



Studies in Technology and Education

Volume 3, Issue 2, 2024 | <https://www.azalpub.com/index.php/ste>

OPEN ACCESS

RESEARCH ARTICLE

Article Info

Received:

February 23, 2024

Accepted:

March 28, 2024

Published:

May 02, 2024

Keywords

Behavior
Education
Personal
Psychology
Traits

Suggested Citation:

Alwani, M. AW. (2024). Personal traits of anxious people before and after cognitive behavioristic therapy and breeding pets. *Studies in Technology and Education*, 3(2), 1-9.

PERSONAL TRAITS OF ANXIOUS PEOPLE BEFORE AND AFTER COGNITIVE BEHAVIORISTIC THERAPY AND BREEDING PETS

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Abstract

The purpose of this study is to explore the personal traits of anxious people before and after cognitive behavioristic therapy and Breeding pets. Sample of the study comprised of 30 participants (17 male and 13 female) moreover the personal traits of participants measured by Clinical analysis questionnaire which is founded by Raymond Cattel & et.al, the questionnaire has been translated to Arabic language by Mohammad al Sayed & Saleh abu Abaah, 1998. Results of this study presented that there are significant differences at ($\alpha \leq 0.01$) in personal traits of anxious people before and after cognitive behavioristic therapy and Breeding pets and Breeding pets in: hypochondriasis, irritation, anxiety depression, guilt and resentment, boredom and withdrawal, boredom and withdrawal, paranoia, psychopathy, Psychasthneia and lack of mental competence in favor of the post test, whereas, there were no significant differences in suicidal depression, low energy depression and schizophrenia.

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INTRODUCTION

Concept of anxiety is an emotion characterized by an annoying condition of internal disorder, involves more than passing worry or fear and does not go away and can get worse over time can interfere with daily activities (Davison and Gerald, 2008). It's usually occur with often accompanied by nervous behavior and other mental or physical illnesses including alcohol or substance abuse as well as withdrawal from drugs of abuse which may mask anxiety symptoms or make them worse (APA, 2013). Anxiety has different symptoms can be either a short term as a state or a long term as a trait, but all the symptoms cluster around excessive, irrational fear and dread, whereas trait anxiety is a worry about future events reflects a stable tendency to respond with state anxiety in the anticipation of threatening situations. It is closely related to the personality trait of neuroticism (Ohman, 2000). The difference between fear and anxiety can be described in duration of emotional experience, temporal focus, specificity of the threat, and motivated direction. While anxiety can be experienced with long, drawn out daily symptoms that reduce quality of life, known as chronic anxiety or it can be experienced in short spurts with sporadic, panic attacks (Jeffrey and Jay, 1998).

Anxiety can effect emotionally such as feelings of apprehension or dread, trouble concentrating, feeling tense and jumpy, anticipating the worst, irritability, and restlessness as well as nightmares, obsessions about sensations (Beidel and Turner, 1988), on another hand the cognitive effects involved in thoughts about suspected dangers, such as fear of dying, people can feel an intense fear when think of dying, or may think of it more often than normal, or can't get it out of their mind (Amodio and Hamilton, 2012). However, there are some people who just tend to be more anxious or have what's called an anxious personality; certain personality traits have been associated with developing anxiety. So anxiety can define their personality, because anxiety affects thought patterns can make them feel and think differently than they would, where the personality refers to individual differences in characteristic patterns of thinking, feeling and behaving, in anxious personality can describe two broad areas: One is understanding individual differences in particular personality characteristics, such as irritability, Hypochondriasis, guilt and resentment, and Boredom and withdrawal (Zalta and Chambless, 2012). The other understands how the various parts of a person come together as a whole.

