

Personality Traits, Cognitive Distortions and Dysfunctional Attitudes in Students

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Trait is a fundamental aspect of human personality which is reflected in principle theories of personality in concepts of traits and considered as a different structure in every person. The present study aims to examine the relationship between personality traits, cognitive distortions and dysfunctional attitudes in students. It was hypothesized that there is likely to be a relationship between personality traits, cognitive distortions and dysfunctional attitudes in students. It was further hypothesized that personality traits and cognitive distortion are likely to predict dysfunctional attitude in students. Correlational research design and purposive sampling technique was used to collect data from students (N=150). The age range was 19 to 25 (M=21.80; SD=2.18). Personality Trait Scale (Rammstedt & John, 2005), Cognitive Distortion Scale (Barriga et al., 2001) and Dysfunctional Attitude scale DAS-SF2 (Weissman, 1979) were used as assessment measures. Data was analyzed by using Descriptive, Correlation, and Regression analysis. Results revealed that personality traits have a negative significant relationship with dysfunctional attitude, while, cognitive distortions have a positive non-significant relationship with dysfunctional attitude. Personality traits have a positive and non-significant relationship with cognitive distortions. In regression analysis, neuroticism highly predicted dysfunctional attitude. While, extroversion, openness to experience, conscientiousness and agreeableness negatively predicted with dysfunctional attitude. The results were discussed with reference to relevant literature. The implications can be used for the counselling of students with dysfunctional attitudes.

Keywords: personality, cognitive distortion, dysfunctional attitude

The theories of Freud and Jung are based on personality which proposes that personality is a predisposition, but the theories of Allport and Cattell are based on personality traits such as outgoing, adventurous, imaginative, shrewd and casual etc.). They encourage the individual to pursue suitable stimulation and connect with the world to generate actions. Through these traits, individuals become different from each other. Personality is what makes prediction in a given situation of what a person would do (Revelle, 2009). Beck's theories are based on cognitive distortion and dysfunctional attitudes. Beck argues that schemas change the way people approach the life cycle elements such as justified knowledge which could be considered as a cognitive distortion. Beck was careful not to claim that depression can be caused by these unhealthy habits. Although it may be a habit to think in certain situations, but depression was associated with him. The ability to control and exacerbate dependent stress, measured by the symptoms of depression and anxiety in adolescents (Mayo et al., 2017).

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The rationale of this study is that attitudes of individuals are becoming worse day by day. With the passage of time, individuals are becoming rude and their behaviour with their age fellows, teachers and parents also becoming very different and strange. The reason behind their dysfunctional attitude is that there are some errors occurring in their thinking pattern, and their cognitions are distorted. From the cultural perspective, there is a huge difference between our generation and the last generation. Our ancestors gave respect to their parents, teachers, peers, siblings, and friends. Their thinking pattern, perception and beliefs related to self, family, friends and even the whole world was positive and their behaviour was functional. Now a day, the new generation has problems in their thought pattern, their perception is becoming worse day by day and their behaviour is also becoming dysfunctional (De Koe, 2019). The reason for choosing this topic was that we were interested to know i.e personality traits can be affected when the attitude of an individual becomes dysfunctional and also if distortions occur in an individual. We wanted to explore the dimensions of personality traits of an individual when the individual's attitude becomes dysfunctional.

Researchers have explored personality traits, cognitive distortions and dysfunctional attitudes in their research. Anzani et al. (2018) investigated the relationship between psychopathological symptoms, defenses, personality traits and negative attitudes towards Trans people. The findings show that mature defences had a significant negative effect and that antagonistic trait had a positive effect on trans-negative attitudes. The predicted trans-negative attitudes had no effect on relatively male repetition of any sexually active male; we also found a significant connection of age and the effect of the interaction between sexual orientation and gender. Furthermore, Mishkevich (2020) inspected attitudes and personality traits. The results show that changes in personality traits and dimensions, which influenced by social factors, have been recognized as a central personality trait in the current research too. Consensus, honesty, and conversion between measurement and evaluation or reasoning did not improve significantly. Measurements significantly reduced neurological effects, without any reasoning. From the evaluation, the attitude towards consent changed with an argument. The changes described by social inequality were enough to close the gap between measures of behavior for all characteristics except openness and quiriness.

