

# **UNIVERSITÄTSKLINIKUM HAMBURG-EPPENDORF**

Zentrum für Psychosoziale Medizin, Klinik und Poliklinik für Psychiatrie und  
Psychotherapie

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## **Akzeptanz und Wirksamkeit einer metakognitiven Selbsthilfeintervention in einer arabischsprachigen Stichprobe mit Depression und/oder Zwangsstörung**

### **Dissertation**

zur Erlangung des Grades eines Doktors der Medizin  
an der Medizinischen Fakultät der Universität Hamburg.

vorgelegt von:

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Hamburg 2020

**Angenommen von der  
Medizinischen Fakultät der Universität Hamburg am: 16.11.2020**

**Veröffentlicht mit Genehmigung der  
Medizinischen Fakultät der Universität Hamburg.**

**Prüfungsausschuss, der/die Vorsitzende: Prof. Dr. Steffen Moritz**

**Prüfungsausschuss, zweite/r Gutachter/in: Prof. Dr. Christoph Heesen**

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# Acceptance and efficacy of a metacognitive self-help intervention in an Arabic-speaking mixed patient sample with depression and/or obsessive–compulsive disorder: A randomized controlled trial

Journal of Experimental Psychopathology  
January–March 2019: 1–18  
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sagepub.com/journals-permissions  
DOI: 10.1177/2043808718820683  
journals.sagepub.com/home/jcpp



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## Abstract

**Objective:** In Arabic-speaking countries, most individuals with depression or obsessive–compulsive disorder (OCD) do not seek or receive evidence-based treatment due to a dearth of facilities, shame/self-stigma, or religious concerns. The feasibility and effectiveness of “Western” psychotherapeutic concepts have rarely been evaluated for Arabic-speaking populations. The present study examined the efficacy of *My Metacognitive Training* (myMCT), a trans-therapeutic self-help manual, in a mixed sample of participants with depression and/or OCD. We considered both participants with depression and/or OCD because a number of cognitive biases and dysfunctional beliefs are shared by the two disorders. **Method:** The myMCT manual was translated into Arabic. A total of 160 individuals with either self-reported OCD and/or self-reported depression were recruited. Individuals were assessed at baseline and then randomized either to myMCT ( $n = 84$ ) or to a wait-list control condition ( $n = 76$ ). Six weeks later, individuals were invited to the post assessment. The Beck Depression Inventory (BDI-II) served here as the primary outcome. Secondary outcomes were the Obsessive–Compulsive Inventory–Revised (OCI-R) and the self-rating version of the Yale-Brown Obsessive Compulsive Scale (OCD patients only). Individuals were reimbursed with a 17€ voucher. **Results:** Completion rates were similarly low in the two groups (myMCT: 37%, controls: 35%). Presumably because of the high rate of noncompletion and nonadherence (29%), the intention-to-treat analyses failed to yield a significant effect. Those who had at least started the myMCT intervention improved significantly on the BDI-II at a large effect size. A significantly larger improvement among those who had started or completed the myMCT intervention was also seen on the OCI-R at a large effect size. **Conclusions:** Individuals who studied the myMCT manual showed large improvement on the BDI-II, irrespective of their primary symptomatology. However, the results are seriously compromised by the low completion rates in both conditions. Importantly, evaluations using the same manual in other language populations (and with other background cultures) produced good to excellent retention rates. The study demonstrates that self-help manuals may not represent a suitable medium for large-scale dissemination of evidence-based self-help material in an Arab population and corroborates prior findings suggesting low adherence in this population. Whether

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smartphone apps and Internet interventions represent more viable alternatives than self-help manuals needs to be tested, as well as specific barriers preventing dissemination and completion in this population.

## Keywords

Bibliotherapy, depression, intervention, motivation, obsessive–compulsive disorder, self-help

Date received: 20 September 2018; accepted: 26 November 2018

## Introduction

### *Treatment gap in obsessive–compulsive disorder and depression*

Obsessive–compulsive disorder (OCD) and depression are serious psychiatric disorders. Although effective therapies are available (see the next section), a large subgroup still does not receive (adequate) treatment due to a number of reasons, including fear of stigma, financial constraints, and poor service availability (García-Soriano, Rufer, Delsignore, & Weidt, 2014; Kohn, Saxena, Levav, & Saraceno, 2004; Marques et al., 2010; Moritz, Schröder, Meyer, & Hauschildt, 2013; Rebello, Marques, Gureje, & Pike, 2014; Schwartz, Schlegl, Kuelz, & Voderholzer, 2013; Stein, 2002; Veldhuis et al., 2012; Wahl, Ertle, Bohne, Zurowski, & Kordon, 2011). If treatment is sought at all, initiation of proper therapy is often delayed by many years. The situation is especially grave in low- and middle-income countries (Andrade et al., 2013; Eaton et al., 2011; Kohn et al., 2004; World Health Organization, 2011).

