PAPER

Utilizing Compassion-Focused Therapy Integrated with Mobile Technology: A Therapeutic Approach to Improve Sense of Coherence in Visually Impaired Students

Saleh Safeer Alkhathami[1], Adel Sayed Abbady[1], Eman Wefky Ahmed[2], Ahmed Ali Teleb[1]($\boxtimes$), Manal Marashdeh[3]

[1]Department of Psychology, College of Education, King Khalid University, Abha, Saudi Arabia

[2]Faculty of Education, Department of Curricula and Teaching Methods, Sohag University, Sohag, Egypt

[3]Department of Business Administration, School of Business, Jadara University, Irbid, Jordan

mmahmod@kku.edu.sa

ABSTRACT

In this study, we investigate the effectiveness of compassion-focused Techniques integrated Mobile Technology implemented to improve the sense of coherence among visually impaired students. The study sample comprised six students (three males and three females) with an average age of 14.30 years and a standard deviation of 1.06. study tools included a sense of coherence scale developed by Al Sadiq and Abbady (2020) and a compassion-focused therapy program specifically designed by the researchers. The results showed statistically significant differences in the average ranks of visually impaired students in the experimental group between pre-measurement and post-measurement on the Sense of Coherence Scale, favoring the post-measurement after the implementation of the therapeutic program. No statistically significant differences were found in the average scores of visually impaired students in the experimental group between post-measurement and follow-up measurements on the Sense of Coherence Scale after implementing the therapeutic program.

KEYWORDS
compassion-focused therapy, mobile technology, sense of coherence, visually impaired

1 INTRODUCTION AND RESEARCH LITERATURE

A blind person is someone who has lost the ability to see with the naked eye or with the assistance of glasses. It cannot acquire knowledge through the eyes, but rather by relying on other senses. He can learn to read and write in Braille. As for the partially disabled person, he is an individual who experiences limited visual loss. However, his remaining visual ability allows him to enhance his skills with the use of prescription lenses [4]. A global report on vision issued by the World Health Organization (WHO) indicates that at least 2.2 billion people suffer from visual impairment or blindness. At least one billion people suffer from preventable

or untreated impairments because they do not receive the care, they need to treat them [42]. Vision loss often leads to significant disability and is linked to a considerable economic burden, decreased quality of life, medical issues, mental health challenges, and high rates of depression and anxiety among individuals with visual impairments [1].

Furthermore, individuals of low socioeconomic status may be at increased risk of visual impairment and subsequent mental health problems. Existing psychosocial interventions aimed at enhancing mental health in individuals with visual impairment show some promise but are constrained by low adherence and a lack of generalizability. There is a need for a better understanding of the mechanisms linking poor vision and poor mental health. It will also be necessary to develop more effective interventions and expand access to services to improve the detection and treatment of mental health problems in this population [12].

Studies also indicate that children who suffer from developmental delays, chronic diseases, or disabilities are more likely than non-disabled children to exhibit a range of behaviors associated with psychological disorders, including "internalizing" and "externalizing" behaviors. Individuals with visual impairment, other disabilities, or special educational needs are also more likely to suffer from psychological disorders, according to parental estimates (30%) and teachers' estimates (22%) [19].

Studies have indicated that children and young people with visual impairments experience more emotional problems than their peers. Additionally, they will exhibit significant symptoms of depression and anxiety in the future. Interventions to promote mental health for visually impaired adults receive little attention, and early intervention for this group would help maximize their independence in later stages of life [6], [17], [27].

A sense of coherence is an optimistic attitude towards stressful and uncontrollable situations, reflecting confidence in one's ability to cope. It also includes the optimistic expectation that life matters will be orderly, transparent, controllable, and understandable, and the confidence that future life events will be controlled through self-efforts or external support. The personal belief that upcoming events are challenges or responsibilities that will be faced by the individual and are worth striving for and sacrificing for, along with a strong capacity to adjust to a world replete with stressful factors (stressors) or fatigue-inducing factors that are inevitable [36].

The feeling of coherence is a concept in positive psychology that aims to understand positive psychological variables such as optimism, gratitude, tolerance, and others. The feeling of coherence comprises a cognitive component, a behavioral component, and an emotional component [8], [9].

The concept of coherence is defined as "a general trend that expresses the extent to which an individual's dynamic sense of confidence is widespread in light of stimuli derived from the individual's internal and external environment in an organized, predictable, and interpretable context of living." Resources are available to individuals to meet the demands posed by these stimuli. These demands are challenges worthy of employment and participation [5]. A sense of coherence refers to a general orientation toward life experiences, encompassing the extent to which life is understood, manageable, and meaningful. It is a regulation of the coping process that develops early in childhood and later becomes more robust based on the degree to which the individual has control over their environment and its outcomes [40].

Coherence is defined as an individual's comprehension of life's challenges and their ability to effectively address those using psychological resources, resulting in harmony and the maintenance of health [38]. It is defined as a general trend that reflects the degree to which a student has a strong, enduring, and dynamic sense of

confidence in their ability to comprehend stimuli from both their internal and external environment [32]. The demands imposed by these stimuli can be managed and overcome, and there is meaning to life.

