responses on Pairwise Comparison of integration of professional wellness education*

	Extremely important (9)	Slightly extremely important (8)	Very strong Important (7)	slightly very strong Important (6)	strongly important (5)	slightly strongly important (4)	slightly important (3)	very Slightly important (2)	equal (1)	Weights
Self-Care	14.27%	11.06%	7.79%	16.87%	8.44%	0.00%	0.00%	31.07%	100.00%	0.210560
Mindfulness	7.19%	17.36%	19.78%	15.57%	11.68%	0.00%	40.69%	0.00%	0.00%	0.124745
Internal Control	13.34%	12.32%	11.69%	9.63%	7.23%	25.23%	12.62%	13.34%	0.00%	0.117126
Communication	16.01%	10.62%	9.35%	13.49%	5.79%	15.16%	0.00%	10.66%	0.00%	0.090093
Resilience education Programs	10.85%	16.09%	12.76%	14.32%	9.21%	10.71%	0.00%	22.58%	0.00%	0.107234
Skill-Training Programs	13.59%	8.22%	18.44%	7.60%	17.11%	19.89%	0.00%	10.51%	0.00%	0.105966
Safety Programs	11.86%	15.17%	8.90%	8.57%	16.08%	16.82%	22.36%	11.85%	0.00%	0.124007
Self-assessment Survey	12.88%	9.15%	11.29%	13.95%	24.44%	12.19%	24.33%	0.00%	0.00%	0.120268

Table 12 presents a comprehensive summary of summary statistics for eight distinct fields representing various programs and practices, and Table 2 shows the importance ratings assigned by respondents for these fields. This information allows for a detailed assessment of the data, its distribution, and the perceived significance of each field.

The minimum and maximum values in Table 12 indicate the range of responses within each field. For example, the field "Self-assessment Survey" demonstrates a wide range, ranging from 1.00 to 7.00, suggesting significant variability in the responses. On the other hand, "Self-Care" exhibits a broader range from 1.00 to 9.00, indicating substantial variability in the opinions expressed by respondents.

The mean, which serves as a central tendency measure, reveals the average score within each field. Fields such as "Self-Care" have a relatively high mean of 2.54, indicating a favorable evaluation by participants, while "Communication" has a mean of

2.13, suggesting a relatively lower level of importance attributed by respondents on average.

The standard deviation measures the dispersion of data points around the mean, providing insights into the variability of responses. Fields with higher standard deviations, such as "Self-assessment Survey" (standard deviation = 1.76), indicate substantial variation in responses, whereas lower standard deviations, as observed in "Self-Care" (standard deviation = 2.16), suggest less variation.

The variance, which is the square of the standard deviation, provides an additional perspective on the spread of data. Fields with higher variances, like "Self-assessment Survey" (variance = 3.10), indicate substantial diversity in responses, while fields with lower variances, such as "Communication" (variance = 2.45), suggest more uniform responses.

Table 13 showcases the importance ratings assigned by respondents to each of the fields, offering insights into the perceived significance of these fields. Participants rated the importance on a scale from 1 to 9, with 9 representing "Extremely Important" and 1 indicating "Equal" importance. For instance, using AHP the weights of each pair-wise comparison have been calculated using respondent responses and the cumulative sum of the responses.

Pairwise Comparison of Self-Care

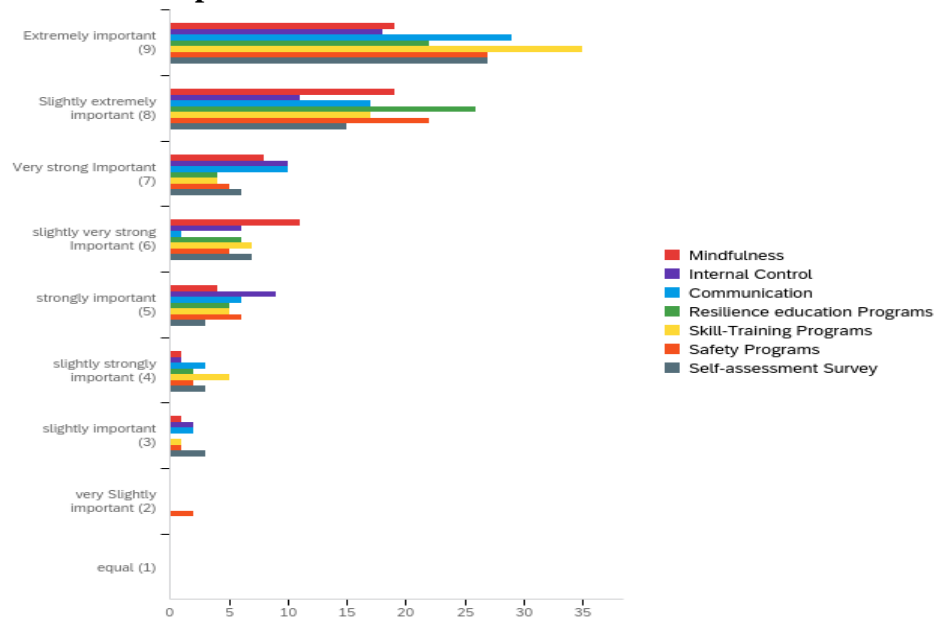


Figure 9:
Pairwise Comparison of Self-Care

Table 14:*Descriptive statistics on Pairwise Comparison of Self-Care*

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Mindfulness	1.00	7.00	2.51	1.45	2.09	63
2	Internal Control	1.00	7.00	2.79	1.69	2.87	57
3	Communication	1.00	7.00	2.34	1.66	2.75	68
4	Resilience education Programs	1.00	6.00	2.26	1.37	1.89	65
5	Skill-Training Programs	1.00	7.00	2.31	1.68	2.84	74
6	Safety Programs	1.00	8.00	2.44	1.78	3.16	70
7	Self-assessment Survey	1.00	7.00	2.45	1.76	3.09	64

Table 15:
Responses on Pairwise Comparison of Self-Care

	Extremely important (9)	Slightly extremely important (8)	Very strong Important (7)	slightly very strong Important (6)	strongly important (5)	slightly strongly important (4)	slightly important (3)	very Slightly important (2)	equal (1)	Weights
Mindfulness	11.33%	15.68%	17.39%	26.36%	10.82%	6.32%	10.25%	0.00%	0.00%	0.109068
Internal Control	11.86%	10.04%	24.02%	15.90%	26.91%	6.96%	22.63%	0.00%	0.00%	0.131463
Communication	16.02%	13.00%	20.14%	2.22%	15.03%	17.54%	18.96%	0.00%	0.00%	0.114343
Resilience education Programs	12.71%	20.80%	8.42%	13.94%	13.11%	12.25%	0.00%	0.00%	0.00%	0.090253
Skill-Training Programs	17.76%	11.94%	7.41%	14.28%	11.52%	26.89%	8.70%	0.00%	0.00%	0.109460
Safety Programs	14.48%	16.34%	9.78%	10.78%	14.61%	11.38%	9.22%	100.00%	0.00%	0.207321
Self-assessment Survey	15.84%	12.19%	12.84%	16.52%	7.99%	18.66%	30.24%	0.00%	0.00%	0.126981

