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Metacognitions And Psychological Flexibility Among The Patients With Generalized Anxiety Disorder, Obsessive And Compulsive Disorder, And Healthy Controls

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Abstract

Objective: The present study aimed to explore metacognitions and psychological flexibility among the patients with generalized anxiety disorder, obsessive-compulsive disorder and healthy peoples and other objective was to determine the relationship among the variables metacognitions and psychological flexibility. Methods: Purposive sampling technique was used to select 60 participants from different hospital settings and community. For this, purpose 20 GAD, 20 OCD from different hospital settings of Kota (Raj) and 20 healthy peoples from community were selected and they were administered Generalized Anxiety Disorder – 7, Yale Brown Obsessive Compulsive Scale, Metacognitions Questionnaire (MCQ) and The Acceptance and Action Questionnaire II (AAQ II). The ANOVA and Post hoc were applied to analyze the data. The results as follows: Patients with GAD obtained significantly greater mean score on metacognitive beliefs than other two groups. Similarly, patients with OCD obtained significantly greater mean score on psychological flexibility than other two groups. The study aims in making the people aware of the various anxiety disorder and their psychological symptom and different coping strategies that can help them deal with the anxiety disorder in a better way, and thus maintaining their emotion. The review concludes with a summary of major research findings, as well as a consideration of future directions and implications for practice and policy.

Keywords: Metacognitions and Psychological Flexibility, Generalized Anxiety Disorder, Obsessive and Compulsive Disorder, And Healthy Controls

INTRODUCTION

In the field of Clinical psychology, neurotic diseases are a subset of internal health diseases characterized by an incapability to manage everyday life. Neurotic diseases are a particular order of common internal diseases that includes anxiety diseases and depressive diseases, as well as compulsive- obsessive complaint (OCD). Generalized anxiety complaint (GAD) is a habitual condition, characterized by patient, inordinate, and unrealistic solicitude, generally associated with depressive symptoms, which vitiate everyday life of its victims and has a low probability of robotic recovery(Wittchenn & Hoyer, 2001). Over the once many decades, experimenters have shown adding exploration interest in GAD population. Up to 20 of grown-ups are affected by anxiety diseases each time (Grenier,S., Desjardins,F., etal., 2019). Compulsive obsessive complaint (OCD) is characterized by prepossessions, which are ego- dystonic and unwanted studies or impulses, and forces, which are repetitious actions or internal acts. Metacognition refers to the cerebral structures, knowledge, events, and processes that are involved in the control, revision, and interpretation of thinking (Fisher,PL. & Wells,A. 2008). Given the growing focus on studies in GAD and OCD, it has been proposed that dysfunctional appraisals of protrusive studies have an important part in the etiology and conservation of prepossessions and forces and anxiety (Wells,A. & Papageorgiou,C. 1998). People living with neurosis have forcefully established in- reality, but they may have difficulty in managing with stressful situations or certain feelings and allowed processes and pattens which may

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https://www.theaspd.com/ijes.php

