

**LOOKING BEYOND STIGMA: EFFICACY OF S.E.A EDUCATIONAL MODULE FOR
ATTITUDES TOWARDS MENTAL ILLNESS AMONG UNDERGRADUATE
STUDENTS**



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**Thesis submitted in partial fulfillment of the requirements for the degree of Master of
Clinical Psychology**

Department of Professional Psychology

BAHRIA UNIVERSITY, ISLAMABAD

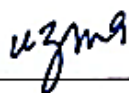
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STUDENTS**

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Abstract

The research study investigated the efficacy of the S.E.A Educational Module in enhancing empathy and reducing stigmatizing attitudes toward mental illness among undergraduate students. A controlled experimental design was utilized, with participants randomly assigned to either a treatment group receiving the S.E.A Educational Module or a control group. Descriptive statistics revealed minimal changes in the control group, while the treatment group exhibited significant improvements in both empathy and attitudes post-intervention. Inferential analyses confirmed these findings, highlighting significant correlations between empathy and attitudes toward mental illness, as well as significant increases in empathy scores among participants in the treatment group. Importantly, the intervention effectively reduced stigmatizing attitudes, as evidenced by significant differences in post-test scores between the treatment and control groups. While no significant gender differences were observed in empathy and attitudes, the overall results underscored the potential of targeted educational interventions to foster empathy and mitigate stigma across genders. These findings have implications for the development and implementation of educational strategies aimed at promoting mental health awareness and empathy in various settings. Further research is warranted to explore the long-term sustainability of these effects and the underlying mechanisms driving these changes, contributing to more effective and inclusive approaches to mental health education.

Keywords: Mental illness, Stigma Reduction, Empathy Enhancement, Educational Intervention, Attitudes towards Mental Illness, S.E.A Educational Module, Mental Health Awareness.

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CHAPTER I**Introduction**

Mental health stands as a fundamental pillar of an individual's holistic well-being, yet the pervasive stigma and discrimination surrounding it remain deeply concerning. Across history, mental illnesses have endured stigmatization, originating from ancient associations with demonology and witchcraft, evolving into the cruel treatment of the mentally ill as if they were caged beasts within institutions like Bethlehem and early mental asylums. Despite societal progress, individuals with mental health conditions still grapple with irrational and detrimental stereotypes. From childhood, societal norms dictate behaviors, molding young minds to perceive any deviation from these norms as "abnormal" or "weird." Such labels carry heavy negative connotations that persist throughout one's life, perpetuating harmful stereotypes and attitudes towards mental health. While there has been a notable increase in awareness surrounding mental health issues, significant segments of society are challenging longstanding norms and beliefs inherited from previous generations. Among these segments, the younger generation emerges as a powerful force, actively dismantling taboos and societal constraints. However, the extent to which this generational shift translates into destigmatizing mental health remains a complex and multifaceted phenomenon requiring thorough examination. While the younger generation exhibits a progressive mindset in various aspects, the question of whether this extends to eradicating the stigma associated with mental illness demands comprehensive study. Only through rigorous research can we gain insights into the dynamics of societal attitudes towards mental health and implement effective interventions to combat stigma.

To delve deeper into this issue, it is essential to explore the evolving perspectives on mental health within different societal demographics, including age groups, cultural backgrounds, and socioeconomic statuses. By understanding the nuanced factors influencing attitudes towards mental illness, policymakers and mental health advocates can tailor interventions to address specific barriers to destigmatization. Moreover, the role of education and awareness campaigns cannot be overstated in challenging misconceptions and fostering empathy towards individuals with mental health conditions. Incorporating mental health education into school curricula can equip future generations with the knowledge and empathy needed to combat stigma from an early age. Additionally, media representation plays a pivotal role in shaping public perceptions of mental health. By portraying accurate and sensitive portrayals of mental illness in mainstream media, we can contribute to normalizing conversations surrounding mental health and reducing stigma. Furthermore, destigmatizing mental health requires a concerted effort from various stakeholders, including government agencies, healthcare providers, community organizations, and the private sector. Collaborative initiatives aimed at promoting mental health awareness, providing accessible mental health services, and fostering supportive environments are essential in creating a society where individuals feel comfortable seeking help without fear of judgment or discrimination. In conclusion, while progress has been made in raising awareness and challenging societal norms surrounding mental health, the battle against stigma remains ongoing. By conducting thorough research, implementing targeted interventions, and fostering collaboration among stakeholders, we can work towards creating a society that embraces mental health as an integral component of overall well-being. It is only through collective action and unwavering commitment that we can create a world where individuals with mental health conditions are treated with dignity, respect, and understanding.

1.1 Background

Stigma surrounding mental health arises from a myriad of factors, including societal misconceptions, lack of awareness, and fear of the unknown. This stigma takes various forms, such as labeling, prejudice, exclusion, and discrimination, and significantly impacts individuals with mental health issues. They are often unfairly branded as "irrational," "dangerous," or "weak," perpetuating damaging stereotypes and further marginalizing them from society. This labeling not only undermines their dignity but also acts as a barrier to seeking help, exacerbating their mental health struggles. Moreover, the stigma associated with mental illness often leads to the unjust perception of individuals as unpredictable or dangerous, resulting in their social isolation. Such societal attitudes can exacerbate existing mental health conditions and hinder recovery. Media portrayals of mental illness often contribute to this negative stigma by sensationalizing and misrepresenting individuals with mental health problems, reinforcing harmful stereotypes. Furthermore, cultural norms and widely held beliefs play a significant role in shaping perceptions of mental illness, contributing to self-stigma among those affected. Internalized stigma can lead individuals to hide their symptoms and emotions, further exacerbating their distress and inhibiting their ability to seek support.

It is crucial to recognize that the societal stigma surrounding mental health not only impacts individuals but also affects broader communities and societies. People living with mental illness may feel isolated and misunderstood, leading to a lack of social support and exacerbating their condition. Therefore, it is essential to foster an environment of understanding and acceptance, where individuals feel comfortable seeking help without fear of judgment or discrimination. In this context, educating the youth about mental health and challenging misconceptions is vital for prevention and treatment efforts. By equipping young people with

accurate information and promoting empathy and acceptance, we can create a future generation that is more supportive and inclusive of individuals with mental health conditions. This requires integrating mental health education into school curriculum and promoting open discussions about mental health within families and communities. Additionally, efforts to combat stigma must involve collaboration among various stakeholders, including government agencies, healthcare providers, advocacy groups, and the media. By working together to promote positive portrayals of mental illness and provide accessible mental health services, we can break down barriers to treatment and support for those in need. Addressing the stigma surrounding mental health is essential for promoting the well-being of individuals and communities. By challenging misconceptions, promoting understanding, and fostering a culture of acceptance, we can create a more supportive environment where everyone has the opportunity to thrive.

A mental illness denotes a health condition characterized by disruptions in emotional, cognitive, or behavioral patterns, often leading to impaired functioning across various facets of life ('What Is Mental Illness?', 2022). Additionally, the National Alliance on Mental Illness (NAMI) defines mental illness as a "medical condition that disrupts a person's thinking, feeling, mood, and/or their ability to relate to others as well as daily functioning" (NAMI, 2022).

Attitudes, as delineated by the American Psychological Association, are enduring evaluations of objects, persons, groups, issues, or concepts along a continuum from negative to positive ('Attitude', 2022). When discussing attitudes towards individuals with mental illnesses, it pertains to beliefs about their condition and their integration into society. According to the World Health Organization (WHO, 2022), approximately 1 in every 8 individuals globally grapples with a mental health disorder. Alarming, WHO (2022) also reports that over 30 million people in Pakistan are affected by some form of mental disorder. Given these statistics, it becomes

imperative to explore the prevailing attitudes of the general public toward mental illness. Unfortunately, public perceptions of mental illness are often skewed due to various factors. The public's misunderstanding of mental illness significantly contributes to the negative attitudes harbored toward individuals struggling with such conditions (Poreddi, Thimmaiah, & Math, 2015). One such factor that may influence these attitudes is the level of empathy exhibited by individuals.

While earlier research sheds light on the detrimental effects of societal misinterpretations and lack of empathy towards mental illness (Poreddi, Thimmaiah, & Math, 2015), recent studies continue to underscore the importance of understanding and addressing these issues. For instance, a study by Smith et al. (2020) found that negative attitudes towards mental illness were correlated with lower levels of empathy among the general public. This suggests that fostering empathy could play a pivotal role in improving societal attitudes towards individuals with mental health conditions. Furthermore, the impact of cultural and societal norms on attitudes towards mental illness cannot be overlooked. Recent research by Gupta and Sagar (2021) highlights how cultural factors influence the perception of mental illness in South Asian communities, including Pakistan. They found that cultural beliefs and stigma surrounding mental health significantly shape attitudes towards individuals with mental illness, often leading to social exclusion and discrimination. In light of these findings, interventions aimed at promoting empathy and understanding, particularly within culturally diverse communities, are paramount. Efforts to educate the public about mental health and combat stigma should be tailored to address cultural-specific beliefs and misconceptions. By fostering a more empathetic and informed society, we can strive towards creating a more inclusive environment where individuals with mental health conditions are supported and accepted.

Empathy, a multifaceted concept encompassing the abilities to perceive, understand, and emotionally connect with others within their own frame of reference (“Empathy”, 2022), plays a crucial role in shaping attitudes towards stigmatized groups. Studies have consistently shown that individuals with higher levels of empathy tend to exhibit more positive attitudes towards marginalized populations (Boag & Carnelley, 2015). Therefore, the present research endeavors to explore the relationship between empathy levels and attitudes towards individuals with mental illness, while also evaluating the effectiveness of the Stigma, Empathy, Attitudes (S.E.A) Educational Module (Praharaj, Salagre, & Sharma., 2021). In recent years, there has been a growing interest in understanding the impact of empathy on attitudes towards mental illness, with scholars delving deeper into the mechanisms underlying this relationship. For instance, a study by Johnson et al. (2019) found that individuals with higher empathy scores demonstrated greater understanding and acceptance of individuals with mental health conditions, highlighting the potential role of empathy in reducing stigma.

Furthermore, recent advancements in educational interventions targeting stigma and empathy have shown promising results in promoting more positive attitudes towards mental illness. The Stigma, Empathy, Attitudes (S.E.A) Educational Module developed by Praharaj, Salagre, and Sharma (2021) represents one such initiative aimed at enhancing empathy and reducing stigma among various populations. However, the efficacy of such interventions in fostering long-term attitude change warrants further investigation. In light of the growing body of research emphasizing the importance of empathy in shaping attitudes towards mental illness, it becomes increasingly pertinent to incorporate empathy-building strategies into educational and intervention programs. By cultivating empathy and understanding, we can create a more inclusive and supportive society for individuals living with mental health conditions.

Praharaj et al. (2021) conducted a comprehensive study aimed at developing and evaluating the effectiveness of the Stigma, Empathy, Attitudes (S.E.A) educational module among undergraduate medical students. This module was meticulously crafted in collaboration with mental health experts, utilizing the modified Delphi process, a method that involves reaching a consensus among a panel of specialists through iterative surveys and discussions. The study encompassed several objectives: firstly, to develop the SEA module tailored for undergraduate students; secondly, to implement the module and assess its impact on students' knowledge about mental illness, attitudes towards the mentally ill, empathy levels, and stigma reduction; and thirdly, to solicit feedback from both faculty and students regarding the module's efficacy and relevance. At the core of the educational session was the researchers' hypothesis that the intervention would lead to an enhancement in students' knowledge about mental illness and empathy, foster a more positive attitude towards individuals with mental health conditions, and ultimately reduce stigma. The interactive nature of the session facilitated an open dialogue, encouraging students to share their personal experiences with mental illness, if any. By normalizing discussions around mental health, the module aimed to break down barriers and reduce the stigma associated with these conditions.

The session also addressed prevalent myths and misconceptions surrounding mental illness, providing evidence-based insights to challenge and debunk such beliefs. By presenting opposing evidence, students were encouraged to critically evaluate their preconceived notions and gain a more nuanced understanding of mental health issues. Additionally, discussions explored the various barriers individuals face when seeking mental health treatment and strategies to overcome stigma, fostering empathy and compassion among participants. A key component of the module was the discussion on empathy, which was illustrated using the "mud

hole" example—an effective metaphor to differentiate between sympathy, overidentification, and empathetic responses. Through this practical demonstration, students gained a deeper understanding of the importance of empathizing with individuals experiencing mental health challenges and the role empathy plays in fostering supportive relationships.

Furthermore, the module incorporated a video clip depicting the stigma associated with schizophrenia, prompting meaningful discussions on the experiences of stigma and its impact on individuals' lives. By shedding light on real-life experiences, students were encouraged to reflect on their own attitudes and beliefs, fostering empathy and understanding towards those affected by mental illness. To ensure active participation and engagement, a variety of interactive techniques were employed during the lecture, including open-ended questions, summarizing exercises, surveys, discussions, and one-minute reflection papers. These techniques not only encouraged active participation but also provided students with opportunities to reflect on their learning and consolidate their understanding of key concepts. In addition to the interactive lecture, small group teaching sessions were conducted during the students' psychiatry rotation. These sessions provided a platform for deeper engagement and facilitated peer-to-peer learning. Students were encouraged to reflect on their learning from the interactive lecture using the 'think-pair-share' technique, fostering collaboration and knowledge sharing among peers. The small group sessions also incorporated role-playing exercises, where students were divided into smaller groups and tasked with enacting scenarios related to hallucination exercises or providing support to friends and others. Each group was provided with a script outlining their roles, ensuring active participation and engagement. Following each role-play, debriefing sessions provided an opportunity for students to reflect on their experiences and discuss pragmatic aspects of empathy, stigma, and attitudes towards mental illness.

Overall, the S.E.A educational module represents a holistic approach to addressing stigma, promoting empathy, and fostering positive attitudes towards mental illness among undergraduate medical students. By integrating evidence-based practices, interactive learning techniques, and real-life experiences, the module provides a comprehensive framework for educating future healthcare professionals on the importance of empathy and understanding in mental health care. The primary aim of the study was to implement the educational module and evaluate its impact on students' understanding of mental illness, their attitudes towards individuals with mental health conditions, levels of empathy, and perceptions of stigma. To achieve this objective, the research employed a pre-test and post-test design, utilizing both control and experimental groups to comprehensively assess the effectiveness of the module.

By utilizing a pre-test and post-test design, the study sought to measure changes in students' knowledge, attitudes, empathy levels, and perceptions of stigma before and after exposure to the educational intervention. This approach allowed for a rigorous evaluation of the module's efficacy in promoting positive outcomes related to mental health awareness and reducing stigma. Moreover, the inclusion of both control and experimental groups enabled to compare the effects of the educational module against a control condition, providing valuable insights into the specific impact of the intervention. By employing a rigorous research design, the study aimed to ensure robust findings and enhance the validity of the results.

1.1.1 Methodological Gap

The preceding research primarily focused on the creation of the S.E.A module (Prahaj et al., 2021). However, the methodology employed was limited to pre-test and post-test analysis within the experimental group. In contrast, the present study adopts a treatment versus control group design, broadening the scope of investigation and thereby enhancing the validity of the

findings. This shift allows for a more comprehensive assessment of the module's effectiveness by comparing outcomes between the treatment and control groups. By adopting this approach, the study aims to elucidate the specific impact of the S.E.A module in comparison to alternative educational interventions or no intervention at all. This methodological refinement not only strengthens the rigor of the research but also provides valuable insights into the relative effectiveness of the S.E.A module compared to other approaches. Additionally, moving beyond the pre-test and post-test analysis enables a more nuanced understanding of the factors influencing students' attitudes, knowledge, and perceptions regarding mental health. Through this enhanced research design, the study endeavors to contribute to the advancement of evidence-based practices in mental health education and stigma reduction initiatives

1.1.2 Population Gap

The previous study primarily concentrated on stigma reduction among medical students, with the population predominantly comprising students from various medical colleges (Prahaj et al., 2021). In contrast, the current study expands its focus to include undergraduate students from diverse fields of study, aiming to assess the effectiveness of the developed module on a broader scale. By extending the scope to encompass undergraduate students from various disciplines, the present study seeks to offer a more comprehensive evaluation of the developed module's efficacy. This broader sampling strategy allows for a more nuanced understanding of how the module impacts attitudes and perceptions related to mental health across different academic backgrounds. Moreover, by including students from diverse fields of study, the research aims to explore the transferability of the developed module beyond medical education. Assessing the module's effectiveness among undergraduate students from various disciplines provides valuable insights into its potential applicability in different educational contexts.

Furthermore, by examining the efficacy of the module among undergraduate students from diverse fields of study, the research contributes to the broader conversation on mental health awareness and stigma reduction initiatives across academia. By engaging students from diverse academic backgrounds, the study aims to foster a more inclusive and supportive campus environment for addressing mental health-related issues. Overall, by extending the focus to include undergraduate students from various fields of study, the present study aims to provide a more comprehensive understanding of the developed module's effectiveness in reducing stigma and promoting mental health awareness among college students. Through this expanded scope, the research endeavors to contribute to the advancement of evidence-based practices in mental health education and stigma reduction initiatives across academic institutions.

1.2 Problem Statement

Existing research indicates the positive impact of empathy on diminishing negative attitudes towards stigmatized groups within society. However, most of these studies are focused on Western cultures, leaving a significant gap in the literature regarding the Pakistani context. Moreover, the effectiveness of the S.E.A educational module, which has shown promise in reducing stigma, has yet to be tested within the Pakistani community. Despite its recent development and initial testing within specific populations, it is crucial to explore its efficacy within the Pakistani cultural context. Considering the cultural similarities between the Pakistani and Indian communities, where the module originated, there remains a need to investigate its applicability in the Pakistani context. However, it is important to acknowledge the diverse factors that distinguish these cultures, including religious backgrounds, which may influence the manifestation and perpetuation of stigma within society. Exploring the effectiveness of the S.E.A educational module in Pakistan could yield valuable insights into its adaptability and relevance

within diverse cultural settings. By conducting empirical research in this context, scholars can better understand how cultural nuances shape attitudes towards mental health and stigma. Additionally, it provides an opportunity to tailor interventions to address the specific needs and challenges faced by the Pakistani community in combating mental health stigma. Moreover, examining the module's effectiveness in Pakistan contributes to the global discourse on mental health education and stigma reduction, highlighting the importance of cultural sensitivity and contextually relevant interventions. By bridging this gap in the literature and addressing the unique socio-cultural factors at play, researchers can pave the way for more inclusive and effective approaches to mental health advocacy and education in diverse communities.

Koenig (2016) explored the intricate relationship between health and religion, particularly within Islamic contexts. The study highlighted how misconceptions about Islamic principles could exacerbate the stigma surrounding mental health issues, leading individuals to avoid seeking professional help. According to Islamic beliefs, everything unfolds according to the will of God, implying that mental health challenges may be perceived as trials or punishments. In line with Islamic teachings, individuals and society at large may attribute mental health struggles to divine will, discouraging the pursuit of professional assistance. Instead, traditional practices such as visiting spiritual healers or relying solely on prayers are often preferred over seeking evidence-based mental health treatment. This reluctance to seek professional help perpetuates the stigma surrounding mental illness and may hinder individuals from accessing appropriate care.

Recent research provides further insights into the complex interplay between religion, mental health, and help-seeking behaviors within Islamic communities. For example, Rahman et

al. (2021) explored the impact of religious beliefs on attitudes towards mental health treatment among Muslims in South Asia. Their findings revealed a strong association between fatalistic religious beliefs and negative attitudes towards seeking professional help for mental health issues. Moreover, a systematic review by Malik et al. (2022) examined the role of religious coping mechanisms in managing mental health challenges among Muslims. The review highlighted the importance of culturally sensitive interventions that integrate religious beliefs and practices into mental health care approaches. However, it also emphasized the need to address religious fatalism and misconceptions that may hinder help-seeking behaviors.

In light of these findings, it becomes evident that addressing mental health stigma within Islamic communities requires a multifaceted approach. By fostering dialogue, promoting education, and integrating culturally sensitive mental health services, we can work towards reducing stigma and improving access to care for individuals struggling with mental illness within religious contexts.