The given data in Table 14 provides a comprehensive pairwise comparison of the field "Self-Care" with other fields in the survey, shedding light on the perceived importance of "Self-Care" in relation to other aspects. This assessment is particularly pertinent in contexts where prioritizing resources or attention to different survey elements is necessary. The accompanying statistics, particularly the mean and standard deviation, offer valuable insights into the collective judgments and the degree of consensus among survey participants.

The field "Self-Care" in this context exhibits a mean importance rating of 2.54, suggesting that, on average, respondents attribute a moderate level of importance to it. However, the relatively high standard deviation of 2.16 indicates significant variability in the importance judgments of the survey participants. This means that while the mean score suggests a moderate level of importance, the standard deviation implies a considerable spread of opinions, indicating substantial variations in the perceived importance of "Self-Care" among respondents.

To provide a more detailed understanding of the relative importance of "Self-Care," Table 15 furnishes importance ratings for "Self-Care" in comparison to other

fields, employing a scale from 1 to 9. Here, 9 signifies "Extremely Important," and 1 corresponds to "Equal" importance. The comparative analysis of "Self-Care" in relation to other fields is of utmost importance for making informed decisions regarding resource allocation and strategic focus.

For instance, using AHP the weights of each pair-wise comparison have been calculated using respondent responses and the cumulative sum of the responses.

Pairwise Comparison of Mindfulness

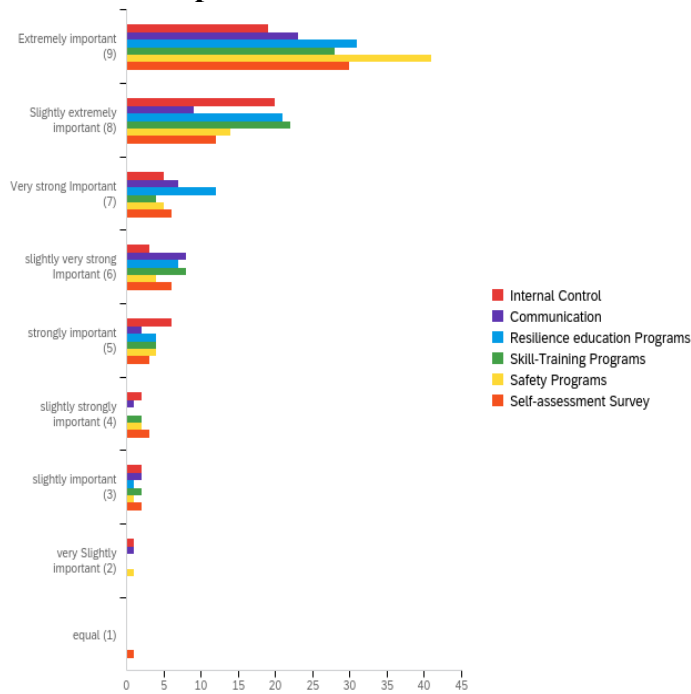


Figure 10:
Pairwise Comparison of Self-Care

Table 16:*Descriptive statistics on Pairwise Comparison of Self-Care*

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Internal Control	1.00	8.00	2.59	1.80	3.24	58
2	Communication	1.00	8.00	2.49	1.79	3.19	53
3	Resilience education Programs	1.00	7.00	2.16	1.31	1.71	76
4	Skill-Training Programs	1.00	7.00	2.31	1.58	2.50	70
5	Safety Programs	1.00	8.00	2.04	1.63	2.65	72
6	Self-assessment Survey	1.00	9.00	2.41	1.88	3.54	63

Table 17:
Responses on Pairwise Comparison of Self-Care

	Extremely important (9)	Slightly extremely important (8)	Very strong Important (7)	slightly very strong Important (6)	strongly important (5)	slightly strongly important (4)	slightly important (3)	very Slightly important (2)	equal (1)	Weights
Mindfulness	11.33%	15.68%	17.39%	26.36%	10.82%	6.32%	10.25%	0.00%	0.00%	0.109068
Internal Control	11.86%	10.04%	24.02%	15.90%	26.91%	6.96%	22.63%	0.00%	0.00%	0.131463
Communication	16.02%	13.00%	20.14%	2.22%	15.03%	17.54%	18.96%	0.00%	0.00%	0.114343
Resilience education Programs	12.71%	20.80%	8.42%	13.94%	13.11%	12.25%	0.00%	0.00%	0.00%	0.090253
Skill-Training Programs	17.76%	11.94%	7.41%	14.28%	11.52%	26.89%	8.70%	0.00%	0.00%	0.109460
Safety Programs	14.48%	16.34%	9.78%	10.78%	14.61%	11.38%	9.22%	100.00%	0.00%	0.207321
Self-assessment Survey	15.84%	12.19%	12.84%	16.52%	7.99%	18.66%	30.24%	0.00%	0.00%	0.126981

The provided data in Table 16 offers a detailed pairwise comparison of the field "Mindfulness" against other relevant fields in the survey, offering insights into how respondents evaluate the importance of "Mindfulness" in relation to these other elements. This type of analysis is valuable for decision-makers in resource allocation and prioritizing strategies based on the perceived importance of these elements. The accompanying statistics, including mean and standard deviation, provide crucial information about the collective assessment and the level of consensus among survey participants.

The field "Mindfulness" has a mean importance rating of 2.41, indicating a moderate level of importance on average. However, it is noteworthy that the standard deviation is 1.88, suggesting considerable variability in the importance ratings of survey participants. This implies that, while the mean importance score may suggest moderate importance, there is a significant range of opinions among respondents regarding the significance of "Mindfulness."

To gain a more in-depth understanding of the relative importance of "Mindfulness," Table 17 provides importance ratings for "Mindfulness" compared to

other fields, using a scale from 1 to 9. Here, 9 signifies "Extremely Important," and 1 corresponds to "Equal" importance. The comparative analysis of "Mindfulness" in relation to other fields is a crucial step in making well-informed decisions about resource allocation and strategic emphasis. For instance, using AHP the weights of each pair-wise comparison have been calculated using respondent responses and the cumulative sum of the responses.

