

RESEARCH ARTICLE

DECREASING SYMPTOMS OF SPECIFIC PHOBIAS WITH COGNITIVE BEHAVIOR THERAPY

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ABSTRACT

Emotions are inborn within every individual. Joy, sadness, and fear are among many forms of emotions. Fear emerges as a reaction to any threatening and dangerous objects or situations. Extreme fear of a certain object or situation for irrational reasons and incoherent with reality is called a specific phobia. One effective therapy to treat specific phobias is cognitive behavior therapy (CBT). This research sought to discover the effectiveness of CBT in decreasing symptoms of specific phobias. This research hypothesized that CBT was effective in decreasing symptoms of specific phobias, as shown in the decreased scores of a phobia of height before and after CBT. This research's subjects were ten people with specific phobias characteristics, whose scores were obtained using one group pretest-posttest design. The severity measure for specific phobia adults, adapted from American Psychological Association, was the tool for collecting data; the alpha coefficient of reliability (α) was 0.841. CBT techniques applied in this research were cognitive restructuring in the cognitive model ABC, Socratic dialogue, and systematic desensitization. The data analysis method used was non-parametric analysis, the Wilcoxon signed-rank. The results showed the pretest-posttest scores as 0.034 and post-test follow-up as 0.033 ($p < 0.05$), which implied the effectivity of CBT in decreasing symptoms of specific phobias. This study suggested that in conducting online CBT in the future, researchers may explore more platforms or applications supporting the therapy session.

KEYWORDS

CBT, Cognitive Model ABC, Phobia, Socratic Dialogue, Systematic Desensitization.

1. INTRODUCTION

One among many fundamental human emotions is fear. Fear emerges as a fundamental emotion as a response toward certain threatening and dangerous objects or situations. Some people can overcome their fears and live a normal life due to protective factors preventing fear from developing into anxiety disorders. Meanwhile, some others find overcoming fears difficult, making those fears linger and even disturbing daily activities.

The exaggerated fear of a certain object or situation for illogical reasons and incoherent with reality is called phobias (Minderop, 2010). The word 'phobia' came from the Greek word Phobos, which means fear or terror. There are various kinds of phobias, such as the phobia of cats or dogs, a phobia of natural events or environment, like thunder or heights, and other phobias with abnormal intensity.

Divided phobias into three categories; social phobias, agoraphobia, and specific phobias (Lahey, 2001). A study defined specific phobias as fears of a certain object or situation causing the individual to anticipate looking at the triggering object or situation (Carter et al., 2017). Minderop (2010) explained the results of the survey conducted by National Comorbidity, which demonstrated a 12% prevalence of people having specific phobias among the world population. Moreover, there discovered that one among eight people has a chance of developing a specific phobia of a certain object or situation, e.g., phobia of spiders or snakes, phobia of heights, and phobia of confined spaces (Feist, 2017).

The highest prevalence for specific phobias is the phobia of the natural environment, especially heights, ranging from 3.1% to 5.3%. Animal

phobia has a 3.3% to 7% prevalence. Both are the most common phobias in people worldwide (Whitbourne and Halgin, 2012). Phobia of heights or acrophobia is an extreme fear of a situation involving heights that disturbs an individual's daily life (Latta, 2019). Acrophobia came from the Greek words Akron, meaning summit, and Phobos, meaning fear.

A recent study stated that individuals with a phobia would feel overly afraid of certain objects or situations and experience intense anxiety like panic attacks whenever facing those triggers (Lahey, 2001). Panic attacks may be present in the form of dizziness, nausea, palpitation, and dryness in the throat (Brosan et al., 2013). Then has concluded that the symptoms of the panic attack were almost identical to general symptoms of fear, except that panic attacks in people with a phobia would be followed by the subjective feeling of sensing approaching danger (Minderop, 2010). Such a state of mind belongs to cognitive distortion, where the individual would feel like losing consciousness and then faint like they are being attacked or losing control.

Proper treatments are necessary for people with phobias to live their daily activities without having to experience intense anxiety. According to previous research there are a few possible interventions for treating phobia: 1) psychoanalysis therapy, b) behavioral therapy, c) cognitive therapy, and d) humanistic therapy. There is also cognitive-behavioral therapy (CBT), a combination of behavioral and cognitive therapy (Annisa and Ifdil, 2016; Cully and Teten, 2008).