As explained by [5], a sense of coherence is a general tendency that expresses the extent to which an individual feels the continuity and prevalence of dynamic ideas, feeling confident that include: stimuli derived from an individual's internal and external environments in the context of life that are structured, predictable, and interpretable; the resources available to the individual to meet the demands imposed by these stimuli; and transforming these demands into challenges worthy of employment and integration. It consists of: Comprehensibility refers to the extent to which an individual perceives the environment as having "cognitive meaning," structured, as ordered, consistent, organized, and clear information, rather than chaotic, irregular, random, and inexplicable.

Future events are predictable to someone with a high level of sense of coherence, and when events occur unexpectedly, they are at least comprehensible and explainable to them. Manageability is defined as the extent to which an individual perceives that the resources available to them are sufficient to meet the demands imposed by stimuli. These resources may be under the individual's control or under the control of others. This enables individuals to cope with unexpected events that arise. Meaningfulness: This component represents a motivational aspect. Individuals who possess a high level of coherence have a logical perspective on life that encompasses both cognitive and emotional aspects. Meaningfulness refers to the extent to which an individual feels that life makes emotional sense and that some problems and demands in life are worth fighting for, worthy of commitment and participation, and are seen as "welcome" challenges rather than burdens that one would rather do without [5].

Students with a high sense of coherence may have a good understanding of most of their personal circumstances, demands, and experiences. They may feel relatively in control of their lives and believe that their tasks and participation in age-appropriate activities are purposeful, important, and valuable efforts. When individuals encounter a stressful situation, they can choose appropriate strategies to effectively cope with stressors in a resilient manner [9].

Self-compassion is a relatively new concept in the field of psychotherapy and has been utilized for many years as a successful therapeutic approach in various ways. They can develop empathy for others. As a developmental strategy that improves psychological health, self-compassion reduces the chance of exposure to psychological trauma, provides individuals with a means of self-treatment, and teaches them how to treat themselves today in a more loving and gentle way.

Self-compassion refers to an individual caring for themselves in the same way they would care for someone they love. It mitigates the impact of negative events. It is a practice in which the individual learns to be a good friend to themselves and not an enemy [14], [30], [35]. Self-compassion is a practice where individuals learn to treat themselves as they would treat a good friend, offering support and kindness when needed most. This concept emphasizes being an inner ally rather than an inner enemy. It is based on the golden rule: "Treat others as you would like to be treated" [35].

Self-compassion is defined as the ability to compassionately direct our caring and supportive nature towards ourselves. Research has shown that self-compassion can cultivate resilience and courage, even in the midst of life's most difficult challenges. Self-compassion comprises several elements, including awareness, attention, understanding, motivation, and commitment to action [37].

Neff's model of self-compassion is one of the most popular explanatory models in the field, consisting of three main dimensions: The first dimension is self-kindness versus harshly critical and judgmental. It refers to an individual's concern for themselves as much as they care for others. Instead of being harshly critical when noticing personal shortcomings, he supports, encourages, and seeks to protect himself from harm. Instead of attacking and berating himself for being incompetent, he works to offer warmth and unconditional acceptance of himself. Likewise, when external life circumstances are difficult and the individual finds it hard to cope, they calm themselves down and try to make themselves feel comfortable. This is in contrast to individuals who, when they make a mistake or fail in some way, are more likely to criticize themselves rather than offer themselves support. Self-compassion also implies that the individual stops the constant self-judgment and degrading internal commentary that they consider normal. This requires him to understand his weaknesses and failures rather than condemn them. It involves clearly recognizing the extent to which he is harming himself through constant self-criticism and resolving internal conflicts [33], [34], [35].

The second dimension is common humanity versus feeling isolated and alienated. It means viewing an individual's experiences as part of the larger human experience rather than seeing them as isolated and separated from the experiences of others. All humans experience suffering, and this suffering is universal. When a person only acknowledges their suffering in solitude in this world, their suffering equates to death or isolation. Common humanity depends on the idea that "the pain I feel in difficult times is the same pain you feel in difficult times." "But the circumstances are different, the degree of pain is different, but the basic experience of human suffering is the same." Feelings of care come naturally because, without them, our species would not be able to survive. This means that the ability to feel empathy and connectedness is part of our biological nature. Our brains are actually designed to care [2], [33].

The third dimension is mindfulness, versus ignoring or exaggerating our pain. This state involves a balanced awareness of present-moment experiences and perceiving painful thoughts and emotions in a measured way, rather than overly identifying with them. Rather, these thoughts and feelings can be viewed as helping alleviate stress and problems, as mindfulness involves being aware of the present moment in a clear and balanced manner. Mindfulness involves being receptive to the current moment's reality, welcoming and allowing all thoughts, feelings, and sensations into consciousness without resistance or avoidance. Mindfulness is an essential component of self-compassion because individuals need to be guided to and acknowledge their suffering. Rumination narrows an individual's focus and magnifies the results of their personal experiences. When an individual acknowledges their pain clearly, they can recognize their suffering without exaggerating it. This enables them to adopt a wiser and more objective perspective on themselves and their lives. In order for an individual to be self-compassionate, mindfulness is actually the first step they must take; they need the mind to respond in a new way [18], [35].

