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Thought Control Strategies 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 thought control 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 thought control and psychological flexibility. Methods: Purposive sampling technique was used to select 60 participants from different hospital settings. For this, purpose 20 GAD , 20 OCD and 20 healthy peoples from different hospital settings of Delhi NCR were availability selected and they were administered Generalized Anxiety Disorder – 7, Yale Brown Obsessive Compulsive Scale, Thought Control Questionnaire (TCQ) 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 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: Thought Control Strategies and Psychological Flexibility, Generalized Anxiety Disorder, Obsessive and Compulsive Disorder, And Healthy Controls

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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). Generalised 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. 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 thought control and psychological flexibility among the patients with generalized anxiety disorder, obsessive compulsive disorder, and healthy.

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

Hypothesis-3: 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 kept in group II and 20 were healthy control participants 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.

Thought Control Questionnaire –TCQ- (Wells and Davies, 1994). using a 4-point scale ranging from 1 (Never) to 4 (Almost always). It produces four factors representing distinct thought control strategies: Reappraisal (e.g. "I try to reinterpret the thought), Social Control/Reappraisal (e.g. "I don't talk about the thought to anyone" or "I ask my friends if they have similar thoughts"), Distraction (e.g. "I think about something else), Worry (e.g. "I worry about more minor things instead"), and Punishment (e.g. "I punish myself for thinking the thought"). Each factor is based on 6 items, producing subscale scores ranging from 6 to 24. A higher

score indicates more use of the specific thought control strategy. The social scale has three items that are reverse-scored, so that a lower score indicates more use of social control (keeping the thoughts to oneself), while a higher score indicates the use of social reappraisal (sharing the thought with others) (Wells A, & Davies MI 1994). Internal consistency for this study was strong for patients (Cronbach's alpha range of .70—.80), and acceptable-to-strong for controls (Cronbach's alpha range .69—.85). The TCQ subscales were weakly correlated (mean rs = 0.21), with the lowest inter-correlation between social and reappraisal (rs = 0.06) while the strongest was between worry and punishment (rs = 0.53).

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, 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 inclusion 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 analysed 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 thought Control Strategies.

Disorder		Distraction	Social Control	worry	Punishment	Re-appraisal	Thought Control
GAD **(group-I)**	Mean	16.85	16.70	20.15	18.45	11.60	83.75
	N	20	20	20	20	20	20
	Std. Deviation	2.907	3.827	3.760	4.839	2.037	10.637
OCD **(group-II)**	Mean	13.35	13.15	16.40	16.90	10.45	70.25
	N	20	20	20	20	20	20
	Std. Deviation	3.703	3.631	3.331	4.541	2.837	8.084
Healthy control **(group-III)**	Mean	11.60	10.60	10.55	9.70	13.45	56.00
	N	20	20	20	20	20	20
	Std. Deviation	3.409	3.393	3.576	2.494	3.940	9.894

From the above table 1 it was evident that patients with generalized anxiety disorder were higher in thought Control than two groups. The mean of the generalized anxiety disorder group (M=83.75), obsessive compulsive disorder group (M=70.25) and healthy control (M=56.00) respectively. Dimension wise analysis also revealed that the mean score of generalized anxiety disorder group was higher in Distraction dimension than other two groups. The mean scores were 16.85, 13.35 and 11.60 for group I, II and III respectively. While for the mean revealed that generalized anxiety disorder group was higher in Social Control dimension than other two groups . The mean were 16.70, 13.15 and 10.60 for group I, II & III respectively, similarly, the mean revealed that generalized anxiety disorder group was higher in the worry dimension than other two groups. The mean and the 20.15, 16.40 and 10.55 for I, II & III respectively, and the mean score generalized anxiety disorder group was higher in the Punishment dimension than other two groups. The mean score were 18.45, 16.90 and 9.70 for I, II & III respectively. Whereas, the mean score revealed that Healthy control was higher in Re-appraisal dimension than other two groups. The mean score were 11.60, 10.45 and 13.45 for group I, II & III respectively.

Table no. 2: showing ANOVA on thought control strategies 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.
Distraction	Between Groups	285.833	2	142.917	12.691	.000
	Within Groups	641.900	57	11.261		
	Total	927.733	59			
Social Control	Between Groups	375.433	2	187.717	14.313	.000
	Within Groups	747.550	57	13.115		
	Total	1122.983	59			
Worry	Between Groups	936.300	2	468.150	36.944	.000
	Within Groups	722.300	57	12.672		
	Total	1658.600	59			
Punishment	Between Groups	872.033	2	436.017	26.025	.000
	Within Groups	954.950	57	16.754		
	Total	1826.983	59			
Re-appraisal	Between Groups	91.633	2	45.817	4.958	.010
	Within Groups	526.700	57	9.240		
	Total	618.333	59			
thought Control	Between Groups	7702.500	2	3851.250	41.802	.000
	Within Groups	5251.500	57	92.132		
	Total	12954.000	59			

From table 2 clearly indicate that ANOVA dimension wise analysis of thought Control score among the three different groups of patients. The thought Control overall difference among the three different groups of patients were found statistically significant (F=41.802, p<.001). Similarly, the dimension wise analysis also revealed same result as on the Distraction dimension (F= 12.691, p=.000<.001), Social Control dimension(F=14.313, p= .000<.001), on the worry dimension t (F=36.944 p= .000<.001), on the punishment dimension (F=26.025 p= .000<.001) and on the re-appraisal dimension t (F=4.958p= .010<0.01) these sub variables difference among the three different groups of patients were found statistically significant. These finding suggest that thought control strategies was work different in patients with GAD, OCD and health control. The findings of the present study confirm the hypothesis -2 which states that "there would be significant differences on thought control strategies among patients with generalized anxiety disorder, obsessive compulsive disorder, and healthy control."