The CBT is a suggested therapy that showed more effective results in treating anxiety disorders and phobias (Mansell, 2007). The basic assumption of CBT is that behaviors are based on thoughts (David et al.,

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2018). Cognitive and behavioral aspects are the target of modification in the process of CBT. The cognitive restructuring may be implemented through the following techniques: a) ABC cognitive model; b) rational denial; c) testing maladaptive belief (Minderop, 2010; Cully and Teten, 2008). Meanwhile, possible techniques for changing behavioral aspects are a) systematic desensitization; b) exposure therapy; c) relaxation exercise; d) biofeedback; e) social skill training (Ongider-Gregory and Baykara, 2015). The CBT techniques suitable to treat people with specific phobias are systematic desensitization and cognitive restructuring (Nathan and Gorman, 2015).

The effectiveness of CBT techniques, particularly systematic desensitization in treating specific phobias, is reinforced by the study (Prayitno et al., 2017) conducted, which resulted in a 60% decrease in specific phobia levels of the research participants, making them more capable of facing their phobia stimulus. Another supporting study showed that cognitive restructuring from CBT and coping desensitization were proven to decrease the phobia intensity in early adults with neurotic tendencies (Melianawati, 2014). Both cognitive restructuring and systematic desensitization can change an individual's mindset toward a phobia object and change the behavior whenever facing the triggering object or situation. Thus, cognitive restructuring and systematic desensitization are considered effective in treating specific phobia.

The explanation mentioned above illustrates how CBT is essential as a strategy to overcome specific phobias so that individuals may live normal daily activities. Hence, researchers aim to conduct a study on "Decreasing Symptoms of Specific Phobias with CBT." This study seeks to discover the effectiveness of CBT in decreasing symptoms of specific phobias.

2. METHOD

Subjects in this research were ten people aged 18-25 years old, having been diagnosed with specific phobias with screening scores ranging from medium to high. Data collection methods were questionnaires, observation, checklist interviews, and rating scales. The questionnaire or psychological scale used in collecting data was the Severity Measure for

Specific Phobias adapted from American Psychological Association (APA) in 2013. This scale consisted of 10 favorable items with an item discrimination index coefficient ranging from 0.276 to 0.790. Based on the measurement of severity measure for a specific phobia scale, the alpha coefficient of reliability (α) was 0.841.

The subjects were ten people who had been diagnosed with specific phobias by a professional psychologist. Those subjects were separated into three groups, Group I: 4 people had a phobia of heights, Group II: 3 people had a phobia of the syringe, and Group III: 3 people had a phobia of cockroaches. After being diagnosed by a professional psychologist, all subjects underwent observation, checklist interview, and rating scale with severity measure for a specific phobia. This resulted in categories ranging from medium to high, documented as the pre-test.

The CBT was conducted online based on the CBT module constructed from the study by (Cully and Teten, 2008). The online CBT was conducted via *Google Classroom*, *Google Meet*, and *Whatsapp*. The CBT module was tested beforehand and revised in duration and item order. CBT techniques applied were cognitive restructuring technique in the form of the ABC cognitive model, Socratic dialogue, and systematic desensitization as the behavioral modification technique.

The online CBT was carried out gradually, based on the phobia object. In phase I, CBT was administered to the group I, which consisted of 4 people with a phobia of height. In phase II, CBT was administered to 3 people with a phobia of the syringe who belonged to group II. Last but not least, in phase III, CBT was administered to 3 people in group III whose phobia was of cockroaches.

The data analysis used in this research was the Wilcoxon signed-rank test. The whole data was analyzed using the data analysis program.

3. RESULT

The results of the pre-test, post-test, and follow-up in measuring specific phobias are shown in the table below:

Subject	Pre-test		Posttest		Follow Up	
	Score	Category	Score	Category	Score	Category
RT	20	Medium	7	Low	2	Low
IP	28	High	8	Low	4	Low
MI	40	High	16	Medium	15	Medium
RS	32	High	3	Low	2	Low
LI	27	High	12	Low	2	Low
XI	33	High	31	High	18	High
ZI	28	High	6	Low	0	Low
MA	28	Medium	28	Medium	9	Low
SM	30	Medium	23	Medium	11	Low
HH	35	High	25	Medium	15	Low
Average	30,1		15,9		7,8	

There were ten research subjects based on the pre-test and post-test data above. Among them, six people showed a decreased score on a specific phobia scale; 2 subjects had a decreased score from high to medium, and four subjects had their score decreased from high to low. Meanwhile, the remaining three subjects showed no change in their score (medium), and one subject had his score still high. In post-test – follow-up, three people showed decreasing scores from medium to low, while the other 7 had no change of scores.