Learning to practice self-compassion will enable an individual to acknowledge their traumatic experiences, start treatment, and develop compassion for others. This process helps individuals reconnect with themselves by understanding their emotions, identifying reasons for negative or unhealthy behaviors, ceasing self-blame for past harm, forgiving themselves for coping with abuse, being kind to themselves, fostering a supportive inner voice to replace self-criticism, reconnecting with others, and reducing isolation. When an individual faces danger, they mount an instinctive response—the stress response—consisting of fighting, fighting, or remaining still

(freezing). These three strategies help us survive physically, but when applied to our mental and emotional functions, we encounter difficulties. When there is no enemy to defend, we turn on ourselves. "Resistance" transforms into self-criticism, "escape" morphs into self-isolation, and "freezing" involves self-absorption, leading to isolation in the individual's thoughts [14], [18].

Indeed, the past years have witnessed a rapid development and implementation of new technologies across various sectors. Technological advancements continue to shape and transform various aspects of our lives, including communication, transportation, healthcare, entertainment, and more.

Recent research has focused on the relationship between compassion and contemporary technology, which has advanced quickly in the last several years. While digital technology advancements build on humanity's enormous capacity to create useful tools that promise to enhance our lives and strengthen our social bonds, the outcomes are frequently far from benign [11].

[24] Conclusions that The integration of digital technology in mental health treatment has the potential to enhance the present compassionate care delivery model and generate innovative approaches to compassion. Though this is a relatively new field of research, organizations and mental health practitioners should take care to ensure that the provision of digital health care maintains a compassionate, human-centered approach. Subsequent investigations may yield instruments for facilitating and assessing the implementation of compassion in digital health care.

It's important to note that while mobile technology can facilitate compassion-focused practices, it is essential to maintain a balanced approach. Face-to-face interactions and real-life experiences should not be replaced entirely by digital interactions, Mobile technology should be used as a complementary tool to support and enhance compassion-focused practices, rather than a substitute for genuine human connection.

The researcher attempts to integrate Compassion-focused techniques with mobile technology to promote Sense of Coherence in Visually Impaired Students. Mobile technology, including smartphones and mobile apps, offers a convenient and accessible platform for delivering interventions and practices that cultivate compassion.

2 RESEARCH PROBLEM

Disability is a natural part of the human experience, and nearly everyone will encounter a disability, whether temporarily or permanently, at some stage in their life. An estimated 1.3 billion people, or approximately 16% of the world's population, currently suffer from a significant disability. This number is increasing due to, among other reasons, the rising prevalence of non-communicable diseases. The environment in which a person lives has a significant impact on the quality and extent of disability. Inaccessible environments create barriers that often hinder the full and effective participation of people with disabilities in society on an equal basis with others. Progress can be made in enhancing social participation by addressing these barriers and facilitating the functioning of individuals with disabilities in their daily lives [41].

Vision loss often leads to significant disability and is associated with a considerable economic burden, reduced quality of life, medical issues, mental health challenges, and high rates of depression and anxiety among individuals with visual impairments. Furthermore, individuals of low socioeconomic status may be at increased risk of visual impairment and subsequent mental health problems. Existing psychosocial interventions aimed at enhancing mental health in individuals with visual impairment demonstrate some promise but are constrained by low adherence and limited

generalizability. There is a need for a better understanding of the mechanisms linking poor vision and poor mental health. It will also be necessary to develop more effective interventions and expand access to services to improve the detection and treatment of mental health problems in this population [12]. Studies indicate that individuals with visual impairments experience more emotional issues than their peers. They will also exhibit significant symptoms of depression and anxiety in the future. Interventions to promote mental health for visually impaired adults receive little attention, and early intervention for this group would help maximize their independence in later stages of life [6], [10], [17], [27].

A strong sense of coherence is linked to better physical and psychological health, improved quality of life and life satisfaction, and, to some extent, greater social support, along with more risk-averse behavior [36]. It is one of the resources of positive psychology and a new approach to combatting depression, reducing aggression, and similar issues. It involves seeking happiness and fostering empathy. In this way, greater convergence is being seen between the two fields, leading to the emergence of positive and health psychology [21]. Studies indicate the importance of self-compassion in mental health and advocate for supporting and developing this therapeutic approach through the implementation of effective intervention programs [29]. As a result, there is an urgent need for current psychosocial interventions to enhance mental health among students with visual impairments.

Studies also indicate the necessity of developing more effective interventions and expanding access to services to enhance the detection and treatment of mental health issues in this group of individuals, and the need for individuals. Early intervention for this group is also crucial as it can boost their independence to the fullest extent [12], [27].

Based on the above information, the challenge with the current study can be formulated in the following questions:

1. What is the effectiveness of compassion-focused therapy in developing a sense of coherence among visually impaired students?
2. What is the sustained effectiveness of compassion-focused therapy in fostering a sense of coherence during the follow-up period?