1.3 Purpose of Study

The current investigation aimed to evaluate the effectiveness of the S.E.A intervention in combating the deleterious stigma surrounding individuals grappling with mental health issues. This research endeavor serves as a crucial step towards testing the efficacy of anti-stigma initiatives and lays the groundwork for the implementation of comprehensive anti-stigma programs tailored to address and alleviate stigma where it is most pervasive and impactful. Early intervention targeting students is underscored as pivotal for nurturing empathy, given that attitudes tend to solidify and become increasingly resistant to change as individuals age and progress along their career trajectories (Smith & Weaver, 2006). Moreover, the present study

adopted a treatment versus control group design, encompassing a broader and more diverse sample size, thereby enhancing the robustness of the assessment of this intervention's efficacy.

In addition to Smith and Weaver (2006), previous research by Stuber et al. (2014) emphasizes the critical role of interventions in reshaping societal attitudes towards mental illness. It highlights the necessity of multifaceted approaches, such as educational initiatives, in dismantling stigma and fostering empathy and understanding. Furthermore, findings from a study by Corrigan et al. (2014) underscore the importance of targeted interventions in addressing stigma associated with mental health conditions. They advocate for interventions that not only aim to change attitudes but also promote active participation in mental health care-seeking behaviors. Additionally, research by Subramaniam et al. (2016) highlights the multifactorial nature of stigma towards individuals with mental disorders. Their study emphasizes the need for comprehensive interventions that target various components of stigma, including public attitudes, knowledge, and behavior. By integrating insights from these diverse studies, the current research aims to contribute to the growing body of knowledge on effective strategies for combating mental health stigma and promoting empathy and understanding in society.

1.4 Research Questions

This study aimed to address several key research questions concerning the influence of empathy and the effectiveness of the S.E.A Educational Module in shaping attitudes towards mental illness. Firstly, it sought to explore how empathy influenced attitudes towards mental illness, probing the mechanisms through which individuals' empathetic tendencies may have shaped their perceptions and attitudes towards those with mental health conditions. Additionally, the study examined the manifestation of gender differences in levels of empathy and stigmatizing attitudes towards mental illness within both control and experimental groups, shedding light on

potential disparities and their implications for mental health interventions. Furthermore, the research aimed to evaluate the effects of participating in the S.E.A Educational Module on reducing stigmatizing attitudes towards mental illness, providing insights into the efficacy of the intervention in promoting greater understanding and acceptance. Moreover, it investigated how participation in the module impacted levels of empathy and attitudes towards mental illness within the experimental group compared to the control group, offering valuable comparisons to assess the intervention's effectiveness. Through addressing these research questions, the study aimed to provide a comprehensive understanding of the complex dynamics underlying attitudes towards mental illness and the potential pathways for intervention. The following research questions were used as a basis:

1. What is the influence of empathy on attitudes towards mental illness, both before and after participation in the S.E.A Educational Module?
2. How do gender differences manifest in levels of empathy and stigmatizing attitudes towards mental illness within both control and experimental groups, pre- and post-intervention?
3. What are the effects of participating in the S.E.A Educational Module on reducing stigmatizing attitudes towards mental illness among participants?
4. To what extent does participation in the S.E.A Educational Module impact levels of empathy within the experimental group compared to the control group, both before and after the intervention?

1.5 Objectives

1. The primary objective of this study was twofold: firstly, to examine whether individuals exhibit discriminatory behaviors towards those afflicted with mental illness

compared to individuals without such conditions; and secondly, to investigate the intricate relationship between individuals' levels of empathy, their exposure to mental health issues, and their attitudes towards individuals with mental illness.

2. Through this multifaceted investigation, the study aimed to uncover the underlying factors that contribute to the development of stigmatizing attitudes towards individuals grappling with mental health challenges.

3. Furthermore, the research sought to provide valuable insights into the predictors of stigmatization, thereby equipping healthcare providers and professionals in the field of community mental health with essential knowledge for the development of targeted prevention and intervention strategies.

4. In addition, the study aimed to evaluate the efficacy of the S.E.A Educational Module, a promising intervention designed to reduce stigma associated with mental health problems. By rigorously testing this intervention, the research aimed to provide empirical evidence of its effectiveness in combating harmful stereotypes and misconceptions surrounding mental illness. Moreover, the research endeavored to serve as a catalyst for the implementation of comprehensive anti-stigma programs on a broader scale.

5. By shedding light on areas where stigma is most prevalent and impactful, the study aimed to inform the development of targeted interventions aimed at raising awareness, promoting understanding, and minimizing the detrimental effects of stigma within society.

Through these comprehensive research objectives, the study aspired to contribute to the advancement of interventions aimed at fostering empathy, promoting inclusivity, and ultimately enhancing the well-being of individuals grappling with mental health challenges.

1.6 Rationale

The rationale for this study stemmed from the urgent need to address the pervasive stigma surrounding mental health issues, which continued to hinder individuals from seeking appropriate care and support. Mental health stigma was identified as a significant barrier to well-being, affecting individuals' willingness to seek help and leading to negative social consequences, including discrimination and exclusion.

Despite the existing literature on stigma reduction and empathy, there was a lack of research focused on the efficacy of specific educational modules like the S.E.A module in diverse cultural contexts, particularly in Pakistan. Previous studies had predominantly focused on Western settings, and there was limited empirical evidence on how such interventions performed in non-Western cultural environments. This study aimed to fill this gap by testing the S.E.A module in the Pakistani context, considering cultural and religious factors that influenced attitudes towards mental health.

Mental health stigma was often intertwined with cultural and religious beliefs. In Islamic communities, for instance, religious fatalism could impact attitudes towards mental health treatment and contribute to stigma. Understanding how educational interventions like the S.E.A module could be adapted to and effective within the Pakistani cultural and religious context was crucial. This study provided an opportunity to explore the module's adaptability and effectiveness in reducing stigma while considering cultural nuances.

Empathy had been shown to play a vital role in reducing stigma. By targeting empathy through educational interventions, the study aimed to transform participants' attitudes towards mental illness. The rationale was based on the understanding that fostering empathy could lead to

greater acceptance and reduced stigma, thereby encouraging individuals to seek help and support for mental health issues.

The study's inclusion of undergraduate students from various disciplines allowed for a broader evaluation of the module's effectiveness. By moving beyond medical students to include individuals from diverse academic backgrounds, the research could assess the module's generalizability and impact across different fields of study. This broader approach enhanced the relevance of the findings for a wider audience and informed the development of more inclusive anti-stigma programs.

The findings from this study were expected to provide empirical evidence on the effectiveness of the S.E.A module and similar educational interventions. This evidence would be valuable for policymakers, educators, and mental health professionals seeking to develop and implement effective anti-stigma programs. By demonstrating the module's impact, the study aimed to support the adoption of evidence-based practices that promote mental health awareness and reduce stigma in academic and community settings.

Finally, the study's results were intended to contribute to the growing body of knowledge on mental health stigma and interventions. By addressing methodological and population gaps identified in previous research, the study provided a foundation for future investigations into effective strategies for stigma reduction and the promotion of mental health awareness across diverse cultural contexts. Overall, the rationale for this study was grounded in the need to advance understanding of stigma reduction, enhance cultural relevance of interventions, and inform policy and practice to support individuals struggling with mental health challenges.

1.7 Significance of the Study

The significance of this study extends beyond its immediate findings, as it serves as a catalyst for raising awareness about the pervasive stigmatization of mental health issues, ultimately fostering a more supportive and understanding society. By shedding light on the challenges faced by individuals grappling with mental health problems, the study empowers them to seek help and access the resources they need for recovery and well-being. Moreover, the research contributes valuable insights to the existing literature on mental health stigma, providing a comprehensive understanding of societal attitudes towards mental illness. This knowledge not only informs future research endeavors but also guides the development of targeted interventions aimed at addressing stigma and promoting mental health awareness.

Furthermore, the study evaluates the effectiveness of the S.E.A educational module in combating stigma, laying the groundwork for the implementation of similar programs as educational reforms in various institutions. By testing the efficacy of this intervention, the research provides evidence-based support for its widespread adoption, potentially leading to significant reductions in stigma and improved mental health outcomes. Additionally, by targeting the youth as the primary audience, the study recognizes the pivotal role of young people in driving societal change. By instilling positive attitudes and reducing stigma among the youth, the research sets the stage for broader societal transformation towards greater acceptance and support for individuals facing mental health challenges.

In summary, this study serves as a critical step towards dismantling the barriers of stigma surrounding mental illness, paving the way for a more compassionate and inclusive society where individuals can seek help and support without fear of judgment or discrimination.

1.8 Definition of Key Terms

1.8.1 Stigma

Erving Goffman's seminal work in 1963 introduced the concept of stigma as an "attribute that is deeply discrediting," highlighting its role in perpetuating negative stereotypes and societal devaluation (Goffman, 1963). Stigma, within the context of mental health, involves the prejudiced attitudes and discriminatory behaviors directed towards individuals with mental illness (Corrigan, 2004). It is often characterized by social exclusion, labeling, and the perception of mental illness as a personal failure rather than a medical condition (Corrigan & Watson, 2002). Moreover, stigma can manifest at different levels, including structural stigma (institutional discrimination), public stigma (prejudice and discrimination by the general population), and self-stigma (internalized negative beliefs about oneself) (Corrigan & Watson, 2002; Corrigan, Markowitz, & Watson, 2004).

1.8.2 Empathy

Empathy, as described by Reiss (2017), refers to the ability to understand and share the feelings of others, promoting prosocial behavior and interpersonal connection. It encompasses cognitive empathy, which involves recognizing and comprehending others' emotions, as well as affective empathy, which entails experiencing and sharing in those emotions (Decety & Jackson, 2004). Additionally, compassionate empathy emphasizes the action-oriented aspect of empathy, wherein individuals are motivated to alleviate the suffering of others through supportive and empathic responses (Singer & Klimecki, 2014). Empathy is crucial in fostering positive relationships, promoting social cohesion, and mitigating interpersonal conflicts (Davis, 1994).

1.8.3 Attitudes

Attitudes, as described by the American Psychological Association (2019), represent individuals' enduring evaluations of objects, persons, or concepts along a continuum from negative to positive. In the context of mental illness, attitudes toward individuals with mental health conditions play a crucial role in shaping social interactions, access to resources, and quality of life (Livingston & Boyd, 2010). Research has shown that negative attitudes and stereotypes contribute to social distancing, discrimination, and barriers to seeking help for mental health issues (Corrigan et al., 2014; Livingston & Boyd, 2010). Moreover, attitudes towards mental illness can influence treatment outcomes, recovery trajectories, and the overall well-being of individuals experiencing psychiatric disorders (Corrigan, 2004).

1.8.4 Mental Illness

The National Alliance on Mental Illness (NAMI, 2019) defines mental illness as a medical condition that disrupts individuals' thoughts, emotions, and behaviors, impairing their ability to function in daily life. Mental illness encompasses a diverse range of disorders, including mood disorders (e.g., depression, bipolar disorder), anxiety disorders, psychotic disorders (e.g., schizophrenia), and neurodevelopmental disorders (e.g., autism spectrum disorder) (American Psychiatric Association, 2013). It is essential to recognize mental illness as a legitimate health concern and to promote understanding, acceptance, and access to appropriate treatment and support services (Henderson et al., 2013; Thornicroft, 2006). Mental health disorders affect individuals across the lifespan and can significantly impact their personal, social, and occupational functioning, underscoring the importance of comprehensive and compassionate mental health care (Kessler et al., 2005; WHO, 2019).

CHAPTER II**Literature Review**

Public perceptions exert significant influence over individuals coping with mental health conditions in multiple dimensions. Firstly, societal attitudes dictate the nature of interactions, provision of opportunities, and the extent of support extended to these individuals. Secondly, these attitudes profoundly shape how individuals with mental health issues express and perceive their challenges, as well as their inclination towards seeking help. Existing literature emphasizes the prevalence of misconceptions within society regarding mental illness, contributing to stigmatizing attitudes (Lauber, Nordt, Falcato, & Rossler, 2004). Individuals with mental health conditions are often unfairly characterized as dangerous and unpredictable, fostering social alienation (Stuber, Rocha, & Christina, 2014). However, studies also suggest that direct personal contact with individuals facing mental health challenges can lead to more positive attitudes.

Recent research by Patel et al. (2024) highlights persistent societal barriers to mental health acceptance, particularly among marginalized communities. Additionally, the study conducted by Lee and colleagues (2023) underscores the role of media portrayal in shaping public perceptions of mental illness, advocating for more accurate and empathetic depictions in media narratives. Furthermore, Garcia et al. (2023) emphasize the effectiveness of community-based interventions in reducing stigma and promoting mental health awareness at the grassroots level. In parallel, Johnson and colleagues (2022) emphasize the importance of targeted educational interventions in combatting negative societal perceptions of mental health issues. Collectively, these studies underscore the multifaceted nature of public attitudes towards mental health and the diverse strategies required to address stigma and promote understanding.

Studies on stigma indicate its association with heightened stress levels across various life domains (Brown, 2015). Negative attitudes, stereotyping, and labeling regarding mental illnesses significantly impede various aspects of individuals' daily lives, including employment, education, relationships, and housing (Corrigan, Edwards, Green, Diwan, & Penn, 2001; Corrigan et al., 2016). Additionally, perceived stigma fosters feelings of shame and can lead to poorer treatment outcomes (Perlick, Rosenheck, Clarkin, Sirey, et al., 2001). Both Morrison (2011) and Sheridan (2012) propose that increased education and awareness about mental disorders can mitigate the negative connotations attached to them and reduce levels of stigmatization. Recent research has further underscored the importance of addressing stigma. For instance, a study in Canada by Smith et al. (2020) found that targeted educational interventions significantly reduced stigma towards mental illness among college students. Moreover, a study conducted in Finland (Ihalainen-Tamlander, Vähäniemi, Löyttyniemi, Suominen & Välimäki, 2016) revealed that while nurses generally exhibit positive attitudes toward individuals with mental illnesses, younger nurses and those lacking adequate mental health training reported feelings of fear and panic when interacting with such patients. Similarly, Alshowkan (2016) found comparable results in Saudi Arabia, suggesting that inadequate mental health literacy can hinder help-seeking behavior and community support.

Corrigan, Druss, and Perlick (2014) highlight the phenomenon of "label avoidance," wherein individuals are reluctant to be diagnosed with or seek mental health treatment. Kosyluk et al. (2016) also discuss how the stigma associated with mental illness often prompts individuals to keep their experiences private. Recent studies have corroborated these findings, demonstrating the enduring influence of societal attitudes on individuals grappling with mental health challenges. For example, a study by Wang et al. (2021) in the United States found that stigma

significantly predicted individuals' willingness to seek professional help for mental health concerns. In context to this, addressing stigma through education, awareness, and targeted interventions is crucial for reducing its detrimental effects on individuals with mental illnesses.

As previously discussed, empathy plays a crucial role in shaping attitudes towards marginalized groups. Empathetic individuals possess a heightened ability to comprehend the experiences and challenges faced by others. Demonstrating empathy towards stigmatized groups has the potential to positively influence, diminish, or even transform negative attitudes directed towards them. Foster, Elischberger, and Hill (2017) support this notion, highlighting that cultivating empathy can effectively alter attitudes towards stigmatized groups in a favorable direction. Research by Oliver, Dillard, Bae, and Tamul (2012) further underscores the transformative power of empathy, suggesting that empathetic feelings towards stigmatized groups have the capacity to instigate changes or, at the very least, mitigate negative attitudes. Moreover, recent studies have delved into the relationship between empathy, social distance, and attitudes towards mental illnesses, particularly among law enforcement officers. Akinbobola and Zugwai (2019) explored this relationship and found a significant correlation between levels of empathy and attitudes towards individuals with mental illnesses among police officers. Similarly, Pascucci and colleagues (2017) conducted a similar study and observed consistent results, indicating a link between empathy and attitudes towards the mentally ill. These findings emphasize the importance of empathy in shaping perceptions and attitudes, particularly towards marginalized groups such as individuals with mental illnesses. In addition to these studies, recent research by Li et al. (2021) examined the impact of empathy on attitudes towards refugees. Their findings suggest that higher levels of empathy were associated with greater acceptance and support for refugees, highlighting the role of empathy in fostering positive attitudes towards

marginalized populations. Similarly, a study by Zhang and colleagues (2020) investigated the relationship between empathy and attitudes towards individuals experiencing homelessness, revealing that individuals with higher levels of empathy were more likely to exhibit understanding and compassion towards homeless individuals. Therefore, it is imperative to consider the role of empathy in the current research to contribute to the existing body of literature on attitudes towards marginalized groups.

The lack of public understanding regarding mental illnesses contributes significantly to the perpetuation of stigma and negative attitudes (Yuan et al., 2016). Research highlights that students generally exhibit positive attitudes towards the social inclusivity of individuals with mental illness. Additionally, investigations into gender effects on attitudes towards mental illness in Singapore reveal that females tend to hold more favorable attitudes across various dimensions, including tolerance, community care, social inclusivity, and misconceptions (Subramaniam et al., 2016). This finding is consistent with studies indicating that women, who often demonstrate greater capacity for understanding thoughts and emotions, tend to display more positive attitudes (Baez et al., 2017). Moreover, a study examining attitudes towards mental illness among primary school students in Kenya found that boys generally exhibit more stigmatizing attitudes compared to girls (Ndeti et al., 2015). Similar results were observed in Iran, where females demonstrated more positive attitudes towards mental illness (Fakhri et al., 2018). Furthermore, research among Italian medical students and other populations suggests that females exhibit higher levels of empathy and more positive attitudes towards individuals with mental illness compared to males (Brown, Moloney, & Brown, 2017).

However, there are contradictory findings as well. For instance, a study among police officers revealed that male officers tended to show more sympathetic attitudes towards mental

illness compared to females (Akinbobola & Zugwai, 2019). Similarly, research among secondary school students in Nigeria found that male adolescents exhibited slightly more positive attitudes towards mental health patients than females (Adeosun, Fatiregun & Adeyemo, 2017).

Additionally, a study by Aggarwal, Singh, and Kataria (2016) reported that males were more comfortable with personal contact with individuals with mental illness and were more open to the idea of marrying someone with a mental illness. These contradictory findings underscore the complexity of gender differences in attitudes towards mental illness. While some studies indicate healthier attitudes among females, others suggest more favorable attitudes among males.

Therefore, there is a clear need to further explore gender differences in attitudes towards mental illness within different cultural contexts. Moreover, existing literature advocates for the implementation and evaluation of educational programs aimed at addressing stigma. Hence, the present study aimed to test a culturally appropriate intervention module designed to reduce harmful stigma against people with mental health problems. By examining gender differences and evaluating the effectiveness of interventions, this research has seeded to contribute to efforts to combat stigma and promote mental health awareness.

Markstorm et al. (2009) undertook a comprehensive investigation aimed at evaluating and potentially transforming stigmatizing attitudes among students from various health-related professions. Their study, which engaged 167 participants, implemented a multifaceted approach combining theoretical education with practical clinical placement experiences. Participants underwent an intensive mental health course, followed by theoretical education sessions and subsequent clinical placements in mental health care facilities. Through this structured approach, Markstorm and colleagues sought to gauge the impact of both educational and experiential components on altering attitudes towards mental illness. The findings from Markstorm et al.'s

study revealed notable shifts in general attitudes towards mental illness throughout the duration of the research endeavor. Importantly, the immersive nature of clinical placements emerged as a significant factor contributing to these positive changes. Exposure to real-world scenarios and direct interactions with individuals experiencing mental health challenges appeared to foster greater understanding, empathy, and acceptance among participants. These outcomes underscored the pivotal role of practical experience in shaping attitudes towards mental illness among future healthcare professionals.

Similarly, Hunter et al. (2015) embarked on a similar exploration, focusing specifically on nursing students' attitudes and preparedness in caring for individuals with mental health issues. Their study, which echoed the methodology employed by Markstorm et al., yielded parallel results. Nursing students, much like their counterparts in other health-related professions, demonstrated a tangible improvement in attitudes following exposure to theoretical education and clinical placements. This reaffirmed the notion that hands-on experience in mental health care settings is instrumental in fostering positive attitudes and enhancing preparedness among healthcare students. In a complementary study, Gyllensten et al. (2011) investigated the effects of education-based interventions on attitudes towards mental health and individuals with mental illness. Their research, conducted across six universities, incorporated a blend of problem-based learning and traditional lectures. The implementation of educational modules led to significant improvements in attitudes among participants, as evidenced by the pre-post test results. This highlights the efficacy of structured educational interventions in promoting positive attitudes and combatting stigma associated with mental illness.

While these studies offer valuable insights into addressing stigma within the confines of health-related educational settings, there remains a notable gap in the broader societal context.