The objectives of the study were to determine the relationship of variables and investigate that personality traits, and cognitive distortions predict dysfunctional attitudes in students.

The hypothesis of our study is that there is likely to be a relationship between personality trait, cognitive distortions and dysfunctional attitudes in students. The second hypothesis is that personality traits and cognitive distortions are likely to predict dysfunctional attitudes in students.

Method

Participants

The sample consisted of 150 male and female students from private educational institute (University from Lahore with different departments including Science, Business, Arts, Literature, Islamic, law, Health, Designing, Engineering etc.) with the age range of 19 – 25 ($M=21.80$; $SD=2.18$) by using purposive sampling strategy. The inclusive criteria of this study were that both male and female participant's age range between 19 - 25. All the students taking part in the study were from different departments of this University. The exclusive criteria of study were that those participants with an age range of less than 19 – 25 years old were not included. The participants suffering from any other medical condition were also excluded.

Table 1*Descriptive Statistics of Demographic Variables*

<i>Variables</i>	<i>M</i>	<i>(SD)</i>	<i>f</i>	<i>(%)</i>
Age	21.80	(2.18)		
Semester				
Semester 1			8	(5.3)
Semester 2			19	(12.7)
Semester 3			30	(20.0)
Semester 4			35	(23.3)
Semester 5			14	(9.3)
Semester 6			10	(6.7)
Semester 7			7	(4.7)
Semester 8			8	(5.3)
Semester 9			2	(1.3)
Semester 10			13	(8.7)
Gender				
Male			48	(32.0)
Female			102	(68.0)
Number of siblings				
Less than 5			123	(82.0)
More than 5			27	(18.0)
Birth order				
First			35	(23.3)
Middle			115	(76.7)
Family system				
Nuclear			107	(71.3)
Joint			43	(28.7)
Education level				
Intermediate			14	(9.3)
Bachelors			99	(66.0)
Masters			25	(16.7)
M.Phil.			12	(8.0)
Department				
Science			99	(66.0)
Arts			51	(34.0)
Area				
Urban			112	(74.7)
Rural			38	(25.3)

Note. N=150; M=Mean; SD=Standard Deviation; f=Frequency; %=Percentage

Assessment Protocol***Demographic Information Sheet***

Demographics variable such as Age of participant, Gender of participant, Program that the participant was enrolled in the University, Department of participant, Birth order and number

of siblings of the participant, family system of the participant and area were measured through a self-constructed form.

Personality Traits Through BFI – K Items

BFI-K measure to personality traits namely Extroversion, Openness to experience, neuroticism, conscientiousness and agreeableness. It consisted of 21 items. A list of the statements was provided, and individuals had to fill the questionnaire by using the given options including “Disagree, Slightly Disagree, Neutral, Slightly Agree and Agree”. These options were provided for each statement. The BFI – K scale Mean ranged between 3.37 – 3.43 and the Standard Deviation of the study ranged between is .74 - .79 which was reported by Rammstedt and John (2005).

Measuring Self - Serving Cognitive Distortions: An Analysis of the How I think Questionnaire (HIT – 16 – Q)

The How I Think Questionnaire (HIT – Q; Barriga et al., 2001) is a self – report questionnaire of 16 items, which an individual has to fill with the options including Disagree (1), Slightly Disagree (2), Neutral (3), Slightly Agree (4) and Agree (5). The statements of the scale included “It’s ok to tell a lie if someone is dumb enough to fall for it.” It is no use trying to stay out of fights. It is use to assess the self – Serving Cognitive Distortions of an individual. In addition, to analyze the validity and reliability of HIT, which is actually, HIT – 16 – Q (Ara & Shah, 2015). According to the author, the reliability of the scale was good like alpha is .83 of total HIT – 16 – Q.