Kotov, Roman; Gamez, Wakiza; Schmidt, Frank; Watson, David (2010) studied a quantitative review of associations between the higher order personality traits in the big three and big Five models : neuroticism, extraversion, disinhibiting, conscientiousness, agreeableness, openness specific depressive, anxiety, and substance use disorders in adults. The review consisting 175 studies published from 1980 to 2007, which yielded 851 effect sizes, studies number ranged from three to 63 and the total sample of the study were from 1,076 to 75,229. All diagnostic groups were high on neuroticism (mean Cohen's $d = 1.65$) and low on conscientiousness mean $d = -1.01$. Many disorders also presented low extraversion, with the largest effect sizes for dysthymic disorder $d = -1.47$ and social phobia $d = -1.31$. Disinhibiting was linked to only a few conditions, including SUD $d = 0.72$, while, agreeableness and openness were largely unrelated to the analyzed diagnoses. The results of the study showed that there are two conditions presented particularly distinct profiles: SUD, which was less related to neuroticism but more elevated on disinhibiting and disagreeableness, and specific phobia, which displayed weaker links to all traits. Moreover the analyses data indicated that epidemiologic samples produced smaller effects than patient samples and that Eysenck's inventories showed weaker associations than NEO scales.

Undine, E; Rainer, H; Peter, K; Malek, B; Kirsten, P; Lenzen and et.al (2005) Investigated a functional BDNF polymorphism and anxiety-related personality traits, the sample of the *Studies in Technology and Education*

study comprise 343 unrelated subjects of German descent (171 male, 172 female, age: 39.0 ± 14.6 years) who were carefully screened for psychiatric health, and the tool of the study were the self-ratable state-trait anxiety inventory (STAI), and the NEO-Five Factor Inventory (NEO-FFI). Results of the study indicated that there are significant ($F=3.2$, $df=2$, $p<0.042$) effect of the genotype was observed with higher levels of trait anxiety in Val/Val (35.0 ± 7.4) compared to Val/Met (33.4 ± 6.5) and Met/Met (32.0 ± 4.6) genotypes. The NEO neuroticism scores were also higher in Val/Val (29.5 ± 7.0) than in Val/Met (28.4 ± 6.5) or Met/Met (26.8 ± 5.8) genotype, but not at a significant rate.

Christine Lochnera, Sian Hemmingsb, Soraya Seedata, Craig Kinnearb, Renata Schoemanc, Kristina Annerbrinkd and etal, (2007) aimed to compare patients and controls with respect to personality traits and investigate the role of genes encoding components of serotonergic (5-HT) and dopaminergic (DA) pathways in patients with SAD. The total sample of the study were 35 male and 28 female have been diagnosed by generalized SAD and SPIN-scores > 18 , and age-matched control participants ($n = 150$; 31 male, 119 female) were included in the study. The Temperament and Character Inventory (TCI) have been used to measure behaviors associated with specific personality dimensions, and DNA was extracted and genotyped to investigate the role of select candidate genes encoding components in serotonergic and dopaminergic pathways in mediating the development of SAD.

Results of the study presented that there are significantly higher on harm avoidance ($p < 0.001$) but lower on novelty seeking ($p = 0.04$) and self-directedness ($p = 0.004$) compared to controls. In the Caucasian subset, there was a difference between patients and controls in distribution of the 5-HT2AT102C polymorphism, with significantly more patients harboring T-containing genotypes (T-containing genotypes: [T / T + T / C] vs. [C / C]) ($\chi^2 = 7.55$; $p = 0.012$). Temperament dimensions did not, however, differ significantly between carriers of different (dominant vs. recessive) alleles for the 5-HT2AT102C polymorphism in SAD patients.

Pim Cuijpersa, b, Annemieke van Stratenc, Marianne Donker c (2005) examined the personality traits with mood and anxiety disorders in differing patterns of comorbidity, the sample of the study consist 640 outpatients and the tool of the study is five-factor model of personality. Mood and anxiety disorders have been assessed by the help of composite international diagnostic inventory, whereas the personality traits have been assessed by the help of NEO - five factor inventory. Results of the study showed that there are significant differences in general sample based on five-factor Inventory, and there are few differences between NEO - FFI scores for differing patterns of mood and anxiety disorders. Furthermore, there are clear differences for subjects with one (mood or anxiety) disorder, subjects with two, and subjects with three or more disorders. Neuroticism and agreeableness differed considerably in subjects with one disorder compared with subjects with two or more disorders.