3   RESEARCH OBJECTIVES

The current study aims to:

1. Compassion-focused therapy's effectiveness in developing a sense of coherence among visually impaired students.
2. Examine the ongoing efficacy of compassion-focused therapy in fostering a sense of coherence during the follow-up period.

4   RELEVANCE OF THE STUDY

1. There is a scarcity of studies—to the extent that researchers are aware—that focus on the treatment of visually impaired students through compassion-focused therapy.
2. We are focusing on developing treatment methods for visually impaired students and emphasizing the significance of implementing preventive programs rooted in positive psychology when working with this population.

3. We are developing a program that can assist parents and specialists in the field of special education in guiding visually impaired teenagers to attain the necessary level of focus to succeed in life.

5 RESEARCH TERMINOLOGY

5.1 Compassion-focused therapy

An organized and planned therapeutic training program that includes methods and techniques for self-compassion. It includes a variety of activities and experiences that follow a sequential schedule and are conducted in the form of group therapy sessions involving visually impaired students. It is based on the development of a positive emotional self-orientation, which serves as a shield against the adverse effects of self-criticism, loneliness, and overthinking. This involves redirecting empathy towards oneself and showing kindness and compassion, particularly during challenging times. It encourages individuals to observe their thoughts and emotions without passing judgment.

5.2 Sense of coherence

[3] define it as an emotional state that emerges from their capacity to comprehend pressures, perceive them logically, exert control over them, and manage them efficiently by utilizing the available coping mechanisms. This is intertwined with their perception of the meaning of life, the pursuit of goals, and purposes, which empower them to recognize these pressures and resist succumbing to them.

6 RESEARCH HYPOTHESES

1. Statistically significant differences were found in the average scores of visually impaired students in the empirical group between the pre-measurement and post-measurement on the sense of coherence scale in favor of the post-measurement after implementing the compassion-focused therapy program.
2. There were no statistically significant differences between the average scores of visually impaired students in the experimental group for the post-measurement and the follow-up measurement on the sense of coherence scale after implementing the compassion-focused therapy program (one month after implementation).

7 PROCEDURES

7.1 Methodology

The quasi-empirical method was used in the study.

7.2 Participants

The exploratory study sample consisted of 51 male and female students at Al Nour School for the Blind in Aswan City, with an average age of 15.9, years, and a

standard deviation of 1.52, to verify the suitability of the tools. The empirical study sample was six students (three males and three females), with an average age of 14.30 and a standard deviation of 1.06, selected from secondary school students at Al Nour School in Aswan.

7.3 Instrument

Sense of coherence scale prepared by Al Sadiq and Abbady (2020). This scale was developed with the aim of measuring the sense of coherence of visually impaired students. The scale in its final form consists of (17) statements, distributed over three dimensions: feeling of understanding (5) statements, feeling of management (6) statements, and feeling of meaning (6) statements. The researchers defined a three-way Likert scale to suit the nature of the response among visually impaired people. Each statement on the scale is answered with one of the following responses: Agree, neutral, disagree. The responses to the scale phrases are graded as follows: (3, 2, 1) for the positive phrases, and (1, 2, 3,) which is (3, 4, 6, 9, 10, 11, and 17) for the positive phrases are (1, 2, 5, 6, 7, 8, 12, 13, 14, 15, and 16).The range of scores on the scale as a whole ranges from 17 to 51 degrees, and a high score indicates that the subject has a high sense of coherence. The validity of the scale was confirmed by assessing its appropriateness in the current study. This was done by calculating the correlation coefficient between the sample members' scores on the current scale and their scores on another test simultaneously.

The therapeutic program. The program was built based on theoretical frameworks and previous studies that utilized self-compassion as an empathetic therapeutic approach [16], [20], [26], [35]. The program also aimed to enhance the sense of coherence among the visually impaired. The therapeutic program was designed to incorporate various techniques and strategies, including lectures, discussions, self-affirmation, reinforcement, self-monitoring, thought monitoring, visualization, self-compassion journaling, compassionate discourse, relaxation (respiratory-muscular-mental), self-talk, emotional experience discussions, and empathic support.

The program consisted of 12 counseling sessions, held three times a week, each lasting 45 minutes. The sessions took between 45 and 120 minutes. The program completion and post-measurement are conducted in a single session.

8 RESULTS

8.1 Testing the validity of the first hypothesis

It states: "There are statistically significant differences between the average ranks of the visually impaired students in the empirical group in the pre- and post-measurements on the sense of coherence scale in favor of the post-measurement after applying the compassion-focused therapy program."

To investigate the validity of this hypothesis, the Wilcoxon W test was used as a non-parametric statistical method to compare two related samples and calculate the significance of the differences between the average ranks of the treatment group's scores in the pre- and post-measurements on the sense of coherence scale, as shown in Table 1.