### *Narrowing the treatment gap*

Cognitive-behavioral therapy (CBT) and variants thereof have proved effective in OCD (Olatunji, Davis, Powers, & Smits, 2013; Öst, Havnen, Hansen, & Kvale, 2015) as well as depression, notwithstanding that, at least for depression, the effects of CBT might have been overestimated and are less strong in more recent studies (Cuijpers et al., 2013; Johnsen & Friberg, 2015). Yet, as mentioned, these treatments are only available to a minority of patients. The treatment gap may be narrowed with low-threshold interventions such as bibliotherapy (self-help books; see the next section), remote therapy (Wootton, 2016), interactive Internet interventions, and self-help websites (Dèttore, Pozza, & Andersson, 2015; Mataix-Cols & Marks, 2006; McIngvale, Bakos-Block, Hart, & Bordnick, 2012). The present study is concerned with bibliotherapy. In our view, on a global scale such

a medium has some advantages over online tools as not all individuals in lower income countries have a smartphone or a personal computer in their homes. As we have argued previously (Moritz et al., 2018), e-books and pdf documents are often less costly than commercial online programs and can be easily downloaded as well as printed (e.g., in outpatient facilities or offices of nongovernmental organizations). If registration is mandatory, online devices have lingering problems with data confidentiality, especially in countries with a poor information technology infrastructure and nonadherence to democratic standards (Lawlor-Savage & Prentice, 2014). Although a recent meta-analysis demonstrated that effects for Internet-delivered interventions are larger than effects for other media, the effectiveness of the various interventions might be equal if the content is similar (Mayo-Wilson & Montgomery, 2013).

Guided and unguided treatment concepts (i.e., self-help programs such as online portals designed for use with or without the assistance of a therapist), which are mainly derived from research in Western societies, have rarely been examined rigorously as to their efficacy in other cultures. It is thus unclear whether evidence obtained from trials mainly conducted in Europe or North America (Mayo-Wilson & Montgomery, 2013) can be transposed to other parts of the world (for a discussion, see Gearing et al., 2013).

CBT-based self-help interventions yield good results in depression, OCD, and other disorders, especially when set up as guided interventions, and they sometimes equal results obtained with face-to-face therapy (Andersson et al., 2012; Dèttore et al., 2015; Herbst et al., 2012; Karyotaki et al., 2017; Mahoney, Mackenzie, Williams, Smith, & Andrews, 2014; Moritz, Kersten, Dietl, Aardema, & O'Connor, 2015; Richards & Richardson, 2012; Tolin et al., 2007; Wootton, Dear, Johnston, Terides, & Titov, 2013). The present study investigated whether *My Metacognitive Training* (myMCT), a self-help manual that has been positively evaluated in German-, English-, and Russian-speaking populations (Hauschildt, Schröder,

& Moritz, 2016; Moritz et al., 2011, 2018; Moritz, Stepulovs et al., 2016), is effective in an Arab population, given that many parts of the Arabic-speaking world have reservations about “the West” in general (Pew Research Center, 2006) and psychological interventions in particular (Gearing et al., 2013).

### *myMCT: A self-help manual for OCD*

We evaluated the Arabic version of the treatment manual myMCT (Moritz & Hauschildt, 2011, 2016), which is available in several other languages as well. The manual and worksheets (see the Method section) can be downloaded at no cost via [www.uke.de/mymct](http://www.uke.de/mymct). The intervention takes an integrative (trans-therapeutic) approach with a clear focus on metacognitive techniques that imparts to patients metacognitive knowledge about cognitive phenomena (e.g., thoughts cannot be fully controlled; thought–action fusion is impossible) and corrects false beliefs (e.g., the belief that thought suppression helps to dilute negative cognitions). This approach is derived from and inspired by metacognitive training (MCT) for psychosis, which aims at “straightening” the cognitive biases of psychosis such as jumping to conclusions and overconfidence (Moritz et al., 2014). MCTs have been developed for different disorders (e.g., depression, borderline personality disorder), each targeting different biases that are implicated in the pathogenesis of the target psychopathology. At the core of myMCT are the six cognitive biases (e.g., perfectionism and inflated responsibility) and dysfunctional coping patterns (e.g., thought suppression) highlighted by the Obsessive–Compulsive Working Group as likely pathogenetic mechanisms of OCD (Obsessive Compulsive Cognitions Working Group, 1997, 2003, 2005). One chapter also addresses the false metacognitive belief that OCD is an incurable brain disorder that is not amenable to psychotherapeutic treatment (Hauschildt, Jelinek, Randjbar, Hottenrott, & Moritz, 2010). In addition, myMCT incorporates techniques from different therapeutic “schools,” such as exposure with response prevention (ERP), the most effective technique for OCD (Rosa-Alcazar, Sanchez-Meca, Gomez-Conesa, & Marin-Martinez, 2008; for a study on self-directed ERP, see Tolin et al., 2007), acceptance and commitment therapy (ACT; Hayes, Masuda, & DeMey, 2003), and mindfulness-based approaches (Hofmann & Asmundson, 2008; Kahl, Winter, & Schweiger,

2012; Öst, 2014). The manual also conveys the metacognitive strategy of association splitting (Moritz & Jelinek, 2007), which has been successfully evaluated as a single technique (Moritz, Jelinek, Klinge, & Naber, 2007; Moritz & Russu, 2013). The association-splitting technique teaches patients how negative thoughts may turn into strong obsessions that increasingly dominate consciousness. Patients are familiarized with the cognitive principle of the “fan effect” and are encouraged to generate neutral and positive associations for OCD-laden cognitions to weaken the associative strength of OCD cognitions (e.g., *black–chocolate* rather than *black–death*).