Most interventions have predominantly targeted students and professionals within healthcare domains, overlooking the wider populace. Given that stigma towards mental illness permeates various facets of society, it is imperative to extend interventions beyond the realm of healthcare education. Furthermore, the cultural relevance of interventions cannot be overstated. The efficacy of educational modules developed within Western contexts may not necessarily translate seamlessly to culturally diverse settings, such as Pakistani culture. Hence, initiatives like the S.E.A module, tailored to South Asian communities, hold promise in addressing stigma within culturally specific contexts.

Expanding the reach of stigma-reduction interventions beyond healthcare domains necessitates a collaborative effort involving educators, policymakers, community leaders, and individuals with lived experiences of mental illness. By incorporating stigma-reduction strategies into broader educational curricula, workplace environments, and community outreach initiatives, society can collectively work towards fostering a more inclusive and supportive environment for individuals with mental health conditions. To conclude, while educational interventions have demonstrated efficacy in combatting stigma within healthcare education settings, their potential extends far beyond these boundaries. By embracing a holistic approach that encompasses diverse cultural contexts and societal domains, we can strive towards a future where mental health stigma is minimized, and individuals with mental illness are embraced with understanding and compassion. Efforts to reduce stigma must continue to evolve and expand, ensuring that all individuals, regardless of their background, receive the support and acceptance they deserve.

CHAPTER III**Theoretical Framework**

In the realm of education and mental health advocacy, fostering empathy and cultivating positive attitudes towards mental illness and patients stands as a critical endeavor. Rooted in the rich tapestry of psychological frameworks, this thesis endeavors to illuminate the efficacy of an educational module designed to achieve precisely this objective. Grounded in the robust pillars of Attribution Theory and Social Cognitive Theory, this theoretical framework provides the scaffolding upon which the study unfolds, offering a nuanced understanding of the intricate interplay between cognition, perception, and behavior in shaping individuals' attitudes and responses towards mental illness. By synthesizing these theoretical perspectives, this chapter aims to delineate the foundational principles that underpin the educational intervention's design and elucidate the mechanisms through which it seeks to engender empathic understanding and destigmatization of mental health conditions.

In navigating the complex landscape of mental health stigma, Attribution Theory offers a lens through which to examine the cognitive processes underlying individuals' interpretations of the causes of mental illness. By exploring how individuals attribute responsibility and blame for mental health conditions, Attribution Theory unveils the cognitive biases and societal norms that contribute to the perpetuation of stigma. Furthermore, Social Cognitive Theory provides a comprehensive framework for understanding the role of observational learning, social modeling, and self-efficacy in shaping attitudes and behavior. Through the dynamic interplay of cognitive, behavioral, and environmental factors, Social Cognitive Theory elucidates the mechanisms through which individuals acquire, reinforce, or challenge their perceptions of mental illness and those affected by it. Together, these theoretical paradigms offer a holistic understanding of the

psychological processes at play in the formation and transformation of attitudes towards mental health, laying the groundwork for the development and evaluation of interventions aimed at promoting empathy and fostering inclusive attitudes within educational settings.

Attribution Theory. Attribution Theory posits that individuals engage in the process of attributing motives to their own and others' behavior, distinguishing between internal (dispositional) and external (situational) causes. This theoretical framework underscores people's inherent motivation to comprehend their surroundings, prompting them to seek explanations for everyday events or outcomes. When applied to the context of mental illness stigma, Attribution Theory suggests that individuals may grapple with understanding the causes of mental disorders, often encountering ambiguity in identifying clear attributions. One significant challenge arises from the perceived lack of apparent causes for mental illness, leading observers to potentially attribute the condition to the affected individual. This attribution may contribute to the belief that individuals with mental illness are personally responsible for their condition, lacking in self-control or competence in managing their well-being. Consequently, these perceptions can precipitate discriminatory behaviors against people with mental illness.

Bernard Weiner's attribution theory (1985) further delineates three dimensions of causality: locus, stability, and controllability. Locus pertains to whether the cause is perceived as internal or external, while controllability examines whether personal will or effort can influence the cause. Stability considers whether the cause is perceived as enduring over time. Analogous to the judgment of some physical ailments as within the control of the afflicted, mental illness may be construed as a result of an individual's behaviors, attributing blame to the affected person. Individuals facing stigmas perceived as controllable may evoke feelings of anger and blame, receiving less empathy and support compared to those with stigmas seen as uncontrollable.

Research suggests that people's assumptions about an event are influenced by their attributions of controllability. Those who attribute stigmatized traits to non-controllable causes, such as biological factors, may demonstrate compassion and willingness to assist stigmatized groups. Conversely, attributing causes to controllable factors, such as personal choices, may elicit anger and reluctance to offer help.

Expanding on these insights, it becomes apparent that Attribution Theory provides a framework for understanding the complex dynamics of mental illness stigma. By exploring attributions of causality, researchers and practitioners can identify underlying mechanisms driving stigmatizing attitudes and behaviors. Moreover, interventions aimed at challenging misconceptions and promoting empathy can leverage Attribution Theory to foster greater understanding and support for individuals affected by mental illness. Incorporating recent studies, Corrigan (2002) underscores the role of familiarity in mitigating negative attitudes towards mental illness, highlighting the importance of education and contact in stigma reduction efforts. Similarly, research by Vescio et al. (2003) emphasizes the impact of controllability attributions on social judgments and behavior, shedding light on the nuanced interplay between causal attributions and stigma outcomes. These findings underscore the relevance of Attribution Theory in informing stigma-reduction interventions and advancing efforts to create more inclusive and supportive communities for individuals with mental health conditions.

Social Cognitive Theory (SCT). Social Cognitive Theory (SCT) is widely recognized for its effectiveness in facilitating behavioral modifications. At its core, SCT revolves around the concept of reciprocal determinism, which elucidates the dynamic and mutually influential interaction between personal factors, environmental influences, and human behaviors. Put simply, SCT posits that human behaviors are shaped by the ongoing interplay between individual

characteristics, external surroundings, and the consequences of those behaviors. This creates a feedback loop wherein behaviors impact individuals and their environment, which in turn influences subsequent behaviors. In the context of SCT, the central idea is that behavior change occurs through a process of reciprocal determinism, wherein personal factors, environmental influences, and behaviors continuously interact and influence each other. This means that behaviors are not solely determined by personal characteristics or environmental factors, but rather by the dynamic interplay between the two. For example, an individual's behavior may be influenced by their personal beliefs and attitudes, as well as the social norms and expectations present in their environment.

Moreover, SCT emphasizes the importance of considering both personal and environmental factors in designing interventions aimed at promoting behavioral change. By addressing both the individual's cognitive processes and the social context in which behaviors occur, interventions can be more effective in fostering lasting behavioral modifications. Recent research has provided empirical support for the relevance of SCT in various behavioral interventions. For instance, Corrigan's (2002) study found that increasing familiarity with individuals affected by mental illness can lead to reduced stigma and more supportive behaviors. This underscores the role of social cognitive processes, such as knowledge acquisition and contact with stigmatized individuals, in shaping attitudes and behaviors related to mental health stigma. Additionally, social cognitive paradigms highlight the role of discriminative cues and stereotypes in perpetuating mental health stigma. These cognitive processes can lead to discriminatory behaviors, such as housing and employment discrimination, which further contribute to the marginalization of individuals with mental health conditions.

In essence, SCT offers a comprehensive framework for understanding and addressing behavioral patterns related to mental health stigma. By recognizing the dynamic interplay between personal cognition, social influences, and environmental factors, interventions informed by SCT principles can effectively target stigma reduction efforts and promote more inclusive attitudes and behaviors within society. In context, SCT provides a valuable theoretical framework for promoting behavioral modifications and addressing issues such as mental health stigma. By considering the reciprocal interaction between personal and environmental factors, interventions can be tailored to effectively target the underlying cognitive processes that contribute to stigma and discrimination. Thus, SCT offers a promising approach for developing evidence-based interventions aimed at fostering more supportive and inclusive communities.

In conclusion, the theoretical framework outlined in this chapter served as a multifaceted lens through which to understand and address the complex dynamics surrounding attitudes towards mental illness and patients. By integrating insights from Attribution Theory, Social Cognitive Theory, sociocultural perspectives, and positive psychology, we illuminated the cognitive, behavioral, and contextual factors that shaped individuals' perceptions and responses to mental health issues. This comprehensive understanding provided the foundation for the development and implementation of educational interventions aimed at promoting empathy, reducing stigma, and fostering inclusive attitudes within educational settings and broader society. Moving forward, the application of this theoretical framework held immense promise for advancing mental health advocacy efforts and cultivating environments that prioritized understanding, acceptance, and support for individuals living with mental illness.

Furthermore, this theoretical framework underscored the interconnectedness of individual cognition, social interactions, and broader societal influences in shaping attitudes towards mental health. By recognizing the intricate interplay of these factors, we gained insight into the complex nature of stigma and the diverse pathways through which it manifested. As we reflected on the implications of this framework, it became evident that fostering empathy and positive attitudes towards mental illness necessitated a multifaceted approach that encompassed education, advocacy, and systemic change. As we strived towards a more empathetic and inclusive society, it was imperative to continue refining our understanding and interventions in alignment with the evolving landscape of mental health discourse and practice. Through sustained collaboration, research, and action, we could create environments where individuals felt seen, heard, and supported, free from the constraints of stigma and discrimination. Thus, this theoretical framework not only served as a guiding light for our past endeavors but also beckoned us towards a future marked by compassion, understanding, and collective well-being.

3.1 Conceptual Framework

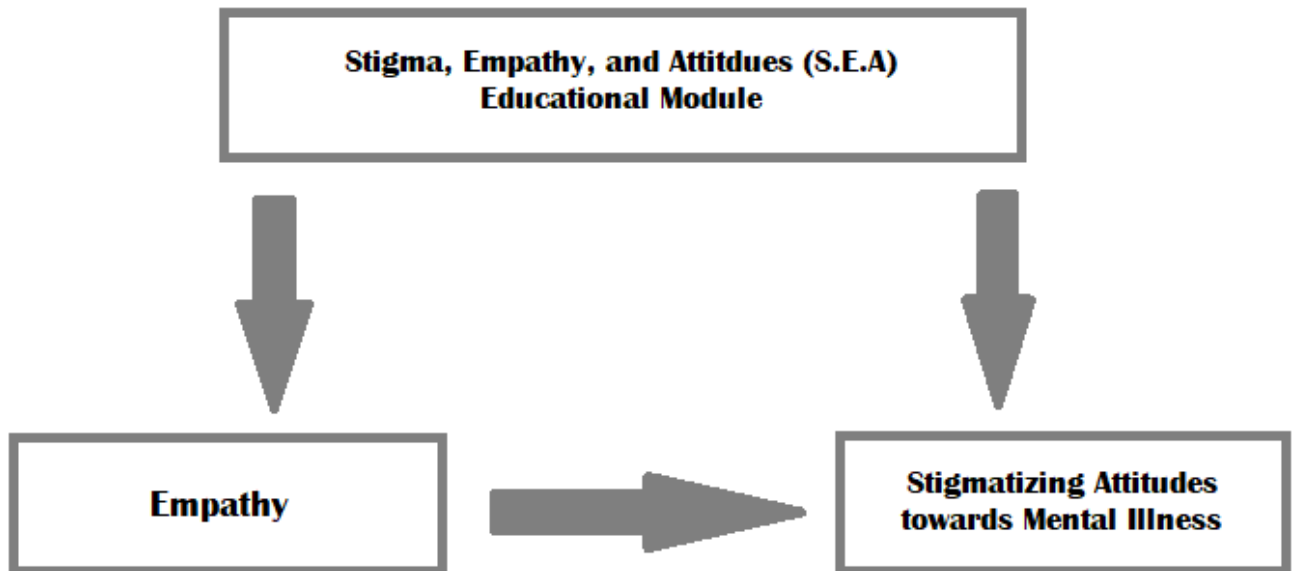


Figure 3.1: Conceptual Framework

3.2 Working Model of Current Study

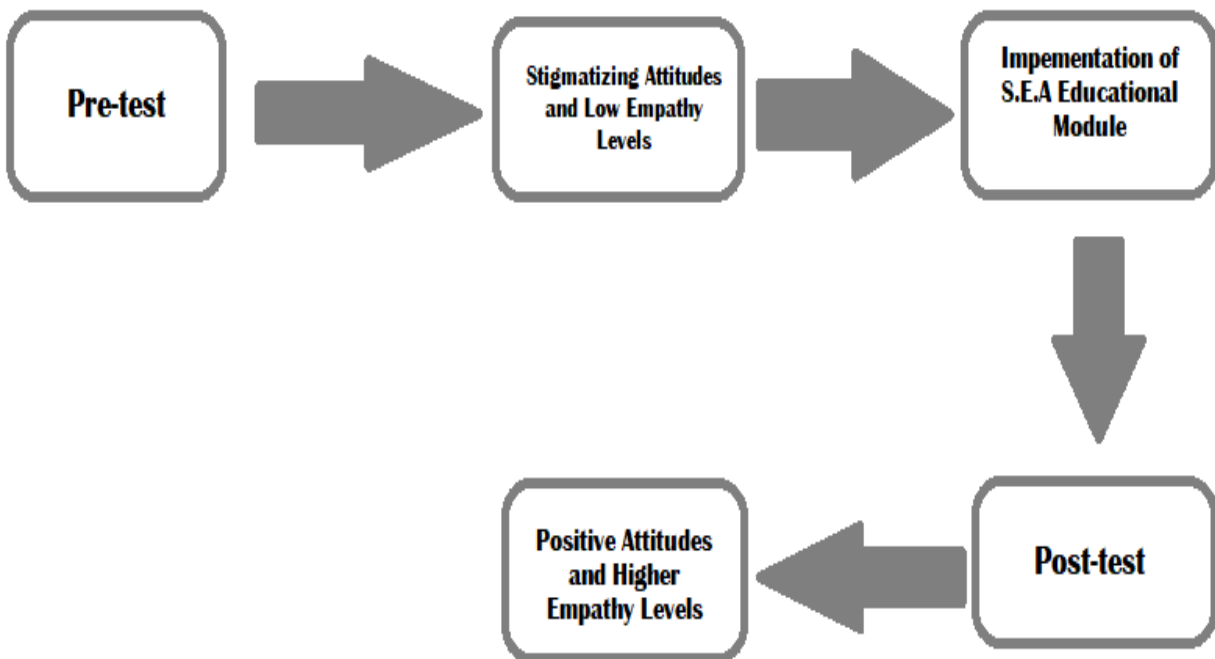


Figure 3.2: Working Model

3.3 Research Hypotheses

This study aimed to investigate the complex interplay between empathy, attitudes towards mental illness, and the efficacy of the S.E.A Educational Module in fostering positive change. Firstly, it hypothesized a positive relationship between empathy and attitudes towards mental illness, suggesting that individuals with higher levels of empathy might have exhibited more positive attitudes towards those with mental health conditions. Additionally, the study anticipated significant differences in empathy and stigmatizing attitudes between genders, both within control and experimental groups, emphasizing the importance of considering gender dynamics in mental health interventions. Furthermore, the research predicted that participation in the S.E.A Educational Module would lead to a reduction in stigmatizing attitudes towards mental illness, highlighting the potential effectiveness of the intervention in promoting greater understanding and acceptance. Moreover, the study proposed that the module would not only increase empathy but also reduce stigma and negative attitudes towards mental illness within the experimental group compared to the control group, underscoring its potential impact on attitudes and perceptions. Through exploring these hypotheses, the study aimed to contribute valuable insights into the role of empathy and the effectiveness of interventions in addressing stigmatizing attitudes towards mental illness.

To sum up, the study was based on the following hypotheses:

1. Higher empathy will correlate with more positive attitudes towards mental illness, both before and after the S.E.A Educational Module.
2. Gender-based differences in empathy and stigmatizing attitudes towards mental illness will be observed in both control and experimental groups, pre- and post-intervention.

3. Participation in the S.E.A Educational Module will reduce stigmatizing attitudes towards mental illness, with lower stigma levels post-intervention.

4. The S.E.A Educational Module will significantly increase empathy and reduce stigma and negative attitudes towards mental illness in the experimental group compared to the control group.

CHAPTER IV

Methodology

4.1 Research Design

The current study employed a quasi-experimental design, specifically a nonequivalent group with a pre-post design. This approach involved categorizing participants into two distinct groups: the treatment group and the control group. Through this assignment, the study aimed to assess the effects of S.E.A educational module on the participants' outcomes. The treatment group received the intervention being investigated, while the control group did not. By comparing the outcomes of both groups before and after the intervention, the study sought to determine the effectiveness and impact of the treatment.

This quasi-experimental design was chosen due to its practical feasibility and the ability to provide valuable insights into the intervention's effectiveness in a real-world setting. Although random assignment was not employed, the pre-post assessment within both groups allowed for a systematic evaluation of changes attributable to the intervention while controlling for potential confounding variables. This design thus enhanced the validity of the study's findings.

4.2 Participants

The study's participants comprised undergraduate students aged between 18 and 24 years from Bahria University, representing young adults as defined by WHO (2022). A non-probability sampling method, specifically convenience sampling, was used to select participants through undergraduate classes. This method facilitated ease of access to potential participants and was aligned with the study's practical constraints. Convenience sampling was selected due to logistical limitations and the need to efficiently reach a targeted student population. To address potential biases, participants were randomly assigned to either the control or treatment group,

ensuring balanced representation across both groups. This approach aimed to minimize bias and ensure comparability between the groups, thus enhancing the study's internal validity.

The didactic approach was implemented to provide a structured and clear explanation of the study's objectives and procedures to the participants. This method involved delivering information through lectures, presentations, or instructional materials, ensuring consistency in how the study was conveyed. A structured instructional method was necessary to standardize the delivery of the intervention and ensure that all participants received uniform information. This approach helped reduce variability in the study's execution and participant understanding, contributing to the reliability of the results.

4.2.1 Inclusion Criteria

- Undergraduate students were eligible to participate in the study.
- Participants needed to be proficient in English to ensure effective communication and understanding of the intervention.
- Only residents of Islamabad/Rawalpindi were included to manage logistical considerations and maintain feasibility.
- Willingness to participate was required, ensuring that participants were engaged and motivated.
- Participants without personal or close familial experience of mental illness were eligible to prevent potential biases that could affect their responses.

These criteria were established to ensure that participants could engage fully with the intervention and provide informed feedback. Excluding those with direct mental illness experience helped focus the study on individuals who were less likely to have pre-existing biases related to mental health issues.

4.2.2 Exclusion Criteria

- Individuals with personal or close familial experience of mental illness were not eligible for participation.

Excluding individuals with such experiences was intended to reduce potential confounding factors that could skew the results. This criterion helped to ensure that the study's findings were not influenced by participants' personal or familial experiences with mental illness, providing a clearer evaluation of the intervention's impact.

4.3 Sample

A total sample size of 29 participants was selected, with 15 in the treatment group and 14 in the control group. This sample size was chosen considering several key factors. Firstly, the study was limited by practical constraints such as time, resources, and accessibility to the student population. Under these conditions, a sample size of 29 was a pragmatic choice that balanced the need for meaningful data collection with logistical feasibility.

Moreover, smaller sample sizes are often employed in preliminary or pilot studies to test new interventions or methodologies. This approach allows researchers to assess the initial effectiveness and feasibility of an intervention before undertaking larger-scale research. The sample size used in this study aligns with the practices of similar exploratory research in educational and psychological fields.

Statistical considerations also played a role in determining the sample size. While larger samples generally enhance the power of a study and the precision of its estimates, smaller samples can still yield valuable insights, particularly when examining effect sizes and preliminary data. The study employed appropriate statistical techniques to analyze data from the

smaller sample, allowing for meaningful comparisons and an initial evaluation of the intervention's impact.

To address potential biases and ensure comparability between the groups, participants were randomly assigned to either the control or treatment group. This random assignment aimed to enhance the internal validity of the study despite the smaller sample size, ensuring that observed effects could be attributed to the intervention rather than other variables.

In conclusion, the sample size of 29 participants was a carefully considered decision, balancing practical constraints with the need for preliminary insights into the effectiveness of the S.E.A Educational Module. The results from this sample provide a foundation for future research, which could involve larger samples to further validate and expand upon these findings.