Table 1. Significance of the differences between the average ranks of the scores of the pre- and post-measurements on the Sense of Coherence Scale

Variables	Measurement Type	Average	Ranks	Average Ranks	Total Ranks	Z Value
Comprehensibility	Pre-test	11.67	Positive = 6 Negative = 0 Equal = 0	.00	.00	−2.232**
	Post-test	19.67		3.50	21.00	
Manageability	Pre-test	6.33	Positive = 6 Negative = 0 Equal = 0	.00	.00	−2.232**
	Post-test	15.17		3.50	21.00	
Meaningfulness	Pre-test	9.83	Positive = 6 Negative = 0 Equal = 0	.00	.00	−2.207**
	Post-test	20		3.50	21.00	
Grand total	Pre-test	27.83	Positive = 6 Negative = 0 Equal = 0	.00	.00	−2.201**
	Post-test	54.83		3.50	21.00	

Note: **p < .01.
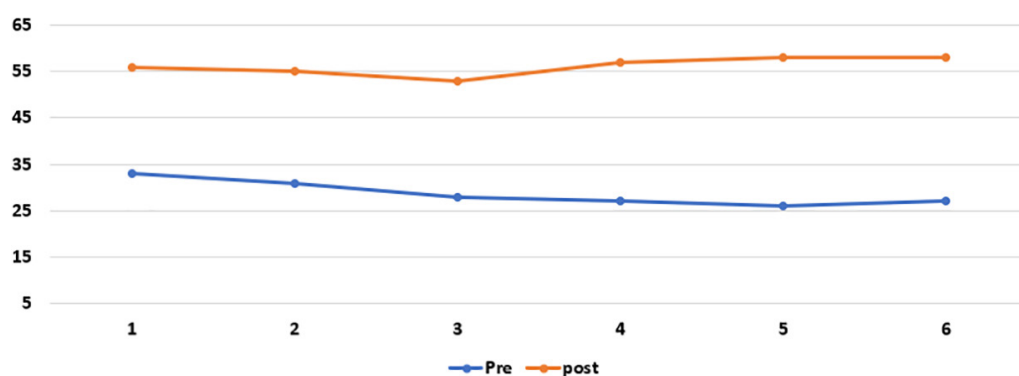
Fig. 1. Graphical representation of the Sense of Coherence Scale scores in the pre- and post-measurements

It is evident from Table 1 and Figure 1 that there are statistically significant differences at the level of (.01) between the average scores of the empirical group before and after implementing the compassion-focused therapy program on the sense of coherence scale, favoring the pre-measurement. This suggests a high level of coherence.

8.2 Testing the validity of the second hypothesis

It states: "There are no statistically significant differences between the average ranks of the visually impaired students in the empirical group in the post- and follow-up measurements on the sense of coherence scale after applying the compassion-focused therapy program (one month after implementing the program)."

To verify the validity of this hypothesis, the Wilcoxon W test was used as a non-parametric statistical method to compare two related samples. This was done to calculate the significance of the differences between the average ranks of the treatment group's scores in the post- and follow-up measurements on the sense of coherence scale, as shown in Table 2.

Table 2. Significance of the differences between the average ranks of the scores of the post and follow-up measurements on the Sense of Coherence Scale

Variables	Measurement Type	Average	Ranks		Average Ranks	Total Ranks	Z Value
Comprehensibility	Post-test	19.67	Positive = 2		1.50	3.00	−1.414
	Follow up-test	19.33	Negative = 0 Equal = 4		.00	.00	
Manageability	Post-test	15.17	Positive = 1		2.00	2.00	−.577
	Follow up-test	15.00	Negative = 2 Equal = 3		2.00	4.00	
Meaningfulness	Post-test	20.00	Positive = 1		2.00	2.00	−1.134
	Follow up-test	19.83	Negative = 3 Equal = 2		8.00	2.67	
Grand total	Post-test	54.83	Positive = 0		.00	.00	−1.342
	Follow up-test	54.17	Negative = 2 Equal = 4		3.00	1.50	

Note: **p < .01.
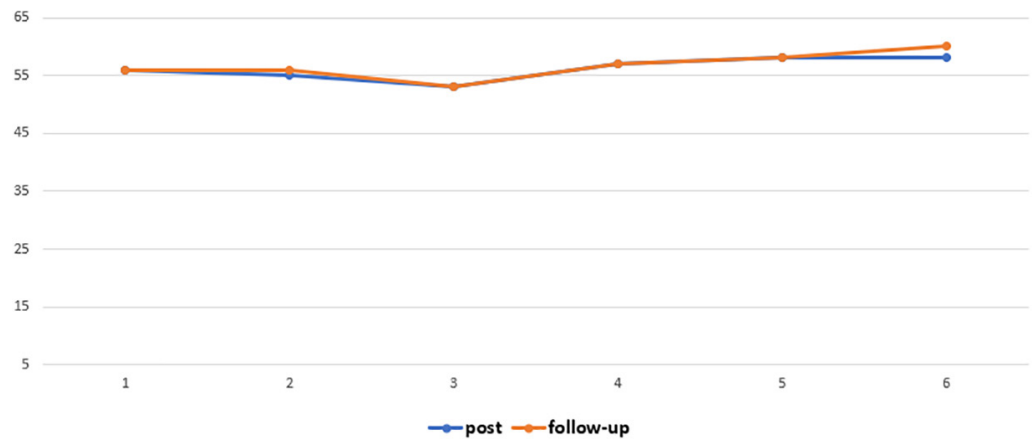
Fig. 2. Graphical representation of the Sense of Coherence Scale scores in the post and follow-up measurements

It is clear from Table 2 and Figure 2 that there are no statistically significant differences between the average scores of the empirical group in the post and follow-up measurements on the sense of coherence scale.