myMCT was developed as an integrative treatment approach as most researchers agree that OCD is a multifaceted and multicausal disorder (Abramowitz, Taylor, & McKay, 2009), which may explain why even the most evidence-based single technique, ERP, is not efficacious in all patients (Abramowitz et al., 2012). Moreover, because preferences, specific needs, and worries vary across individuals, we aimed to provide a “tool kit” for readers to choose from. As some of the approaches amalgamated in myMCT derive from traditions with different (and sometimes opposing) treatment recommendations (Hofmann & Asmundson, 2008), we aimed to provide a synergic combination of the techniques in order not to confuse readers. To illustrate, we agree with Needleman and Cushman (2010), who argue that change-oriented CBT and acceptance-oriented ACT share important features and can thus be effectively combined despite remaining differences (“the goal of traditional CBT is to reduce symptoms, whereas, the goal of ACT is valued living irrespective of symptoms,” p. 168). We reconciled CBT and ACT using the following philosophy: “If you cannot change the thought, accept the fact that you have the thought and realize that it is a thought only.”

### *Empirical evidence for the efficacy of myMCT*

Four randomized controlled studies on the myMCT have been conducted so far ( $N = 86$ – $128$  participants). For the beta version and the first edition, the effects of the treatment were most convincing for obsessive thoughts at a medium to strong effect size, while the effects on compulsive behavior are less established (Hauschildt et al., 2016; Moritz et al., 2011; Moritz, Stepulovs et al., 2016). The manual has

therefore been recently complemented by exercises targeting compulsions. A recent study on 70 patients showed a good retention rate (80%) as well as large effect sizes for both obsessive and compulsive symptoms on the Yale-Brown Obsessive Compulsive Scale (Y-BOCS; see Methods) for myMCT relative to the control condition (Moritz et al., 2018). Depression and cognitive biases also declined and (metacognitive) knowledge acquisition was enhanced. Interestingly, poor insight emerged as a risk factor for nonresponse. To improve adherence, the third edition of the manual aims to enhance motivation for change by various exercises (e.g., writing a letter to one's disorder, imagining overarching life values and goals). A recent meta-analysis shows that unguided myMCT exerts an average effect size of .40 (Hedges'  $g$ ; Philipp et al., 2018) relative to control conditions, which is slightly higher than for other unguided self-help interventions (Pearcy, Anderson, Egan, & Rees, 2016).

### **Mental health in Arab countries**

Results of studies on treatment compliance in Arab countries are mixed. While one study found better medication adherence in Arab patients with hypertension (Al-Ramahi, 2015) when indirectly compared to a U.S. population, some studies suggest that adherence to evidence-based (medical) treatment is lower among Arab people. This finding has been linked with preference for "traditional therapy" and expectations of severe side effects (Yoel et al., 2013). Interestingly, low adherence to treatment and preventive medical approaches have also been found among Arabs who have immigrated to the U.S. (Talaat, 2015).

Gearing and colleagues (2013) posit that efficacious psychosocial evidence-based interventions may fail when adapted from one culture to another. Translation necessitates a deep understanding of the respective culture (including within-culture differences), established practices, and obstacles. In their systematic review encompassing 22 psychosocial or mental health studies in Middle East Arab countries, they identified more barriers (68%) than promoters (32%) to the effective translation and adaptation of empirically supported psychosocial interventions. Poor or questionable acceptability of the intervention within the cultural context (54%), community and system difficulties (27%), and problems with clinical engagement processes (19%) were noted as the most frequent barriers.

In Arab countries with a predominantly Muslim population, mental disorders are often attributed externally to the will of God, divine punishment, evil spirits, or sorcery (Gearing et al., 2013). Common barriers to treatment are a lack of general public awareness of mental illness as well as psychosocial treatment in Arab countries (Al-Darmaki, Thomas, & Yaaqeb, 2016; Eapen & Ghubash, 2004; Karam et al., 2006), personal financial constraints (Eapen & Ghubash, 2004; Karam et al., 2006; Murray et al., 2006), gender norms that impede women's access to health services (Al-Krenawi & Graham, 1999), and poor local transportation (Eapen & Ghubash, 2004). Furthermore, social shame is strongly associated with mental illness (Eapen & Ghubash, 2004; Karam et al., 2006) and with the utilization of mental health services (Eapen & Ghubash, 2004; Shalhoub-Kevorkian, 2005). Families of individuals with mental illness or those seeking treatment are at risk of diminishing their social status in their community (Shalhoub-Kevorkian, 2005). Treatment from religious and traditional healers is perceived as less stigmatizing (Al-Krenawi & Graham, 1999; Wahass & Kent, 1997). In a recent study on Emirati college students, social stigma represented the strongest barrier to seeking help for mental health problems. Many students endorsed religious practices to cope with mental health problems and to maintain mental health (Al-Darmaki et al., 2016). "Westernized" professional mental health services are often viewed as not respecting Arab values (Al-Krenawi & Graham, 1999; Al-Krenawi, Graham, Al-Bedah, Kadri, & Sehwaileh, 2009; Savaya, 1998). Initial engagement of Arabs with mental health services is accordingly low.