Dysfunctional Attitudes Scale (DAS - SF2)

There are nine items on the dysfunctional attitudes scale (DAS - SF2, Weissman, 1979). A list of the statement was provided to the individuals. The individuals had to fill the questionnaire by selecting one of the options from “Totally Agree, Agree, Disagree and Totally Disagree, were allocated given to each statement. The statements of the scale included ‘If you don’t have other people to lean on, you are bound to be sad, I don’t need the approval of other people in order to be happy, if you can’t do something well, there is little point in doing it at all etc. According to the author, the reliability (.50) of the scale shows non - significant relationship with Beck Depression Inventory (BDI; Beck & Steer, 1993).

Procedure

Participants were briefed about the research study to motivate them to participate and requested to volunteer participation in this study. Those who gave their consent to participate were included in the study. Every participant was asked to read and fill the consent form carefully along with three questionnaires BFI-K, HIT and DAS-SF2, to collect data. In addition, their Family System, Birth Order, Program, Current Semester, Department, area, Gender and Age were also added as demographic variables. Data was also collected online with the help of Google Form. There were seventy questionnaires which were filled online through Google Form and the remaining eighty questionnaires were filled by participants in person. All the questionnaires including BFI-K, HIT and DAS-SF2 found us in the form of Open Access. Earlier, the data was screened and no missing value was found. Further, different tests and analysis were applied on the whole data, then the results were calculated which showed the relationship of all variables including BFI-K, HIT and DAS-SF2. The ethical consideration of

our study was that each participant was provided with a consent form and details were provided about the research purpose. The researcher was given surety that their identity would be kept anonymous and if they wanted to leave the research at any time, they were free to go. The results of the research would be provided if any of the participants was interested to know, as feedback to their work.

Results

Table 2

Descriptive statics of the study variable Personality traits, cognitive distortion and dysfunctional attitude in Students (N=150)

Variables	k	α	M	(SD)	Range	
					Actual	Potential
Extraversion	4	.82	11.98	2.98	5-20	4-20
Openness to Experience	5	.71	16.42	3.94	6-25	5-25
Neuroticism	4	.72	13.48	3.24	5-20	4-20
Conscientious	4	.74	12.98	3.37	5-20	4-20
Agreeableness	4	.78	12.36	2.91	4-19	4-20
HIT	16	.86	34.48	12.12	16-76	16-80
DAS	9	.67	24.50	4.96	10-35	9-36

Note. k = Number of items, α = Cronbach's alpha reliability, M=Mean, SD= Standard Deviation.

Table 2 showed the reliability coefficient of personality traits, cognitive distortions and dysfunctional attitudes. All the scales of Cronbach's alpha reliability showed high internal consistency.

Table 3

Correlation between personality traits, cognitive distortions and dysfunctional attitude in sample (N=150)

Variables	1	2	3	4	5	6	7	8	9	10	11
1 Gender	-	-.03	-.19	-.15	-.23**	-.02	.01	.00	-.12	-.09	.03
2 Age		-	.05	.06	.00	.06	.06	-.06	-.01	-.15	.11
3 Birth order			-	.12	.00	-.04	-.14	.07	-.13	.28**	.20*
4 Area				-	-.07	-.12	-.15	-.23**	-.13	.11	.15
5 Extraversion					-	.38**	.29**	.25**	.26**	.11	-.28**
6 Openness to experience						-	.70**	.51**	.46**	.02	-.27**
7 Neuroticism							-	.63**	.40**	.04	-.20*
8 Conscientious								-	.46**	.16*	.22**
9 Agreeableness									-	.03	-.22**
10 HIT										-	.04
11 DAS											-

Note. *p<.05, **p<.01, ***p<.001. DAS-Dysfunctional attitude scale, HIT-How I Think

Table 3 showed Pearson product moment correlation amongst personality traits, cognitive distortions and dysfunctional attitudes. Results also indicated that gender has a negative

significant relationship with extroversion. Birth order has a positive significant with cognitive distortions and negative significant with dysfunctional attitude. Extroversion, openness to experience, neuroticism, conscientiousness, agreeableness has a negative significant relationship with dysfunctional attitudes. Conscientiousness has a positive significant relationship with cognitive distortions.