beget disabled capacity for being in contact with the present and acting on long-term pretensions rather than short-term urges. Unlike utmost studies, studies of emotional complaint are extended and reclaimed and are delicate to control. The metacognitive model of general psychopathology (Wells & Matthews, 1994; Wells, 2008) proposes that this style of thinking is a general unproductive factor. The process is comprised largely of perseveration in the form of solicitude and/or reflection and results from metacognition. Metacognitions are pivotal factors for the development and conservation of pathologic anxiety. Metacognitions that aren't specific to any psychiatric complaint can be called "general metacognitions." general metacognitions can be seen both in OCD and GAD. Cognitive propositions have varied in the stresses placed on the part of colorful aspects of beliefs about studies. While many studies have delved OCD specific metacognitions, including study emulsion beliefs, beliefs about rituals, and internal stop signals (Hansmeier, Exner, Rief, & Glombiewski 2016) general metacognitive beliefs may also be useful in understanding the processes involved in the colorful symptom confines of OCD. It's anticipated that metacognitive processes, including compulsive- obsessive (O-C) beliefs, will contribute differentially to the symptom confines of OCD. Such an understanding is anticipated to be useful in perfecting the effectiveness of personalized cognitive- behavioral interventions for different symptom donations in OCD and GAD. Gundogmus, Tekin, Aydin, Ucar, & Uzun, (2022) compare the metacognitions in OCD, GAD and healthy controls. According to the comparison of OCD and GAD cases, 'positive belief', and BAI scores were set up to be statistically different (p0.05). Other study was set up that metacognition was the strongest middleman of this relationship, indeed when counting for state and particularity anxiety (Gutierrez, Hirani, Curtis, etal. 2020). Metacognitive beliefs could contribute to cerebral dysfunction if they support unreasonable interpretations of studies, unattainable pretensions, or bias cognitive coffers. Metacognitive beliefs and allowed control strategies could therefore be marvels that uphold increased perceptivity to stress, and contribute to emotional symptoms and complaint (Wells, Matthews, 1996; Wells, 2000, 2006). Several recent studies have examined styles of study control in individualities with colorful anxiety diseases. Two studies have set up that individualities with compulsive - obsessive complaint use the study control strategies of discipline and worry more and use distraction lower thannon-clinical actors (Coles, Heimberg, 2005; Abramowitz, Whiteside, Kalsy, & Tolin, 2003; Amir, Cashman, & Foa, 1997). Coles, Heimberg (2005) were the first study that individualities with GAD use different styles for controlling their unwanted studies thannon-anxious individualities. Specifically, individualities with GAD reported lesser use of solicitude and discipline strategies, and lower use of distraction and social control strategies than did NACs. Further, solicitude and discipline strategies were appreciatively identified with depressive symptoms and inordinate solicitude, while distraction and social control strategies were negatively identified with these measures of psychopathology. Eventually, advanced situations of life satisfaction were identified with lesser use of distraction and social control strategies, and lower use of solicitude and discipline strategies. People with OCD also employ lesser sweats to control studies than those with GAD (Morillo etal., 2007). Abramowitz and Foa(1998) set up that people with OCD with comorbid GAD reported more generalised solicitude than those without, but no difference in the inflexibility of OCD symptoms. Research findings concluded that poor study control strategies and negative metacognitive beliefs prompt the cerebral inflexibility. Cerebral inflexibility is defensive against negative passions and can promote positive internal health (Masuda etal., 2011). That is, cerebral inflexibility can act as a buffer between stress and negative cerebral issues (Gloster, Meyer, & Lieb, 2017). Those who are more psychologically flexible generally report lower situations of depression, anxiety, and torture during stressful life events (Masuda etal., 2011). Research has constantly set up that poverties in cerebral inflexibility are related to OCD symptoms (Bluett etal., 2014) as well as the broader development and conservation of a range of mood and anxiety diseases(Spinhoven, Drost, de Rooij, van Hemert, & Penninx, 2014). Two studies reported a significant reduction in AAQ scores as well as the Yale- Brown compulsive- obsessive Scale scores during ACT treatment (Dehlin etal., 2013, Twohig etal., 2006, 2013, 2015) delved the part of cerebral strictness as a middleman in a sample of 41 cases treated with ACT. A agreement analysis of the AAQ values showed that the position of the AAQ at the time of discharge (post) intermediated the change in Y-BOCS between the launch values (pre) and follow-up. In addition, a change in their tone-designed variable, 'cerebral inflexibility related to preoccupation, prognosticated a reduction in compulsive- obsessive symptoms.

In summary previous studies have shown that only few researches have been done on these variables on such population. Thus, the aim of the present work is to explore the metacognitive beliefs, thought control and

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https://www.theaspd.com/ijes.php

psychological flexibility among the patients with generalized anxiety disorder, obsessive compulsive disorder, and healthy.

Hypothesis-1: There would be significant differences on metacognitive beliefs among patients with generalized anxiety disorder, obsessive compulsive disorder, and healthy control.

Hypothesis-2: There would be significant differences on psychological flexibility among patients with generalized anxiety disorder, obsessive compulsive disorder, and healthy control.

METHOD:

Participants:

Present study is exploratory in nature. Data were collected on a total of 60 participants fulfilled DSM-V criteria to be mainly diagnosed with GAD, OCD and healthy control participants. Out of which 20 participants were diagnosed with GAD kept in group I, 20 participants were diagnosed with OCD similarly kept in group II and 20 were healthy control participants also kept in group III. Further the age group of the participants is 17-27 years of age. The availability basis sampling technique was used to select the participants of the study. Patient inclusion criteria were age and a primary diagnosis of GAD and OCD. Healthy control participants were selected from community. Exclusion criteria for all participants were a history of any other psychiatric disorder, neurological or developmental disorder and severe head injury. Control participants were further excluded if they reported current symptoms of any mental illness in need of treatment.

MEASURES

Generalized Anxiety Disorder – 7 (GAD-7; Spitzer et al., 2006). The GAD-7 is a screening and severity measure of GAD according to the diagnostic criteria of the DSM-IV-TR (American Psychiatric Association, 2000). It consists of 7 items with a 4-point Likert-type scale ($3 = nearly \ every \ day$; $0 = not \ at \ all$). The score ranges for mild, moderate, and severe levels of GAD are 5–9, 10–14, and 15–21, respectively. We used the Spanish translation of the GAD-7 for Colombia distributed by Pfizer, which showed good psychometric properties in initial studies in our laboratory with clinical ($\alpha = 0.87$) and non-clinical samples ($\alpha = 0.90$), and a one-factor structure.

Yale Brown Obsessive Compulsive Scale (Y-BOCS; Goodman et al., 1989). The YBOCS is a 10 item assessor-rated measure of OCD symptom severity that is commonly used as a primary outcome in clinical trials for OCD. Total scores on the Y-BOCS range from 0 to 40. The Y-BOCS has demonstrated both good interrater reliability for the total score (rs between .80 and .97) and two week test-retest reliability (between .81 and .97). In the current study, Cronbach's α at pretreatment was .79.