The most recent WHO Mental Health Atlas that includes country profiles (World Health Organization, 2014) shows that psychiatric treatment in Arab countries is tenuous. Even in high-income countries such as Qatar, there are only 2.95 psychiatrists per 100,000 people compared to 12.4 in the U.S. (in Iraq [upper-middle income]: 0.4; in Jordan [upper-middle income]: 0.51; in Syria [lower-middle income]: 0.0 per 100,000 people). For psychologists, the discrepancy is even greater (U.S.: 29.62; Qatar: 1.28; Iraq: 0.1; Jordan: 0.27; Syria: 0.12 per 100,000 people). The U.S. has 648 psychiatric hospitals, but there is only one in Qatar (Iraq: 3; Jordan: 3; Syria: 5). For psychiatric units in general hospitals, the discrepancy is also large (U.S.: 1,170; Qatar: 0; Iraq: 22; Jordan: 3;

Syria: 3). Overall, the budget for mental health in the Arab world is low (Okasha, Karam, & Okasha, 2012).

To conclude, the mental health infrastructure in Arab countries is poor, especially in rural areas and areas affected by armed conflicts. In these areas, self-help interventions are perhaps the only available treatment. Yet, despite examples of successful implementation of CBT-oriented mental health interventions in Arab countries (Hamdan-Mansour, Puskar, & Bandak, 2009; Knaevelsrud, Brand, Lange, Ruwaard, & Wagner, 2015), reservations concerning evidence-based (Western) treatment remain strong.

### *Shared cognitive biases in OCD and depression*

Depression and OCD are closely related, and depression is the most frequent comorbid disorder in OCD (56%; Rickelt et al., 2016). It thus comes to no surprise that they share a number of important cognitive and affective biases as well as dysfunctional coping styles such as thought suppression and rumination when dealing with negative emotions and low self-esteem (Abramowitz, Storch, Keeley, & Cordell, 2007; Brown, Antony, & Barlow, 1992; Dar & Iqbal, 2015; Exner, Martin, & Rief, 2009; Ghamari Kivi, Mohammadipour Rik, & Sadeghi Movahhed, 2013; Halvorsen et al., 2015; Hansmeier, Exner, Rief, & Glombiewski, 2016; Hezel & McNally, 2016; Jacoby, Leonard, Riemann, & Abramowitz, 2014; Moradi, Fata, Ahmadi Abhari, & Abbasi, 2014; Moritz, Jahns et al., 2016; Motivala et al., 2018; Shaw, Carbonella, Arditte Hall, & Timpano, 2017; Sun, Zhu, & So, 2017; Yap, Mogan, & Kyrios, 2012). These cognitive biases are targeted in the treatment of both depression (e.g., Jelinek, Otte, Arlt, & Hauschildt, 2013) and OCD (e.g., Jelinek, Moritz, & Hauschildt, 2017). Clark (2004) postulates that intrusive thoughts in patients with OCD often lead to depressive cognitions. For example, when a patient with OCD thinks he has to control an intrusive thought, this may trigger worry and ruminative thinking as a strategy for dealing with the distressing thought. In line with this, an influential cognitive model of obsessions (Rachman, Thordarson, Shafran, & Woody, 1995) suggests that when patients with OCD have shameful obsessions, they see themselves as having poor moral values. This may lead to cognitive biases that are typical for patients with depression, such as a negative self-view and rumination as well as negative self-interpretations. Therefore, it is plausible that some

treatments for depression may be helpful for patients with OCD as well (and vice versa).

## **The present study**

For the present study, we addressed the question raised in our last trial on myMCT (Moritz et al., 2018) regarding whether culturally adapted translations of the manual are feasible and efficacious in nonindustrialized countries. We chose to translate the myMCT manual into Arabic because it is a world language spoken in many countries with a primarily Muslim population that often lives in areas with a poor mental health infrastructure. A self-help tool may be an alternative treatment for those who fear stigma and negative consequences when seeking face-to-face treatment for mental health problems.

We did not confine recruitment to patients with OCD for two reasons. First, some patients may not know the correct label/diagnosis of their symptoms and may experience these instead as somatic disorders (Al-Darmaki et al., 2016; Al-Krenawi, 2005; Eapen & Ghubash, 2004; Karam et al., 2006). Second, as discussed above in greater detail, depression and OCD share a number of important cognitive and affective biases as well as dysfunctional coping styles that can be addressed by the same therapeutic approach.

We hypothesized that myMCT would be equally effective with OCD and depressed patients and that satisfaction with the manual would be comparable to that of other language samples. We also explored possible moderators of change.

## **Method**

### *Study design*

We set up an Internet-based randomized wait-list controlled trial (the assessment was done online; the self-help training was bibliotherapeutic and conveyed via a pdf document). Participants in the intervention condition received the Arabic translation of the myMCT manual immediately after randomization, whereas participants in the wait-list condition received the manual upon completion of the post assessment. The study was set up as an unguided treatment; participants did not receive any therapeutic advice or counseling. Participants were mainly recruited via Google AdWords between October 2017 and March 2018. A lower number of participants were recruited via



Facebook online forums. Study participation was anonymous. Inclusion was not restricted to particular countries, but fluency in Arabic was mandatory.