The use of animal husbandry to improve mental health was initiated in the 1980s and 1990s by the Delta Society (now Pet Partners) USA. It refers to so-called combination therapies or animal-assisted therapy (AAT) from informal therapies called animal-assisted activities (AAA). Given the critical importance of clear definitions for demonstrating efficacy. Animal-assisted therapeutic interventions (AAI) is the umbrella term for the intentional and purposeful incorporation of animals into human mental health, and AAA aims to advance human well-being. Animal husbandry therapy takes the form of animal-assisted psychotherapy (AAP) and animal-assisted play therapy (AAPT). These interventions include human-animal interaction in addition to, or combination with, a recognized, professional form of mental health treatment. The unique relationships formed between humans and animals are seen as key agents of change and respected in a similar way to the therapist-client relationship. (Stefanini.2016)

Animal breeding as a treatment improves the patient's mental, social, emotional and physical functions. Therapy sessions can take place in different facilities and include activities such as games, sports and animal care. It is performed individually or in groups and, like any other form of therapy, is tailored to each patient's needs (Jackson, 2012). Among the pets that contribute to the treatment programs are domestic animals such as dogs, cats, and dolphins, and farm animals such as horses, rabbits, and various birds in the programs. They help to feel calm and optimistic in adults and children. They help build trust between patient and therapist, and encourage the achievement of therapeutic goals. Animal Assisted Therapy does not constitute an individualized school of psychotherapy and is not likely to have positive outcomes for all people with all types of disorders (Ogilvie, 2016). Studies have indicated that raising animals has a role in changes in brain chemistry in the patient and increases neurotransmitters that improve mood, promote relaxation and reduce stress. (Moretti et al. 2011, Ambrosi et al., 2019) She also indicated several advantages of this treatment in body functions such as lowering high blood pressure, regulating the pulse, increasing activity and positive movement, and this helps in improving the health of the patient faster. Among the most psychological benefits Clarity is emotional support, reducing feelings of loneliness, sadness, and isolation, as well as helping to develop empathy and kindness skills, improving the self-image of the depressed, increasing self-confidence, and increasing positive attitudes towards reality in general (Souter and Miller, 2007). The life and quality of the patient's life. E life fully, it helps the patient to find meaning in his life. The animal breeder may enjoy that he has accomplished, practiced taking responsibility, and proved his success in interacting with the surrounding environment around him. A close bond is often established between the patient and the animal, so the patient feels good control over the environment around him because he has the ability to control some parts of life as he feels The patient is able to succeed in some challenges, so pet breeding becomes a source of support and motivation. Contact with animals also improves the social skills of depressed patients, reduces feelings of marginalization and provides opportunities to interact with others. (Horowitz, 2010, Cheung and Kam, 2017). Animal assisted therapy aims to improve a patient's cognitive, emotional, social and physical functions. It has been implemented in many hospitals, clinics, and other rehabilitation areas, nursing homes, prisons, private homes, and animal farms. And it has been used in group and individual therapy Animal-assisted therapy is not based on any particular psychological theory, but can be incorporated into various types of it (Delta Society, 2008; Friedman & Son, 2009). Therefore, the researcher resorted to using animal husbandry from cognitive behavioral therapy to see its effectiveness with the cognitive behavioral therapy program.

With respect to the previous studies, the personality traits is appear to be associated with comorbidity and less so with any specific disorder such as anxiety, depression or any other disorders.

METHODOLOGY

This study aims to investigate the personal traits of anxious people before and after cognitive behavioristic therapy and Breeding pets. There are statically differences in personal traits of anxious people before and after cognitive behavioristic therapy and Breeding pets. The sample of the study compromise 30 anxious people (17 male and 13 female)aged between 18 – 54 years all the respondents were from the middle class family.

The personal traits of anxious people were measured with the help of Clinical analysis questionnaire which is founded by Raymond Cattel & et.al, the questionnaire has been translated to Arabic language by Mohammad al Sayed & Saleh abu Abaah, 1998. This scale cconsisting of 128 items scoring template for each item record the value of the three responses in the clear box, the scale has a Cronbach alpha 0.85 and re-tests reliability 0.83.