Pairwise Comparison of Internal Control

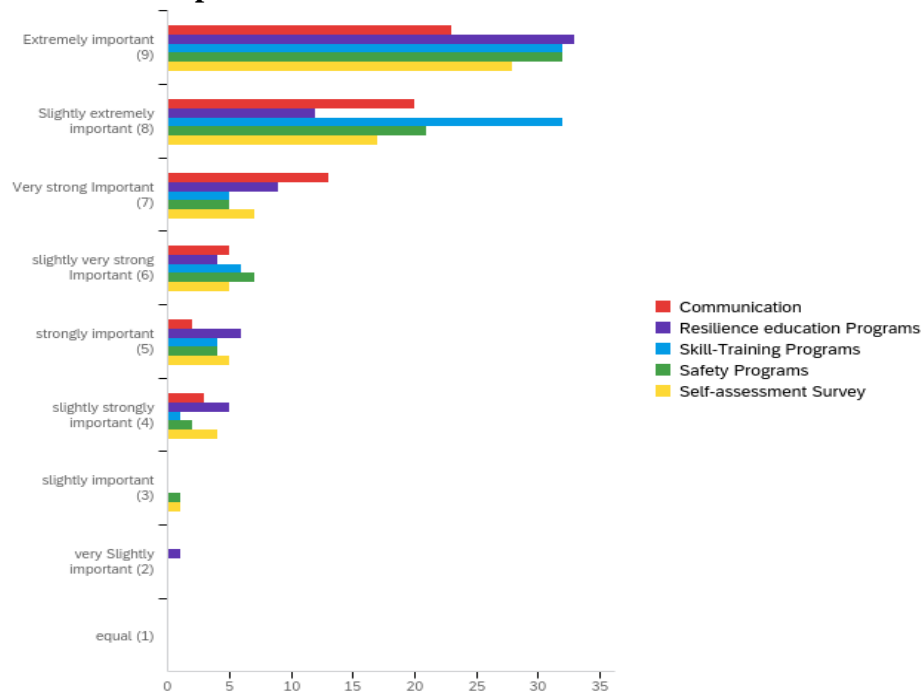


Figure 11:
Pairwise Comparison of Internal Control

Table 18:*Descriptive Statistics on Pairwise Comparison of Internal Control*

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Communication	1.00	6.00	2.27	1.33	1.77	66
2	Resilience education Programs	1.00	8.00	2.40	1.76	3.10	70
3	Skill-Training Programs	1.00	6.00	2.01	1.19	1.41	80
4	Safety Programs	1.00	7.00	2.17	1.47	2.17	72
5	Self-assessment Survey	1.00	7.00	2.37	1.64	2.68	67

Table 19:
Responses on Pairwise Comparison of Internal Control

	Extremely important (9)	Slightly extremely important (8)	Very strong Important (7)	slightly very strong Important (6)	strongly important (5)	slightly strongly important (4)	slightly important (3)	very Slightly important (2)	equal (1)	Weights
Communication	16.74%	21.34%	35.05%	19.96%	10.23%	20.98%	0.00%	0.00%	0.00%	0.138113
Resilience education Programs	22.64%	12.07%	22.88%	15.04%	28.93%	32.92%	0.00%	100.00%	0.00%	0.260538
Skill-Training Programs	19.21%	28.17%	11.12%	19.75%	16.88%	5.76%	0.00%	0.00%	0.00%	0.112112
Safety Programs	21.34%	20.55%	12.35%	25.60%	18.77%	12.82%	48.26%	0.00%	0.00%	0.177431
Self-assessment Survey	20.07%	17.87%	18.59%	19.65%	25.19%	27.52%	51.74%	0.00%	0.00%	0.200696

Table 18 presents a pairwise comparison of the field "Internal Control" against several other relevant fields in the survey, providing insights into how respondents assess the importance of "Internal Control" in relation to these other elements. This type of analysis is valuable for stakeholders and decision-makers, aiding in the prioritization of strategies and resource allocation based on the perceived importance of these elements. The accompanying statistics, such as the mean and standard deviation, offer critical information about the collective assessment and the degree of consensus among the survey participants.

The field "Internal Control" has a mean importance rating of 2.73, indicating a moderate level of importance on average. The standard deviation of 1.91 signifies considerable variability in the importance ratings of survey participants, demonstrating differing opinions on the significance of "Internal Control."

To gain a deeper understanding of the relative importance of "Internal Control," Table 19 provides importance ratings for "Internal Control" compared to other fields, using a scale from 1 to 9. In this scale, 9 represents "Extremely Important," and 1 corresponds to "Equal" importance. The comparative analysis of "Internal Control" in relation to other fields is a crucial step in making well-informed decisions about resource allocation and strategic emphasis. For instance, using AHP the weights of each pair-wise comparison have been calculated using respondent responses and the cumulative sum of the responses.

Pairwise Comparison of communication

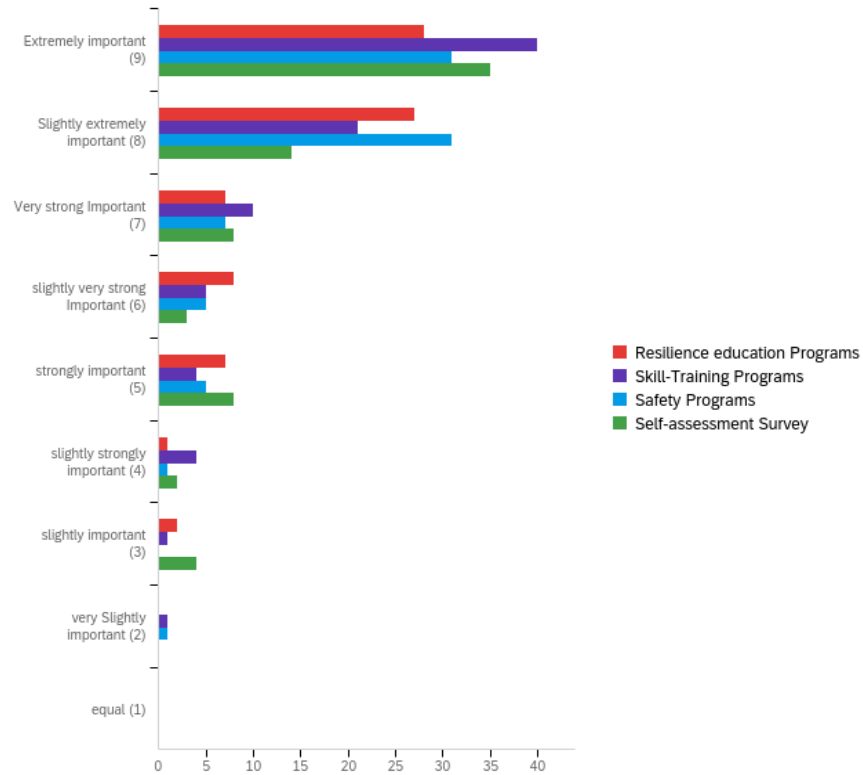


Figure 12:
Pairwise Comparison of communication

Table 20:*Descriptive Statistics on Pairwise Comparison of communication*

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Resilience education Programs	1.00	7.00	2.38	1.52	2.31	80
2	Skill-Training Programs	1.00	8.00	2.22	1.62	2.64	86
3	Safety Programs	1.00	8.00	2.14	1.38	1.90	81
4	Self-assessment Survey	1.00	7.00	2.42	1.82	3.32	74