A total of 506 persons accessed the introductory webpage (multiple entries were possible), 230 exited after the first page, 11 participants declined the electronic informed consent, and 105 participants exited later in the survey. The total sample thus consisted of 160 individuals with either self-reported OCD symptoms (with or without depression,  $n = 68$ ) or depression without OCD ( $n = 92$ ) who completed the baseline survey and were allocated to either myMCT ( $n = 84$ ) or the wait-list control group ( $n = 76$ ); 36% completed the assessments 6 weeks later (treatment group:  $n = 31$ , 37%; control group:  $n = 27$ , 35%). The assessments were set up using the online software Questback/Unipark®; no IP addresses were stored. Ethical approval was obtained prior to the start of the trial.

### *Invitation and baseline survey*

The google AdWords campaign, as well as the posts connected to the baseline survey, informed participants about the study's rationale. Participants were guaranteed delivery of a manual either immediately or after a 6-week delay (i.e., for the wait-list control group). Only individuals 18 years or older who reported having OCD and/or depression were included, but this was not formally verified via, for example, a diagnostic telephone interview. Concurrent treatments (e.g., medication, psychotherapy) did not represent exclusion criteria. Unlike prior self-help studies on myMCT and on single concepts incorporated in myMCT such as association splitting, a financial incentive was provided (an Amazon voucher sent via e-mail with a \$17 value). Moreover, all participants received another self-help manual upon completion as an incentive. Electronic informed consent was mandatory. Then, questions on demographic background (e.g., age, sex, level of education) were posed as well as questions on medical history (e.g., onset of disorder, prior experience with psychotherapy or self-help related to OCD). Next, psychopathological scales were administered (see the Measures section). As in prior studies on myMCT, we asked participants whether they had answered the questions truthfully, and we requested an e-mail address and a personal code word. Participants were then randomized to one of the two conditions (allocation was according to the date of participation as displayed in the so-called

trigger e-mail). Due to the online setup of the study, concealed allocation was different from the standard case in which team members perform enrollment. Our procedure is best described as centralized assignment. The risk of bias was low as the person allocating individuals to conditions had no information about the participants other than the date they entered the study.

### *Intervention and post assessment*

Participants in the myMCT condition were e-mailed the self-help manual and worksheets as two separate pdf attachments within 24 hr following completion of the baseline survey. The Arabic myMCT manual can be downloaded at no cost via [www.uked.de/mymct](http://www.uked.de/mymct). It contains 14 chapters; the translated Arabic version is 177 pages long (including 97 pictures and 26 worksheets containing exercises). We instructed participants to work through the material over the next few weeks. After 6 weeks, participants in the myMCT and the control group received a personal invitation via e-mail to take part in the post assessment. First, participants were requested to reenter the e-mail address they had used for the baseline assessment as well as their personal code word (to match pre- and post data). The same set of questionnaires was administered as before (we again asked whether patients had OCD; the Y-BOCS was administered only to those who affirmed having OCD). For those who received the manual and claimed that they had at least started to read the myMCT, we asked for their subjective appraisal. In addition, we asked about important changes in their treatment and recent incidents that might have impacted their symptomatology. Up to three reminders for participation were sent.

### *Measures*

All measures were translated by Schaimaa Irshaid.

*Beck Depression Inventory II (BDI-II)*. The BDI-II (Beck, Steer, & Brown, 1996) served as the primary outcome as depression is a common denominator in both depression and OCD. The BDI-II contains 21 items that tap into cognitive, behavioral, and somatic symptoms of depression. Items have to be endorsed on a 4-point Likert-type scale. Consistent with current diagnostic criteria in the DSM-5, the assessment interval encompassed the previous 2 weeks. The psychometric properties are good (Kühner, Bürger, Keller, &

**Table 1.** Demographic and psychopathological baseline characteristics of the sample.

Variable	Treatment		Statistics
	Control (n = 76)	myMCT (n = 84)	
Sex (female/male)	34/42	36/48	$\chi^2(1) = 0.06, p = .811$
Age in years	28.97 (8.69)	29.27 (7.55)	$t(158) = 0.23, p = .815$
At least 12 years school (yes/no/not answered)	62/7/7	68/9/7	$\chi^2(1) = 0.13, p = .938$
Clinical			
Medication (yes/no)	15/61	18/66	$\chi^2(1) = 0.07, p = .792$
Self-reported OCD (yes/no)	30/46	38/46	$\chi^2(1) = 0.54, p = .461$
Self-reported major depression (yes/no)	52/24	55/29	$\chi^2(1) = 0.16, p = .693$
Current psychotherapy (yes/no)	5/71	4/80	$\chi^2(1) = 0.25, p = .618$

myMCT = My Metacognitive Training; OCD = obsessive-compulsive disorder.

Hautzinger, 2007). For the test–retest reliability of the Arabic translation, see the Results section.

**Obsessive–Compulsive Inventory–Revised (OCI-R).** The OCI-R (Foa et al., 2002) served as a measure for OCD symptom severity in all participants. The OCI-R is a self-report scale capturing frequent OCD symptoms (e.g., washing, checking, ordering during the last week). Previous studies have shown good to excellent psychometric properties (Abramowitz & Deacon, 2006; Foa et al., 2002; Huppert et al., 2007). Internet administration of the scale (Coles, Cook, & Blake, 2007) has been found to be equivalent to paper-and-pencil administration. For the test–retest reliability of the Arabic translation, see the Results section.