Metacognitions Questionnaire –MCQ- (Wells and Cartwright-Hatton, 2004). The MCQ-30 is a short version of the original MCQ and assesses individual differences in five factors important in the metacognitive model of psychological disorders. In particular, unhelpful metacognitions may contribute to obsessive and compulsive symptoms, pathological worry and underpin trait anxiety. The five subscales of the MCQ-30 are: cognitive confidence, positive beliefs about worry, cognitive self-consciousness, negative beliefs about uncontrollability of thoughts and danger, and beliefs about the need to control thoughts. Reliability of MCQ is good enough, with alpha coefficients ranging from 0,73 in "Cognitive self-awareness" and 0,93 in "Negative beliefs about uncontrollable worries and their danger". Construct validity is also good, rating a CFI of 0,91 (Wells and Cartwright-Hatto, 2004).

The Acceptance and Action Questionnaire II (AAQ II Bond et al., 2011). The AAQ -II

is a 7-item self-report measure of psychological flexibility on a scale of 1 ("never true") to 7 ("always true") with lower scores reflecting greater psychological flexibility. Internal Consistency ranges from .78-.88, and it has acceptable test-retest reliability (3 months = .81; 12 Journal Pre-proof Journal Pre-proof PSYCHOLOGICAL FLEXIBILITY 10 months = .79; Bond et al., 2011). It is a widely used measure in ACT research; however, researchers have more recently questioned the discriminative validity of the AAQ-II Ong, Lee, Levin, & Twohig,

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https://www.theaspd.com/ijes.php

2019).

Procedure:

A full description of the study was rendered to the participants. A written informed consent was obtained from them. After the diagnostic interview, the interviewer filled out the demographic and clinical data form, the scales used for the severity ratings of OCD and GAD. Following this, the patients were screened for exclusion and in clusion of criteria. Then finally various assessment tools were administered and scored according to the standardized procedures set for each tool. Total time spent in filling all the questionnaires was around 30 minutes to 50 minutes. However, most of the participants were able to complete the questionnaires without any help.

STATISTICAL ANALYSES:

Data was analyzed using Statistical Package for the Social Sciences (SPSS) to examine the comparability of participants in the GAD and OCD and healthy control. Mean scores, Standard Deviations were computed. To find out the significance of the difference among means of three different groups under study ANOVA was applied. Further, to study the pair groups difference the Post hoc analysis was applied.

RESULTS AND DISCUSSION:

Table no. 1: Mean and SDs of different patients with generalized anxiety disorder, obsessive compulsive disorder, and healthy control on metacognition.

Disorder		Cognitive	Positive	Cognitive self	Negative beliefs about	Need to	Metacognition
		Confidence	Beliefs	consciousness	uncontrollability and	control	
			About		danger	thought	
			worry				
GAD	Mean	15.80	13.55	16.15	18.90	17.35	84.90
(group-I)	N	20	20	20	20	20	20
	SD	3.592	3.236	4.133	4.154	3.964	7.993
OCD	Mean	14.15	12.05	13.45	17.10	15.00	71.75
(group-II)	N	20	20	20	20	20	20
	SD	2.978	2.929	3.426	3.999	3.960	9.727
Healthy	Mean	13.85	16.55	14.05	11.25	11.35	68.00
control	N	20	20	20	20	20	20
(group-	SD	3.150	4.883	3.576	2.447	3.703	8.033
III)							

From the above table it was evident that patients with generalized anxiety disorder were higher in metacognition than two groups. The mean of the generalized anxiety disorder group (M=84.90), obsessive compulsive disorder group (M=71.75) and healthy control (M=68.00) respectively. Dimension wise analysis also revealed that the mean score of generalized anxiety disorder group was higher in cognitive confidence dimension than other two groups. The mean scores were 15.80, 14.15 and 13.85 for group I, II and III respectively. While for the mean revealed that generalized anxiety disorder group was higher in Cognitive self-consciousness dimension than other two groups. The mean were 16.15, M=16.32, 13.45 and M=14.05 for group I, II & III respectively, similarly, the mean revealed that generalized anxiety disorder group was higher in the negative beliefs about uncontrollability and danger dimension than other two groups. The mean and the 18.90, 17.10 and 11.25 for I, II & III respectively, and the mean score generalized anxiety disorder group was higher in the Need to control thought dimension than other two groups. The mean score were 17.35,

17.10 and 11.25 for I, II & III respectively. Whereas, the mean score revealed that Healthy people was higher in positive beliefs about worry dimension than other two groups. The mean score were 13.55, 12.05 and 16.55 for group I, II & III respectively. The table shows that there seems a difference in metacognitive beliefs, and its dimensions among the patients with generalized anxiety disorder, obsessive-compulsive disorder and healthy