Table 21:
Responses on Pairwise Comparison of communication

	Extremely important (9)	Slightly extremely important (8)	Very strong Important (7)	slightly very strong Important (6)	strongly important (5)	slightly strongly important (4)	slightly important (3)	very Slightly important (2)	equal (1)	Weights
Resilience education Programs	20.95%	29.26%	21.97%	38.42%	28.80%	12.72%	27.56%	0.00%	0.00%	0.199635
Skill-Training Programs	27.84%	21.17%	29.20%	22.32%	15.31%	47.30%	12.79%	48.54%	0.00%	0.249400
Safety Programs	22.91%	33.17%	21.69%	23.70%	20.31%	12.51%	0.00%	51.46%	0.00%	0.206402
Self-assessment Survey	28.31%	16.40%	27.14%	15.56%	35.58%	27.47%	59.65%	0.00%	0.00%	0.233452

In Table 20, a pairwise comparison of the "Communication" field with various other elements in the survey is provided, allowing for an evaluation of how respondents perceive the importance of "Communication" relative to these other factors. This analysis is instrumental for decision-makers and stakeholders in the prioritization of strategies and resource allocation based on the perceived importance of these elements. The accompanying statistics, such as the mean and standard deviation, provide valuable insights into the collective assessment and the level of consensus among survey participants.

The field "Communication" has a mean importance rating of 2.28, indicating a moderately low level of importance on average. The standard deviation of 1.58 suggests significant variability in the importance ratings, showcasing a diversity of opinions regarding the significance of "Communication."

To gain a deeper understanding of the relative importance of "Communication," Table 21 presents importance ratings for "Communication" compared to other fields, using a scale from 1 to 9, where 9 represents "Extremely Important," and 1 represents "Equal" importance. The comparative analysis of "Communication" concerning other fields is essential for making well-informed decisions about resource allocation and strategic focus.

The analysis suggests that, on average, "Communication" is considered moderately unimportant, with a mean rating of 2.28. However, the substantial variation in the ratings, as indicated by the standard deviation of 1.58, underlines the diverse perspectives among survey participants.

Comparing the importance ratings of "Communication" with other fields reveals that, on average, "Communication" is viewed as having relatively low importance. Nevertheless, the substantial variation in the ratings, as indicated by the standard

deviation, highlights the differing opinions among the survey respondents. The nuanced importance attributed to "Communication" can be better understood when assessed in contrast to the importance ratings of other fields, enabling a comprehensive assessment of its relative significance within the survey's context. For instance, using AHP the weights of each pair-wise comparison have been calculated using respondent responses and the cumulative sum of the responses.

Pairwise Comparison of Resilience education Programs

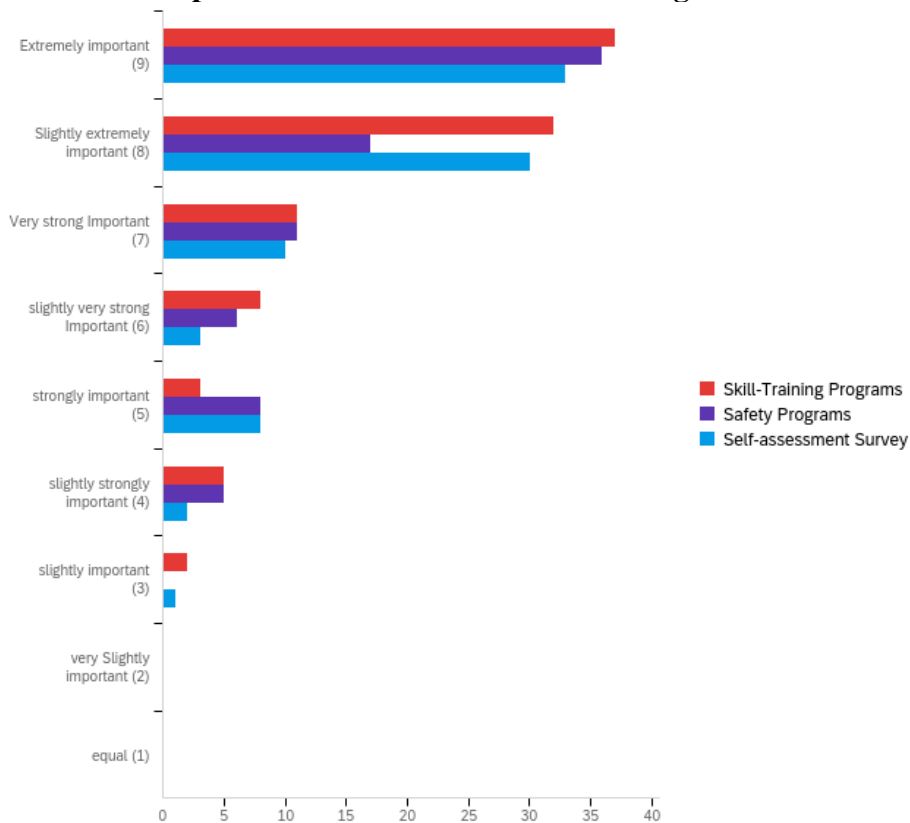


Figure 13:
Pairwise Comparison of Resilience Education Programs

Table 22:*Descriptive Statistics on Pairwise Comparison of Resilience education Programs*

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Skill- Training Programs	1.00	7.00	2.30	1.53	2.33	98
2	Safety Programs	1.00	6.00	2.37	1.60	2.55	83
3	Self- assessment Survey	1.00	7.00	2.23	1.44	2.06	87