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.**
Distraction	GAD	OCD	3.50000*	1.06120	.005
		Healthy Participants	5.25000*	1.06120	.000
	OCD	Healthy Participants	1.75000	1.06120	.234
Social Control	GAD	OCD	3.55000*	1.14520	.008
		Healthy Participants	6.10000*	1.14520	.000
	OCD	Healthy Participants	2.55000	1.14520	.075
Worry	GAD	OCD	3.75000*	1.12570	.004
		Healthy Participants	9.60000*	1.12570	.000

	OCD	Healthy Participants	5.85000*	1.12570	.000
Punishment	GAD	OCD	1.55000	1.29435	.460
		Healthy Participants	8.75000*	1.29435	.000
	OCD	Healthy Participants	7.20000*	1.29435	.000
Re-appraisal	GAD	OCD	1.15000	.96127	.460
		Healthy Participants	-1.85000	.96127	.141
	OCD	Healthy Participants	-3.00000*	.96127	.008
thought Control	GAD	OCD	13.50000*	3.03532	.000
		Healthy Participants	27.75000*	3.03532	.000
	OCD	Healthy Participants	14.25000*	3.03532	.000

Tukey test was used for post hoc analyses and the results were given in table 3. The table showed that dimension-wise analysis of thought control of mean difference between groups. It shows that the group difference in metacognition beliefs between I and II was found 13.50 which was statistically significant (P= .000<.001). Similarly, the mean differences between group I and group III was found 27.75 and it was also found to be statistically significant (p=.000<0.001), and the difference between-group II and group III was found 14.25 and it was found statistically significant (p=.000<0.001) 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 thought control strategies. Finding revealed that generalized anxiety disorder patients had strategies used for the control of unpleasant and unwanted thoughts than two other groups (obsessive compulsive disorder and healthy control). Hence, the hypothesis-2 was proved true by the finding of the study.

The findings show that the GAD group differed from the OCD and non-patient groups by using more distraction, social control, worry, and punishment techniques. This finding is similar with Coles and Heimberg (2005), who discovered higher punishment and worry strategies in GAD patients. One prevalent cognitive component of anxiety disorders, particularly a defining characteristic of generalized anxiety disorder, is distraction and worry. Frequent negative thoughts and attitudes about worry are linked to generalized anxiety Disorder (GAD) (Ruscio & Borkovec, 2004). While rumination is considered the primary characteristic of sadness (Wells, 2009), research indicates that concern is also elevated in those who suffer from depression (Starcevic, 1995). Numerous research have looked at mind control techniques in a range of psychological conditions. For instance, compared to a non-patient group, GAD patients reported using less social control and diversion techniques and more punishment and anxiety techniques (Coles and Heimberg, 2005). Reprimanding oneself might involve physical acts such as hitting or yelling at oneself or warning that dire consequences would ensue if one continues to think negatively. Negative feelings and anxiety about thinking are extended by these tactics. According to metacognitive theory, they are very similar to the meta-worry and meta-emotions that have been found to play a significant role in the maintenance of GAD and other disorders (Wells & Carter, 2009; Wells, 2009).

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

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.
Psychological flexibility	Between Groups	1523.233	2	761.617	38.992	.000
	Within Groups	1113.350	57	19.532		
	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 -2 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.
Psychological flexibility	GAD	OCD	2.15000	1.39759	.281
		Healthy Participants	9.45000*	1.39759	.000
	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-2 was proved true by the finding of the study.

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-V 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 was conducted with the objectives to investigate the difference among GAD, OCD and health control patients on metacognitive beliefs, thought control strategies and psychological flexibility. The ANOVA and Post hoc were used to find out the difference among GAD, OCD and health control patients on metacognitive beliefs, thought control strategies and psychological flexibility were applied separately The following results were obtained:

1. Patients with GAD obtained significantly greater mean score on thought control than other two groups.
2. Patients with OCD obtained significantly greater mean score on psychological flexibility than other two groups.

References

1. 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
2. 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
3. APA, A. P. A. (2013). Diagnostic and statistical manual of mental disorders. *The American Psychiatric Association*.
4. 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
5. 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
6. 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
7. Diagnostic and statistical manual of mental disorders (DSM-5®). (2013). *American Psychiatric Association*.
8. García-Montes, J. M., Cangas, A., Pérez-Álvarez, M., Fidalgo, Á. M., & Gutiérrez, O. (2006). The role of meta-cognitions 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
9. 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
10. 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
11. 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
12. 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
13. 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.
14. 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
15. 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
16. 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
17. 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).
18. 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).
19. Wells, A., & Carter, K. E. P. (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. doi:10.1521/ijct.2009.2.3.224
20. 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
21. 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

22. Wells, A., & Papageorgiou, C. (1998). Relationships between worry, obsessive-compulsive symptoms and meta-cognitive beliefs. *Behaviour Research and Therapy*, *36*(9), 899–913.
23. 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