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https://www.theaspd.com/ijes.php

peoples but these differences may be due to chance factors, hence, to see that whether the differences are real or due to the chance factors, ANOVA was applied. The results are shown in the following table:

Table no. 2: showing ANOVA on metacognitions score among the three different groups of patients with

generalized anxiety disorder, obsessive compulsive disorder, and healthy control

		Sum of Squares	df	Mean Square	F	Sig.
Cognitive	Between	44.100	2	22.050		
Confidence	Groups				2.087	.133
	Within	602.300	57	10.567		
	Groups					
	Total	646.400	59			
Positive Beliefs	Between	210.000	2	105.000		
About worry	Groups				7.345	.001
	Within	814.850	57	14.296		
	Groups					
	Total	1024.850	59			
Cognitive self-	Between	80.400	2	40.200		
consciousness	Groups				2.899	.063
	Within	790.450	57	13.868		
	Groups					
	Total	870.850	59			
Negative beliefs	Between	639.900	2	319.950		
about	Groups				24.468	.000
uncontrollability	Within	745.350	57	13.076		
and danger	Groups					
	Total	1385.250	59			
Need to control	Between	365.633	2	182.817		
thought	Groups				12.158	.000
	Within	857.100	57	15.037		
	Groups]	
	Total	1222.733	59			
Metacognition	Between	1958.033	2	979.017		
	Groups				9.201	.000
	Within	6064.700	57	106.398		
	Groups				_	
	Total	8022.733	59			

From table 2 clearly indicate that ANOVA dimension wise analysis of metacognition beliefs score among the three different groups of patients. The metacognition overall difference among the three different groups of patients were found statistically significant (F=9.201, p<.001). On the positive beliefs about worry dimension (F=7.345, p=.001<.001), control thoughts dimension (F=12.158, p=.000<.001), on the negative beliefs about uncontrollability and danger dimension the difference among the three different groups of patients were found statistically significant (F=24.468, p=.000<.001), these sub variables difference among the three different groups of patients were found statistically significant. Whereas, the difference among three different groups of Cognitive Confidence dimension (F=2.087, p=.133>.05) and cognitive self-consciousness dimension (F= 2.899, p=.063<.01) were not found significant at any level of confidence.

ISSN: 2229-7359 Vol. 11 No. 19s, 2025

https://www.theaspd.com/ijes.php

Table no. 3: Showing the difference between the possible pairs of groups.

Dependent Variable	(I) Sample	(J) Sample	Mean Difference (I-J)	Std. Error	Sig.
Cognitive Confidence	GAD	OCD	1.65000	1.02794	.252
		Healthy Participants	1.95000	1.02794	.149
	OCD	Healthy Participants	.30000	1.02794	.954
Positive Beliefs About	GAD	OCD	1.50000	1.19564	.427
worry		Healthy Participants	-3.00000*	1.19564	.039
	OCD	Healthy Participants	-4.50000 [*]	1.19564	.001
Cognitive self	GAD	OCD	2.70000	1.17761	.065
consciousness		Healthy Participants	2.10000	1.17761	.184
	OCD	Healthy Participants	60000	1.17761	.867
Negative beliefs about	GAD	OCD	1.80000	1.14352	.265
uncontrollability and		Healthy Participants	7.65000 [*]	1.14352	.000
danger	OCD	Healthy Participants	5.85000 [*]	1.14352	.000
Need to control thought	GAD	OCD	2.35000	1.22625	.143
		Healthy Participants	6.00000*	1.22625	.000
	OCD	Healthy Participants	3.65000 [*]	1.22625	.012
Metacognition	GAD	OCD	9.80000 [*]	3.26187	.011
		Healthy Participants	13.55000 [*]	3.26187	.000
	OCD	Healthy Participants	3.75000	3.26187	.488

Tukey test was used for post hoc analyses and the results were given in table 3. The table showed that dimension-wise analysis of metacognition of mean difference between groups. It shows that the group difference in metacognition beliefs between I and II was found 9.80 which was statistically significant (P=.011<.01). Similarly, the mean differences between group I and group III was found 13.55 and it was also found to be statistically significant (p=.098>0.05), whereas, the difference between-group II and group III was found 3.75 and it was not found statistically significant (p=.500>0.05) at any level of confidence.