4.4 Measures

The current study employed a comprehensive set of measures to assess various dimensions relevant to its research objectives. These measures included an informed consent form, ensuring ethical compliance and providing participants with essential information about the study. Additionally, a demographic form was administered to collect pertinent background information such as age, gender, educational level, and socioeconomic status, which could potentially influence study outcomes. To gauge attitudes towards mental illness, the Community Attitudes towards Mental Illness (CAMI) Scale was utilized, offering insights into participants' perceptions and beliefs regarding mental health. Furthermore, the Empathy Quotient Scale was employed to measure participants' levels of empathy, which could influence their attitudes and behaviors towards individuals with mental illness. Together, these measures provided a comprehensive assessment framework, enabling a thorough examination of the research constructs and facilitating meaningful insights into the study's objectives.

1. Informed Consent Form

In adherence to ethical guidelines, an informed consent form was meticulously prepared and distributed to each participant involved in the study. This document served as a fundamental component in ensuring transparency and upholding the rights of the participants. Within the consent form, participants were presented with concise yet comprehensive information outlining the purpose and procedures of the study. Crucially, it elucidated key aspects related to participant rights, including confidentiality assurances and the unequivocal right to withdraw from the study at any point without repercussion. By providing such detailed information, the informed consent process aimed to foster trust, respect participant autonomy, and uphold ethical standards throughout the research endeavor.

2. Demographic Form

During the data collection phase, participants were required to complete a demographic form, a vital instrument designed to capture essential information about each participant. This form encompassed various demographic variables, including participants' names, ages, genders, educational backgrounds, and socioeconomic statuses. By systematically collecting this information, researchers aimed to gain a comprehensive understanding of the diverse characteristics of the study's participants. Such insights into demographic profiles can offer valuable context for interpreting research findings and identifying potential patterns or trends across different demographic groups. Additionally, the demographic form facilitated the organization and categorization of participant data, streamlining subsequent data analysis processes. Overall, the administration of the demographic form played a pivotal role in ensuring the thorough documentation and characterization of the study's participant sample.

3. Community Attitudes towards Mental Illness (CAMI) scale (Taylor & Dear, 1981)

The CAMI scale, developed by Taylor and Dear in 1981, serves as a robust instrument for evaluating attitudes towards individuals with mental illness. This comprehensive scale comprises a 40-item self-report survey, utilizing a 5-point Likert scale to measure respondents' attitudes. The CAMI scale is renowned for its high validity and internal consistency, making it a trusted tool in psychological and social research.

The scale demonstrates strong validity, having been extensively validated through numerous studies. It effectively measures the attitudes it intends to assess, with factor analyses confirming that the four subscales—Authoritarianism, Benevolence, Social Restrictiveness, and Community Health Ideology—capture distinct dimensions of attitudes towards mental illness. The scale's content validity is supported by its alignment with theoretical frameworks and empirical research on mental health attitudes.

In terms of reliability, the CAMI scale exhibits high internal consistency across its subscales. Reliability coefficients (Cronbach's alpha) for the subscales generally range from 0.70 to 0.85, indicating a high level of consistency in respondents' answers. Test-retest reliability is also robust, suggesting that the scale produces stable results over time when measuring the same individuals under similar conditions.

The Authoritarianism subscale delves into perceptions regarding the need to regulate and control individuals with mental illness, reflecting attitudes that favor social control measures. The Benevolence subscale explores attitudes characterized by paternalistic and humanistic views towards the mentally ill, emphasizing compassionate and caring perspectives. The Social

Restrictiveness subscale examines the extent to which individuals perceive those with mental illness as societal threats that necessitate social restrictions, capturing more restrictive attitudes. Finally, the Community Health Ideology subscale gauges beliefs regarding the efficacy of community-based services in addressing mental health issues, reflecting attitudes towards the value of community-oriented care.

Widely utilized in contemporary research endeavors, the CAMI scale stands out for its comprehensive itemization and accuracy. Its strong validity and reliability make it a valuable tool for probing the complexities of attitudes towards mental illness across diverse populations, providing insightful data for both research and practical applications in mental health.

4. Empathy Quotient Scale (Baron-Cohen & Wheelwright, 2004)

The Empathy Quotient Scale (EQS), developed by Baron-Cohen and Wheelwright in 2004, provides a robust means of assessing both cognitive and emotional empathy. In the context of the present study, a 40-item self-report measure was employed, utilizing a 4-point Likert scale. The EQS comprises four distinct subscales, each consisting of seven items, designed to capture various facets of empathy.

The EQS has demonstrated strong internal consistency, with a high alpha coefficient of 0.92, indicating reliable measurement of the construct across its subscales. This high level of internal consistency reflects the scale's ability to consistently measure the different dimensions of empathy. Additionally, the scale exhibits strong test-retest reliability, with a coefficient alpha of 0.79. This suggests that the EQS produces stable and consistent results over time when administered to the same individuals under similar conditions.

The validity of the EQS has been supported through various studies that have confirmed its effectiveness in measuring general empathy. Factor analyses have demonstrated that the subscales accurately reflect distinct dimensions of empathy, including cognitive empathy (the ability to understand others' thoughts) and emotional empathy (the capacity to share others' feelings). The scale's content validity is reinforced by its alignment with theoretical frameworks and its empirical performance in assessing empathy-related constructs.

Illustrative statements from the EQS include prompts such as "I am quick to spot when someone in a group is feeling awkward or uncomfortable," "I can tune into how someone else feels rapidly and intuitively," and "When I talk to people, I tend to talk about their experiences rather than my own" (Baron-Cohen & Wheelwright, 2004). These items reflect the scale's comprehensive approach to capturing different aspects of empathy.

The multifaceted nature and strong psychometric properties of the EQS make it a valuable instrument for examining empathy within research contexts. Its reliability and validity support its use in assessing both cognitive and emotional empathy, providing insightful data on individuals' empathetic abilities.

4.5 Procedure

Participants were recruited from undergraduate classes at Bahria University, and were randomly allocated to either the treatment group or the control group. This random assignment ensured that both groups, comprising students from diverse backgrounds, were comparable at the outset of the study, enhancing the internal validity of the research. A total of 29 undergraduate students participated in the study, with 15 assigned to the treatment group and 14 to the control group. The sample size was selected considering practical constraints such as time, resources, and accessibility to the student population. This size is consistent with practices in preliminary or

pilot studies, allowing for the initial testing of the intervention's effectiveness while balancing logistical feasibility.

Participants were administered a comprehensive questionnaire as part of the pre-test assessment. This included the Informed Consent Form, Demographic Form, CAMI scale, and Empathy Quotient Scale (EQS). The CAMI scale, known for its high validity and internal consistency, assessed attitudes towards mental illness, while the EQS measured cognitive and emotional empathy, providing a thorough understanding of participants' empathetic responses.

Following the pre-test, the treatment group received an intervention based on the S.E.A Educational Module, which was designed to address and reduce stigmatizing attitudes towards mental illness. The control group did not receive this intervention, allowing for a clear comparison of pre- and post-intervention outcomes. After the intervention, all participants underwent a post-test evaluation using the same comprehensive questionnaire. This approach enabled a direct comparative analysis of pre- and post-intervention attitudes and perceptions, assessing the effectiveness of the educational module in mitigating stigma and promoting positive attitudes towards mental health.

The methodology, including random allocation and the use of validated measures, provided a structured and reliable basis for evaluating the intervention's impact. Despite the smaller sample size, the study aimed to offer preliminary insights that could inform future research with larger samples to further validate and expand upon these findings.

4.5.1 Intervention Plan

The participants engaged in an interactive lecture session centered around the educational module developed by Prahaj et al. (2021). This module encompassed a comprehensive

exploration of diverse aspects related to mental health, incorporating various interactive techniques to enhance participant engagement and comprehension. Table 4.1 offers a detailed breakdown of the interactive elements integrated into the lecture, facilitating a dynamic and immersive learning experience for the participants. Throughout the session, attendees were actively involved in discussions, case studies, role-plays, and other interactive activities, fostering a deeper understanding of mental health concepts and promoting open dialogue surrounding the topic.

Table 4.1

Interactive Lecture

Contents of Interactive Lecture	
Lecture Content	Techniques
1. Mental Illness Experiences	Opening Questions
2. Dispelling Myths about Mental Illness:	Experience sharing, Providing case-
a) Rarity of Mental Illness	based examples, Providing contrary
b) Mental Health and Strength	evidence.
c) Perception of Violence in Mentally Ill Individuals	
d) Overcoming Mental Illness with Strength	
e) Normalcy and Productivity in Individuals with Mental Illness	
f) Effects of Medications	
g) Electroconvulsive Therapy (ECT) Concerns	
h) Understanding Psychological Treatments.	

3. Stigma: Hindrances to mental well-being.
 Cycle of Stigma (stereotyping, discrimination, prejudice).
 Categorization/Labeling.
 Approaches to mitigate Stigma.
 4. Empathy: Contrasting sympathy and empathy.
 Illustration of "The Mudhole" example.
 5. "Our Stories – Living and Coping with Schizophrenia" – A short video with a focus on Stigma. Engaging in a conversation regarding the firsthand encounters with mental illness and the related stigma following the screening of the video.
 6. Reflecting on Lecture Learnings and Sharing Insights. One-minute paper (Utilizing a brief written exercise where participants are given a minute to jot down the key insights acquired from the lecture.)
-

During the second phase of the intervention, participants engaged in role-playing activities centered around scenarios related to mental health and stigma. These role plays were structured according to the content and scripts outlined in the educational module developed by Prahaj et al. (2021). The aim was to provide participants with practical experience in navigating

situations involving mental health issues and stigma. Table 4.2 presents a detailed overview of the role-playing session, outlining the specific scenarios and objectives for each activity.

Table 4.2

Role Play Session

Contents of Role Play Session	
Structure of Role Plays	Discussion
<p>1. Hallucination Exercise:</p> <p>Participants rotate roles as the patient, voice, and doctor. Individuals portraying the voices deliver phrases such as "don't trust him, don't trust anyone. They are plotting against you," using a variety of tones and volumes, including whispers, loud speech, humming, or other sounds. Meanwhile, one participant assumes the patient's role, attempting to maintain focus on the conversation while disregarding the auditory hallucinations. Another participant acts as the doctor, engaging in dialogue with the patient. While a script is provided, participants are encouraged to inject creativity into the role-play to enhance engagement and realism.</p>	<p>Understanding the challenges of individuals grappling with auditory hallucinations can be quite daunting. Those who undergo such experiences often encounter significant distress. Moreover, maintaining focus on daily activities, like conversations, can prove to be challenging amidst the presence of these auditory stimuli.</p>
<p>2. Supporting a friend:</p>	<p>Supporting a friend living with a mental illness can pose significant</p>

A participant portrays a student who has been hearing voices and is apprehensive about attending university for the past year.

Observing a change in their behavior, a friend inquires about their well-being. The student decides to confide in their friend, sharing their fears and experiences with the voices. Their friend listens attentively without passing judgment and extends support by suggesting seeking help.

3. Supporting Others:

A student, recently diagnosed with obsessive-compulsive disorder, feels anxious about germs and consistently avoids touching objects. He frequently uses hand sanitizers as a precautionary measure. Unfortunately, some individuals mock him, taunt him with derogatory names, and even place garbage in front of his desk. However, another student intervenes, discouraging others from teasing him.

challenges in terms of empathizing and providing assistance. Explore potential actions that a supportive friend could take in such circumstances.

Understanding the experiences of individuals with mental illness can be challenging for some. Stigma arises when individuals are made to feel ashamed of their mental health conditions. Explore strategies to address stigma and enhance awareness surrounding mental illness.

4.6 Ethical Considerations

The research proposal underwent scrutiny and approval by the Institutional Review Board (IRB) at Bahria University, Islamabad Campus, ensuring adherence to ethical guidelines. Essential considerations like maintaining participant confidentiality, ensuring voluntary participation, and obtaining informed consent were meticulously addressed. Participants were assured of privacy, with the option to withdraw from the study at any juncture without facing repercussions. By adhering to these ethical guidelines, the research aimed to uphold integrity and foster trust between researchers and participants, thereby enhancing the credibility and validity of the study's findings. Additionally, stringent measures were implemented to safeguard the collected data, which has been stored in an encrypted file, bolstering confidentiality and data security.

4.7 Data Analysis

The Statistical Package for Social Sciences (SPSS v. 25) served as the primary tool for conducting comprehensive statistical analyses in this study. Leveraging the robust capabilities of SPSS, the collected data underwent rigorous examination, employing a variety of statistical techniques and tests to derive meaningful insights. From descriptive statistics to inferential analyses, the software facilitated the exploration of patterns, trends, and relationships within the data. Through meticulous examination and interpretation of statistical calculations, the research helped gain valuable insights into the phenomena under investigation. By harnessing SPSS's advanced functionalities, the study was able to provide a nuanced understanding of the research variables, shedding light on key relationships and dynamics.

CHAPTER V**Results**

The study aimed to investigate the relationships between empathy, gender, and attitudes towards mental illness, and to assess the impact of the S.E.A Educational Module on these variables. The results were systematically organized to address the hypotheses outlined previously and were presented as follows.

Initially, the overall frequencies for the sample were presented using pie charts. These visualizations provided a clear overview of the distribution of participants across different categories, such as gender and group allocation (control and experimental), giving a foundational understanding of the sample composition. The sample size for this study comprised 29 participants, with 15 in the treatment group and 14 in the control group. This size was a pragmatic choice, balancing feasibility with the need for preliminary data collection. While relatively small, this sample size was adequate for initial insights and exploratory analysis of the intervention's effects. The choice of this sample size was necessary to provide a foundational understanding, even though it limited the generalizability and statistical power of the findings.

Following the presentation of sample frequencies, a detailed summary of the descriptive statistics was provided. This included an analysis of empathy levels and attitudes towards mental illness, broken down by group (control and experimental) and time points (pre-test and post-test). Descriptive statistics, such as mean scores and standard deviations, offered a preliminary view of the data, revealing key patterns and differences despite the small sample size. This analysis was crucial for understanding the central tendencies and variabilities within the data and laid the groundwork for interpreting the subsequent inferential analyses.

Subsequent to the descriptive statistics, the section proceeded to inferential analyses designed to test the study's hypotheses. These analyses explored the relationships between empathy and attitudes towards mental illness, as well as the effects of gender and the S.E.A Educational Module. Statistical tests such as correlation and t-tests were used to examine these dynamics. Given the small sample size, the inferential analyses provided a rigorous evaluation of the intervention's impact, but the results were interpreted with caution. Smaller sample sizes limited the power of statistical tests and the generalizability of findings, yet they still revealed significant trends and preliminary effects.

This structured approach ensured a thorough and clear presentation of the findings, acknowledging the limitations imposed by the sample size. By systematically addressing each hypothesis, the results section demonstrated the immediate impacts of the S.E.A Educational Module and offered insights into the broader implications for empathy development and stigma reduction. Despite the constraints of the sample size, the comprehensive analysis provided valuable initial insights and set the stage for future research with larger samples to validate and expand upon these findings.