9 DISCUSSION

This study contributes to the expanding field of technology-based interventions for individuals with visual impairments, providing insights into the potential advantages of compassion-focused mobile applications.

The results of the current research support previous studies that have shown self-compassion interventions significantly impact various aspects such as eating behavior, rumination, stress, depression, mindfulness, self-criticism, anxiety, individuals with brain injury, eating disorders, personality disorders, and schizophrenia spectrum disorders. These interventions are particularly beneficial for individuals who are highly critical of themselves and enhance psychological well-being [7],

[15], [25], [28]. Self-compassion also resulted in an increase in life satisfaction, positive affect scores, and a decrease in negative affect scores. Self-compassion strongly contributes to increases in positive affect levels, indicating that individuals with high self-compassion also experience high levels of positive affect [29].

The researchers explain this result as the effectiveness of the compassion-focused therapy program in enhancing empathy through imagery and relaxation exercises and progressing towards improving self-compassion identity and its application. Due to the needs of visually impaired individuals for assistance and support in overcoming challenges during the social adaptation process, particularly in communications, social interaction with peers and the community, and finding their place in society, there are obstacles in organizing student activities that cater to their abilities and visual capacities, as well as challenges related to health and mental well-being.

The therapeutic program based on self-compassion fosters a positive self-attitude among visually impaired individuals. This enables them to develop self-understanding in situations of pain or failure, rather than being overly critical and self-blaming. They come to recognize their experiences as part of the shared human experience, moving away from feelings of isolation. The program helps them process painful thoughts and emotions within a context of mindfulness and vigilance, rather than getting overly absorbed in them. The techniques used in the program also helped improve the sense of coherence.

The current study concluded that compassion-focused therapy is effective in improving feelings of coherence, as supported by other studies [22], [31], [39], which indicated that the sense of coherence can be enhanced through various therapeutic approaches. Compassion-focused therapy is an effective approach to enhancing self-compassion and personal agency among university students, as well as to improving psychological well-being [13].

10 ACKNOWLEDGMENT

11 REFERENCES

[1] A. S. M. Abdel Razek and Asma Shihab Mohamed, "Problems that limit the social adaptation of visually impaired students," *College of Social Work Journal for Social Studies and Research*, vol. 31, pp. 193–220, 2023.

[2] W. H. Al Rikabi and J. N. K. Al Jarfi, "Self-compassion among university students," *Nasam Journal*, vol. 23, pp. 227–253, 2019.

[3] A. M. Al Sadiq and A. S. Abbady, "A causal model of the relationships between sense of coherence, fearful patterns of empathy, and early childhood memories in visually impaired adolescents," *Fayoum University Journal of Psychological and Educational Sciences*, vol. 14, no. 10, pp. 474–524, 2020.

[4] A. M. Al Sharif, "Special education and its therapeutic programs," Cairo: Anglo-Egyptian Library, 2011.

[5] A. Antonovsky, *Unraveling the Mystery of Health: How People Manage Stress and Stay Well*. San Francisco: Jossey-Bass, 1987.

[6]   L. B. Augestad, "Mental health among children and young adults with visual impairments: A systematic review," *Journal of Visual Impairment & Blindness*, vol. 111, no. 5, pp. 411–425, 2017. https://doi.org/10.1177/0145482X1711100503

[7]   E. Beaumont and M. C. Hollins, "A narrative review exploring the effectiveness of compassion-focused therapy," *Counselling Psychology Review*, vol. 30, no. 1, pp. 21–32, 2015. https://doi.org/10.53841/bpscpr.2015.30.1.21

[8]   E. Bracha and D. Hoffenbartal, "The existence of a sense of coherence in teaching situations among student-teachers," *Procedia–Social and Behavioral Sciences*, vol. 180, pp. 722–729, 2015. https://doi.org/10.1016/j.sbspro.2015.02.185

[9]   O. Braun-Lewensohn, O. Idan, B. Lindström, and M. Margalit, "Salutogenesis: Sense of coherence in adolescence," in *The Handbook of Salutogenesis*, 2017, pp. 123–136. https://doi.org/10.1007/978-3-319-04600-6_14

[10]   M. Capella-McDonnall, "The need for health promotion for adults who are visually impaired," *Journal of Visual Impairment & Blindness*, vol. 101, no. 3, pp. 133–145, 2007. https://doi.org/10.1177/0145482X0710100302

[11]   J. Day, J. C. Finkelstein, B. A. Field, B. Matthews, J. N. Kirby, and J. R. Doty, "Compassion-focused technologies: Reflections and future directions," *Frontiers in Psychology*, vol. 12, pp. 603618, 2021. https://doi.org/10.3389/fpsyg.2021.603618

[12]   D. L. Demmin and S. M. Silverstein, "Visual impairment and mental health: Unmet needs and treatment options," *Clinical Ophthalmology*, vol. 14, pp. 4229–4251, 2020. https://doi.org/10.2147/OPTH.S258783

[13]   I. Dundas, P. E. Binder, T. G. Hansen, and S. H. Stige, "Does a short self-compassion intervention for students increase healthy self-regulation? A randomized control trial," *Scandinavian Journal of Psychology*, vol. 58, no. 5, pp. 443–450, 2017. https://doi.org/10.1111/sjop.12385

[14]   B. Engel, *It Wasn't your Fault: Freeing Yourself from the Shame of Childhood Abuse with the Power of Self-Compassion*. Oakland, CA: New Harbinger Publications, 2015.