**Yale-Brown-Obsessive-Compulsive Scale (Y-BOCS).** The self-report version of the Y-BOCS (Baer, Brown-Beasley, Sorce, & Henriques, 1993; Goodman, Price, Rasmussen, Mazure, Delgado et al., 1989; Goodman, Price, Rasmussen, Mazure, Fleischmann et al., 1989) was administered to those who indicated having OCD. The Y-BOCS shows high agreement with the original interview version (Schaible, Armbrust, & Nutzinger, 2001; Steketee, Frost, & Bogart, 1996). Five items assess the severity of obsessive thoughts and compulsions. Two additional questions tap illness insight (Item 11) and avoidance (Item 12). To avoid potential misunderstandings, examples of obsessive thoughts and compulsive behavior were provided as part of the instructions (e.g., cognitive compulsions are sometimes confused by patients with obsessions; Federici et al., 2010). The questions related to the previous week. We then calculated the total score (Items 1–10). The test–retest reliability of the online version of the instrument is good (Moritz, Jelinek,

Hauschildt, & Naber, 2010; Moritz & Russu, 2013). For the test–retest reliability of the Arabic translation, see the Results section.

**Patient Satisfaction Questionnaire/Fragebogen zur Patientenzufriedenheit (ZUF-8).** To assess general satisfaction with the manual, we administered the ZUF-8 (Schmidt & Wittman, 2008) to those who had read the manual in part or in whole. This scale was originally derived from the Client Satisfaction Questionnaire (Attkisson & Zwick, 1982) and was adapted for a bibliotherapeutic intervention. Its psychometric properties are good (Kriz, Nübling, Steffanowski, Rieger, & Schmidt, 2008; Schmidt, Nübling, Lamprecht, & Wittmann, 1994). Furthermore, individuals who had begun to read the myMCT manual were asked for their appraisal of the intervention (e.g., usefulness, comprehensibility, symptom reduction, side effects; see Tables 3 and 4). Items had to be rated on a 4-point Likert-type scale (1 = *not at all*, 2 = *a little*, 3 = *a lot*, 4 = *absolutely*).

### Strategy of data analysis

We performed an analysis of variance with time as the within-subject variable and group as the between-subject factor. For the intention-to-treat analyses (i.e., considering all patients randomized to conditions irrespective of adherence and completion status), we used multiple imputation with 100 iterations and entered all demographics listed in Table 1 and baseline psychopathological variables (BDI-II, OCI-R, Y-BOCS; see Table 2) as predictors.

We also looked at completer data and whether group differences occurred when comparing participants in the myMCT group who had started to read the manual versus control participants (per-protocol

**Table 2.** Differences between the myMCT and control groups across time; per protocol and intention-to-treat analyses with means and standard errors.<sup>a</sup>

Domain/Variable	Wait-list control		myMCT		myMCT per protocol	Statistics (between-group comparisons)	
	Baseline (n = 76)	Post (n = 27)	Baseline (n = 84)	Post (n = 31)		Complete cases (ANOVA)	Per protocol (ANOVA)
BDI-II (post, WL: n = 27; myMCT, n = 31)	32.82 (10.92)	28.70 (12.57)	32.81 (12.27)	23.58 (13.78)	18.11 (14.23)	Time: $F(1;56) = 26.01, p < .001$ , $\eta^2_{\text{partial}} = .317$ ; Interaction: $F(1;56) = 0.00, p = .958$ , $\eta^2_{\text{partial}} < .001$	Time: $F(1;34) = 39.56, p < .001$ , $\eta^2_{\text{partial}} = .538$ ; Interaction: $F(1;34) = 7.27, p = .011$ , $\eta^2_{\text{partial}} = .176$
OCI-R (post, WL: n = 27; myMCT, n = 30)	32.68 (14.46)	33.96 (13.88)	32.57 (14.09)	28.10 (14.80)	18.67 (8.50)	Time: $F(1;55) = 2.41, p = .127$ , $\eta^2_{\text{partial}} = .042$ ; Interaction: $F(1;55) = 1.71, p = .197$ , $\eta^2_{\text{partial}} = .030$	Time: $F(1;34) = 15.33, p < .001$ , $\eta^2_{\text{partial}} = .311$ ; Interaction: $F(1;34) = 13.86, p = .001$ , $\eta^2_{\text{partial}} = .290$
Y-BOCS Total (post, WL: n = 15; myMCT, n = 18)	22.30 (5.99)	18.43.60 (7.20)	24.35 (6.86)	18.22 (7.65)	12.20 (6.26) (n = 5)	Time: $F(1;14) = 6.38, p = .024$ , $\eta^2_{\text{partial}} = .313$ ; Interaction: $F(1;14) = 0.41, p = .531$ , $\eta^2_{\text{partial}} = .029$	Time: $F(1;9) = 14.18, p = .004$ , $\eta^2_{\text{partial}} = .612$ ; Interaction: $F(1;9) = 1.61, p = .309$ , $\eta^2_{\text{partial}} = .114$

myMCT = My Metacognitive Training; ANOVA = analysis of variance; BDI-II = The Beck Depression Inventory; WL = wait-list; OCI-R = Obsessive-Compulsive Inventory-Revised; Y-BOCS = Yale-Brown Obsessive-Compulsive Scale.