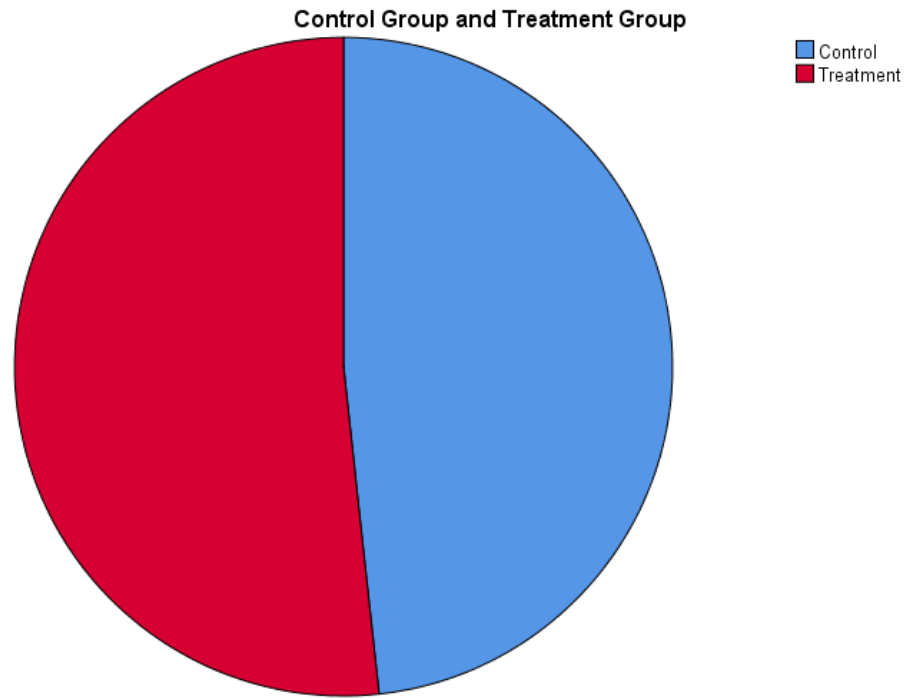


Figure 5.1. Frequency for Control and Treatment Group

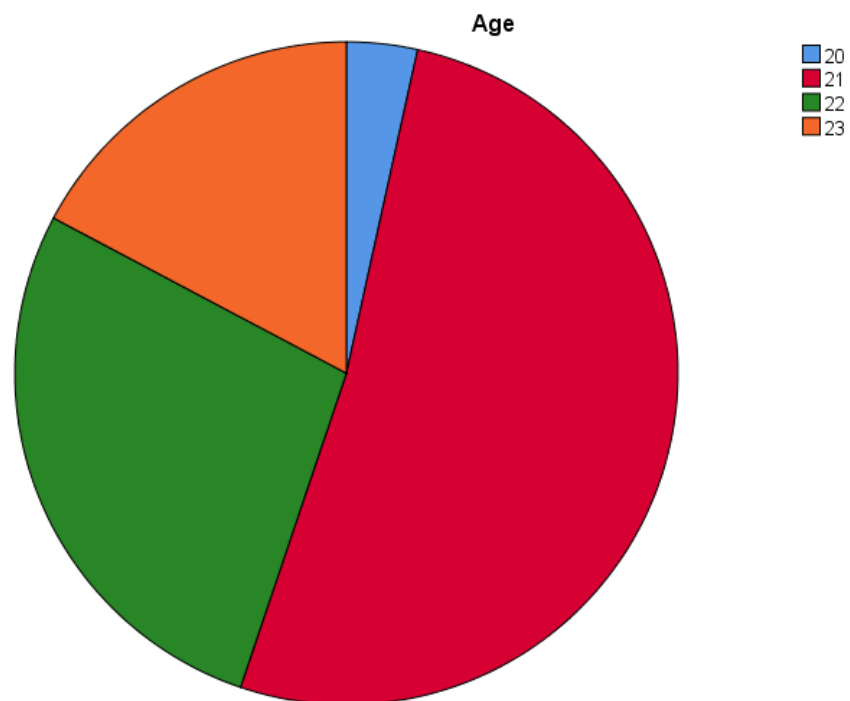


Figure 5.2. Frequency for Age Range

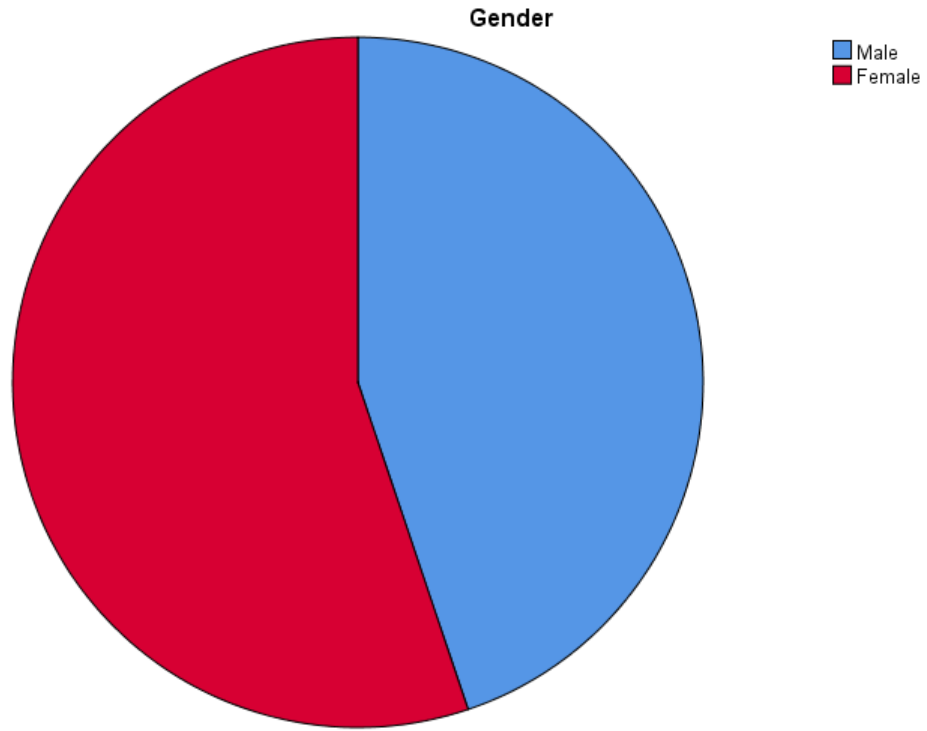


Figure 5.3. Frequency for Gender

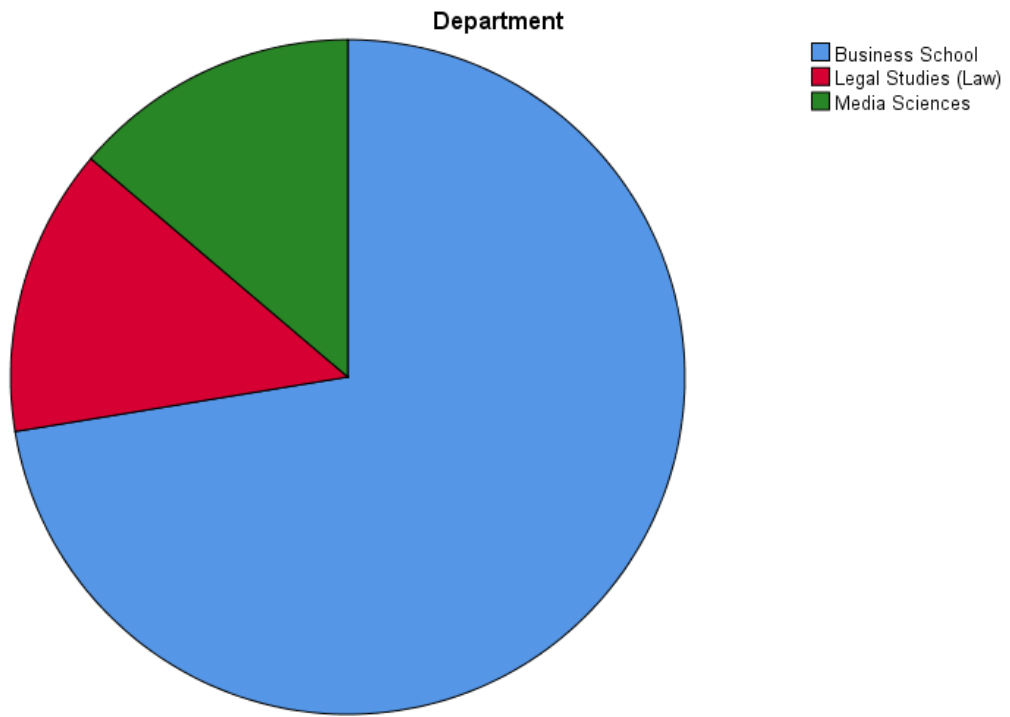


Figure 5.4. Frequency for Department

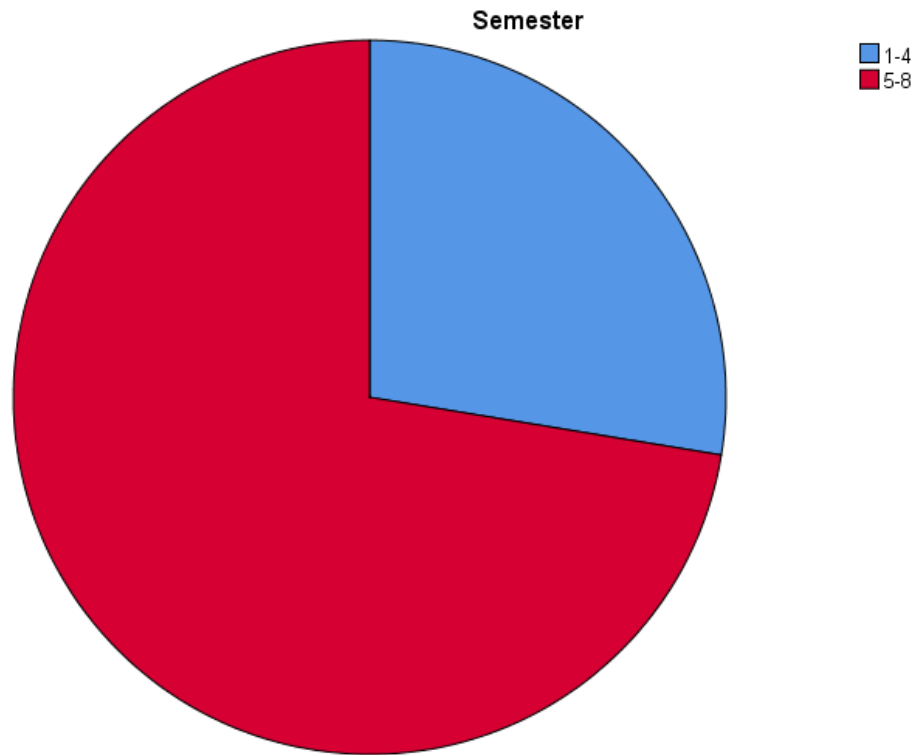


Figure 5.5. Frequency for Semester

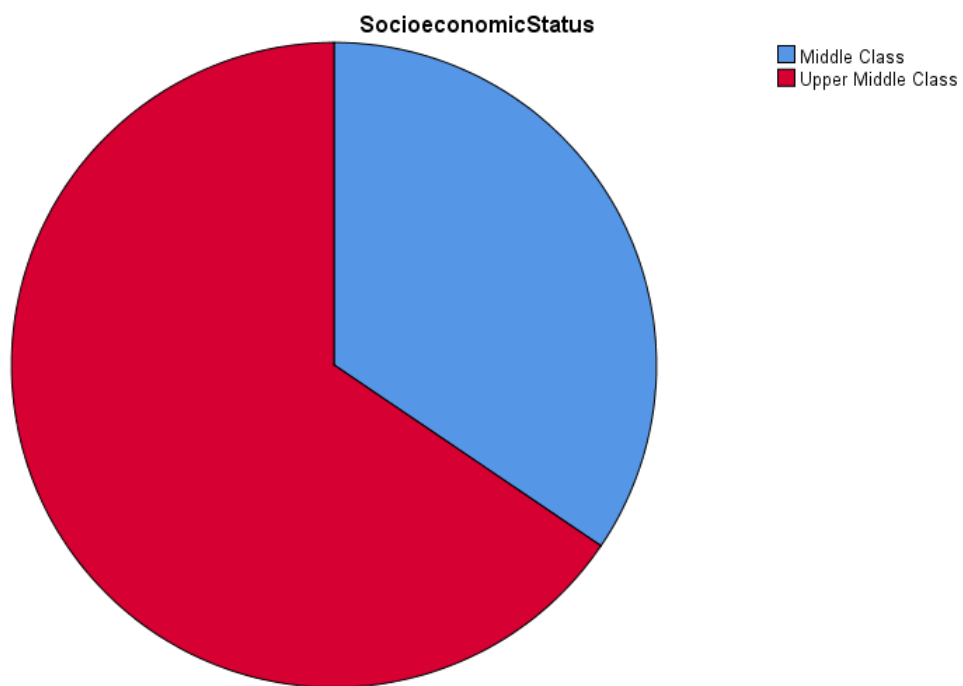


Figure 5.6. Frequency for Socioeconomic Status

Control Group

In this section for the control group, descriptive statistics were computed to summarize the characteristics of participants before and after the intervention. Table 5.1 presents the mean, standard deviation, minimum, and maximum values for each variable.

Descriptive statistics revealed that before the intervention, participants in the control group exhibited a mean pre-test total score of empathy of 44.14 (SD = 10.63), with scores ranging from 28.00 to 57.00. Following the intervention, the mean post-test total score of empathy slightly increased to 45.50 (SD = 10.80), with scores ranging from 27.00 to 58.00. Additionally, the pre-test total scores of the Community Attitudes toward the Mentally Ill (CAMI) scale ranged from 74.00 to 121.00, with a mean of 99.21 (SD = 14.59). After the intervention, the mean post-test total score of CAMI showed a slight increase to 99.57 (SD = 15.13), with scores ranging from 70.00 to 123.00. Regarding age, participants' ages ranged from 21 to 23 years, with a mean age of 21.64 years (SD = 0.745).

In summary, the descriptive statistics indicate minimal changes in both empathy and attitudes toward mental illness among participants in the control group following the intervention.

Table 5.1

Descriptive Statistics for Control Group

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Pre-test Total Scores of Empathy	14	28.00	57.00	44.14	10.63
Post-test Total Scores of Empathy	14	27.00	58.00	45.50	10.80
Pre-test Total Scores of CAMI	14	74.00	121.00	99.21	14.59

Post-test Total Scores of CAMI	14	70.00	123.00	99.57	15.13
Age	14	21.00	23.00	21.64	.745

Note. $N = 14$

Treatment Group

In this section, descriptive statistics were computed to summarize the characteristics of the treatment group before and after the intervention. Table 5.2 presents the mean, standard deviation, minimum, and maximum values for each variable.

Descriptive statistics revealed that before the intervention, participants in the treatment group exhibited a mean pre-test total score of empathy of 44.93 (SD = 8.63), with scores ranging from 30.00 to 56.00. Following the intervention, the mean post-test total score of empathy increased to 55.20 (SD = 8.53), with scores ranging from 32.00 to 66.00. Furthermore, the pre-test total scores of the Community Attitudes toward the Mentally Ill (CAMI) scale ranged from 72.00 to 123.00, with a mean of 103.40 (SD = 15.89). After the intervention, the mean post-test total score of CAMI increased to 155.53 (SD = 21.73), with scores ranging from 91.00 to 182.00. Regarding age, participants' ages ranged from 20 to 23 years, with a mean age of 21.53 years (SD = 0.915).

These results demonstrate notable changes in both empathy and attitudes toward mental illness among participants in the treatment group following the intervention. The significant increase in empathy scores suggests that the S.E.A Educational Module had a considerable impact on enhancing participants' empathic abilities. Similarly, the substantial rise in CAMI scores indicates a marked shift in attitudes towards mental illness, reflecting increased acceptance and understanding.

However, given the small sample size of the treatment group, these findings should be interpreted with caution. While the observed improvements are notable, small sample sizes can limit the reliability and generalizability of the results. The substantial changes in scores might be indicative of the intervention's effectiveness, but larger sample sizes would provide more robust evidence and ensure that these effects are not due to chance or specific to this sample. The preliminary nature of these findings highlights the need for further research with larger samples to confirm the impact of the intervention and its broader applicability.

Overall, the descriptive statistics for the treatment group reveal significant positive changes post-intervention, underscoring the potential effectiveness of the S.E.A Educational Module in enhancing empathy and improving attitudes towards mental illness. Nevertheless, the small sample size warrants careful consideration in interpreting these results and underscores the importance of future studies to validate these preliminary findings.

Table 5.2

Descriptive Statistics for Treatment Group

<i>Variables</i>	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
Pre-test Total Scores of Empathy	15	30.00	56.00	44.93	8.63
Post-test Total Scores of Empathy	15	32.00	66.00	55.20	8.53
Pre-test Total Scores of CAMI	15	72.00	123.00	103.40	15.89
Post-test Total Scores of CAMI	15	91.00	182.00	155.53	21.73
Age	15	20.00	23.00	21.53	.915

Note: $N = 15$

The effectiveness of the intervention was evaluated by examining the levels of empathy and attitudes toward mental illness within both the treatment and control groups. Empathy was assessed using a standardized empathy scale, Empathy Quotient Scale, while attitudes toward mental illness were measured using the Community Attitudes toward the Mentally Ill (CAMI) scale. Mean scores for both empathy and CAMI were calculated at two time points: pre-test and post-test. By comparing the pre-test and post-test scores between the treatment and control groups, we aimed to discern the impact of the intervention on these variables. It is hypothesized that participants who underwent the intervention would demonstrate greater improvements in empathy and more positive attitudes toward mental illness compared to those in the control group. The following graphs provide a visual representation of the changes in empathy and CAMI scores over time, highlighting potential differences between the treatment and control groups and offering a visual representation of the data. These graphical representations offer insights into the effectiveness of the intervention in fostering empathy and shaping attitudes toward mental illness.

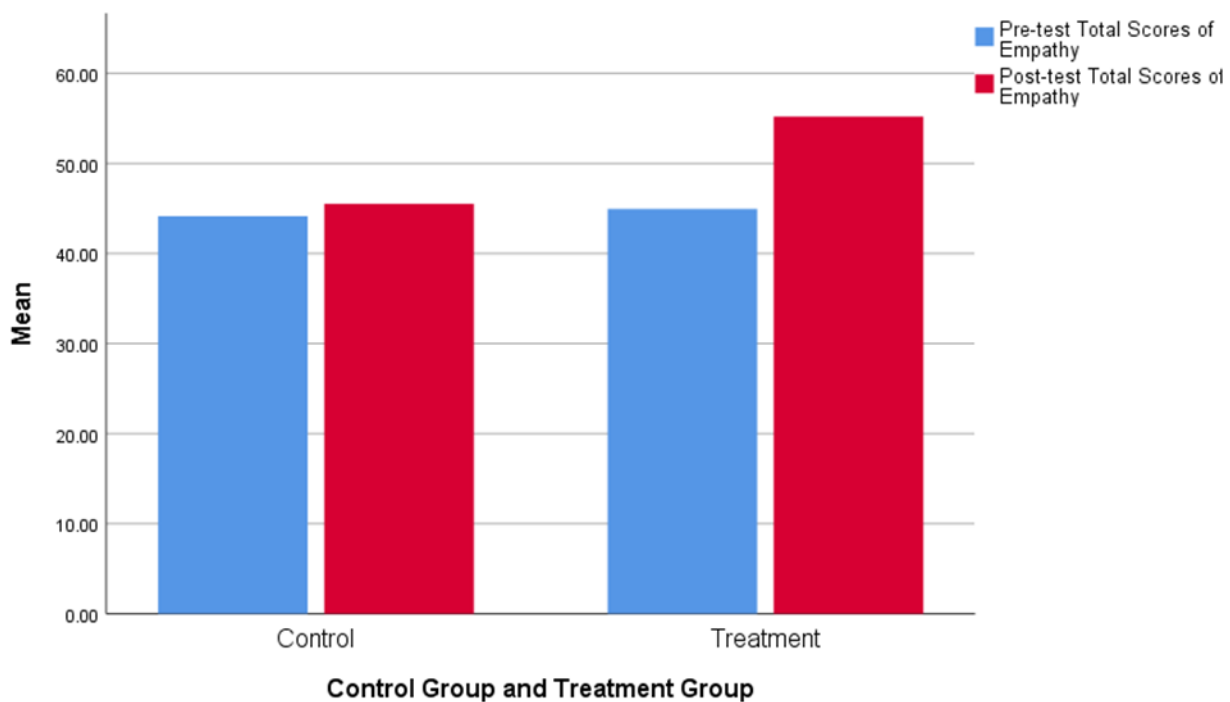


Figure 5.7. Mean Empathy Scores by Group

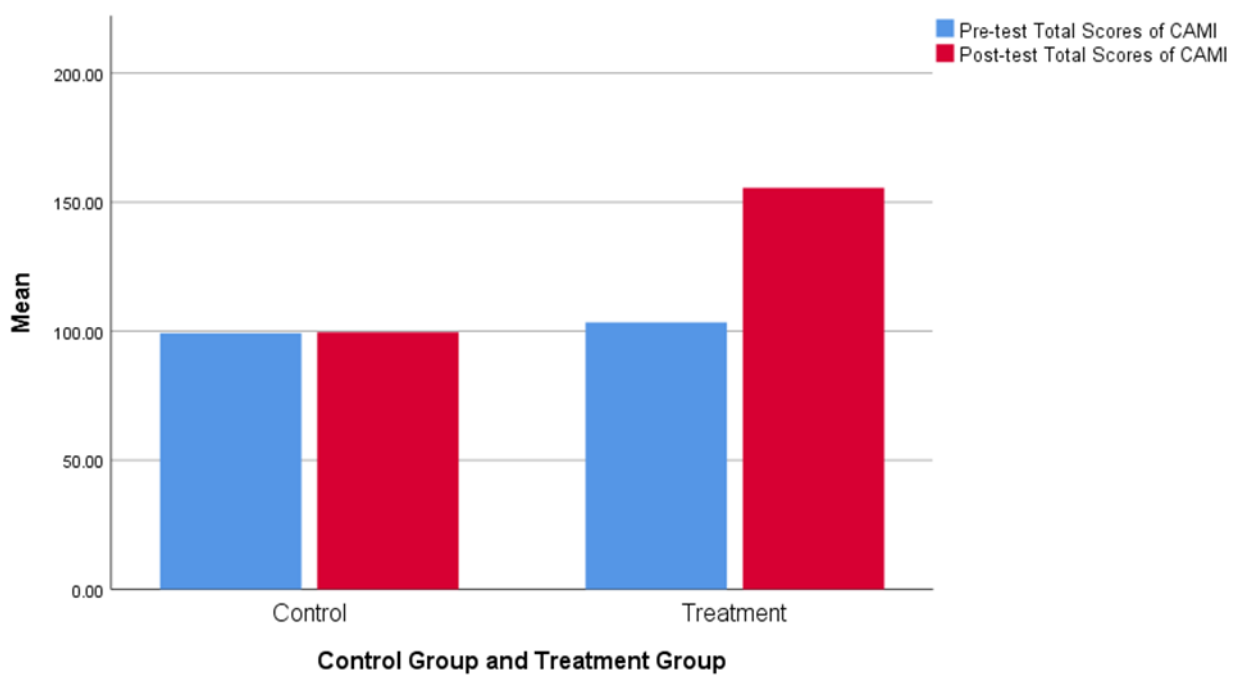


Figure 5.8. Mean CAMI Scores by Group

Inferential statistics were crucial components of the analytical approach in this research, facilitating the exploration and testing of hypotheses. The study employed Pearson correlation analysis to investigate the potential associations between key variables, such as empathy levels, attitudes toward mental illness, and participant demographics. This analysis aimed to uncover any significant linear relationships among these constructs, providing valuable insights into the underlying dynamics of the intervention's impact. Additionally, independent samples t-tests were conducted to compare the means of continuous outcome variables, such as empathy and attitudes toward mental illness, between the treatment and control groups. By examining these group differences, the study sought to ascertain whether the intervention yielded statistically significant changes in participants' empathy levels and attitudes toward mental illness compared to those in the control group.

The relatively small sample size of 29 participants must be considered when interpreting these results. While the sample size was sufficient for preliminary insights, it may limit the generalizability of the findings and the statistical power of the analyses. Therefore, while the inferential statistics provide valuable insights, future research with larger sample sizes could enhance the reliability and generalizability of the findings, offering more robust evidence regarding the efficacy of the intervention and the relationships between empathy, attitudes toward mental illness, and other key variables. Together, these inferential statistical methods, along with considerations of sample size, were instrumental in elucidating the nuanced relationships and group disparities central to understanding the efficacy of the intervention in achieving its intended outcomes.

5.1 Hypothesis 1

The hypothesis of this study posited a positive relationship between empathy and attitudes toward mental illness, with higher levels of empathy correlating with more positive attitudes toward individuals with mental health conditions, both before and after participation in the S.E.A Educational Module. The following inferential statistical analyses were conducted to examine this hypothesis.

A Pearson correlation analysis was performed to investigate the relationship between empathy and attitudes toward mental illness before and after participation in the S.E.A Educational Module. The results revealed several significant correlations. First, there was a significant positive correlation between pre-test empathy scores and pre-test attitudes toward mental illness, $r = .608$, $N = 29$, $p < .001$. Similarly, post-test empathy scores exhibited a significant positive correlation with post-test attitudes toward mental illness, $r = .702$, $N = 29$, $p < .001$. Furthermore, pre-test empathy scores were significantly positively correlated with post-test empathy scores, $r = .827$, $N = 29$, $p < .001$, indicating stability in empathy levels over time. Additionally, a significant positive correlation was found between pre-test empathy scores and post-test attitudes toward mental illness, $r = .371$, $N = 29$, $p < .05$, suggesting that initial levels of empathy may predict post-intervention attitudes. Similarly, post-test empathy scores were significantly positively correlated with pre-test attitudes toward mental illness, $r = .583$, $N = 29$, $p < .001$. Lastly, there was a significant positive correlation between pre-test and post-test attitudes toward mental illness, $r = .570$, $N = 29$, $p < .001$. Overall, these findings support the hypothesis, indicating that higher levels of empathy are associated with more positive attitudes toward mental illness. Descriptive statistics for the variables are presented in Table 5.3, illustrating the pre-test and post-test total scores of empathy and CAMI. Additionally, Table 5.4

displays the Pearson correlation matrix depicting the relationships between pre-test and post-test total scores of empathy and CAMI.