The result of the Wilcoxon signed-rank test in pretest-posttest showed a Z score of 2.666 ($p < 0.05$). This result demonstrated the difference between subjects' scores before undergoing CBT and after undergoing CBT. Before the CBT sessions, subjects showed higher symptoms of specific phobias (mean: 30.1) than after CBT sessions (mean: 15.9). In post-test – follow-up, the Z score was 2.807 ($p < 0.05$). This result illustrated the difference between the symptoms of specific phobias in post-test and follow-up. Phobia symptoms in follow-up were lower (mean: 7.8) than in post-test (mean 15.9).

The result of the Wilcoxon signed-rank test is shown below:

	Pre-pos	Pos-follow up
Z	2.666	2,807
Sig. (2-tailed)	.008	0,005

4. DISCUSSION

This study showed significant differences in the symptoms level of specific phobias in subjects before and after undergoing CBT and in the follow-up phase. The average score of the specific phobia scale decreased from pre-test to post-test and follow-up. Therefore, it can be inferred that CBT effectively decreases symptoms of specific phobias in subjects.

CBT is psychotherapy seeking to mend a client's behavioral problems and emotions by changing a false mindset (Satterfield, 2015). CBT enables the therapist to replace irrational negative cognition with more proper and suitable cognition so that the emotional and psychological problems may lessen and gradually disappear. There are two aspects to modify in CBT, cognitive and behavioral aspects. The cognitive aspect is the first to alter since thoughts and beliefs are responsible for psychological disorders and stress (David et al., 2018). The first session in CBT was for cognitive restructuring to reduce the symptoms of specific phobias.

The cognitive restructuring techniques chosen in this study were ABC cognitive model and Socratic dialogue. The purpose of using the ABC cognitive model was to allow subjects to understand the relation of stimulus – cognition – response (SCR) in the process of inducing their phobia. Subjects may find out the correlation between anxious behavior and extreme fear of certain objects coming from negative or illogical thoughts, which also trigger discomfort. The SCR chain influences how individuals value and interpret events, which impacts their emotions and

actions (Putranto, 2016). On the other hand, the purpose of Socratic dialogue (with questions “what proves the object/situation to be frightening? What are the logical reasons? Are there any other way to perceive it? Should I let it go? What can I learn from this?”) is to contradict previous thoughts and to compel subjects to re-evaluate thoughts and belief, to develop a more adaptive way of thinking (Clark and Egan, 2015).

After cognitive restructuring, the next aspect of modifying is the behavior aspect. In modifying the behavior, subjects were asked to do certain actions that would be an indirect experience in facing the situation/object of phobia through systematic desensitization (David et al., 2018). Systematic desensitization is an approach combining the visualization of a phobia object/situation with a certain relaxation technique (Otta and Ogazie, 2014).

The stages of systematic desensitization consist of relaxation training, writing down various situations triggering fear while filling out fear intensity scores, and visualizing various previously written situations (Rajiah and Saravanan, 2014). The goal of systematic desensitization is to train subjects to be able to confront phobia stimuli, although only from the imagery process. Another purpose of systematic desensitization is to assist the subject in replacing maladaptive behavior when facing the phobia object with more adaptive behavior that they learn from the relaxation training. The relaxation methods used in training sessions are progressive relaxation and diaphragmatic breathing.

After undergoing systematic desensitization, the therapist offers support, reinforces subjects' belief, and motivate them to stay committed to changing behaviors related to their phobia symptoms. Support and motivation are necessities in CBT since motivation gives certain energy that would lead the subject to a more positive state during therapy (Ryan et al., 2011; Abraham, 2017; Pachana et al., 2007).

Having completed the CBT intervention, subjects may cognitively interpret events or objects that they fear before to be illogical and, later on, change their perspective. This perspective-change makes subjects more comfortable and adjusts their behavior in facing the phobia object/situation. Also, although it may happen rather slowly, systematic desensitization helps subjects gradually confront phobia stimuli. The research limitation is that researchers did not explore more platforms or applications supporting the therapy sessions.