[15]   M. Ferrari, C. Hunt, A. Harrysunker, M. J. Abbott, A. P. Beath, and D. A. Einstein, "Self-compassion interventions and psychosocial outcomes: A meta-analysis of RCTs," *Mindfulness*, vol. 10, pp. 1455–1473, 2019. https://doi.org/10.1007/s12671-019-01134-6

[16]   A. Finlay-Jones, K. Bluth, and K. Neff, Handbook of Self-Compassion. Springer Nature, 2019.

[17]   C. R. Frank, X. Xiang, B. C. Stagg, and J. R. Ehrlich, "Longitudinal associations of self-reported vision impairment with symptoms of anxiety and depression among older adults in the United States," *JAMA Ophthalmology*, vol. 137, no. 7, pp. 793–800, 2019. https://doi.org/10.1001/jamaophthalmol.2019.1085

[18]   C. Germer, *The Mindful Path to Self-Compassion: Freeing Yourself from Destructive Thoughts and Emotions*. New York, NY: Guilford Press, 2009.

[19]   J. Harris and C. Lord, "Mental health of children with vision impairment at 11 years of age," *Developmental Medicine & Child Neurology*, vol. 58, no. 7, pp. 774–779, 2016. https://doi.org/10.1111/dmcn.13032

[20]   J. Johnson, *The Self Compassion Workbook Practical Exercises to Approach Your Thoughts, Emotions, and Actions with Kindness*. Rockridge Press, 2021.

[21]   S. Joseph and S. Sagy, "Positive psychology in the context of salutogenesis," in M. Mittelmark, et al., Eds., *The Handbook of Salutogenesis*. Springer, Cham, 2017. https://doi.org/10.1007/978-3-319-04600-6_10

[22]   R. N. Jueng and I. J. Chen, "The effects of horticultural therapy on sense of coherence among residents of long-term care facilities: A Quasi experimental design," *International Journal of Environmental Research and Public Health*, vol. 19, no. 9, p. 5412, 2022. https://doi.org/10.3390/ijerph19095412

[23] J. Kemp, *The ACT workbook for perfectionism: Build your best (imperfect) life using powerful Acceptance and Commitment Therapy and self-compassion skills.* New Harbinger Publications, 2021.

[24] J. Kemp, T. Zhang, F. Inglis, D. Wiljer, S. Sockalingam, A. Crawford, and G. Strudwick, "Delivery of compassionate mental health care in a digital technology–driven age: Scoping review," *Journal of Medical Internet Research,* vol. 22, no. 3, p. e16263, 2020. https://doi.org/10.1136/bmjopen-2018-027989

[25] J. N. Kirby, C. L. Tellegen, and S. R. Steindl, "A meta-analysis of compassion-based interventions: Current state of knowledge and future directions," *Behavior Therapy,* vol. 48, no. 6, pp. 778–792, 2017. https://doi.org/10.1016/j.beth.2017.06.003

[26] R. L. Kolts, T. Bell, J. Bennett-Levy, and C. Irons, *Experiencing Compassion-Focused Therapy from the Inside Out: A Self-Practice/Self-Reflection Workbook for Therapists.* Guilford Publications, 2018.

[27] V. Lawrence, J. Murray, and S. Banerjee, "'Out of sight, out of mind': A qualitative study of visual impairment and dementia from three perspectives," *International Psychogeriatrics,* vol. 21, no. 3, pp. 511–518, 2009. https://doi.org/10.1017/S1041610209008424

[28] J. Leaviss and L. Uttley, "Psychotherapeutic benefits of compassion-focused therapy: An early systematic review," *Psychological Medicine,* vol. 45, no. 5, pp. 927–945, 2015. https://doi.org/10.1017/S0033291714002141

[29] A. Mantelou and E. Karakasidou, "The effectiveness of a brief self-compassion intervention program on self-compassion, positive and negative affect and life satisfaction," *Psychology,* vol. 8, no. 4, pp. 590–610, 2017. https://doi.org/10.4236/psych.2017.84038

[30] J. Marotta, *50 Mindful Steps to Self-esteem: Everyday Practices for Cultivating Self-acceptance and Self-compassion.* Oakland, CA: New Harbinger Publications, 2013.