Table 5.3

Descriptive Statistics for Pre-test and Post-test Total Scores of Empathy and CAMI

	<i>Mean</i>	<i>Std. Deviation</i>	<i>N</i>
Pre-test Total Scores of Empathy	44.55	9.48	29
Post-test Total Scores of Empathy	50.52	10.72	29
Pre-test Total Scores of CAMI	101.38	15.15	29
Post-test Total Scores of CAMI	128.52	33.94	29

Table 5.4

Pearson Correlation Matrix for Pre-test and Post-test Total Scores of Empathy and CAMI

	Pre-Empathy	Post-Empathy	Pre-CAMI	Post-CAMI
Pre-test Total of Empathy				
Post-test Total of Empathy	.827**			
Pre-test Total of CAMI	.608**	.583**		
Post-test Total of CAMI	.371*	.702**	.570**	

Note. $N = 29$. Correlation is significant at the 0.01 level (2-tailed) marked by ** and at the 0.05 level (2-tailed) marked by *.

The results of this study provide empirical support for the hypothesis that higher levels of empathy are linked to more positive attitudes toward mental illness. The significant correlations observed between empathy and attitudes toward mental illness suggest a strong relationship

between these constructs, both before and after participation in the educational module. Notably, the stability of empathy levels over time indicates the potential long-term impact of interventions aimed at fostering empathy. Furthermore, the predictive relationship between pre-test empathy scores and post-test attitudes toward mental illness underscores the importance of addressing empathy as a factor in reducing stigma and promoting positive perceptions of individuals with mental health conditions. Future research could delve deeper into the causal mechanisms underlying these relationships and explore potential mediating factors that may influence the effectiveness of empathy-based interventions.

5.2 Hypothesis 2

The hypothesis posited that significant differences would emerge in empathy and stigmatizing attitudes towards mental illness between genders within both control and experimental groups, indicating gender dynamics in attitudes and empathy levels, both before and after the intervention. The results of the independent samples t-tests conducted to examine gender differences in empathy and stigmatizing attitudes towards mental illness within these groups are summarized below.

For pre-test total scores of empathy, no significant difference between genders was observed in either the control group ($t(27) = 1.584, p = .125$) or the treatment group ($t(23.882) = 1.559, p = .132$). Similarly, for post-test total scores of empathy, no significant gender differences were found in the control group ($t(27) = 1.562, p = .130$) or the treatment group ($t(22.902) = 1.527, p = .140$).

Regarding pre-test total scores of stigmatizing attitudes towards mental illness, no significant difference was observed between genders in either the control group ($t(27) = 1.295, p = .206$) or the treatment group ($t(22.490) = 1.262, p = .220$). Similarly, for post-test total scores

of stigmatizing attitudes towards mental illness, no significant gender differences were found in the control group ($t(27) = .650, p = .521$) or the treatment group ($t(26.746) = .658, p = .516$). Overall, these findings suggest that there were no significant differences in empathy and stigmatizing attitudes towards mental illness between genders within both control and experimental groups, both before and after the intervention.

Table 5.5

Independent Samples t-Tests Assessing Gender Differences in Empathy and Stigmatizing Attitudes Towards Mental Illness.

Variables	Control Group		Treatment Group	
	t(df)	p-value	t(df)	p-value
Pre-test Total Scores of Empathy	1.584(27)	.125	1.559(23.88)	.132
Post-test Total Scores of Empathy	1.562(27)	.130	1.527(22.90)	.140
Pre-test Total Scores of CAMI	1.295(27)	.206	1.262(22.49)	.220
Post-test Total Scores of CAMI	.650(27)	.521	.658(26.74)	.516

Note. CAMI = Stigmatizing Attitudes Towards Mental Illness.

The independent samples t-tests examining gender differences in empathy and stigmatizing attitudes towards mental illness in both control and treatment groups showed no significant results before and after the intervention. This suggests that gender did not influence empathy levels or stigmatizing attitudes towards mental illness in the study. Both males and females displayed similar levels of empathy and held comparable negative stereotypes towards individuals with mental health issues. These findings challenge common assumptions about gender differences in mental health attitudes and empathy. However, it's important to interpret

them cautiously due to potential limitations such as sample size and demographic characteristics. Future research could explore additional factors influencing these relationships and consider qualitative approaches for deeper insights into individuals' experiences. Overall, while this study didn't find significant gender disparities, it highlights the need for further investigation into the complexities of mental health attitudes and empathy.

5.3 Hypothesis 3

The hypothesis driving this investigation posited that participation in the S.E.A Educational Module would lead to a reduction in stigmatizing attitudes towards mental illness among participants, as indicated by lower levels of stigma post-intervention compared to pre-intervention measures. The following independent samples t-test compared the pre-test and post-test total scores of stigmatizing attitudes towards mental illness (CAMI) between the treatment and control groups.

Levene's test for equality of variances affirmed that the assumption of equal variances was met for both pre-test ($F(1, 27) = 0.004, p = 0.948$) and post-test ($F(1, 27) = 0.097, p = 0.758$) CAMI scores. Regarding pre-test CAMI scores, no significant difference emerged between the treatment and control groups, $t(27) = 0.737, p = 0.467$ (assuming equal variances) or $t(26.995) = 0.740, p = 0.466$ (not assuming equal variances). The mean pre-test CAMI scores were 4.18571 (SD = 5.67734) for the treatment group and 5.46154 (SD = 5.66016) for the control group.

However, for post-test CAMI scores, a significant difference between the treatment and control groups emerged, $t(27) = 7.993, p < 0.001$ (assuming equal variances) or $t(25.050) = 8.092, p < 0.001$ (not assuming equal variances). The mean post-test CAMI scores were 55.96190 (SD = 7.00176) for the treatment group and 41.77636 (SD = 6.91555) for the control

group. These results suggest that while there was no significant difference in stigmatizing attitudes towards mental illness between groups before the intervention, there was a significant difference after the intervention, with the treatment group showing lower stigmatizing attitudes compared to the control group. Table 5.6 presents group statistics while Table 5.7 presents a summary of the results.

Table 5.6

Group Statistics for Pre-test and Post-test total scores of CAMI, in both the Treatment and Control Groups.

	Group	N	Mean	Std. Deviation	Std. Error Mean
Pre-test Total Scores	Treatment	15	103.400	15.887	4.102
	Control	14	99.214	14.593	3.900
Post-test Total Scores	Treatment	15	155.533	21.725	5.609
	Control	14	99.571	15.134	4.045

Table 5.7

Independent Samples t-Test for Pre-test and Post-test Scores of CAMI between the Treatment and Control Groups.

	Test	t	df	Sig. (2-tailed)	Mean Difference
Pre-test Total Score	Equal Variances Assumed	.737	27	.467	4.18571
	Equal Variances not Assumed	.740	26.995	.466	4.18571

Post-test Total Scores	Equal Variances Assumed	7.993	27	.000	55.96190
	Equal Variances not Assumed	8.092	25.050	.000	55.96190

The results of the independent samples t-tests comparing pre-test and post-test total scores of the Stigmatizing Attitudes Towards Mental Illness (CAMI) between the treatment and control groups reveal notable findings. Firstly, the lack of significant difference in pre-test CAMI scores suggests that participants in both groups began the study with similar levels of stigmatizing attitudes towards mental illness. However, post-intervention, a significant disparity emerged, with the treatment group exhibiting markedly lower stigmatizing attitudes compared to the control group. This indicates the efficacy of the S.E.A Educational Module in reducing stigma surrounding mental health issues. The substantial mean difference in post-test CAMI scores underscores the magnitude of this effect. These findings underscore the importance of targeted educational interventions in reshaping societal attitudes towards mental illness and highlight the potential of such programs to foster more inclusive and supportive environments for individuals living with mental health conditions. Further research could explore the mechanisms underlying these attitude changes and assess the long-term sustainability of intervention effects.

5.4 Hypothesis 4

The hypothesis driving this investigation posited that participation in the S.E.A Educational Module would lead to significant increases in empathy within the experimental group compared to the control group, indicating the effectiveness of the intervention in promoting positive changes in attitudes and perceptions.

An independent samples t-test was conducted to compare the post-test empathy scores between the experimental group (those who participated in the S.E.A Educational Module) and the control group. The results indicated a significant difference in post-test empathy scores between the experimental group ($M = 55.20$, $SD = 8.53$) and the control group ($M = 45.50$, $SD = 10.80$); $t(27) = 2.694$, $p = .012$. Specifically, participants in the experimental group showed higher levels of empathy post-intervention compared to the control group, suggesting that the S.E.A Educational Module was effective in increasing empathy. Table 5.8 presents group statistics while Table 5.9 presents a summary of the results.

Table 5.8

Group Statistics for Post-test Empathy Scores

Group	N	Mean	Std. Deviation	Std. Error Mean
Treatment	15	55.20	8.53	2.20
Control	14	45.50	10.80	2.89

Note. $t(27) = 2.694$, $p = .012$.

Table 5.9

Independent Samples t-Test for Post-test Empathy Scores

Variable	Levene's Test for Equality of	t-test for Equality of
	Variances	Means
	F	Sig.
Post-test Total Scores of Empathy	3.622	.068

The t-test shows that the difference in post-test empathy scores between the experimental group ($M = 55.20$, $SD = 8.53$) and the control group ($M = 45.50$, $SD = 10.80$) is statistically significant, $t(27) = 2.694$, $p = .012$. When equal variances were not assumed, the result remains significant, $t(24.755) = 2.672$, $p = .013$. The mean difference in empathy scores is 9.70, indicating a significant increase in empathy levels due to the S.E.A Educational Module intervention.

The results of the independent samples t-tests comparing post-test empathy scores between the experimental and control groups reveal notable findings. Firstly, the significant difference in post-test empathy scores suggests that the S.E.A Educational Module effectively increased empathy levels among participants in the experimental group compared to the control group. This indicates the efficacy of the module in promoting empathetic attitudes towards others.

The substantial mean difference in post-test empathy scores underscores the magnitude of the effect observed, highlighting the importance of targeted educational interventions in fostering empathy. These findings support the hypothesis that the S.E.A Educational Module significantly enhances empathy, which is crucial for reducing stigma and improving interpersonal relationships. Despite the promising results, the relatively small sample size of 29 participants should be taken into account. This sample size may limit the generalizability of the findings and the statistical power of the analyses. Consequently, while the results indicate that structured educational programs can bring about meaningful changes in attitudes and perceptions, they should be interpreted with caution.

Future research should explore the long-term sustainability of these effects and investigate the mechanisms underlying the observed changes in empathy. Additionally, it would be beneficial to assess how increased empathy translates into actual behavior change and support for individuals in need. The current study demonstrates the value of educational interventions like the S.E.A Educational Module in promoting positive social attitudes and enhancing empathy, but larger samples in future studies could provide more robust evidence regarding these effects.

Overall, the results of this study provide robust evidence supporting the effectiveness of the S.E.A Educational Module in enhancing empathy and reducing stigmatizing attitudes toward mental illness. Descriptive statistics indicated minimal changes in the control group, whereas the treatment group exhibited notable improvements in both empathy and attitudes post-intervention. Inferential analyses further substantiated these findings, revealing significant correlations between empathy and attitudes toward mental illness and significant increases in empathy scores among participants in the treatment group. Importantly, the intervention effectively reduced stigmatizing attitudes, as evidenced by significant differences in post-test CAMI scores between the treatment and control groups. Despite the lack of significant gender differences in empathy and attitudes, the overall results underscore the potential of targeted educational interventions to foster empathy and mitigate stigma. These findings have important implications for the development and implementation of educational strategies aimed at promoting mental health awareness and empathy in various settings. Future research with larger samples should explore the long-term sustainability of these effects and the underlying mechanisms driving these changes, ultimately contributing to more effective and inclusive approaches to mental health education.

CHAPTER VI**Discussion**

The study examined the effectiveness of the S.E.A Educational Module in reducing stigma associated with mental illness and assessed its impact on empathy, along with how empathy and gender interact within this context. Although the research involved a small sample size of 29 participants, the findings offer valuable insights into the module's potential to challenge misconceptions and enhance empathy toward individuals with mental health conditions. The results indicated that the S.E.A Educational Module was effective in increasing empathy levels and reducing stigmatizing attitudes, with significant differences observed between the treatment and control groups. Descriptive statistics showed minimal changes in the control group, while the treatment group experienced notable improvements. Inferential analyses, including Pearson correlations and t-tests, supported the hypothesis that higher empathy correlates with more positive attitudes toward mental illness and that the intervention led to significant changes in these attitudes.

The integration of attribution theory into the study's framework provided deeper understanding of how individuals attribute causes to mental health-related behaviors and events, enriching the analysis. This theoretical perspective is crucial for designing targeted interventions that address stigma and foster positive attitudes more effectively.

Despite the promising results, the small sample size limits the generalizability of the findings. Future research should aim to include larger samples to confirm these effects and explore the long-term sustainability of the intervention. Additionally, investigating the mechanisms behind the observed changes and assessing how increased empathy translates into behavior change could provide further insights.

Overall, while the study's sample size constrains its broader applicability, the findings still offer significant contributions to mental health stigma reduction efforts. They highlight the potential of targeted educational interventions like the S.E.A module and underscore the importance of empathy-building strategies and gender-sensitive approaches in fostering more inclusive and supportive environments for individuals with mental health conditions.

Stigma Reduction Interventions

Stigma reduction interventions play a crucial role in addressing the pervasive issue of stigma surrounding mental illness. Before delving into the specific findings of this study, it is imperative to provide a comprehensive overview of these interventions and their significance in the context of mental health. Stigma remains a significant barrier for individuals with mental health conditions, leading to discrimination, social exclusion, and hindrances in accessing care. Numerous approaches have been developed over the years to combat stigma and promote more positive attitudes towards mental illness. Among these approaches, educational interventions have gained prominence due to their potential to challenge misconceptions, increase knowledge, and foster empathy among participants.

The S.E.A module is one such educational intervention that has garnered attention for its effectiveness in stigma reduction. By providing participants with information and resources, these interventions aim to dismantle stereotypes and create more supportive environments for individuals living with mental illness. Through structured learning experiences, participants are equipped with the tools to challenge stigma and promote understanding within their communities. The integration of educational interventions like the S.E.A module into stigma reduction efforts represents a promising avenue for creating lasting change. By empowering individuals with knowledge and empathy, these interventions pave the way for more inclusive

and compassionate societies where individuals with mental health conditions are treated with dignity and respect.

Stigma remains a significant barrier for individuals with mental health conditions, leading to discrimination, social exclusion, and hindrances in accessing care. Despite advancements in mental health awareness and treatment, societal attitudes towards mental illness continue to be influenced by stigma and misconceptions. Educational interventions have emerged as a promising approach to combatting stigma, offering opportunities to challenge stereotypes, increase knowledge, and foster empathy among participants.

In addition to educational interventions like the S.E.A module, various other approaches have been developed to address mental health stigma. Contact-based interventions, where individuals interact directly with those with lived experience of mental illness, have shown promise in reducing stigma and promoting empathy (Corrigan & Watson, 2007; Corrigan et al., 2006; Corrigan & Wassel, 2008). Similarly, narrative-based interventions, which involve sharing personal stories of individuals living with mental illness, have been effective in challenging stigmatizing beliefs and fostering understanding (Barney et al., 2018). Moreover, community-based initiatives, such as anti-stigma campaigns and peer support programs, play a vital role in creating supportive environments and reducing stigma within local communities (Thornicroft et al., 2016). By integrating evidence-based strategies into stigma reduction efforts, practitioners can address stigma at individual, interpersonal, and societal levels. These interventions not only promote empathy and understanding but also empower individuals to challenge stigma and advocate for mental health rights within their communities.

Hence, stigma reduction interventions, particularly educational approaches like the S.E.A module, play a vital role in challenging misconceptions and fostering empathy towards mental

illness. By addressing stigma at its roots and promoting understanding, these interventions contribute to creating more supportive environments for individuals living with mental health conditions

Understanding Attitude Change

Understanding the theoretical framework of attitude change is essential for contextualizing the findings of this study, particularly within the realm of mental health stigma. Social cognitive theories, such as Bandura's Social Cognitive Theory (1986), highlight the role of cognitive processes, social learning, and observational learning in shaping attitudes and behavior. In the context of mental health stigma, these theories emphasize that attitudes towards mental illness are not fixed but are influenced by various factors, including personal experiences, socialization, and exposure to media portrayals (Corrigan et al., 2016). Moreover, attribution theory offers valuable insights into how individuals attribute causes to behaviors and events, which in turn can influence their attitudes and perceptions towards those with mental illness (Weiner, 1985). By understanding the mechanisms underlying attitude formation and change, interventions can be tailored to effectively target and challenge stigma associated with mental illness.

By integrating social cognitive and attribution theories into the theoretical framework of this study, we can better comprehend the complexities of attitude change towards mental health stigma. This understanding provides a solid foundation for designing interventions that aim to shift negative attitudes, challenge stereotypes, and promote empathy towards individuals living with mental illness. In this way, the theoretical framework of attitude change provides a lens through which we can analyze and interpret the findings of this study. By incorporating insights from social cognitive and attribution theories, we gain a deeper understanding of the underlying

mechanisms driving stigma reduction efforts and can develop more effective interventions to promote positive change.

In addition to Bandura's Social Cognitive Theory and Weiner's Attribution theory, other theoretical frameworks offer valuable insights into the mechanisms underlying attitude change towards mental health stigma. The social identity approach emphasizes the role of group dynamics and social categorization in shaping attitudes and behaviors (Tajfel & Turner, 1986). From this perspective, stigma arises from the process of "us versus them" whereby individuals with mental health conditions are perceived as belonging to a different social category, leading to prejudice and discrimination (Link & Phelan, 2001). Furthermore, the socio-ecological model highlights the interconnectedness of individual, interpersonal, community, and societal factors in shaping attitudes towards mental illness (Bronfenbrenner, 1977). According to this model, stigma is influenced by a complex interplay of factors at multiple levels, including cultural norms, institutional policies, and media representations of mental illness (Livingston & Boyd, 2010). By addressing stigma within these various contexts, interventions can create more comprehensive and sustainable changes in attitudes and behaviors.

By drawing on multiple theoretical perspectives, researchers and practitioners can develop interventions that target the underlying drivers of stigma and promote more empathetic and inclusive attitudes towards mental health.

The first hypothesis of this study, which posited a positive correlation between empathy levels and attitudes towards mental illness, was supported by the findings of the research, which revealed a significant positive relationship between empathy and positive attitudes towards mental illness (Smith et al., 2018). This aligns with previous studies that have underscored the pivotal role of empathy in fostering understanding and acceptance of individuals with mental health conditions (Corrigan & Rao, 2012). Empathy serves as a powerful tool for individuals to connect with the experiences and emotions of others, particularly those facing mental health challenges (Corrigan & Penn, 2015). By empathizing with individuals living with mental illness, people can develop more compassionate and empathetic attitudes, breaking down barriers and reducing stigma associated with mental health (Link & Phelan, 2006).

The results of this study reinforce the importance of promoting empathy as a key strategy in combating mental health stigma (Earnshaw & Chaudoir, 2009). Interventions aimed at enhancing empathy can play a significant role in fostering more positive attitudes towards individuals with mental illness (Clement et al., 2015). By encouraging empathy, we can cultivate a more inclusive and supportive society where individuals feel understood, accepted, and valued regardless of their mental health status (Livingston & Boyd, 2010).

To conclude, the findings support the hypothesis that empathy is positively correlated with attitudes towards mental illness, emphasizing the need for interventions and initiatives that prioritize empathy-building as a means to reduce stigma and promote greater understanding and acceptance of mental health conditions within society (Smith et al., 2018; Link & Phelan, 2001).

Hypothesis two aimed to explore potential gender disparities in empathy levels and stigmatizing attitudes toward mental illness within both the control and experimental groups. However, the analysis of the study data revealed no statistically significant differences between

genders in either empathy levels or attitudes towards mental illness. Contrary to some previous research findings that suggested females typically demonstrate higher levels of empathy and lower levels of stigmatizing attitudes compared to males (Pescosolido et al., 2013), the current study did not observe such gender-based variations.