Table 23:*Responses on Pairwise Comparison of Resilience education Programs*

	Extremely important (9)	Slightly extremely important (8)	Very strong Important (7)	slightly very strong Important (6)	strongly important (5)	slightly strongly important (4)	slightly important (3)	very Slightly important (2)	equal (1)	Weights
Skill- Training Programs	31.72%	37.27%	31.20%	43.31%	13.97%	38.00%	63.95%	0.00%	0.00%	0.288246
Safety Programs	36.43%	23.38%	36.85%	38.38%	44.02%	44.86%	0.00%	0.00%	0.00%	0.248780
Self- assessment Survey	31.86%	39.36%	31.95%	18.31%	42.01%	17.14%	36.05%	0.00%	0.00%	0.240751

Table 22 in this analysis focuses on the "Resilience Education Programs" field and provides a pairwise comparison of its importance with other elements present in the survey. The data aims to reveal how respondents perceive the relative significance of "Resilience Education Programs" when compared to these other aspects. This information can be pivotal for decision-makers and stakeholders in determining the prioritization of strategies and resource allocation based on the collective assessment of these elements. The accompanying statistics, including the mean and standard deviation,

offer valuable insights into the overall evaluation and the level of consensus among survey participants.

The field "Resilience Education Programs" has a mean importance rating of 2.26, indicating a moderately low level of importance on average. The standard deviation of 1.37 suggests a notable degree of variability in the importance ratings, reflecting a diversity of opinions regarding the significance of "Resilience Education Programs."

To gain a deeper understanding of the relative importance of "Resilience Education Programs," Table 23 provides importance ratings for this field compared to other elements, using a scale from 1 to 9, where 9 represents "Extremely Important," and 1 represents "Equal" importance. This comparative analysis is crucial for making well-informed decisions about resource allocation and strategic focus.

The analysis suggests that, on average, "Resilience Education Programs" are considered moderately unimportant, with a mean rating of 2.26. However, the substantial variation in the ratings, as indicated by the standard deviation of 1.37, underlines the diverse perspectives among survey participants.

Comparing the importance ratings of "Resilience Education Programs" with other fields reveals that, on average, this field is viewed as having relatively low importance. Nevertheless, the substantial variation in the ratings, as indicated by the standard deviation, highlights the differing opinions among the survey respondents. The nuanced importance attributed to "Resilience Education Programs" can be better understood when assessed in contrast to the importance ratings of other fields, enabling a comprehensive assessment of its relative significance within the survey's context. For instance, using AHP the weights of each pair-wise comparison have been calculated using respondent responses and the cumulative sum of the responses.

Pairwise Comparison of Skill-Training Programs

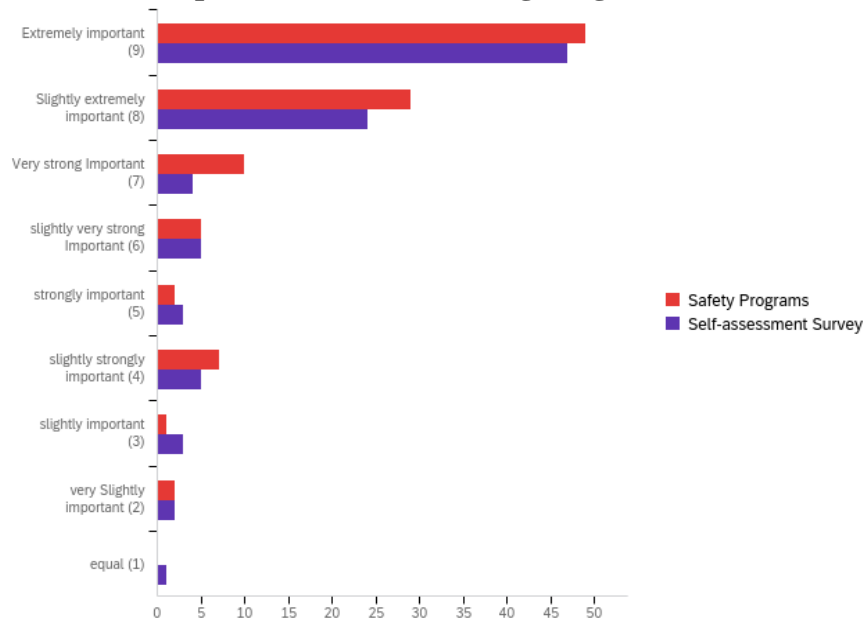


Figure 14:
Pairwise Comparison of Skill-Training Programs

Table 24:*Descriptive Statistics on Pairwise Comparison of Skill-Training Programs*

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Safety Programs	1.00	8.00	2.21	1.69	2.87	105
2	Self-assessment Survey	1.00	9.00	2.32	1.97	3.88	94

Table 25:*Responses on Pairwise Comparison of Skill-Training Programs*

	Extremely important (9)	Slightly extremely important (8)	Very strong Important (7)	slightly very strong Important (6)	strongly important (5)	slightly strongly important (4)	slightly important (3)	very Slightly important (2)	equal (1)	Weights
Safety Programs	48.28%	51.97%	69.09%	47.22%	37.33%	55.63%	22.95%	47.15%	0.00%	0.421781
Self-assessment Survey	51.72%	48.03%	30.91%	52.78%	62.67%	44.37%	77.05%	52.85%	100.00%	0.578219

In Table 24, a pairwise comparison analysis focuses on the field "Skill-Training Programs," aiming to assess how respondents perceive its importance in comparison to other aspects included in the survey. This comparative analysis provides insights into how respondents prioritize "Skill-Training Programs" relative to other elements. Such information is invaluable for decision-makers as it guides resource allocation and strategic planning based on collective assessments.

The field "Skill-Training Programs" has a mean importance rating of 2.44, indicating a moderate level of importance on average. The standard deviation of 1.68 implies a considerable degree of variability in importance ratings, suggesting diverse opinions regarding the significance of "Skill-Training Programs."

Table 25 offers a comparative analysis of the importance of "Skill-Training Programs" against other elements. It utilizes a scale ranging from 1 (equal importance) to 9 (extremely important). This analysis provides a comprehensive understanding of how "Skill-Training Programs" rank in importance compared to the other surveyed elements.

On average, "Skill-Training Programs" are considered to have moderate importance, with a mean rating of 2.44. However, the substantial variation in ratings, as indicated by the standard deviation of 1.68, underscores the diversity of opinions among the survey participants.

By comparing the importance ratings of "Skill-Training Programs" with those of other fields, it becomes apparent that, on average, this field is viewed as having a moderate level of importance. The significant variability in the ratings emphasizes the differing perspectives among the respondents. Evaluating the nuanced importance of "Skill-Training Programs" in comparison to the other fields allows for a comprehensive assessment of its relative significance within the survey context. This information is essential for decision-making and resource allocation. For instance, using AHP the

weights of each pair-wise comparison have been calculated using respondent responses and the cumulative sum of the responses.