From the table 1, 2 and 3 clearly indicated that findings of ANOVA and Post hoc analysis suggest that generalized anxiety disorder, obsessive compulsive disorder, and healthy control have different levels of metacognitive beliefs. Finding revealed that generalized anxiety disorder patients had significantly greater amount of metacognitive belief than two other groups (obsessive compulsive disorder and healthy control). Hence, the hypothesis-1 which states that "there would be significant differences on metacognitive beliefs among patients with generalized anxiety disorder, obsessive compulsive disorder, and healthy control" was proved true by the finding of the study. Metacognitive beliefs were linked to pathological concern and symptoms of generalised anxiety disorder (Barahmand 2009; Cartwright-Hatton and Well's 1997; Davis and Valentiner 2000; McEvoy and Mahoney 2013; Sica et al. 2007; Thielsch et al. 2015). For instance, Thielsch et al. (2015) observed in an ecological assessment research that negative metacognitive beliefs predicted adolescents' daily concern, and Nassif (1999) found that negative metacognitive beliefs predicted the subsequenton set of GAD. There is evidence that persons who fit the criteria for generalised anxiety disorder (GAD) also report much greater levels of maladaptive metacognitive beliefs about concern than do those with other anxiety disorders or those who are not worried (Wells and Carter 2001). However, metacognitive views have been linked to increased anxiety (Van der Heiden et al. 2010; Ramos-Cejudo and Salguero 2017). other anxiety disorders (Bailey and Wells 2015; Sassaroli et al. 2015; Yoris et al. 2015).

ISSN: 2229-7359 Vol. 11 No. 19s, 2025

https://www.theaspd.com/ijes.php

Table no. 4: Mean and SDs of different patients with generalized anxiety disorder, obsessive compulsive

disorder, and healthy control on psychological flexibility.

Disorder		Psychological flexibility			
	Mean	35.85			
GAD (group-I)	N	20			
	Std. Deviation	4.511			
	Mean	38.00			
OCD (group-II)	N	20			
	Std. Deviation	4.577			
Healthy control	Mean	26.40			
(group-III)	N	20			
	Std. Deviation	4.160			

From the above table 4 it was evident that patients with obsessive compulsive disorder were higher in psychological flexibility than two groups. The mean of the generalized anxiety disorder group (M=35.85), obsessive compulsive disorder group (M=38.00) and healthy control (M=26.40) respectively. The table shows that there appears to be a difference in psychological flexibility between patients with generalized anxiety disorder (GAD), obsessive-compulsive disorder, and healthy people, but these differences may be due to chance factors; thus, ANOVA was used to determine whether the differences are real or due to chance factors. The findings are presented in the table below:

Table no. 5: showing ANOVA on psychological flexibility score among the three different groups of patients with generalized anxiety disorder, obsessive compulsive disorder, and healthy control.

		Sum of Squares	Df	Mean Square	F	Sig.
	Between Groups	1523.233	2	761.617	38.992.0	
Psychological flexibility	Within Groups	1113.350	57	19.532		.000
	Total	2636.583	59			

From table-5 clearly indicate that ANOVA dimension wise analysis of psychological flexibility score among the three different groups of patients. The psychological flexibility overall difference among the three different groups of patients were found statistically significant (F=38.992, p<.001). These finding suggest that psychological flexibility was work different in patients with GAD, OCD and health control. The findings of the present study confirm the hypothesis -3 which states that "there would be significant differences on psychological flexibility among patients with generalized anxiety disorder, obsessive compulsive disorder, and healthy control."

Table no. 6: Showing the difference between the possible pairs of groups

	(I) Sample	(J) Sample	Mean Difference (I-J)	Std. Error	Sig.
	GAD	OCD	2.15000	1.39759	.281
Psychological		Healthy Participants	9.45000 [*]	1.39759	.000
flexibility	OCD	Healthy Participants	1.60000*	1.39759	.000

Tukey test was used for post hoc analyses and the results were given in table 6. The table showed that analysis of psychological flexibility of mean difference between groups. It shows that the group difference in metacognition beliefs between I and III was found 9.45 which was statistically significant (P= .000<.001). Similarly, the mean differences between group II and group III was found 1.60 and it was also found to be statistically significant (p=.000<0.001), whereas, the difference between-group I and group II was found 2.15 and it was not found statistically significant (p=.281<0.001) at any level of confidence.

From the table 4, 5 and 6 clearly indicated that findings of ANOVA and Post hoc analysis suggest that generalized anxiety disorder, obsessive compulsive disorder, and healthy control have different levels of psychological flexibility. Finding revealed that OCD patients had used small amount of psychological flexibility than two other groups (GAD and healthy control). Hence, the hypothesis-3 was proved true by the finding of the study.

ISSN: 2229-7359 Vol. 11 No. 19s, 2025

https://www.theaspd.com/ijes.php

In light of this, psychological flexibility is crucial for life's pleasure since difficult circumstances and change are a constant in our existence. Well-developed psychological flexibility is linked to improved mental health and a decreased chance of having a mental disease, according to a meta-analysis conducted by Hayes et al. (2006). Wersebe et al. (2018) found that throughout a self-help session aimed at enhancing psychological flexibility, a sizable sample saw a reduction in stress and an uptick in well-being. This conclusion is consistent with the fact that many mental diseases are associated with considerable impairments in flexibility processes (Allen and Barlow, 2009; Twohig et al., 2006). Research has also revealed that individuals with obsessive compulsive symptoms have lower levels of cognitive flexibility compared to those in good health (Paast et al., 2016; Sternheim et al., 2014). The lack of psychological flexibility in OCD sufferers is apparent when one examines the diagnostic criteria for the disorder as outlined in DSM-5 and ICD-10, which include avoidance, rigidity, and adherence to unduly superior assumptions (American Psychiatric Association, 2013; Dilling and Freyberger, 2006). Studies show that OCD patients struggle more than healthy individuals to appropriately control their emotions (La Cruz et al., 2013; Whitehead and Suveg, 2016). According to Allen and Barlow (2009) and Twohig et al. (2006), flexibility or embracing one's beliefs and feelings seems to be crucial for OCD therapy to be successful.