The participants have been subjected to a treatment program consists of 8 individual treatment sessionsthroughout one month (three sessions during the first week, two sessions for second and third week, whereas in fourth week there was one treatment session. The questionnaires were administrated separately before and after the therapy program, while the total time taken by each participant varies 60 to 90 minutes, the data was tabulated andentered to SPSS program for analysis and extraction results based on z-test.

RESULTS AND DISCUSSION

Table (1) shows result of Pre- test &Post-test the personal traitsof experimental group

Factors	Pre / Post	Attitudes	Number	Mean	Sum	Z	Sig
Hypochondriasis	Pre Post	+	18	9.50	171.00	3.77	*
		-	0				
		=	2				
		Total	20				
Suicidal depression	Pre Post	+	19	10.00	190.00	3.87	
		-	0				
		=	1				
		Total	20				
Irritation	Pre Post	+	9.50	9.50	171.00	3.78	*
		-	0				
		=	2				
		Total	20				
Anxiety depression	Pre Post	+	19	10.00	10.00	3.88	*
		-	0				
		=	1				
		Total	20				
Low energy depression	Pre Post	+	20	10.50	0.0	3.95	
		-	0				
		=	0				
		Total	20				
Guilt and resentment	Pre Post	+	19	10.00	10.50	3.87	*
		-	0				
		=	1				
		Total	20				
Boredom and withdrawal	Pre Post	+	20	10.50	0.0	3.95	*
		-	0				
		=	0				
		Total	20				
Paranoia	Pre Post	+	19	10.00	10.0	3.91	*
		-	0				
		=	1				
		Total	20				
Factors	Pre / Post	Attitudes	Number	Mean	Sum	Z	Sig
Psychopathy	Pre Post	+	20	10.50	210.00	4.00	*
		-	0				
		=	0				
		Total	0				

		Total	20				
Psychasthneia	Pre Post	+	20	10.50 0	210.00 00	3.99	*
		-	0				
		=	0				
		Total	20				
Schizophrenia	Pre Post	+	17	9.00 0	210.00 00	3.66	
		-	0				
		=	3				
		Total	20				
Lack of mental competence	Pre Post	+	20	10.50 0	153.00 00	3.97	*
		-`5	0				
		=	0				
		Total	20				

Significant at ($\alpha \leq 0.01$)

Table (1) presented that there are significant differences at ($\alpha \leq 0.01$) personal traits of anxious people before and after cognitive behavioristic therapy and Breeding pets in: Hypochondriasis, Irritation, Anxiety depression, Guilt and resentment, Boredom and withdrawal, Boredom and withdrawal, Paranoia, Psychopathy, Psychasthneia and Lack of mental competence in favor of the post test, on another hand, there were no significant differences in Suicidal depression, Low energy depression and Schizophrenia.

The results indicated that the many personal traits are affected clearly by cognitive behavioral therapy and Breeding pets more than others. The purpose of therapeutic program is to educate the individuals about the physical symptoms which they are feeling and interpret it, and to help the individual to know the physical symptoms as a result of maybe: anxiety, fear, sadness, anger or any perceived feelings whether positive or negative will take place a physical change. Moreover, the therapeutic program directs the individual to know the coping strategies as a defense to get rid of these feelings.

CONCLUSION

The personality traits are among the most stable variables in the dental character. The trait is almost constant, and it must interact with thoughts, feelings and behavior in a strong way until it reaches a noticeable change. This change appeared because animal husbandry interacted with cognitive behavioral therapy programs and gave a very strong result in significantly changing traits. This change, even if it is temporary for short periods, with the expectation of the researcher, does not last for several months, and it is necessary to follow up with this program for a longer time in order to reach a more permanent change. Raising animals gives an opportunity to interact with feelings and express feelings more clearly. When a depressed patient is unable to deal with humans, he may feel successful in dealing with animals, and when humans disappoint him, he finds fulfillment from animals. Breeding animals gives the patient an opportunity to prove himself and exercise the control he has lost in his daily life. Breeding animals allows the depressed person to succeed in building challenges and succeeding over them, and this contributes to raising his value to himself.