<sup>a</sup> Post scores refer to raw data (not imputed).

**Table 3.** Subjective appraisal.<sup>a</sup>

Item	myMCT condition	Positive appraisal in % (a lot, absolutely)
I think the myMCT manual is good for self-help and self-guidance.	3.00 (0.87) [2.91 (0.87)]	66.6 [68.2]
I think the contents of the manual were comprehensible.	3.11 (0.78) [3.23 (0.69)]	77.7 [86.4]
I think the manual was helpful.	3.00 (0.87) [3.05 (1.05)]	66.6 [68.2]
I was able to use the manual on a regular basis during the past six weeks.	2.11 (0.60) [2.50 (1.06)]	22.2 [45.4]
I had to force myself to use the manual.	1.56 (0.73) [2.23 (0.81)]	11.1 [36.3]
The length of the manual was just right.	2.67 (1.00) [2.68 (0.84)]	55.7 [63.6]
Other people supported me in using the manual.	1.56 (0.00) [1.59 (0.91)]	22.2 [18.1]
I think the manual would make more sense if it were used together with psychotherapy.	3.33 (0.71) [2.73 (0.70)]	88.8 [68.2]
I could combine the exercises with daily life.	3.22 (0.97) [—]	88.8 [—]
I would use the manual in the future (yes/no).	—	88.9 [87]

Note. scores: 1 = not at all, 2 = a little; 3 = a lot, 4 = absolutely. myMCT = My Metacognitive Training.

<sup>a</sup> Means and standard deviations (results from Moritz et al., 2018, are in square brackets).

**Table 4.** Subjective appraisal of myMCT (adapted from the ZUF-8).<sup>a</sup>

Item	myMCT condition	Positive versus negative appraisal in %
How do you rate the quality of the manual? (excellent, good vs okay, not good)	2.67 (0.71) [2.96 (0.83)]	55.5 [73.9]
Did you receive the type of treatment you expected to receive? (absolutely, a lot vs a little, not at all)	2.33 (0.87) [2.52 (0.85)]	33.3 [47.8]
To what extent did the manual help you cope with your problems? (absolutely, a lot vs a little, not at all)	2.33 (0.71) [2.36 (0.66)]	44.4 [45.5]
Would you recommend the manual to a friend with similar symptoms? (yes, probably yes vs probably not, no)	3.11 (0.93) [3.17 (0.89)]	88.9 [78.3]
How happy are you with the extent of the help you have received through using the manual? (very satisfied, mostly satisfied vs somewhat dissatisfied, dissatisfied)	2.44 (0.88) [2.82 (0.85)]	44.4 [72.7]
Did the manual help you to cope with your problems more successfully? (absolutely, a lot vs a little, not at all)	2.67 (1.00) [2.38 (0.92)]	55.5 [38.1]
How satisfied are you with the manual in general? (very satisfied, mostly satisfied vs somewhat unsatisfied, unsatisfied)	2.78 (0.97) [2.91 (0.92)]	66.6 [63.6]
Would you use the manual again? (yes, probably yes vs probably not, no)	3.33 (0.71) [3.14 (0.99)]	88.8 [77.3]

Note. myMCT = My Metacognitive Training; ZUF-8 = Patient Satisfaction Questionnaire/Fragebogen zur Patientenzufriedenheit.

<sup>a</sup> Means and standard deviations (results from Moritz et al., 2018, are in square brackets).

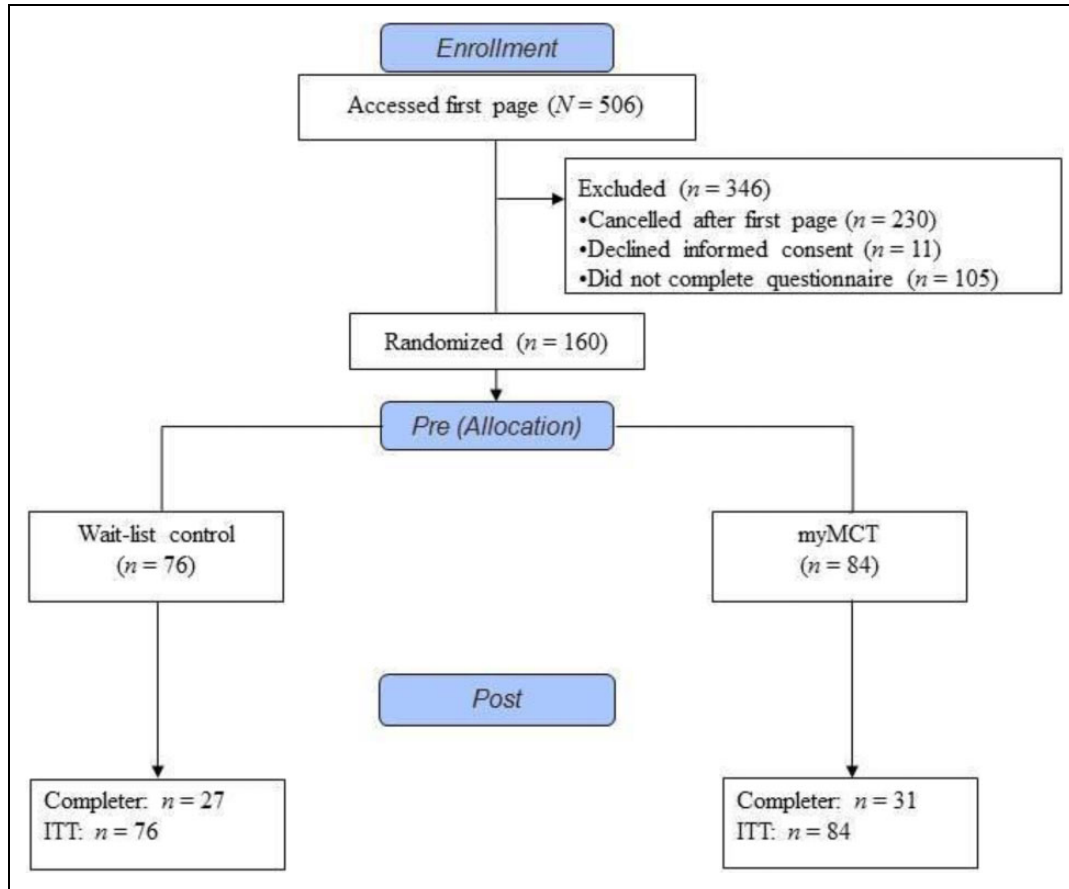
analysis). Potential moderators of treatment outcome were examined using the PROCESS macro by Hayes (Model 1); parameters were set to default mode.