6. CONCLUSION

Thus, it can be concluded that changes in cognitive and behavioral aspects caused specific phobia symptoms in subjects to decrease. The decrease of specific phobia symptoms can be seen in lessening anxiety and physical symptoms (dizziness and palpitation). The end goal of CBT intervention is to assist subjects in developing proper and adaptive coping and problem-solving so that they can confront the fear-triggering situation.

RECOMMENDATION

This study suggested that in conducting online CBT in the future, researchers may explore more platforms or applications supporting the therapy sessions; to find an easier way for subjects to learn the material, do the task, and undergo the whole therapy process in just one application.

REFERENCES

- Abraham, J. 2017. Jurnal Psikologi Indonesia Vol 12 No 1 2017 (JPI Himpsi).
- Annisa, D. F., and Ildil, I. 2016. Konsep kecemasan (anxiety) pada lanjut usia (lansia). *Konselor*, 5(2), 93-99.
- Brosnan, L., Cooper, P., and Shafraan, R. 2013. *The Complete CBT Guide for Anxiety*. Hachette UK.
- Carter, K., Seifert, C. M., and Kwiatkowski, J. 2017. *Psikologi Umum*. Jakarta: ECG.
- Clark, G. I., and Egan, S. J. 2015. The Socratic method in cognitive behavioural therapy: a narrative review. *Cognitive Therapy and Research*, 39(6), 863-879.
- Cully, J. A., and Teten, A. L. 2008. *A therapist's guide to brief cognitive-behavioral therapy*. Houston: Department of Veterans Affairs South Central MIRECC.
- David, D., Cristea, I., and Hofmann, S. G. 2018. Why cognitive behavioral therapy is the current gold standard of psychotherapy. *Frontiers in Psychiatry*, 4.
- Feist, G. J. 2017. *Personality, behavioral thresholds, and the creative scientist*.
- Lahey, B. B. 2001. *Psychology: an introduction*. McGraw-Hill Companies.
- Latta, S. 2019. *Scared stiff: Everything you need to know about 50 famous phobias*. Zest BooksTM.
- Mansell, W. 2007. *Coping with Fears and Phobias: A CBT Guide to Understanding and Facing Your Anxieties*. Simon and Schuster.
- Melianawati, M. 2014. Penerapan CBT Pada Penderita Fobia Spesifik. *CALYPTRA*, 3(1), 1-12.
- Minderop, A. 2010. *Psikologi sastra: karya, metode, teori, dan contoh kasus*. Yayasan Pustaka Obor Indonesia.
- Nathan, P. E., and Gorman, J. M. 2015. *A guide to treatments that work*. Oxford University Press.
- Ongider-Gregory, N., And Baykara, B. 2015. Efficacy of Cognitive Behavioral Group Therapy (CBGT) Among Children with Anxiety Disorders. *Journal of Cognitive-Behavioral Psychotherapy and Research*, 4(1), 26.
- Otta, F. E., and Ogazie, C. A. 2014. Effects of Systematic Desensitization and Study Behaviour Techniques on the Reduction of Test Phobia Among in School. *World*, 1(3).
- Pachana, N. A., Woodward, R. M., and Byrne, G. J. A. 2007. Treatment of specific phobia in older adults. *Clinical Interventions in Aging*, 2(3), 469.
- Prayitno, P., Afdal, A., Ildil, I., and Ardi, Z. 2017. *Layanan Bimbingan Kelompok dan Konseling Kelompok yang Berhasil: Dasar dan Profil*.
- Putranto, A. K. 2016. *Aplikasi cognitive behavior dan behavior activation Dalam intervensi klinis*. Jakarta Selatan: Grafindo Books Media.
- Rajiah, K., and Saravanan, C. 2014. The effectiveness of psychoeducation and systematic desensitization to reduce test anxiety among first-year pharmacy students. *American Journal of Pharmaceutical Education*, 78(9).
- Ryan, R. M., Lynch, M. F., Vansteenkiste, M., and Deci, E. L. 2011. Motivation and autonomy in counseling, psychotherapy, and behavior change: A look at theory and practice 1\$ψ\$7. *The Counseling Psychologist*, 39(2), 193-260.
- Satterfield, J. M. 2015. *Cognitive-behavioral therapy: Techniques for retraining your brain*. Great Courses.
- Whitbourne, S. K., and Halgin, R. 2012. *Abnormal psychology: Clinical perspectives on psychological disorders*. McGraw-Hill Higher Education.