Table 4

Linear regression analysis predicting dysfunctional attitude (N=150)

<i>Predictors</i>	<i>B</i>	<i>SE</i>	<i>β</i>
Constant	31.30	2.37	
Birth order	2.2	.92	.19*
Extraversion	-.34	.13	-.20*
Openness to experience	-.22	.16	-.17*
Neuroticism	.14	.19	.09*
Conscientious	-.15	.149	-.10
Agreeableness	-.09	.16	-
			.053***
R	.40**		
R ²	.16*		
F	4.5		

Note. *p<.05, **p<.01, ***p<.001.

Table 4 results reveal that Cognitive Distortions were found to be a positive predictor of Dysfunctional attitudes. Neuroticism and birth order were found to be positive predictors, whereas agreeableness negatively predicted dysfunctional attitudes.

Discussion

In the present study, personality traits including openness to experience, extroversion, neuroticism, agreeableness and conscientiousness shows that Extroversion tends to be high in front of dysfunctional attitudes, while introversion, which is the opposite of extroversion, tends also to be high in front of dysfunctional attitudes, because introverts also have their own company with friends, family, and they also live a happy and optimistic life (Bibi et al., 2017). This Big Five Trait also tends to be high in front of dysfunctional attitudes, because these types of people are very cooperative, and want to help of other persons in difficult situations. They also live a joyful life. Conscientiousness which covers traits, as being in order or taking responsibility and overall be a dependable person, also covers character strengths delaying gratification and having an overall impulse control. This trait has low as compared to dysfunctional attitudes because these types of people are very responsible and fulfil their duties carefully. Emotional stability versus neuroticism-encompassed traits such as being calm and not neurotic in difficult situations. Emotionally stable people have a great command on their emotions, and can easily control their emotions in every situation. This is why their lives are very functional while, neurotic people have low self – esteem, and their confidence level is also very low, therefore their relationships are very weak and their lives are completely dysfunctional (McDermut et al., 2019). We can say that neuroticism tends to be low in front of dysfunctional attitude (Yesilyaprak et al., 2019). Neurotic people have dysfunctional attitudes, beliefs and behavior in their lives. Openness to experience is a broad trait which includes having an independent mind

set which also include being original and not being close minded. It tends to be high as compared to dysfunctional attitudes, because these people want to explore things in the world, and they are open-minded people. Cognitive distortion has a positive non-significant relationship with dysfunctional attitude (Mehrinejad & Shahabi, 2018; Pace et al., 2019).

Limitation and Suggestions

Limitations of this study were that a small sample drawn from students of one university only. The results of the research are therefore not generalizable. Moreover, some of our participants felt difficulty in understanding the text of the questionnaire, which was in the English language. The Suggestions of the sample should be larger, from different universities which can be used for a more representative study and the scales must be translated in Urdu language for clear responses.

Implications

The implications of the study, in the cultural context, was that those individuals having distortions in their thinking pattern, their schematic abilities become worse day by day and that is why their behaviour, beliefs and attitudes become dysfunctional. Personality is a predisposition but the traits and characteristics of personality change through these errors and on account of perceiving problems of an individual. Moreover, awareness seminars, workshops and campaigns, which are related to mental health including cognitive distortions and dysfunctional attitudes, beliefs etc. should be held at local or international levels that so people can know the importance of mental health and they have some awareness related to distortions and dysfunctional attitudes, beliefs and behaviour etc. People should have knowledge or how to deal with these elements and which coping strategies to use in order to control these types of behaviour and attitudes. Furthermore, the study should be broadened to the scope of knowledge regarding the role of major psychological factors (Personality traits, cognitive distortions and dysfunctional attitudes) that influence the behavior of students.