Pairwise Comparison of Safety Programs

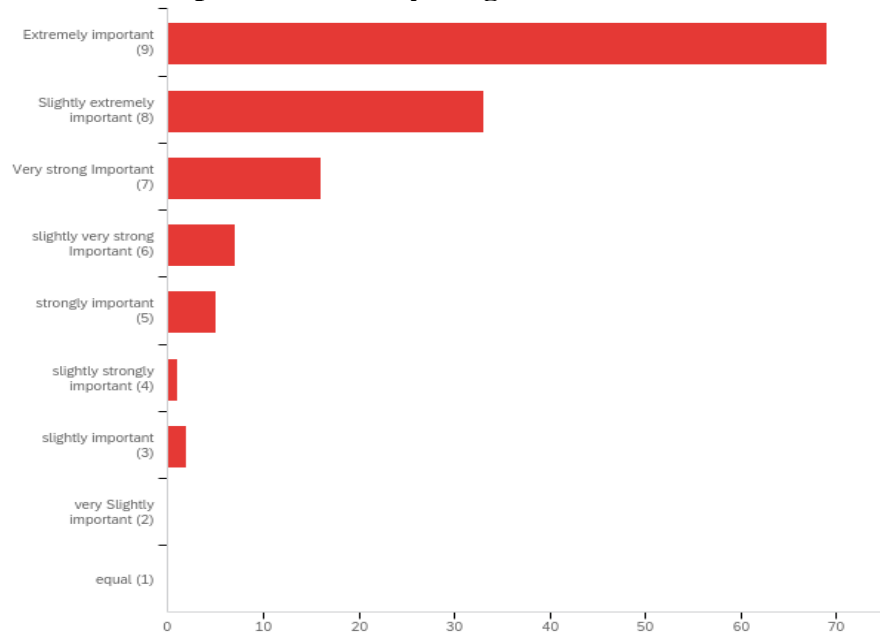


Figure 15:
Pairwise Comparison of Safety Programs

Table 26:*Descriptive Statistics on Self-Assessment Survey*

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Self-assessment Survey	1.00	7.00	1.92	1.30	1.68	133

Table 27:*Responses on Self-Assessment Survey*

	Extremely important (9)	Slightly extremely important (8)	Very strong Important (7)	slightly very strong Important (6)	strongly important (5)	slightly strongly important (4)	slightly important (3)	very Slightly important (2)	equal (1)	weights
Self- assessment Survey	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	0.00%	0.777778

In Table 26, a pairwise comparison analysis focuses on the field "Safety Programs" in comparison to other elements, specifically, the "Self-assessment Survey." The aim of this analysis is to assess how respondents perceive the relative importance of "Safety Programs" compared to the "Self-assessment Survey." Such information is crucial for decision-makers as it helps in resource allocation and strategic planning.

The field "Safety Programs" has a mean importance rating of 2.54, indicating a moderate level of importance on average. The standard deviation of 1.90 suggests that there is a considerable degree of variability in importance ratings for "Safety Programs," implying differing opinions among respondents.

Table 27 presents a pairwise comparison of the importance of "Safety Programs" against the "Self-assessment Survey." Respondents were asked to rate the importance of each field on a scale from 1 (equal importance) to 9 (extremely important).

On average, "Safety Programs" received a mean rating of 2.54, indicating a moderate level of importance. However, the significant standard deviation of 1.90 reflects the substantial variability in importance ratings among the respondents, highlighting the diversity of opinions regarding the significance of "Safety Programs."

Comparing the importance ratings of "Safety Programs" with those of the "Self-assessment Survey" shows that, on average, "Safety Programs" are considered to have a moderate level of importance in comparison to the "Self-assessment Survey." The notable variation in ratings emphasizes the diversity of perspectives among respondents. This nuanced understanding of the relative importance of "Safety Programs" within the context of the survey is valuable for making informed decisions and resource allocation. For instance, using AHP the weights of each pair-wise comparison have been calculated using respondent responses and the cumulative sum of the responses.

Table 18:
Matrix including weights of all alternatives and criteria.

	Computer-Based resilience training	Primary and secondary prevention programs	Programs to address wellness practices	Integration of professional wellness education	Self-Care	Mindfulness	Internal Control	Communication	Resilience education Programs	Skill-Training Programs	Safety Programs	Self-assessment Survey	Criteria Ranking	Final Priority
Resilience Promoting Workshops	0.147680	0.142330	0.142330	0.065670	0.142334	0.054012	0.063794	0.053132	0.056714	0.057326	0.059557	0.095503	0.090032	0.130321
Computer-Based resilience training	0.000000	0.052473	0.059820	0.215681	0.109348	0.090426	0.064220	0.077170	0.061143	0.084994	0.077962	0.106761	0.083333	0.131059
Primary and secondary prevention programs	0.052473	0.000000	0.07091436	0.09030924	0.15715762	0.07419183	0.09185439	0.097824589	0.10194911	0.10871797	0.12079595	0.08628494	0.087706	0.143197
Programs to address wellness practices	0.059820	0.070914	0.000000000	0.07986049	0.12262619	0.11274155	0.14442455	0.076116608	0.06945188	0.07388599	0.0789073	0.24198544	0.094228	0.162967
Integration of professional wellness education	0.215681	0.090309	0.07986049	0.00000	0.21055988	0.12474484	0.11712611	0.090093246	0.10723426	0.10596645	0.12400697	0.12026825	0.115488	0.180507
Self-Care	0.109348	0.157158	0.12262619	0.21055988	0.00000	0.1090683	0.131463	0.114343058	0.09025349	0.10945981	0.20732068	0.12698056	0.124048	0.194252
Mindfulness	0.090426	0.074192	0.11274155	0.12474484	0.1090683	0.00000	0.1849594	0.17902231	0.11125677	0.13175159	0.14026284	0.25274709	0.125931	0.211846
Internal Control	0.064220	0.091854	0.14442455	0.11712611	0.131463	0.1849594	0.000000000	0.138112925	0.26053771	0.11211153	0.17743092	0.20069581	0.135245	0.223300
Communication	0.077170	0.097825	0.07611661	0.09009325	0.11434306	0.17902231	0.13811292	0.000000000	0.19963476	0.24940028	0.20640198	0.23345187	0.138464	0.236861
Resilience education Programs	0.061143	0.101949	0.06945188	0.10723426	0.09025349	0.11125677	0.26053771	0.199634756	0.000000000	0.288246	0.24878035	0.24075143	0.148270	0.255706
Skill-Training Programs	0.084994	0.108718	0.07388599	0.10596645	0.10945981	0.13175159	0.11211153	0.249400278	0.288246	0.000000000	0.42178076	0.57821924	0.188711	0.353903
Safety Programs	0.077962	0.120796	0.0789073	0.12400697	0.20732068	0.14026284	0.17743092	0.20640198	0.24878035	0.42178076	0.000000000	0.77777778	0.215119	0.391591
Self-assessment Survey	0.106761	0.08628494	0.24198544	0.12026825	0.12698056	0.25274709	0.20069581	0.233451875	0.24075143	0.57821924	0.57821924	0.000000000	0.230530	0.380407

