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RESEARCH ARTICLE

Application of Kawa Model in Social Anxiety Disorder: An Experimental Study

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Abstract: ***AIM***: To determine the Impact of Kawa model in people experiencing social anxiety. ***Objective***: • To identify people with moderate to very severe social anxiety • To educate about The Kawa model and implement the Kawa model-based intervention. • To identify the effect of Kawa model on social anxiety. • To compare the difference in social anxiety scores from Pre-test to Post-test between control and experimental group. ***Methodology***: An experimental study employing convenient sampling method was conducted among students aged 18-24 with social anxiety disorder, with a sample size of 30 participants. The participants were selected based on the inclusion and exclusion criteria. The participants were divided into experimental group and control group and were assessed using Liebowitz social anxiety scale. The study period was 6 weeks. The students were asked to fill the consent form with the given instructions. ***Result***: This study showed that the Kawa model-based intervention in the experimental group significantly reduced social anxiety scores in participants compared to the control group. ***Conclusion***: This study evaluated the effectiveness of a Kawa model-based intervention in reducing social anxiety. The results indicate that the Kawa model-based approach led to a significant reduction in social anxiety disorder, with a notable improvement observed from pre-test to post-test scores. The statistical analysis supports that the Kawa model-based intervention is effective in managing social anxiety, suggesting it as a valuable method for enhancing therapeutic outcomes in this area.

Keywords: Kawa Model, Social Anxiety Disorder, Young adults.

INTRODUCTION

Social Anxiety Disorder (SAD) is one of the most common mental health conditions, particularly affecting young adults. It is characterized by a marked and persistent fear of social or performance situations where an individual is exposed to possible scrutiny by others. Individuals with SAD often avoid these situations or endure them with intense anxiety, leading to impairments in social participation, interpersonal relationships, academic performance, and overall occupational balance.

Occupational therapy emphasizes enabling individuals to engage in meaningful activities. Within this context, the **Kawa Model**, developed by Michael Iwama, provides a culturally sensitive and client-centered framework for practice. The model uses the metaphor of a river to represent life:

- **Water** symbolizes life flow and well-being,
- **Rocks** represent life challenges and barriers,
- **Driftwood** signifies personal attributes, values, and resources,
- **Riverbanks** represent environmental and social contexts.

By identifying and addressing these elements, occupational therapists can help clients visualize their life situations, recognize strengths and obstacles, and collaboratively explore ways to enhance participation and flow.The Kawa Model has been widely acknowledged as an effective therapeutic tool because of its adaptability across cultures and its emphasis on client narrative and meaning-making. In mental health, it offers an occupation-based approach to support individuals in overcoming psychosocial barriers and building coping strategies.

This study explores the application of the Kawa Model as an occupational therapy intervention for young adults with Social Anxiety Disorder. The aim is to evaluate its effectiveness in reducing anxiety symptoms and promoting functional engagement, thereby contributing to evidence-based practice in occupational therapy for mental health.

METHODOLOGY

Research Design: Quasi-experimental study.

Population: Students with Social Anxiety Disorder (SAD).

Sample Size: 30 participants (18–24 years).

Sampling Technique: Convenient sampling with random allocation (lottery method).

Duration: 6 weeks.

TOOL DESCRIPTION
Kawa Model

The Kawa Model (2006) was created by a team of occupational therapists in Japan led by a Japanese-Canadian occupational therapist Michael K. Iwama.

Liebowitz Social Anxiety Scale (LSAS):

- 24 items: 11 social interaction + 13 performance situations.
- Two subscales: fear and avoidance.
- Valid and reliable, Cronbach's alpha: 0.90–0.98.

SCORING

- 0 – No social anxiety
- 30-49 – Mild social anxiety
- 50-64 -Moderate social anxiety
- 65-79 – Marked social anxiety
- 80-94 – Severe social anxiety
- >Very severe social anxiety

PROCEDURE

1. Institutional permission and informed consent were obtained.
2. 75 students were screened using LSAS → 30 met inclusion criteria.
3. Participants were randomly divided into:
    - Experimental Group:Kawa Model intervention (6 weeks).
    - Control Group: Relaxation, grounding, and positive affirmation techniques.
4. Pre-test and post-test LSAS scores were collected.
5. Data were analyzed using paired t-test (within group) and independent t-test (between groups).