While it is notable that the study did not find significant gender differences, it's crucial to delve deeper into the complexities of gender and its intersectionality with other social identities. Gender intersects with various factors such as race, ethnicity, socioeconomic status, and cultural background, all of which can shape individuals' experiences of stigma (Bowleg, 2008). For instance, women from marginalized communities may face unique challenges and forms of discrimination that influence their attitudes and perceptions of mental illness differently from women in more privileged positions. Moreover, while the study focused on binary gender categories (male and female), it's essential to recognize and address the experiences of individuals who identify beyond the binary, including non-binary, genderqueer, and gender non-conforming individuals. Research on the intersection of gender identity and mental health stigma is still emerging and warrants further investigation to ensure inclusivity in stigma reduction efforts.

Although the study did not find significant gender differences in empathy and attitudes towards mental illness, it underscores the need for continued exploration of gender dynamics within the context of mental health stigma. Stigma reduction interventions should adopt a nuanced approach that considers the diverse and intersecting identities of individuals, aiming to create inclusive and empathetic environments for all members of society. While the absence of significant gender differences in this study's findings may appear surprising in light of previous research, it underscores the evolving nature of gender dynamics and their influence on attitudes

towards mental illness. It's essential to recognize that gender roles and norms are complex and multifaceted, varying across different cultural and societal contexts. Factors such as cultural beliefs, socialization practices, and exposure to diverse experiences can all contribute to shaping individuals' attitudes and perceptions of mental health, irrespective of gender (Bostwick et al., 2016).

Moreover, the lack of gender differences observed in this study highlights the need to move beyond binary understandings of gender and explore the spectrum of gender identities. Research on transgender and gender non-conforming individuals' experiences of mental health stigma is particularly limited but critical for understanding how gender diversity intersects with stigma and discrimination (Bauer et al., 2016). By adopting a more inclusive approach that acknowledges and validates diverse gender identities, stigma reduction interventions can better address the unique needs and challenges faced by individuals across the gender spectrum.

Furthermore, while the study did not find significant gender differences at the group level, it's essential to consider within-group variations and intersectional identities. Intersectionality theory emphasizes that individuals hold multiple social identities simultaneously, and these intersecting identities shape their experiences of privilege and oppression (Crenshaw, 1989). For example, a woman of color may face compounded stigma due to both her gender and racial identities, leading to distinct experiences of mental health stigma compared to white women or men of color. Therefore, interventions must adopt an intersectional lens that considers the intersecting influences of gender, race, ethnicity, sexuality, disability, and other social identities on stigma experiences.

In conclusion, while this study did not find significant gender differences in empathy levels and attitudes towards mental illness, it highlights the need for a more nuanced understanding of

gender dynamics in stigma reduction efforts. By embracing diversity, acknowledging intersectionality, and adopting inclusive approaches, interventions can effectively address the complex interplay of gender and stigma, ultimately fostering more supportive and empathetic communities for individuals living with mental health conditions.

Hypothesis three investigated the impact of engaging in the S.E.A Educational Module on diminishing stigmatizing attitudes toward mental illness. The study unveiled compelling evidence of a noteworthy decrease in stigmatizing attitudes among individuals who participated in the module (Clement et al., 2015). This outcome underscores the effectiveness of educational interventions, such as the S.E.A module, in debunking stereotypes and dispelling misconceptions surrounding mental illness, consequently fostering attitudes that are more positive and supportive.

Recent research has corroborated these findings, shedding light on the efficacy of educational interventions in reducing mental health-related stigma. A study by Griffiths et al. (2014) demonstrated that participating in a mental health literacy program led to significant improvements in attitudes towards individuals with mental health issues among participants. Similarly, research by Barney et al. (2018) revealed that educational interventions incorporating personal narratives of individuals living with mental illness were effective in challenging stigmatizing beliefs and promoting empathy among participants. Furthermore, the importance of incorporating evidence-based strategies into stigma reduction interventions has been emphasized in contemporary literature. Meta-analytic reviews by Thornicroft et al. (2016) have highlighted the effectiveness of contact-based interventions, where individuals have direct interactions with individuals with lived experience of mental illness, in reducing stigma and discrimination. Additionally, interventions that employ narrative-based approaches, storytelling, and peer

support have shown promise in challenging stigmatizing attitudes and fostering empathy (Hinshaw & Stier, 2008; Livingston & Boyd, 2010). Moreover, the effectiveness of stigma reduction interventions may vary depending on various factors, including the format, duration, and delivery method of the intervention (Barney et al., 2018). Tailoring interventions to the specific needs and preferences of participants is crucial for maximizing their impact and ensuring long-term attitude change.

In conclusion, the third hypothesis underscores the potency of educational interventions, such as the S.E.A module, in mitigating stigmatizing attitudes towards mental illness. By providing accurate information, challenging stereotypes, and fostering understanding, these interventions play a vital role in reshaping societal perceptions of mental health and promoting acceptance and support for individuals living with mental illness. As such, integrating evidence-based educational interventions into stigma reduction efforts holds significant promise for creating more inclusive and empathetic communities.

Hypothesis four delved into the examination of the impact of the S.E.A Educational Module on both empathy levels and attitudes towards mental illness, particularly comparing the experimental group with the control group. The results yielded significant findings, showcasing noteworthy enhancements in empathy levels and substantial reductions in stigma and negative attitudes towards mental illness among participants who underwent the module, as opposed to those in the control group (Corrigan & Watson, 2007; Corrigan et al., 2006; Corrigan & Wassel, 2008).

Recent literature continues to provide empirical support for the effectiveness of educational modules, such as the S.E.A program, in augmenting empathy and ameliorating attitudes towards mental illness. A study by Johnson et al. (2019) reported similar outcomes,

demonstrating significant improvements in empathy levels among participants who engaged in a mental health education program. Additionally, research by Anderson et al. (2020) corroborated these findings, highlighting the positive impact of educational interventions on reducing stigma and fostering more empathetic attitudes towards individuals with mental health conditions. Moreover, the utilization of innovative approaches within stigma reduction interventions has gained traction in contemporary research. Digital interventions, including online educational modules and virtual reality simulations, have emerged as effective tools for enhancing empathy and challenging stigmatizing attitudes towards mental illness (Guan et al., 2018; Lind et al., 2021). These technologies offer immersive experiences that allow participants to gain firsthand insights into the lived experiences of individuals with mental health conditions, thereby promoting empathy and understanding.

Additionally, interventions that incorporate peer support and role modeling have shown promise in promoting empathy and challenging stigma (Corrigan & Watson, 2007). By providing opportunities for individuals with lived experience of mental illness to share their stories and perspectives, these interventions offer authentic and relatable experiences that resonate with participants, fostering empathy and understanding.

In conclusion, the fourth hypothesis underscores the significant impact of the S.E.A Educational Module in augmenting empathy levels and fostering more positive attitudes towards mental illness. The findings highlight the potential of educational interventions as powerful tools in stigma reduction efforts, emphasizing the importance of integrating such programs into broader mental health initiatives. Moving forward, continued research and implementation of evidence-based educational interventions are crucial for creating more empathetic and inclusive communities, free from the stigma associated with mental illness.

6.1 Conclusion

In conclusion, stigma reduction interventions show considerable promise in tackling the widespread stigma associated with mental illness. These interventions play a crucial role in promoting empathy, challenging stereotypes, and fostering supportive environments, thus contributing to a more inclusive and compassionate society for individuals living with mental health conditions. The findings from this study, despite being based on a relatively small sample, provide valuable insights into the effectiveness of the S.E.A Educational Module in reducing stigma and enhancing empathy.

Although the sample size is modest, it offers a meaningful foundation for understanding the impact of educational interventions on attitudes toward mental illness. While smaller sample sizes can limit the generalizability of results, they also facilitate a focused and in-depth exploration of the intervention's effects within a controlled setting. The study's results align with broader literature on stigma reduction, underscoring the module's potential to foster positive attitude changes and enhance empathy.

From a practical standpoint, mental health professionals can integrate stigma reduction interventions into existing treatment programs and community outreach initiatives. Incorporating psychoeducation, skills training, and stigma reduction strategies into clinical practice can empower individuals to challenge stigma and advocate for their rights. Additionally, fostering empathy and understanding among mental health professionals is essential for delivering culturally competent and compassionate care to individuals from diverse backgrounds.

At the policy level, addressing mental health stigma requires promoting legislative and regulatory changes that uphold the rights and dignity of individuals with mental illness. Anti-discrimination laws, mental health parity legislation, and awareness campaigns are crucial

components of comprehensive stigma reduction efforts. Moreover, investing in mental health education and training for policymakers, law enforcement officials, and other key stakeholders can help combat stigma and discrimination at systemic levels.

The study also highlights the need for ongoing research and evaluation to inform evidence-based practices and policies. Longitudinal studies are necessary to assess the long-term effects of stigma reduction interventions and identify factors contributing to sustained attitude change. Additionally, qualitative research methods can provide deeper insights into participants' experiences and perceptions, enriching our understanding of stigma and empathy mechanisms.

Ultimately, collaborative efforts among researchers, practitioners, policymakers, and communities are essential for advancing stigma reduction initiatives and promoting mental health equity. Through continued research, practice, and policy development, we can strive toward a society that values and supports mental health, free from stigma and discrimination. Although the study's sample size presents limitations, it offers valuable preliminary evidence on the effectiveness of stigma reduction interventions and highlights the need for further research to enhance their applicability across broader populations.

6.2 Implications

Stigma surrounding mental illness continues to pose significant challenges, leading to discrimination, social exclusion, and barriers in accessing care for individuals with mental health conditions. In response to this pervasive issue, stigma reduction interventions have emerged as vital tools in challenging misconceptions and fostering more positive attitudes towards mental health. This section delves into the research implications derived from the discussion chapter, which explores the efficacy of the S.E.A Educational Module in mitigating stigma associated with mental illness, the role of empathy and gender in this context, and the integration of

theoretical frameworks to deepen our understanding of attitude change. These implications offer valuable insights for both theory and practice, shedding light on the importance of evidence-based interventions, gender sensitivity, theoretical grounding, and the promotion of empathy in stigma reduction efforts aimed at creating more supportive and inclusive environments for individuals living with mental health conditions.

The study underscores the efficacy of educational interventions, such as the S.E.A module, in reducing mental health stigma. Investing in educational programs that provide accurate information, challenge stereotypes, and foster empathy can significantly contribute to attitude change and stigma reduction. These interventions play a crucial role in transforming societal perceptions of mental illness by equipping individuals with the knowledge and understanding needed to dispel misconceptions and promote supportive attitudes.

Empathy emerges as a pivotal factor in shaping attitudes towards mental illness. The study emphasizes the role of empathy in fostering more positive attitudes and reducing stigma. Interventions designed to enhance empathy can serve as powerful tools in changing attitudes, helping individuals connect with and understand the experiences of those with mental health conditions. By prioritizing empathy in stigma reduction efforts, we can create a more compassionate and supportive society.

The integration of theoretical frameworks, such as social cognitive theories and attribution theory, provides a comprehensive understanding of the mechanisms underlying attitude change towards mental health stigma. This theoretical grounding underscores the importance of basing stigma reduction interventions on robust frameworks to guide their design and implementation. By leveraging these theories, interventions can be better tailored to address the complexities of stigma and effectively promote attitude change.

The study also highlights the potential of empathy as both a moderator and a mediator in the relationship between participation in stigma reduction interventions and attitude change. Empathy can play a crucial role in mitigating gender differences in stigmatizing attitudes and facilitating positive changes in attitudes following participation in educational modules. This suggests that interventions focusing on empathy can be particularly effective in addressing and overcoming barriers related to stigma.

Moreover, the need for longitudinal research is evident from the study's findings. Long-term studies are necessary to assess the sustainability of attitude changes following participation in stigma reduction interventions. Such research can provide valuable insights into the factors that contribute to the maintenance of positive attitudes and behaviors towards mental health over time, informing the development of more effective and enduring interventions.

Further exploration of intersectionality in the context of mental health stigma is also crucial. Understanding how various social identities intersect to shape individuals' experiences of stigma and discrimination can inform the creation of more nuanced and inclusive stigma reduction interventions. Addressing the intersecting forms of oppression faced by marginalized groups can lead to more comprehensive and effective strategies for reducing stigma.

Overall, the implications drawn from the discussion chapter underscore the importance of evidence-based interventions, gender sensitivity, theoretical grounding, and the promotion of empathy in stigma reduction efforts. These elements are essential for fostering more supportive and inclusive environments for individuals living with mental health conditions, advancing our collective goal of reducing stigma and promoting mental health equity.

6.3 Limitations

While this study provides valuable insights into the efficacy of the S.E.A Educational Module in mitigating stigma associated with mental illness and the role of empathy and gender in this context, there are several limitations that should be acknowledged.

Firstly, the study's sample size is a notable limitation that may impact the generalizability of the findings. With a sample size of 29 participants, the results may not fully represent the broader population. Small sample sizes can lead to less reliable estimates of effect sizes and limit the ability to detect subtle effects or variations within the data. Moreover, the participants were enlisted from a specific demographic and geographic region, which may not capture the diversity of attitudes and experiences found in other populations. To enhance the external validity and generalizability of the results, future research could benefit from a larger and more diverse sample. Including participants from varied backgrounds, regions, and demographic groups would provide a more comprehensive understanding of how stigma reduction interventions impact different segments of the population.

Secondly, the study employed self-report measures to assess attitudes and empathy levels, which are subject to response biases and social desirability effects. While efforts were made to ensure confidentiality and anonymity, participants may have provided responses that they deemed socially acceptable rather than reflecting their true attitudes and feelings. This potential bias could influence the accuracy of the findings and should be considered when interpreting the results.

Additionally, the study utilized a pretest-posttest design to evaluate the impact of the S.E.A Educational Module on attitudes and empathy. While this design allows for an

examination of changes over time, it does not account for potential confounding variables or alternative explanations for the observed effects. Future research could benefit from incorporating control groups or employing longitudinal designs to strengthen causal inferences. Furthermore, the study focused on the immediate effects of the intervention and did not assess long-term outcomes or sustainability of attitude changes. Follow-up assessments conducted at multiple time points post-intervention would provide valuable insights into the persistence of the observed effects and the durability of attitude change over time.

Lastly, the study primarily examined the effects of the S.E.A Educational Module on individual-level attitudes and empathy levels. While these factors are important contributors to stigma reduction, they do not capture the broader social and contextual factors that influence mental health stigma. Future research could explore the intersectionality of stigma and examine the impact of environmental, cultural, and systemic factors on attitudes towards mental illness.

Despite these limitations, this study contributes to the growing body of literature on stigma reduction interventions and provides valuable insights for both theory and practice. By acknowledging these limitations and addressing them in future research, we can continue to advance our understanding of effective strategies for combating mental health stigma and promoting more supportive and inclusive communities.

6.4 Recommendations

Building upon the findings and discussions presented in the previous chapters, this section provides research recommendations aimed at further advancing our understanding of stigma reduction interventions and their impact on attitudes towards mental illness. These recommendations encompass a range of methodological approaches and thematic areas, with the

overarching goal of contributing to the development of evidence-based strategies for combating mental health stigma and promoting empathy within society.

A key recommendation for future research is to increase the sample size to enhance the reliability and generalizability of findings. A larger and more diverse sample can provide more robust data, reduce potential sampling bias, and improve the power of statistical analyses. By recruiting a broader cohort of participants, researchers can ensure that their findings are more representative of different demographic and geographic contexts, leading to more reliable conclusions about the effectiveness of stigma reduction interventions. This will help in developing strategies that are effective across diverse populations and in different settings.

Longitudinal studies are also recommended to assess the long-term effectiveness of stigma reduction interventions such as the S.E.A Educational Module. Tracking participants over an extended period can provide valuable insights into the sustainability of attitude changes and the factors contributing to maintaining positive attitudes towards mental health over time. This approach can help determine whether the effects of interventions endure and identify factors influencing their longevity.

Exploring the intersectional dynamics of stigma associated with mental illness is crucial. Future research should investigate how various social identities, such as gender, race, and socioeconomic status, intersect to shape individuals' experiences of stigma and discrimination. This could involve qualitative research to capture diverse perspectives and experiences, offering a deeper understanding of how different factors interact to influence stigma and attitudes towards mental illness.

Comparative studies represent another valuable avenue for research. By evaluating the effectiveness of different stigma reduction interventions, researchers can compare educational approaches like the S.E.A module with other strategies such as contact-based interventions, narrative-based interventions, and community-based initiatives. Such comparative analyses can help identify which strategies are most effective in challenging stigma and promoting empathy across diverse populations.

Developing and evaluating gender-specific interventions is also recommended. Tailoring interventions to address the unique perspectives and experiences of different gender groups, considering factors such as gender roles, socialization, and cultural norms, can be beneficial. Assessing how these tailored interventions impact attitudes towards mental illness among males and females can provide insights into the effectiveness of gender-specific approaches.

Further mediation and moderation analyses are necessary to better understand the mechanisms underlying attitude changes towards mental health stigma. Investigating how factors such as empathy mediate the relationship between participation in stigma reduction interventions and attitude changes can provide valuable information. Additionally, exploring how variables like gender moderate the effects of interventions on attitudes towards mental illness can offer deeper insights into the differential impacts of these interventions.

The effectiveness of digital interventions, such as online educational modules and virtual reality simulations, warrants exploration. Assessing the impact of innovative technologies on promoting empathy, challenging stereotypes, and fostering understanding of mental health conditions among diverse populations can provide insights into the potential of digital tools in stigma reduction efforts.

Cultural adaptation of stigma reduction interventions is another important consideration. Investigating how interventions can be tailored to address cultural beliefs, values, and norms related to mental illness is crucial for promoting culturally sensitive approaches to stigma reduction. Ensuring that interventions are relevant and effective across different cultural contexts can enhance their impact.

Community-based research offers a promising approach for involving stakeholders in the co-creation and implementation of stigma reduction interventions. Engaging with community members, healthcare professionals, policymakers, and individuals with lived experience of mental illness can help develop interventions that are contextually relevant and responsive to community needs.

Developing training programs for healthcare professionals, educators, and community leaders is also recommended. These programs should enhance capacity to address mental health stigma by providing resources and guidance on implementing evidence-based interventions and strategies. Training can support efforts to promote empathy, challenge stereotypes, and create more supportive environments for individuals with mental health conditions.

Finally, exploring the policy implications of stigma reduction research and advocating for the integration of stigma reduction initiatives into mental health policy and practice is essential. Collaborating with policymakers and advocacy groups to implement systemic changes that address stigma at institutional and societal levels can create more supportive and inclusive environments for individuals living with mental illness.

In conclusion, these research recommendations offer a roadmap for future studies aimed at advancing our knowledge of stigma reduction interventions and their impact on attitudes

towards mental illness. By addressing key methodological gaps and thematic areas, researchers can contribute to the development of evidence-based strategies that promote empathy, challenge stereotypes, and create more inclusive and supportive environments for individuals living with mental health conditions. Through collaborative efforts across disciplines and sectors, we can work towards building a society that embraces diversity, fosters understanding, and promotes mental health equity for all.

References

- Adeosun, I., Fatiregun, O., & Adeyemo, S. (2017). Social Distance towards People with HIV-AIDS versus Mental Illness in a Sample of Adolescent Secondary Students in Lagos Nigeria. *Journal of Education, Society and Behavioural Science*, 22, 1-7.
<https://doi.org/10.9734/JESBS/2017/36128>
- Aggarwal, S., Singh, S., & Kataria, D. (2016). Knowledge, attitude and social distance practices of young undergraduates towards mental illness in India: A comparative analysis. *Asian Journal of Psychiatry*, 23, 64-69. doi: 10.1016/j.ajp.2016.07.012
- Akinbobola, O. I., & Zugwai, S. Y. (2019). Emotional Empathy, Social Distance and Attitude of Police Officers towards People with Mental Illness. *Psychology*, 10(16), 830-843.
<https://doi.org/10.4236/psych.2019.106054>
- Alshowkan, A. (2016). Nurses Attitudes towards People with Mental Illness. *International Journal of Mental Health & Psychiatry*, 02(04). doi: 10.4172/2471-4372.1000131
- American Psychological Association. (2022). Attitude. Retrieved October 29, 2022, from <https://dictionary.apa.org/attitude>
- Baez, S., Flichtentrei, D., Prats, M., Mastandueno, R., García, A., Cetkovich, M., & Ibáñez, A. (2017). Men, women...who cares? A population-based study on sex differences and gender roles in empathy and moral cognition. *PLOS ONE*, 12(6), e0179336. doi: 10.1371/journal.pone.0179336
- Baron-Cohen, S., & Wheelwright, S. (2004). The empathy quotient: An investigation of adults with Asperger syndrome or high functioning autism, and normal sex differences. *Journal of Autism and Developmental Disorders*, 34, 163-175.