CONCLUSION:

The present study aimed to investigate the differences in metacognitive beliefs and psychological flexibility in GAD and OCD with healthy controls. In present study, results showed that dysfunctional metacognitive beliefs and psychological inflexibility were mostly elevated in patients with GAD and OCD when compared with the healthy control. In addition, the healthy control subjects showed higher cognitive flexibility, as expected. These results provide evidence for the transdiagnostic characteristics of the psychological processes under investigation and reject the priori hypotheses. The current study adds to previous prospective studies by demonstrating that metacognitive beliefs and psychological flexibility are important factor of vulnerability to psychopathology. As per the cognitive model of GAD; individual who develops GAD have a metacognitive dysfunction, characterized by negative beliefs about the effects of engaging in active worry. Therefore, in the present work, we decided to focus on GAD and OCD to explore that specific metacognitive beliefs and psychological inflexibility that would favors these anxiety disorders. Metacognitive beliefs impaired self-knowledge about the own cognitive operations therefore it results in the sense of threat and perseverance in worrying. Present study results pointed out a "high negative beliefs about uncontrollability and danger and need to thought control" as the main metacognitive beliefs involved in the long-time maintenance in GAD and OCD. These dysfunctional metacognitive beliefs play significant role in pathological worries in GAD and OCD. Which may impaired daily functioning and increase the avoidance in individual. Poor psychological flexibility impacts the psychological wellbeing and valued actions of the individual. Thus, it needed a therapeutic intervention (CBT, ACT mindfulness-based CBT, ERP and others) to enlarge the awareness of one's cognitive processes and to make a person able to detect maladaptive Mata beliefs replace them with more adaptive Mata beliefs and increase the psychological flexibility in the individual. However more studies are needed to generalize the present result.

REFERENCES:

- Abramowitz, J. S., Whiteside, S., Kalsy, S. A., & Tolin, D. F. (2003). Thought control strategies in obsessive-compulsive disorder: a replication and extension. *Behaviour Research and Therapy*, 41(5), 529–540. doi:10.1016/s0005-7967(02)00026-8
- · Allen, L. B., & Barlow, D. H. (2009). Relationship of exposure to clinically irrelevant emotion cues and obsessive-compulsive symptoms. *Behavior Modification*, 33(6), 743-762.
- · Amir, N., Cashman, L., & Foa, E. B. (1997). Strategies of thought control in obsessive-compulsive disorder. Behaviour Research and Therapy, 35(8), 775–777. doi:10.1016/s0005-7967(97)00030-2
- · APA, A. P. A. (2013). Diagnostic and statistical manual of mental disorders. The American Psychiatric Association.
- Aydın, O., Balıkçı, K., Çökmüş, F. P., & Ünal Aydın, P. (2019). The evaluation of metacognitive beliefs and emotion recognition in panic disorder and generalized anxiety disorder: effects on symptoms and comparison with healthy control. *Nordic Journal of Psychiatry*, 73(4–5), 293–301. doi:10.1080/08039488.2019.1623317
- Bailey, R., & Wells, A. (2015). Metacognitive beliefs moderate the relationship between catastrophic misinterpretation and health anxiety. *Journal of Anxiety Disorders*, 34, 8-14.