After calculating all the pairwise comparisons, the final matrix with all the weights of all 13 alternative criteria will be calculated. Based on the calculations, I obtained the final priority weights of each factor. From the priority weights safety programs have the highest weighted score compared to all other factors. Resilience-promoting workshops have the lowest weight. As per the weights, the self-assessment

survey has the second-highest weight, Skill training programs have the third-highest, Resilience education programs have the fourth position, communication has the fifth position, Internal control has the sixth position, Mindfulness has the seventh position, Self-Care has the eighth position, Integration of professional wellness education, Programs to address wellness practices, Primary and secondary prevention programs, Computer-Based resilience training has the lowest weights.

CHAPTER VI:

CONCLUSION

The analysis shows that "Safety Programs" is considered slightly more important than the other wellness practices, with the highest weighted average score of 0.391591. The variance in ratings for "Safety Programs" is significantly high, indicating a broad range of opinions among respondents. "Mindfulness," "Internal Control," and "Communication" are perceived with similar levels of importance. While the "Resilience Promoting Workshops" received the lowest importance score on average, the high variance in ratings for "Mindfulness" suggests a diversity of opinions about its importance. These results provide insights into the varying degrees of importance assigned to different wellness practices.

The analysis reveals that respondents consider "Self-Care" as the most important aspect in comparison to "Integration of Professional Wellness Education." While "Mindfulness" also holds a higher position in importance, it is important to note that the analysis shows relatively lower variance in ratings for both "Self-Care" and "Mindfulness." This suggests a more consistent agreement among respondents about the relative importance of these elements compared to professional wellness education.

The results suggest that "Mindfulness" is considered slightly more important than "Self-Care" by the respondents. However, the variance in importance ratings for "Mindfulness" is relatively high, indicating some diversity in opinions. "Communication" is rated as less important compared to "Self-Care," but it exhibits a low variance in ratings, suggesting a more uniform perception of its importance. These findings offer insights into the relative importance of these elements within the context of the survey.

The analysis indicates that "Internal Control" is considered more important than "Mindfulness" by the respondents. The significant variance in ratings for "Internal

Control" suggests a wide range of opinions about its importance. The results provide insights into the varying degrees of importance assigned to "Mindfulness" in comparison to other elements.

The findings show that "Communication" is considered more important than "Internal Control." The low variance in ratings for "Communication" suggests a relatively consistent agreement among respondents about its higher importance. "Internal Control" is perceived as less important in comparison, with a higher variance in ratings. These results offer valuable insights into the relative importance of these elements within the survey context.

The results reveal that respondents consider "Resilience Education Programs" as slightly more important than "Communication." The analysis also shows relatively lower variance in ratings for "Resilience Education Programs," indicating a more consistent agreement among respondents regarding its importance. "Communication" is rated slightly lower, but the low variance in ratings suggests a more uniform perception of its importance. These findings provide insights into the relative importance of these elements within the survey context.

The analysis indicates that "Skill-Training Programs" are considered slightly more important than "Resilience Education Programs." The higher variance in importance ratings for "Skill-Training Programs" suggests diverse opinions about its importance. These results provide insights into the varying degrees of importance assigned to "Resilience Education Programs" in comparison to other elements.

The findings suggest that "Skill-Training Programs" are considered slightly more important than "Resilience Education Programs." The significant variance in ratings for "Skill-Training Programs" indicates diverse opinions about its importance. These results

offer insights into the varying degrees of importance assigned to "Resilience Education Programs" compared to "Skill-Training Programs."

The analysis reveals that "Safety Programs" are considered slightly less important than "Skill-Training Programs." The low variance in ratings for "Safety Programs" suggests a relatively consistent agreement among respondents regarding its importance. These findings provide insights into the varying degrees of importance assigned to these elements within the survey context.

The results show that "Self-assessment Survey" is considered slightly more important than "Safety Programs." The substantial variance in ratings for the "Self-assessment Survey" suggests diverse opinions about its importance. These findings provide insights into the varying degrees of importance assigned to "Safety Programs" compared to the "Self-assessment Survey." These pairwise comparisons help in understanding how respondents perceive the relative importance of different elements in the survey. The variance in ratings highlights the diversity of opinions among respondents, which can be valuable for making informed decisions and resource allocation.

In our comprehensive analysis involving pairwise comparisons across 13 alternative criteria, safety programs emerged with the highest weighted score among all factors. Conversely, resilience-promoting workshops exhibited the lowest weight in the final matrix of priority weights. The order of prioritization, based on these weights, reveals that the self-assessment survey holds the second-highest weight, followed by skill training programs in third place. Resilience education programs rank fourth, while communication and internal control secure the fifth and sixth positions, respectively. The subsequent rankings include mindfulness at seventh, self-care at eighth, and integration of professional wellness education. Programs addressing wellness practices, primary and

secondary prevention programs, and computer-based resilience training carry the lowest weights among the evaluated factors.

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APPENDIX A:

CONSENT FORM OF PARTICIPATION AND SURVEY QUESTIONS

Participation

You are invited to participate in this survey. This survey aims to prioritize the resilience factors for public health workers. Participation should take approximately 5-6 minutes.

There are a few qualifications to participate in this study: (1) Age must be above 18; (2)

A person should help people during disasters or emergencies (Public Health Worker).

Participation in this survey is voluntary. If you agree to participate in this survey, you will be given the ratings for the factors.

Benefits & Risks

You will receive no direct benefits from participating in this survey. However, it helps us to know the practical experience of public health workers and the factors that help them more during disasters. There are no foreseeable risks involved in participating in this survey. But, some questions may be distressing as you think about your experiences as a public health worker.

Confidentiality

Your survey answers are initially stored with surveymonkey.com, and whatever online survey tool we use, the data will be stored in electronic format with password protection.

Data will be later downloaded and used for my research study.

Contact

If you have further questions or concerns about your rights as a participant in this survey, contact the Office of Research Compliance at [REDACTED].