INTERVENTION PROTOCOL
EXPERIMENTAL GROUP
Week 1
Introduction and Life Flow Exploration

A. Introduction to Basics
    - Basics of the Kawa Model and Understanding Social Anxiety Disorder (SAD)
    - Participants draw river diagram using a hypothetical case for familiarization
B. River Drawing and Mapping
    - Draw personal river
    - Mapping with Narrative interview/Worksheets
C. Goal Setting
    - Setting goals based on the river diagram

Week 2 and 3
Navigating Rocks and Strengthening Driftwoods

A. Identifying Barriers
    - Identify barriers and develop practical coping strategies using driftwood
B. Overcoming Barriers
    - Role play basic social interactions focused on reading facial expressions and body gestures
    - Social skill training in initiating and maintaining conversations and responding to social cues
    - Reinforcing assertiveness training to express needs and feelings.
D. Feedback and Discussion
    - Focused on identified strengths

Week 4 and 5
Widening Riverbank

A. Identifying Supportive Environments
    - Identify supportive environments and situations
    - Discuss ways to expand comfortable/supportive environments
B. Gradual Exposure
    - Gradual exposure to real-life social scenarios (simple to complex)
C. Support Group Participation
    - Encouraging and guiding participants to attend support group meetings
    - Facilitating discussion among participants to get practical, constructive, and Helpful information

Week 6
Tracking Process and Adaptation

A. Review Progress
    - Reviewing progress made
    - Adjusting strategies for sustaining progress (future planning)
B. Deepening Insight
    - Deepen insight into underlying triggering factors
C. Building Routine
    - Build a routine including social life, self-care, and productivity

CONTROL GROUP

- Introduction to Social anxiety disorder(SAD)
- Relaxation technique (Deep breathing exercise)
- Grounding technique (54321 method)
- Guiding to practice personal positive affirmations.

RESULT AND DISCUSSION

The study included 30 participants: 15 in the control group (5 male, 10 female) and 15 in the experimental group (4 male, 11 female).

The control group showed a reduction in social anxiety, with mean LSAS scores decreasing from 70.87 (SD = 14.78) to 64.53 (SD = 14.11). This change was statistically significant ($p < 0.001$) and indicates that relaxation therapy is effective in reducing anxiety

symptoms. These findings are consistent with earlier studies supporting relaxation therapy in anxiety management (Hyeun-sil Kim & Eun Joo Kim, 2018).

The experimental group, which received the Kawa Model-based intervention, demonstrated a greater reduction in LSAS scores, from 70.93 (SD = 15.48) to 59.20 (SD = 16.61). This change was also statistically significant ($p < 0.001$). The mean change score (-11.73, SD = 1.83) was significantly larger than that of the control group (-6.33, SD = 1.59), confirming the superior effectiveness of the Kawa Model in reducing social anxiety.

These findings align with previous research demonstrating the value of the Kawa Model in enhancing well-being, communication, and occupational participation (Newbury & Iape, 2021). Further, recent reviews (Ober, Newbury, & Iape, 2022) emphasize the model's adaptability across contexts and its potential in psychosocial rehabilitation.

Overall, the study demonstrated the efficacy of the Kawa model intervention in reduction of the Social anxiety disorder in the participants. These findings alligns with the insights of scoping review by Ober, Newbury, and Lape (2022), which reviewed the model's effectiveness across different contexts and suggest promising implications for integrating kawa model intervention to reduce social anxiety and improve wellbeing of life.

CONCLUSION

This study evaluated the effectiveness of a Kawa model-based intervention in reducing social anxiety. The results indicate that the Kawa model-based approach led to a significant reduction in social anxiety disorder, with a notable improvement observed from pre-test to post-test scores. The statistical analysis supports that the Kawa model-based intervention is effective in managing social anxiety, suggesting it as a valuable method for enhancing therapeutic outcomes in this area.

LIMITATIONS:

- Study involved only college students in one geographical region.
- The study was conducted on a restricted age group of 18 to 24.

RECOMMENDATIONS:

- A long term follow up study could be considered
- Study can be conducted on different age groups
- The Study can be performed on college students from different geographical regions
- The Study can be carried further on a larger population
- The Study can be conducted on other physical and mental disorders to explore the broader applicability and effect of Kawa model