References

- Ara, E., & Shah, S. A. (2015). Validating “How I Think” questionnaire-measuring self-serving cognitive distortions among adolescents in Kashmir. *International Journal of Physical and Social Sciences*, 5(6), 117-130. <https://doi.org/10.3390/bs8050046>
- Anzani, A., Di Sarno, M., Sacchi, S., & Prunas, A. (2018). Maladaptive personality traits, defense mechanisms, and trans-negative attitudes. *International Journal of Transgenderism*, 19(4), 456-465. <https://doi.org/10.1080/15532739.2018.1478759>
- Barriga, A. Q., Gibbs, J. C., Potter, G. B., & Liau, A. K. (2001). Test manual for the How I Think Questionnaire. Champaign, IL: Research Press.
- Beck, A.T. and Steer, R.A. (1993) Beck Depression Inventory Manual. Psychological Corporation, San Antonio.
- Beck, A. T., Brown, G., Steer, R. A., & Weissman, A. N. (1991). Factor analysis of the Dysfunctional Attitude Scale in a clinical population. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 3(3), 478-483. <https://doi.org/10.1037/1040-3590.3.3.478>

- Beck, A. T., Davis, D. D., & Freeman, A. (Eds.). (2015). *Cognitive therapy of personality disorders (3rd ed)*. Guilford Publications.
- Bibi, A., Masroor, U., & Khalid, M. A. (2017). Personality traits and dysfunctional attitudes among patients with somatic symptom disorder in Pakistan. *The International Journal of Indian Psychology* 5(1). <http://dx.doi.org/10.25215/0501.039>
- De Koe, L-A. (2019). *Exploring the experience of and the associated risk factors of maladaptive anger for children aged between 11-14 years in a Namibian school setting* (Doctoral dissertation, University of Namibia). <https://repository.unam.edu.na/bitstream/handle/11070/2564/koe2019.pdf?sequence=1&isAllowed=y>
- Mayo, D., Corey, S., Kelly, L. H., Yohannes, S., Youngquist, A. L., Stuart, B. K., ... & Loewy, R. L. (2017). The role of trauma and stressful life events among individuals at clinical high risk for psychosis: A review. *Frontiers in psychiatry*, 8, (55). <https://doi.org/10.3389/fpsy.2017.00055>
- McDermut, W., Pantoja, G., & Amrami, Y. (2019). Dysfunctional beliefs and personality traits. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 37(4), 338-357. <https://doi.org/10.1007/S10942-019-00315-5>
- Mehrinejad, A., & Shahabi, F. (2018). Prediction of attitude toward extramarital relationships based on impulsivity and personality traits. *Journal of Research and Health*, 8(6), 492-498. <http://jrjrh.gmu.ac.ir/article-1-1174-en.html>
- Mishkevich, A. (2020). *Changeability of personality traits and attitudes toward traits in short time-intervals* [Doctoral dissertation, Perm State National Research University]. https://www.researchgate.net/publication/343097894_Changeability_of_personality_traits_and_attitudes_toward_traits_in_short_time_intervals
- Pace, U., D'Urso, G., & Zappulla, C. (2019). Hating among adolescents: Common contributions of cognitive distortions and maladaptive personality traits. *Current Psychology*, 40(1), 1-6. <https://link.springer.com/article/10.1007/s12144-019-00278-x>
- Rammstedt, B., & John, O. P. (2005). Big Five Inventory-Short Version. *PsycTests*. <https://doi.org/10.1037/t68752-000>
- Revelle, W. (2009). Personality structure and measurement: The contributions of Raymond Cattell. *British Journal of Psychology*, 100(1), 253-257. <https://doi.org/10.1348/000712609X413809>
- Weissman, A. N. (1979). The Dysfunctional Attitude Scale: A validation study. *Dissertation Abstracts International*, 40(3-B), 1389-1390.
- Yesilyaprak, N., Batmaz, S., Yildiz, M., Songur, E., & Akpınar Aslan, E. (2019). Automatic thoughts, cognitive distortions, dysfunctional attitudes, core beliefs, and ruminative response styles in unipolar major depressive disorder and bipolar disorder: A comparative

study. *Psychiatry and Clinical Psychopharmacology*, 29(4), 854-863.
<https://psycnet.apa.org/doi/10.1080/24750573.2019.1690815>