[31] C. H. Mayer, R. Viviers, A. P. Flotman, and D. Schneider-Stengel, "Enhancing sense of coherence and mindfulness in an ecclesiastical, intercultural group training context," *Journal of Religion and Health,* vol. 55, no. 6, pp. 2023–2038, 2016. https://doi.org/10.1007/s10943-016-0301-0

[32] S. M. Montaser and S. F. Idris, "The effectiveness of a training program to develop a sense of coherence among female graduate students," *Journal of the Faculty of Education in Psychological Sciences: Ain Shams University – Faculty of Education,* vol. 45, no. 1, pp. 401–474, 2021.

[33] K. Neff, *Self-Compassion: Stop Beating Yourself Up and Leave Insecurity Behind.* New York: Harper Collins, 2011.

[34] K. D. Neff, "Self-compassion: An alternative conceptualization of a healthy attitude toward oneself," *Self and Identity,* vol. 2, no. 2, pp. 85–102, 2003. https://doi.org/10.1080/15298860309032

[35] Neff and C. Germer, *The Mindful Self-Compassion Workbook: A Proven Way to Accept Yourself, Build Inner Strength, and Thriveÿ ÿ.* New York, NY: Guilford Publications, 2018. https://doi.org/10.4324/9781315265438-28

[36] S. J. Radwan, *Psychological Health.* Dar Al Masirah. 2002.

[37] L. R. Silberstein-Tirch, *How to Be Nice to Yourself_ The Everyday Guide to Self-Compassion_ Effective Strategies to Increase Self-Love and Acceptance.* California: Althea Press, 2019.

[38] M. A. Tawfiq, "Psychological immunity and psychological recovery as predictors of feelings of coherence and hope among university faculty members infected with the Coronavirus Covid-19," *Egyptian Journal of Psychological Studies: Egyptian Society for Psychological Studies,* vol. 31, no. 113, pp. 369–408, 2021.

[39] M. Valtonen, T. Raiskila, J. Veijola, K. Läksy, M. L. Kauhanen, J. Kiuttu, and A. Tuulio-Henriksson, "Enhancing sense of coherence via early intervention among depressed occupational health care clients," *Nordic Journal of Psychiatry,* vol. 69, no. 7, pp. 515–522, 2015. https://doi.org/10.3109/08039488.2015.1011230

[40] J. G. Winger, R. N. Adams, and C. E. Mosher, "Relations of meaning in life and sense of coherence to distress in cancer patients: A meta-analysis," *Psycho-Oncology*, vol. 25, no. 1, pp. 2–10, 2016. https://doi.org/10.1002/pon.3798

[41] World Health Organization, *Disability*, 2023. Available from: https://www.who.int/health-topics/disability#tab=tab_1

[42] World Health Organization, *The Organization Issues the First Global Report on the Vision*, 2023. Available from: https://www.who.int/ar/news/item/09-02-1441-who-launches-first-world-report-on-vision

12 AUTHORS

Dr. Saleh Safeer Alkhathami is an Assistant Professor in Department of Psychology, College of Education at King Khalid University in Abha. He obtained a PhD in Psychology from University of Bedfordshire, United Kingdom in 2015. He is a Supervisor of Guidance and Counseling Unit and Alumni Association Unit at College of Education at King Khalid University in Abha. He is certified as a Clinical Psychologist. His research interests' areas include Clinical Psychology, Mental Health, and Psychotherapy, Counseling psychology, Positive psychology, and Community mental health (E-mail: salkathame@kku.edu.sa).

Prof. Adel Sayed Abbady is a Professor of Psychology at the Faculty of Education in Aswan University. He obtained a master's degree in 2010 and obtained a doctorate in 2013. He currently works as a professor of Psychology at the College of Education, King Khalid University since 2016. His research interests include personality analysis and measurement, human learning, psychotherapy, and big data analysis.

Dr. Eman Wefky Ahmed is an Associate Professor at Sohag University. She earned her Bachelor of Science and Education in 1992, followed by a Master's in Education in 1999. In 2004, she completed her Doctorate in Curriculum and Teaching Methods at Flensburg University, Germany. Her career spans teaching, research, and educational development, both locally and internationally (E-mail: adahmed@kku.edu.sa).

Prof. Ahmed Ali Teleb is a Professor of Psychology at the Faculty of Education, New Valley University. He obtained a Master's degree in psychology, 2003, Assiut University. He obtained a PHD in Psychology, 2010, channel program between Konstanze University (Germany) and Assiut university (Egypt). He currently works as a professor of Psychology at College of Education, King Khalid University, since 2011. He is an arbitrator in various scientific journals (such as: Current research in psychology, Frontiers in psychology, King Khalid educational journal, Sohag educational journal, etc.). His research interest with designing and applying behavioral, cognitive, cognitive-behavioral, emotional schemas, cognitive schema, and dialectical-behavioral counselling program (E-mail: mmahmod@kku.edu.sa).

Dr. Manal Marashdeh is an Assistant Professor at faculty of business Jadara University, Jordan. With a dedication to academia, she imparts knowledge and mentors students in their academic pursuits. She specializes in her field, contributes to research and scholarly activities, aiming to enhance education and inspire future generations of scholars (E-mail: manal@jadara.edu.jo).