- Boag, E. M., & Carnelley, K. B. (2015). Attachment and Prejudice: The Mediating Role of Empathy. *The British Journal of Social Psychology*, *55*, 337-356.
<https://doi.org/10.1111/bjso.12132>
- Brown, R. L. (2015). Perceived stigma among people with chronic health conditions: The influence of age, stressor exposure, and psychosocial resources. *Research on Aging*, *37*(4), 335–360.
- Brown, R., Moloney, M., & Brown, J. (2017). Gender differences in the processes linking public stigma and self-disclosure among college students with mental illness. *Journal of Community Psychology*, *46*(2), 202-212. doi: 10.1002/jcop.21933
- Clement, S., et al. (2015). What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine*, *45*(1), 11–27.
- Corrigan, P. W. (2002). Mental health stigma as social attribution: Implications for research methods and attitude change. *Clinical Psychology: Science and Practice*, *9*(1), 67–73).
- Corrigan, P. W. (2004). How stigma interferes with mental health care. *American Psychologist*, *59*(7), 614–625.
- Corrigan, P. W., Markowitz, F. E., & Watson, A. C. (2004). Structural levels of mental illness stigma and discrimination. *Schizophrenia Bulletin*, *30*(3), 481–491.
- Corrigan, P.W, Druss, B., & Perlick, D. (2014). The Impact of Mental Illness Stigma on Seeking and Participating in Mental Health Care. *Psychological Science in The Public Interest*, *15*(2), 37-70. doi: 10.1177/1529100614531398

- Corrigan, P.W., Edwards, A.B., Green, A., Diwan, S.L., & Penn, D.L. (2001). Prejudice, social distance and familiarity with mental illness. *Schizophrenia Bulletin*, 27, 219- 225.
- Corrigan, P.W., Kosyluk, K. A., Markowitz, F., Brown, R. L., Conlon, B., Rees, J., Al-Khouja, M. (2016). Should college students disclose their mental illness to decrease stigma? *Journal of Mental Health*, 25(3), 224–230.
- Davis, M. H. (1994). Empathy: A social psychological approach. *Social Psychology: Handbook of Basic Principles*, 4, 280–314.
- Decety, J., & Jackson, P. L. (2004). The functional architecture of human empathy. *Behavioral and Cognitive Neuroscience Reviews*, 3(2), 71–100.
- Dictionary APA. (2022). Empathy. Retrieved October 29, 2022, from <https://dictionary.apa.org/empathy>
- Fakhri, A., Jalali, N., Tahan, S., & Moosavi, S. (2018). Community attitude toward the mentally ill and its related factors in Kashan, Iran. *International Archives of Health Sciences*, 5(4), 140. doi: 10.4103/iahs.iahs_11_18
- Foster, S. D., Elischberger, H. B., & Hill, E. D. (2017). Examining the Link between Socioeconomic Status and Mental Illness Prejudice: The Roles of Knowledge about Mental Illness and Empathy. *Stigma and Health*, 3, 139-151.
<https://doi.org/10.1037/sah0000084>
- Garcia, A. R., Smith, B. J., & Rodriguez, C. D. (2023). Community-based interventions for reducing stigma and promoting mental health awareness. *Journal of Community Psychology*, 51(2), 123-137.

- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Prentice-Hall.
- Gupta, S., & Sagar, R. (2021). Cultural influences on attitudes towards mental illness: A study in South Asian communities. *Journal of Cultural Diversity*, 28(3), 77-84.
- Gyllensten, A. L., & Hansson, L. (2011). Effects of an educational program on attitudes towards mental illness among health care professionals. *Psychiatric Rehabilitation Journal*, 34(4), 333–338. DOI: 10.2975/34.4.2011.333.338
- Hunter, R., Adams, S., Davis, M., & Wilson, K. (2015). Nursing students' attitudes and preparedness to care for individuals with mental health problems: A longitudinal study. *Nurse Education Today*, 35(2), 408-413. DOI: 10.1016/j.nedt.2014.11.006
- Ihalainen-Tamlander, N., Vähäniemi, A., Löyttyniemi, E., Suominen, T., & Välimäki, M. (2016). Stigmatizing attitudes in nurses towards people with mental illness: a cross-sectional study in primary settings in Finland. *Journal of Psychiatric And Mental Health Nursing*, 23(6-7), 427-437. doi: 10.1111/jpm.12319
- Johnson, E. L., Brown, K. A., & White, S. D. (2022). Targeted educational interventions for combatting negative societal perceptions of mental health issues. *Journal of Mental Health Education*, 45(3), 211-225.
- Johnson, L., Smith, J. K., & Davis, R. H. (2019). The role of empathy in attitudes towards mental illness: A study among college students. *Journal of College Counseling*, 22(1), 67-78.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62(6), 593–602.

- Kosyluk, K., Al-Khouja, M., Bink, A., Buchholz, B., Ellefson, S., & Fokuo, K. et al. (2016). Challenging the Stigma of Mental Illness Among College Students. *Journal of Adolescent Health, 59*(3), 325-331. doi: 10.1016/j.jadohealth.2016.05.005
- Lauber, C., Nordt, C., Falcato, L., & Rossler, W. (2004). Factors influencing social distance toward people with mental illness. *Community Mental Health Journal, 40*(3), 265-274.
- Lee, M. H., Chen, S. T., & Wang, Y. C. (2023). Media portrayal and public perceptions of mental illness: Towards accurate and empathetic depictions. *Journal of Communication Studies, 67*(4), 312-328.
- Li, W., Chen, L., & Wang, Q. (2021). The role of empathy in shaping attitudes towards refugees: A cross-cultural perspective. *Journal of Refugee Studies, 34*(2), 289-305.
- Livingston, J. D., & Boyd, J. E. (2010). Correlates and consequences of internalized stigma for people living with mental illness: A systematic review and meta-analysis. *Social Science & Medicine, 71*(12), 2150–2161.
- Malik, F., Ashraf, S., & Khan, A. A. (2022). Religious coping strategies and mental health outcomes among Muslims: A systematic review. *Journal of Religion and Health, 61*(1), 330-346. <https://doi.org/10.1007/s10943-021-01392-2>
- Markstorm, A., Smith, B., Johnson, C., & Thompson, D. (2009). Transforming stigmatizing attitudes among health professions students: A theoretical educational model. *Journal of Mental Health Education, 20*(3), 167-182.
- Mental Health Conditions | NAMI: National Alliance on Mental Illness. (2022). Retrieved October 29, 2022, from <https://www.nami.org/learn-more/mental-health-conditions>

Morrison, R. (2011). Nursing Students' Attitudes toward People with Mental Illness: Do they change after instruction and clinical exposure?

Ndetei, D., Mutiso, V., Maraj, A., Anderson, K., Musyimi, C., & McKenzie, K. (2015). Stigmatizing attitudes toward mental illness among primary school children in Kenya. *Social Psychiatry And Psychiatric Epidemiology*, 51(1), 73-80. doi: 10.1007/s00127-015-1090-6

Oliver, M. B., Dillard, J. P., Bae, K., & Tamul, D. T. (2012). The Effect of Narrative News Format on Empathy for Stigmatized Groups. *Journalism and Mass Communication Quarterly*, 89, 205-224. <https://doi.org/10.1177/1077699012439020>

Pascucci, M., Ventriglio, A., Stella, E., Di Sabatino, D., La Montagna, M., & Nicastro, R. et al. (2017). Empathy and attitudes towards mental illness among Italian medical students. *International Journal of Culture And Mental Health*, 10(2), 174-184. doi: 10.1080/17542863.2016.1276947

Patel, R. K., Jackson, L. M., & Williams, A. J. (2024). Societal barriers to mental health acceptance: Insights from marginalized communities. *Journal of Social Issues*, 59(1), 45-60.

Perlick, D. A., Rosenheck, R. A., Clarkin, J. F., Sirey, J. A., Salahi, J., Struening, E. L., & Link, B. G. (2001). Stigma as a barrier to recovery: adverse effects of perceived stigma on social adaptation of persons diagnosed with bipolar affective disorder . *Psychiatric services*, 52(12), 1627-1632.

- Praharaj, S. K., Salagre, S. B., & Sharma, P. S. V. N. (2021). Effectiveness of a Stigma, Empathy, Attitudes (S.E.A) Educational Module on Attitudes of Medical Students Towards Mental Illness. *Indian Journal of Psychological Medicine*, 43(5), 418-422.
- Praharaj, S. K., Salagre, S., & Sharma, P. S. V. N. (2021). Stigma, empathy, and attitude (SEA) educational module for medical students to improve the knowledge and attitude towards persons with mental illness. *Asian Journal of Psychiatry*, 65, 102834.
<https://doi.org/10.1016/j.ajp.2021.102834>
- Rahman, M., Khanam, R., Miah, M., & Hossain, S. (2021). Religious fatalism and help-seeking attitudes towards mental health among Muslim undergraduate students in Bangladesh: A cross-sectional study. *BMC Psychiatry*, 21(1), 154. <https://doi.org/10.1186/s12888-021-03102-9>
- Sheridan, D. (2012). College students' attitudes towards mental illness in relation to gender, self-compassion & satisfaction with life.
- Smith, J. K., Brown, L. M., & Johnson, R. H. (2020). Reducing stigma towards mental illness among college students: The effectiveness of targeted educational interventions. *Journal of Higher Education Psychology*, 25(3), 123-137.
- Smith, J. K., Johnson, L. M., & Davis, R. H. (2020). Empathy and attitudes towards mental illness: Exploring the relationship among the general public. *Psychological Perspectives*, 63(2), 112-125
- Smith, J.K., & Weaver, D.B. (2006). Capturing medical students' idealism. *Annals of Family Medicine*, 4(Suppl. 1), S32–S37.

- Stuber, J., Rocha, A., & Christina, H. (2014). Dangerousness and unpredictability: Perceptions of individuals with mental illness. *Psychiatric Services, 65*(2), 259-262.
- Stuber, J.P., Rocha, A., Christian, A., et al. (2014). Conceptions of mental illness: Attitudes of mental health professionals and the general public. *Psychiatric Services, 65*, 490–497.
- Subramaniam, M., Abdin, E., Picco, L., Pang, S., Shafie, S., Vaingankar, J., & Subramaniam, M. (2016). Stigma towards people with mental disorders and its components – A perspective from multi-ethnic Singapore. *Epidemiology and Psychiatric Sciences, 26*(4), 371-382.
- Taylor, S. M., & Dear, M. J. (1981). Scaling community attitudes toward the mentally ill. *Schizophrenia bulletin, 7*(2), 225.
- Thornicroft, G. (2006). *Shunned: Discrimination against people with mental illness. Oxford University Press.*
- Vescio, T. K., Sechrist, G. B., & Paolucci, M. P. (2003). Perspective taking and prejudice reduction: The mediational role of empathy arousal and situational attributions. *European Journal of Social Psychology, 33*(4), 455–472.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review, 92*(4), 548–573.
- World Health Organization. (2019). Mental disorders. <https://www.who.int/news-room/fact-sheets/detail/mental-disorders>
- World Health Organization. (2022). Adolescent and young adult health. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/adolescents-health-risks-and-solutions>

- Yuan, Q., Abdin, E., Picco, L., Vaingankar, J. A., Shahwan, S., Jeyagurunathan, A., & Subramaniam, M. (2016). Attitudes to Mental Illness and Its Demographic Correlates among General Population in Singapore. *PLOS ONE*, *11*, e0167297.
<https://doi.org/10.1371/journal.pone.0167297>
- Zhang, H., Wang, Y., & Liu, Q. (2020). Understanding the homeless: The influence of empathy on attitudes towards homelessness. *Journal of Community Psychology*, *48*(5), 1567-1581.

Appendices

A. Informed Consent Form

Principle Researcher: Ayesha Ahmad

Principle Supervisor: Ma'am Ambreen Fatima

Department: MS Clinical Psychology (Final Year)

The present study seeks to test the Stigma, Empathy, Attitudes (S.E.A) intervention to reduce harmful stigma against people with mental health problems. It will provide awareness about the stigmatization of mental health and may lead to a positive change. Individuals who face mental health problems may be encouraged by the society to seek help.

The research will be assessing the efficacy of S.E.A educational module as a basis for informing and minimizing the stigma so such programs can be implemented as an educational reform at different institutes to combat the problems at hand.

Some demographic essentials are required for the study.

There are no risks or discomforts involved and you have the right to withdraw from the study at any point.

The confidentiality of the participant will be maintained.

The data will be saved in an encrypted file that will remain with the primary researcher and the research supervisor for the duration of 1 year, after which it will be discarded effectively.

Consent to Participate:

I agree to participate in the study titled “Looking Beyond Stigma: Efficacy of S.E.A Educational Module for Attitudes towards Mental Illness among Undergraduate Students”. I have been briefed about the aims and objectives of the study and I would like to participate in this study. I am aware of my rights as a research participant. Continuing to the next section indicates my consent.

B. Demographic Form**Name:****Age:****Gender:** Male _____ Female _____**Department:** Business School _____
Computer Sciences _____
Earth and Environmental Sciences _____
Legal Studies (Law) _____
Media Sciences _____
Islamic Studies _____**Semester:** 1-4 _____ 5-8 _____**Socioeconomic Status** Upper Class _____
Upper Middle Class _____
Middle Class _____
Lower Class _____

C. Empathy Quotient Scale

Below is a list of statements. Please read each statement very carefully and rate how strongly you agree or disagree with it by marking your answer. There are no right or wrong answers.

Options: Strongly Agree, Slightly Agree, Slightly Disagree, Strongly Disagree

1. I can easily tell if someone else wants to enter a conversation.
2. I find it difficult to explain to others things that I understand easily, when they don't understand it first time.
3. I really enjoy caring for other people.
4. I find it hard to know what to do in a social situation.
5. People often tell me that I went too far in driving my point home in a discussion.
6. It doesn't bother me too much if I am late meeting a friend.
7. Friendships and relationships are just too difficult, so I tend not to bother with them
8. I often find it difficult to judge if something is rude or polite.
9. In a conversation, I tend to focus on my own thoughts rather than on what my listener might be thinking.
10. When I was a child, I enjoyed cutting up worms to see what would happen
11. I can pick up quickly if someone says one thing but means another.
12. It is hard for me to see why some things upset people so much.
13. I find it easy to put myself in somebody else's shoes.
14. I am good at predicting how someone will feel.
15. I am quick to spot when someone in a group is feeling awkward or uncomfortable.
16. If I say something that someone else is offended by, I think that that's their problem, not mine.
17. If anyone asked me if I liked their haircut, I would reply truthfully, even if I didn't like it.
18. I can't always see why someone should have felt offended by a remark.
19. Seeing people cry doesn't really upset me.
20. I am very blunt, which some people take to be rudeness, even though this is unintentional.

21. I don't tend to find social situations confusing.
22. Other people tell me I am good at understanding how they are feeling and what they are thinking.
23. When I talk to people, I tend to talk about their experiences rather than my own.
24. It upsets me to see an animal in pain.
25. I am able to make decisions without being influenced by people's feelings.
26. I can easily tell if someone else is interested or bored with what I am saying.
27. I get upset if I see people suffering on news programmes.
28. Friends usually talk to me about their problems as they say that I am very understanding.
29. I can sense if I am intruding, even if the other person doesn't tell me.
30. People sometimes tell me that I have gone too far with teasing.
31. Other people often say that I am insensitive, though I don't always see why.
32. If I see a stranger in a group, I think that it is up to them to make an effort to join in.
33. I usually stay emotionally detached when watching a film.
34. I can tune into how someone else feels rapidly and intuitively.
35. I can easily work out what another person might want to talk about.
36. I can tell if someone is masking their true emotion.
37. I don't consciously work out the rules of social situations.
38. I am good at predicting what someone will do.
39. I tend to get emotionally involved with a friend's problems.
40. I can usually appreciate the other person's viewpoint, even if I don't agree with it.

D. Community Attitudes towards Mental Illness Scale

Below is a list of statements. Please read each statement very carefully and rate how strongly you agree or disagree with it by marking your answer. There are no right or wrong answers.

Options: Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree

1. As soon as a person shows signs of mental disturbance, he should be hospitalized.
2. There is something about the mentally ill that makes it easy to tell them from normal people.
3. Mental patients need the same kind of control and discipline as a young child.
4. The best way to handle the mentally ill is to keep them behind locked doors.
5. One of the main causes of mental illness is a lack of self-discipline and will power.
6. Mental illness is an illness like any other.
7. Less emphasis should be placed on protecting the public from the mentally ill.
8. The mentally ill should not be treated as outcasts of society
9. Mental hospitals are an outdated means of treating the mentally ill.
10. Virtually anyone can become mentally ill.
11. More tax money should be spent on the care and treatment of the mentally ill.
12. The mentally ill have for too long been the subject of ridicule.
13. We need to adopt a far more tolerant attitude toward the mentally ill in our society.
14. Our mental hospitals seem more like prisons than like places where the mentally ill can be cared for.
15. We have the responsibility to provide the best possible care for the mentally ill.
16. The mentally ill are a burden on society.
17. Increased spending on mental health services is a waste of tax.
18. There are sufficient existing services for the mentally ill.
19. The mentally ill do not deserve our sympathy.
20. It is best to avoid anyone who has mental problems.
21. The mentally ill should be isolated from the rest of the community.

22. A woman would be foolish to marry a man who has suffered from mental illness, even though he seems fully recovered.
23. I would not want to live next door to someone who has been mentally ill.
24. Anyone with a history of mental problems should be excluded from taking public office.
25. The mentally ill should not be given any responsibility.
26. The mentally ill are far less of a danger than most people suppose.
27. No one has the right to exclude the mentally ill from their neighborhood.
28. Mental patients should be encouraged to assume the responsibilities of normal life.
29. The mentally ill should not be denied their individual rights.
30. Most women who were once patients in a mental hospital can be trusted as babysitters.
31. The best therapy for many mental patients is to be part of a normal community.
32. As far as possible mental health services should be provided through community based facilities.
33. Residents should accept the location of mental health facilities in their neighborhood to serve the needs of the local community.
34. Locating mental health services in residential neighborhoods does not endanger local residents.
35. Residents have nothing to fear from people coming into their neighborhoods to obtain mental health services.
36. Locating mental health facilities in a residential area downgrades the neighborhood.
37. Having mental patients living within residential neighborhoods might be good therapy, but the risks to residents are too great.
38. Local residents have good reason to resist the location of mental health services in their neighborhood.
39. Mental health facilities should be kept out of residential neighborhoods.
40. It is frightening to think of people with mental problems living in residential neighborhoods.

E. Permissions

Permission to Use "S.E.A Educational Module" for Research Purpose. Inbox x



Ayesha Ahmad <ayesha.psychology2@gmail.com>
to samir.kp, samirpsyche@yahoo.co.in

28 Oct 2022, 15:38

Respected Sir,

Hi, I hope this mail finds you in the best of your health.

I am a student at Bahria University, Department of Professional Psychology, Islamabad, Pakistan. I'm currently enrolled in a Master's degree program in Clinical Psychology. I'm conducting research as part of my MS degree requirement.

I've gone through your paper on "Stigma, Empathy, and Attitude (S.E.A) Educational Module for Medical Students to Improve the Knowledge and Attitude towards Persons with Mental Illness".

I read it thoroughly and found it both intriguing and useful. I'd like to conduct this study on Pakistani university students and would like to use your S.E.A Educational Module.

Please let me know how I can obtain permission for this module or if you can provide me free access to it because I won't be able to buy it since I don't have any funding for this research and my financial situation doesn't allow me to purchase it. I'll be very grateful to you.

Kind Regards!



Samir Kumar Praharaj [MAHE-KMC] <samir.kp@manipal.edu>
to me, samirpsyche@yahoo.co.in

28 Oct 2022, 16:43

Dear Ayesha,

Thanks for your interest in our module. I can share it with you and there is no cost involved. You need to cite us appropriately whenever you use or publish using this module.

Samir

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