ISSN: 2229-7359 Vol. 11 No. 19s, 2025

https://www.theaspd.com/ijes.php

- Barahmand, U. (2009). Meta-cognitive profiles in anxiety disorders. Psychiatry Research, 169(3), 240-243.
- Cartwright-Hatton, S., & Wells, A. (1997). Beliefs about worry and intrusions: The Meta-Cognitions Questionnaire and its correlates. *Journal of anxiety disorders*, 11(3), 279-296.
- Coles, M. E., & Heimberg, R. G. (2005). Thought control strategies in generalized anxiety disorder. *Cognitive Therapy and Research*, 29(1), 47–56. doi:10.1007/s10608-005-1647-x
- Cucchi, M., Bottelli, V., Cavadini, D., Ricci, L., Conca, V., Ronchi, P., & Smeraldi, E. (2012). An explorative study on metacognition in obsessive-compulsive disorder and panic disorder. *Comprehensive Psychiatry*, *53*(5), 546–553. doi:10.1016/j.comppsych.2011.09.008
- Davis, R. N., & Valentiner, D. P. (2000). Does meta-cognitive theory enhance our understanding of pathological worry and anxiety?. *Personality and Individual Differences*, 29(3), 513-526.
- de la Cruz, L. F., Micali, N., Roberts, S., Turner, C., Nakatani, E., Heyman, I., & Mataix-Cols, D. (2013). Are the symptoms of obsessive-compulsive disorder temporally stable in children/adolescents? A prospective naturalistic study. *Psychiatry Research*, 209(2), 196-201.
- Diagnostic and statistical manual of mental disorders (DSM-5®). (2013). American Psychiatric Association.
- Dilling, H., & Freyberger, H. J. (2006). Taschenführer zur ICD-10-Klassifikation psychischer Störungen. 3. Auflage 2006. Verlag Hans Huber, Hogrefe AG. Bern 1999/2001.
- García-Montes, J. M., Cangas, A., Pérez-Álvarez, M., Fidalgo, Á. M., & Gutiérrez, O. (2006). The role of metacognitions and thought control techniques in predisposition to auditory and visual hallucinations. *The British Journal of Clinical Psychology*, 45(3), 309–317. doi:10.1348/014466505x66755
- Grenier, S., Desjardins, F., Raymond, B., Payette, M.-C., Rioux, M.-È., Landreville, P., ... Vasiliadis, H.-M. (2019). Six-month prevalence and correlates of generalized anxiety disorder among primary care patients aged 70 years and above: Results from the ESA-services study. *International Journal of Geriatric Psychiatry*, 34(2), 315–323. doi:10.1002/gps.5023
- Gundogmus, I., Tekin, S., Aydin, M. B., Ucar, H., & Uzun, Ö. (2022). Comparison of metacognitions in Obsessive- compulsive disorder, Generalized anxiety disorder, and healthy controls. *European Psychiatry: The Journal of the Association of European Psychiatrists*, 65(S1), S185–S185. doi:10.1192/j.eurpsy.2022.488
- Gutierrez, R., Hirani, T., Curtis, L., & Ludlow, A. K. (2020). Metacognitive beliefs mediate the relationship between anxiety sensitivity and traits of obsessive-compulsive symptoms. *BMC Psychology*, 8(1), 40. doi:10.1186/s40359-020-00412-6
- Hansmeier, J., Exner, C., Rief, W., & Glombiewski, J. A. (2016). A test of the metacognitive model of obsessive- compulsive disorder. *Journal of Obsessive-Compulsive and Related Disorders*, 10, 42–48. doi:10.1016/j.jocrd.2016.05.002
- Hayes, S. C., Luoma, J., Bond, F., Masuda, A., and Lillis, J. (2006). Acceptance and Commitment Therapy: Model, processes, and outcomes. Behaviour Research and Therapy, 44, 1-25. http://dx.doi.org/10.1016/j.brat.2005.06.006
- Oğuz, G. (2019). Comparison Between Obsessive Compulsive Disorder and Panic Disorder on Metacognitive Beliefs, Emotional Schemas, and Cognitive Flexibility. International Journal of Cognitive Therapy. https://doi.org/10.1007/S41811-019-00047-5
- McEvoy, P. M., & Mahoney, A. E. (2013). Intolerance of uncertainty and negative metacognitive beliefs as transdiagnostic mediators of repetitive negative thinking in a clinical sample with anxiety disorders. *Journal of anxiety disorders*, 27(2), 216-224.
- Nassif, Y. (1999). Predictors of pathological worry. Unpublished M.Phil. Thesis. University of Manchester, UK
- Nieto, P., Delgado, M., Leon, L., & Guerra, N. (2010). Cognitive Control and Anxiety Disorders: Metacognitive Beliefs and Strategies of Control Thought in GAD and OCD. Clínica y Salud, 21, 159–166.
- Oguz, G., Celikbas, Z., Batmaz, S., Cagli, S., & Sungur, M. Z. (2019). Comparison between obsessive compulsive disorder and panic disorder on metacognitive beliefs, emotional schemas, and cognitive flexibility. *International Journal of Cognitive Therapy*, 12(3), 157–178. doi:10.1007/s41811-019-00047-5
- Østefjells, T., Melle, I., Aminoff, S. R., Hellvin, T., Hagen, R., Lagerberg, T. V., ... Røssberg, J. I. (2017). An exploration of metacognitive beliefs and thought control strategies in bipolar disorder. *Comprehensive Psychiatry*, 73, 84–92. doi:10.1016/j.comppsych.2016.11.008
- · Paast, N., Khosravi, Z., Memari, A. H., Shayestehfar, M., & Arbabi, M. (2016). Comparison of cognitive

ISSN: 2229-7359 Vol. 11 No. 19s, 2025

https://www.theaspd.com/ijes.php

flexibility and planning ability in patients with obsessive compulsive disorder, patients with obsessive compulsive personality disorder, and healthy controls. *Shanghai archives of psychiatry*, 28(1), 28.