REFERENCES

Ambrosi, C., Zaiontz, C., Peragine, G., Sarchi, S., Bona, F. (2019). Randomized controlled study on the effectiveness of animal-assisted therapy on depression, anxiety, and illness perception in institutionalized elderly. *Psychogeriatrics*, 19(1): 55-64.

- American Psychiatric Association (2013) Diagnostic and Statistical Manual of Mental Disorders (Fifth ed.). Arlington, VA: *American Psychiatric Publishing*, p. 189.
- Amodio M; Hamilton, K (2012) intergroup anxiety effects on implicit racial evaluation and stereotyping, *Emotion* 12 (6): 1273–1280.
- Beidel, D; Turner, S (1988) Comorbidity of test anxiety and other anxiety disorders in children, *Journal of Abnormal Child Psychology* 16 (3): 275–287.
- Cheung, C.K., Kam, P.K. (2017). Conditions for pets to prevent depression in older adults. *Aging & Mental Health*, 22(12): 1627–1633.
- Chitic V, Rusu AS, Szamoskozi S. The Effects of Animal Assisted Therapy on Communication and Social Skills: A Meta-Analysis. *Transylvanian Journal of Psychology*. 2012; 13(1):1–17.
- Christine, L; Sian, H; Soraya, S; Craig, K; Renata, S; Kristina, A and etal, (2007) genetics and personality traits in patients with social anxiety disorder: a case-control study in South Africa, *Journal of European Neuropsychopharmacology*, Volume 17, Issue 5, Pages 321–327.
- Davison, Gerald C. (2008) abnormal psychology. Toronto: Veronica Visentin. p. 154.
- Delta Society (2008). What are animal assisted activities/therapy? Available online on <http://www.deltasociety.org/Document.Doc?> Accessed at July 10, 2019
- Friedmann, E., Son, H. (2009). The Human– Companion Animal Bond: How Humans Benefit. *Veterinary Clinics of North America: Small Animal Practice*, 39(2): 293–326. doi:10.1016/j.cvsm.2008.10.015
- Germain SM, Wilkie KD, Milbourne VMK, Theule J. Animal-assisted Psychotherapy and Trauma: A Meta-analysis. *Anthrozoös*. 2018; 31(2):141–64. <https://doi.org/10.1080/08927936.2018.1434044>
- Hamama L, Hamama-Raz Y, Dagan K, Greenfeld H, Rubinstein C, Ben-Ezra M. A preliminary study of group intervention along with basic canine training among traumatized teenagers: A 3-month longitudinal study. *Children and Youth Services Review*. 2011; 33(10):1975–80. <https://doi.org/10.1016/j.childyouth.2011.05.021>
- Hartwig EK. Building Solutions in Youth: Evaluation of the Human–Animal Resilience Therapy Intervention. *Journal of Creativity in Mental Health*. 2017; 12(4):468–81. <https://doi.org/10.1080/15401383.2017.1283281>
- Hoagwood KE, Acri M, Morrissey M, Peth-Pierce R. Animal-assisted therapies for youth with or at risk for mental health problems: A systematic review. *Applied Developmental Science*. 2017; 21(1):1–13. <https://doi.org/10.1080/10888691.2015.1134267> PMID: 28798541
- Horowitz, S. (2010). Animal-assisted therapy for inpatients: Tapping the unique healing power of the human-animal bond. *Alternative and Complementary Therapies*, 16(6): 339-343