DECLARATION: The authors have no conflict of interest

REFERENCES

1. Clarke, J., and J. Fox. "The Impact of Social Anxiety on Occupational Participation in College Life." *Occupational Therapy in Mental Health*, vol. 33, no. 1, 2017, pp. 31–46. https://doi.org/10.1080/0164212X.2016.1222323.
2. Crosby, A. M. *Using the Kawa Model to Improve Teachers' Social-Emotional Health*. Department of Occupational Therapy, Medical University of South Carolina, 2023. https://medica-muse.researchcommons.org/muscotd-ppotd/9.
3. Cox, D. L., and M. S. Martin. "The Kawa Model: A Self-Reflection Tool for Occupational Therapy Student Development in Practice Placements in Australia." *Australian Occupational Therapy Journal*, vol. 63, no. 6, 2016, pp. 434–441. https://doi.org/10.1155/2023/2768898.
4. Carmody, S., et al. "The Guiding Nature of the Kawa (River) Model in Ireland: Creating Both Opportunities and Challenges for Occupational Therapists." *Occupational Therapy International*, vol. 14, no. 4, 2007, pp. 221–236. https://doi.org/10.1002/oti.235.
5. Dryman, M. T., et al. "Social Anxiety Disorder and Quality of Life: How Fears of Negative and Positive Evaluation Relate to Specific Domains of Life Satisfaction." *Journal of Anxiety Disorders*, vol. 38, 2016, pp. 1–8. https://doi.org/10.1016/j.janxdis.2015.12.003.
6. Ernst, J., et al. "Social Anxiety in Adolescents and Young Adults from the General Population: An Epidemiological Characterization of Fear and Avoidance in Different Social Situations." *Current Psychology*, 2022. https://doi.org/10.1007/s12144-022-03755-y.
7. Foo, K. S., et al. "Kawa Model on Mental Health, Sports and Physical Performance: A Mini Review." *Asian Journal of Sport and Exercise Psychology*, 2023. https://dx.doi.org/10.1016/j.ajsep.2023.08.002.
8. Gregg, B. T., et al. "The Kawa River Model: Applying Theory to Develop Interventions for Combat and Operational Stress Control." *Occupational Therapy in Mental Health*, vol. 31, no. 4, 2015, pp. 366–384. https://doi.org/10.1080/0164212X.2015.1075453.
9. Hakami, R. M., et al. "Social Anxiety Disorder and Its Impact in Undergraduate Students at Jazan University, Saudi Arabia." *Mental Illness*, vol. 9, no. 2, 2018. https://doi.org/10.4081/mi.2017.7274.

10. Krötz, T., L. Höfel, and M. Georgi. "Flussmetapher Erleichtert Therapieeinstieg: Kawa-Modell bei Kindern mit Chronischen Schmerzerkrankungen." *Ergopraxis*, vol. 15, no. 5, 2022, pp. 32–35. https://doi.org/10.1055/a-1768-8757.
11. Lape, J. E., A. Lukose, and D. R. Cherian. "Use of the Kawa Model to Facilitate Interprofessional Collaboration: A Pilot Study." *The Internet Journal of Allied Health Sciences and Practice*, vol. 17, no. 1, 2019, Article 3. https://doi.org/10.46743/1540-580X/2019.1780.
12. Luan, Y.-S., et al. "The Experience Among College Students with Social Anxiety Disorder in Social Situations: A Qualitative Study." *Neuropsychiatric Disease and Treatment*, vol. 18, 2022, pp. 1729–1737. https://doi.org/10.2147/ndt.s371402.
13. Newbury, R. S., and J. E. Lape. "Well-Being, Aging in Place, and Use of the Kawa Model: A Pilot Study." *Annals of International Occupational Therapy*, 2020. https://doi.org/10.3928/24761222-20200413-02.
14. Ober, J. L., R. S. Newbury, and J. E. Lape. "The Dynamic Use of the Kawa Model: A Scoping Review." *The Open Journal of Occupational Therapy*, vol. 10, no. 2, 2022, pp. 1–12. https://doi.org/10.15453/2168-6408.1952.
15. Obadeji, A., and B. Kumolalo. "Social Anxiety Disorder among Undergraduate Students: Exploring Association with Self-Esteem and Personality Traits." *World Social Psychiatry*, vol. 4, no. 1, 2022, p. 24. https://doi.org/10.4103/wsp.wsp322.
16. Paxson, D., et al. "The Kawa Model: Therapists' Experiences in Mental Health Practice." *Occupational Therapy in Mental Health*, vol. 28, no. 4, 2012, pp. 340–355. https://doi.org/10.1080/0164212x.2012.708586.
17. Reta, Y., et al. "Social Anxiety Disorder Among Undergraduate Students of Hawassa University, College of Medicine and Health Sciences, Ethiopia." *Neuropsychiatric Disease and Treatment*, vol. 16, 2020, pp. 571–577. https://doi.org/10.2147/ndt.s235416.
18. Stein, M. B., and Y. M. Kean. "Disability and Quality of Life in Social Phobia: Epidemiologic Findings." *American Journal of Psychiatry*, vol. 157, no. 10, 2000, pp. 1606–1613. https://doi.org/10.1176/appi.ajp.157.10.1606.
19. Teoh, J. Y., and M. K. Iwama. *The Kawa Model Made Easy: A Guide to Applying the Kawa Model in Occupational Therapy Practice*. 2nd ed., 2015. https://www.kawamodel.com/download/KawaMadeEasy2015.pdf.
20. Weis, A., et al. "Life after Losing an Adult Child to a Drug Overdose: A Kawa Perspective." *The Open Journal of Occupational Therapy*, vol. 7, no. 3, 2019, Article 2. https://doi.org/10.15453/2168-6408.1488