- Papageorgiou, C., & Wells, A. (2009). A prospective test of the clinical metacognitive model of rumination and depression. *International Journal of Cognitive Therapy*, 2(2), 123-131.
- Ramos-Cejudo, J., & Salguero, J. M. (2017). Negative metacognitive beliefs moderate the influence of perceived stress and anxiety in long-term anxiety. *Psychiatry research*, 250, 25-29.
- Ruscio, A. M., & Borkovec, T. D. (2004). Experience and appraisal of worry among high worriers with and without generalized anxiety disorder. *Behaviour research and therapy*, 42(12), 1469-1482.
- Sassaroli, S., Centorame, F., Caselli, G., Favaretto, E., Fiore, F., Gallucci, M., ... & Rapee, R. M. (2015). Anxiety control and metacognitive beliefs mediate the relationship between inflated responsibility and obsessive compulsive symptoms. *Psychiatry Research*, 228(3), 560-564.
- Sica, C., Steketee, G., Ghisi, M., Chiri, L. R., & Franceschini, S. (2007). Metacognitive beliefs and strategies predict worry, obsessive-compulsive symptoms and coping styles: A preliminary prospective study on an Italian non-clinical sample. Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice, 14(4), 258-268.
- Starcevic, V. (1995). Pathological worry in major depression: A preliminary report. Behaviour Research and Therapy, 33(1), 55-56.
- Thielsch, C., Andor, T., & Ehring, T. (2015). Metacognitions, intolerance of uncertainty and worry: An investigation in adolescents. *Personality and Individual Differences*, 74, 94–98. doi:10.1016/j.paid.2014.10.004
- Thielsch, C., Ehring, T., Nestler, S., Wolters, J., Kopei, I., Rist, F., ... & Andor, T. (2015). Metacognitions, worry and sleep in everyday life: Studying bidirectional pathways using Ecological Momentary Assessment in GAD patients. *Journal of Anxiety Disorders*, 33, 53-61.
- Turk, C. L., Heimberg, R. G., & Mennin, D. S. (2004). Assessment of worry and generalized anxiety disorder.
 In R. G. Heimberg, C. L. Turk, & D. S. Mennin (Eds.), Generalized anxiety disorder: Advances in research and practice (pp. 219–247).
- Twohig, M. P., Hayes, S. C., & Masuda, A. (2006). Increasing willingness to experience obsessions: Acceptance and Commitment Therapy as a treatment for Obsessive Compulsive Disorder. Behavior Therapy, 37, 3-13.
- van der Heiden, C., Melchior, K., Muris, P., Bouwmeester, S., Bos, A. E., & van der Molen, H. T. (2010). A hierarchical model for the relationships between general and specific vulnerability factors and symptom levels of generalized anxiety disorder. *Journal of anxiety disorders*, 24(2), 284-289.
- Wells, A. (2004). A cognitive model of GAD: Metacognitions and pathological worry. In R. G. Heimberg, C. L. Turk, & D. S. Mennin (Eds.), *Generalized anxiety disorder: Advances in research and practice* (pp. 164–186).
- Wells, A., & Carter, K. (2001). Further tests of a cognitive model of generalized anxiety disorder: Metacognitions and worry in GAD, panic disorder, social phobia, depression, and nonpatients. *Behavior therapy*, 32(1), 85-102.
- Wells, A., & Carter, K. E. (2009). Maladaptive thought control strategies in generalized anxiety disorder, major depressive disorder, and nonpatient groups and relationships with trait anxiety. *International Journal of Cognitive Therapy*, 2(3), 224-234.
- Wells, A., & Davies, M. I. (1994). The Thought Control Questionnaire: a measure of individual differences in the control of unwanted thoughts. *Behaviour Research and Therapy*, 32(8), 871–878. doi:10.1016/0005-7967(94)90168-6
- Wells, A., & Papageorgiou, C. (1998). Relationships between worry, obsessive-compulsive symptoms and meta-cognitive beliefs. *Behaviour Research and Therapy*, 36(9), 899–913.
- Wells, Adrian, & Cartwright-Hatton, S. (2004). A short form of the metacognitions questionnaire: properties of the MCQ-30. *Behaviour Research and Therapy*, 42(4), 385–396. doi:10.1016/S0005-7967(03)00147-5
- Wersebe, H., Lieb, R., Meyer, A. H., Hofer, P., & Gloster, A. T. (2018). The link between stress, well-being, and psychological flexibility during an Acceptance and Commitment Therapy self-help intervention. *International journal of clinical and health psychology*, 18(1), 60-68.
- Whitehead, M. R., & Suveg, C. (2016). Difficulties in emotion regulation differentiate depressive and obsessive- compulsive symptoms and their co-occurrence. *Anxiety, Stress, & Coping, 29*(5), 507-518.
- · Yoris, A., Esteves, S., Couto, B., Melloni, M., Kichic, R., Cetkovich, M., ... & Sedeño, L. (2015). The roles of

ISSN: 2229-7359 Vol. 11 No. 19s, 2025

https://www.theaspd.com/ijes.php

interoceptive sensitivity and metacognitive interoception in panic. Behavioral and Brain Functions, 11(1), 1-6.