- Jeffrey, B; Jay, S (1998) From normal fear to pathological anxiety. *Psychological Review* 105 (2): 325–50.
- Kamioka H, Okada S, Tsutani K, Park H, Okuizumi H, Handa S, et al. Effectiveness of animal-assisted therapy: A systematic review of randomized controlled trials. *Complement Ther Med.* 2014; 22(2):371– 90. <https://doi.org/10.1016/j.ctim.2013.12.016> PMID: 24731910.
- Kawamura, N., Niiyama, M., Niiyama, H. (2009). Animal-assisted activity: experiences of institutionalized Japanese Older Adults. *J Psychosoc Nurs Ment Health Serv*, 47(1):41-7
- Kotov, R; Gamez, W; Schmidt, F; Watson, D (2010) linking big personality traits to anxiety, depressive, and substance use disorders: A meta-analysis. *Journal of Psychological Bulletin*, Vol 136(5), pp, 768-821.
- Kruger, A.K., Serpell, J. (2010). Animal-Assisted Interventions in Mental Health: Definitions and Theoretical Foundations. In *Handbook on Animal-Assisted Therapy: Theoretical Foundations and Guidelines for Practice*, 4th edition, edited by Fine A.H, published by academic press, U.S.A. 2010, chapter: 2, pp.21-38.
- Lange AM, Cox JA, Bernert DJ, Jenkins CD. Is Counseling Going to the Dogs? An Exploratory Study Related to the Inclusion of an Animal in Group Counseling with Adolescents. *Journal of Creativity in Mental Health.* 2007; 2(2):17–31. https://doi.org/10.1300/J456v02n02_03
- Mandr a, P.P., Moretti, T.C.D.F., Avezum, L.A., Kuroishi, R.C.S. (2019). *Animal assisted therapy: systematic review of literature.* *Codas*, 31(3):e20180243.
- Maujean A, Pepping CA, Kendall E. A Systematic Review of Randomized Controlled Trials of Animal-Assisted Therapy on Psychosocial Outcomes. *Anthrozoos: A Multidisciplinary Journal of The Interactions of People & Animals.* 2015; 28(1):23–36. <https://doi.org/10.2752/089279315x14129350721812>
- Moretti, F., Ronchi, D.D., Bernabei, V., Marchetti, L., Ferrari, B., Forlani, C., et al. (2011). *Pet therapy in elderly patients with mental illness.* *Psychogeriatrics*, 11 (2): 125-9
- O'Haire ME, Guerin NA, Kirkham AC. Animal-Assisted Intervention for trauma: a systematic literature review. *Front Psychol.* 2015; 6:1121. Epub 2015/08/25. <https://doi.org/10.3389/fpsyg.2015.01121> PMID: 26300817; PubMed Central PMCID: PMC4528099.
- Ogilvie, G.K. (2016). A Clinician's Viewpoints on Wellness and the Human-Animal Bond in Practice. *Advances in Small Animal Medicine and Surgery*, 29(9): 1–3.
- Ohman, A (2000) fear and anxiety: evolutionary, cognitive, and clinical perspectives. In Lewis, Michael; Haviland-Jones, Jeannette M. *Handbook of emotions.* New York: *The Guilford Press.* pp. 573–93.
- Pim, C; Annemieke, S; Marianne, D (2005) personality traits of patients with mood and anxiety disorders, *Journal of Psychiatry Research*, Volume 133, Issues 2–3, 28, Pages 229–237.

- Souter MA, Miller MD. Do Animal-Assisted Activities Effectively Treat Depression? A Meta-Analysis. *Anthrozoos*. 2007; 20(2):167–80.
- Souter, M.A., Miller, M.D. (2007). Do animal-assisted activities effectively treat depression? A meta-analysis. *Anthrozoos*, 20 (2): 167-180.
- Stefanini MC, Martino A, Allori P, Galeotti F, Tani F. The use of Animal-Assisted Therapy in adolescents with acute mental disorders: A randomized controlled study. *Complementary Therapies in Clinical Practice*. 2015; 21(1):42–6. <https://doi.org/10.1016/j.ctcp.2015.01.001> PMID: 25701449. 72.
- Stefanini MC, Martino A, Bacci B, Tani F. The effect of animal-assisted therapy on emotional and behavioral symptoms in children and adolescents hospitalized for acute mental disorders. *European Journal of Integrative Medicine*. 2016; 8(2):81–8. <https://doi.org/10.1016/j.eujim.2016.03.001>
- Undine, E; Rainer, H; Peter, K; Malek, B; Kirsten, P; Lenzen and et.al (2005) a functional BDNF polymorphism and anxiety-related personality traits, *Journal of Psychopharmacology*, Volume 180, Issue 1, pp 95-99.
- Zalta, K.; Chambless, L (2012) understanding gender differences in anxiety: *The Mediating Effects of Instrumentality and Mastery*. *Psychology of Women Quarterly* 36 (4): 488–9.