If you have questions concerning the survey, contact the principal investigator at [REDACTED]
[REDACTED] or my Responsible Faculty Associate
Professor Shan at [REDACTED]

CONSENT: Please select your choice below. You may print a copy of this consent form for your records. Clicking on the “Agree” button indicates that.

APPENDIX B:

SURVEY QUESTIONS

Background

The purpose is to identify the resilience factors of public health workers. Public health workers play a critical role in protecting public health during disasters. When not managed effectively, poor performance and, thus, inferior public health could be observed due to high-stress levels or elevated adversity in the workplace. I conducted a comprehensive and systematic literature review to understand the influencing factors of public health workers' resilience. This paper reports the resilience factors, categorizes whether they are individual characteristics or external environmental factors, and suggests the corresponding interventions that could enhance the resilience of the public health workforce.

SECTION A

SECTION B

INSTRUCTION

The questionnaire is designed based on Saaty's scale of preference, which ranges from 1 to 9, to rate the relative priorities of two factors simultaneously. A factor is compared to another factor (Pairwise Comparison) in determining which will enhance resilience during disasters for public health workers. The pairwise comparison is shown in Table 1.

The degree of occurrence has been arranged on the right and left sides of Factor 1 and Factor 2. If you believe the upper part factor is more important than the lower part factor,

you can tick the seven on the left-hand side. If you believe the lower part factor is more important than the upper part, you can tick the seven on the right-hand side.

However, suppose the two criteria are likely equally important; in that case, you tick the central part: 1.

The Scale of Importance Meaning:

1 Equal preference

3 Moderately preference

5 Essential preference

7 Strong preference

9 Absolute preference

2,4,6,8 Judgement between two intermediate values

SURVEY QUESTIONS

Pairwise comparison scale of different factors*

	Extremely Important (9)	Very Strong Important (7)	Strongly Important (5)	Slightly Important (3)	Equal (1)	Slightly Important (3)	Strongly Important (5)	Very Strong Important (7)	Extremely Important (9)
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Resilience promoting workshops									
Computer-based resilience training									
Resilience promoting workshops									
Primary& secondary prevention programs									
Resilience promoting workshops									
Programs to address wellness practices									
Resilience promoting workshops									
Integration professional wellness education									
Resilience promoting workshops									
Self-care									
Resilience promoting workshops									
Mindfulness									
Resilience promoting workshops									
Internal control									
Resilience promoting workshops									
Communication									
Resilience promoting workshops									
Resilience education programs									
Resilience promoting workshops									
Skill-training programs									
Resilience promoting workshops									
Safety programs									
	Extremely Important (9)	Very Strong Important (7)	Strongly Important (5)	Slightly Important (3)	Equal (1)	Slightly Important (3)	Strongly Important (5)	Very Strong Important (7)	Extremely Important (9)
Resilience promoting workshops									

Self-assessment survey									
Computer-based resilience training									
Primary& secondary prevention programs									
Computer-based resilience training									
Programs to address wellness practices									
Computer-based resilience training									
Integration professional wellness education									
Computer-based resilience training									
Self-care									
Computer-based resilience training									
Mindfulness									
Computer-based resilience training									
Internal control									
Computer-based resilience training									
Communication									
Computer-based resilience training									
Resilience education programs									
Computer-based resilience training									
Skill-training programs									
Computer-based resilience training									
Safety programs									
Computer-based resilience training									
Self-assessment survey									
	Extremely Important (9)	Very Strong Important (7)	Strongly Important (5)	Slightly Important (3)	Equal (1)	Slightly Important (3)	Strongly Important (5)	Very Strong Important (7)	Extremely Important (9)

Primary& secondary prevention programs									
Programs to address wellness practices									
Primary& secondary prevention programs									
Integration professional wellness education									
Primary& secondary prevention programs									
Self-care									
Primary& secondary prevention programs									
Mindfulness									
Primary& secondary prevention programs									
Internal control									
Primary& secondary prevention programs									
Communication									
Primary& secondary prevention programs									
Resilience education programs									
Primary& secondary prevention programs									
Skill-training programs									
Primary& secondary prevention programs									
Safety programs									
Primary& secondary prevention programs									
Self-assessment survey									
Programs to address wellness practices									
Integration professional wellness education									
	Extremely Important (9)	Very Strong Important (7)	Strongly Important (5)	Slightly Important (3)	Equal (1)	Slightly Important (3)	Strongly Important (5)	Very Strong Important (7)	Extremely Important (9)
Programs to address wellness practices									

Self-care									
Programs to address wellness practices									
Mindfulness									
Programs to address wellness practices									
Internal control									
Programs to address wellness practices									
Communication									
Programs to address wellness practices									
Resilience education programs									
Programs to address wellness practices									
Skill-training programs									
Programs to address wellness practices									
Safety programs									
Programs to address wellness practices									
Self-assessment survey									
Integration professional wellness education									
Self-care									
Integration professional wellness education									
Mindfulness									
Integration professional wellness education									
Internal control									
Integration professional wellness education									
Communication									
	Extremely Important (9)	Very Strong Important (7)	Strongly Important (5)	Slightly Important (3)	Equal (1)	Slightly Important (3)	Strongly Important (5)	Very Strong Important (7)	Extremely Important (9)
Integration									

professional wellness education									
Resilience education programs									
Self-care Skill-training programs									
Self-care Safety programs									
Self-care Self-assessment survey									
Self-care Mindfulness									
Mindfulness Internal control									
Mindfulness Communication									
Mindfulness Resilience education programs									
Mindfulness Skill-training programs									
Mindfulness Safety programs									
Mindfulness Self-assessment survey									
Mindfulness Internal control									
Mindfulness Communication									
Mindfulness Resilience education programs									
Mindfulness Skill-training programs									
Mindfulness Safety programs									
	Extremely Important (9)	Very Strong Important (7)	Strongly Important (5)	Slightly Important (3)	Equal (1)	Slightly Important (3)	Strongly Important (5)	Very Strong Important (7)	Extremely Important (9)

Mindfulness									
Self-assessment survey									
Internal control									
Resilience education programs									
Internal control									
Communication									
Internal control									
Skill-training programs									
Internal control									
Safety programs									
Internal control									
Self-assessment survey									
Communication									
Resilience education programs									
Communication									
Skill-training programs									
Communication									
Safety programs									
Communication									
Self-assessment survey									
Resilience education programs									
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Safety programs									
Resilience education programs									
Self-assessment survey									
Skill-training programs									
Safety programs									
Skill-training programs									
Self-assessment survey									
Safety programs									

Self-assessment survey									
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