## Results

### Sample characteristics and comparisons

Table 1 confirms that both groups were comparable with regard to demographic and psychopathological

baseline characteristics. The sample showed OCD and depressive symptom severity on the brink of moderate-to-severe symptoms. OCI-R scores cannot be compared to prior studies since we used a 5-point Likert-type scale to allow greater variability in regard to our mixed sample. Most patients were males in their late 20s and were rather well-educated. Few participants were currently receiving medication and even fewer were receiving psychotherapy.



**Figure 1.** CONSORT chart diagram.

### Group comparisons on main outcomes

The CONSORT flowchart is displayed in Figure 1. Only 36% of the participants responded to our multiple invitations to participate in the post assessment; rates were similar for both groups. Moreover, only 29% ( $n = 9$ ) of the myMCT sample who responded to our invitation reported that they had read or started to read the book.

The regression models of the intention-to-treat analyses indicated a nonsignificant effect of the sample on symptom improvement (BDI-II: 0.12,  $p = .905$ ; Y-BOCS:  $b = 2.82$ ,  $p = .394$ ; OCI-R: 0.09,  $p = .336$ ). Table 2 presents results of the completer and per-protocol analyses, which yielded very different findings because the poor retention rate and treatment adherence lowered the power to detect effects with intention-to-treat analyses. Although for the completer (BDI-II, Y-BOCS) and per-protocol analyses (all indexes), the effect of time was significant, suggesting large improvements over the 6 weeks, only the per-protocol analyses yielded interactions in favor of myMCT at a medium-to-large (nonsignificant for

Y-BOCS) or large (significant for BDI-II, OCI-R) effect size (see Table 2).

### Prediction and moderation

We tested demographic and psychopathological variables as potential moderators of treatment outcome using the PROCESS macro by Hayes (Model 1). For all analyses, the BDI-II difference score served as the outcome variable. The interaction was not significant for any of the variables. The only significant effects were related to symptom decline across time. Having read fewer self-help books in the past ( $b = -2.72$ ,  $SE = 1.23$ ,  $t = -2.22$ ,  $p = .0031$ ,  $LLCI = -5.18$ ,  $ULCI = -0.26$ ) and having a higher baseline motivation ( $b = 3.85$ ,  $SE = 1.39$ ,  $t = 2.77$ ,  $p = .008$ ,  $LLCI = 1.07$ ,  $ULCI = 6.63$ ) were related to better outcomes.

### Subjective appraisal (ZUF-8 and additional questions)

Results of the ZUF-8 (Table 3) and other qualitative questions (Table 4) were compared with data obtained

from a prior study on patients with OCD in an English-speaking sample (Moritz et al., 2018). Relative to the evaluation of myMCT in this previous study, ratings were worse (i.e., the difference was 10% or more) related to quality, whether the participants received the intervention they expected to receive, and participants' happiness with the extent of help received. Moreover, only a few participants were able to use the manual on a regular basis. Most participants, more than in the prior study, endorsed that the manual would make more sense if it were used together with psychotherapy.

Better ratings were obtained on the questions concerning whether the participants would recommend the manual to a friend with similar symptoms and whether they would use the manual again. Fewer individuals than in the prior study had to force themselves to use the manual (see Tables 3 and 4).

Ratings were comparable for appropriateness for self-help, helpfulness, comprehensibility, satisfaction with the manual, and length of the manual. Ratings were similar for the question as to whether the participants had received support from others.

### Noncompletion

Noncompleters (i.e., participants who did not engage in the post assessment) did not differ from completers on any of the pathological or demographic background characteristics apart from lower motivation,  $t(158) = 2.37, p = .019$ .

### Reliability

For the total sample, internal consistency was good to excellent (BDI-II:  $\alpha = .84$ , Y-BOCS:  $\alpha = .78$ ; OCI-R:  $\alpha = .89$ ) and the test-retest reliability was satisfactory (BDI-II:  $r = .70, p < .001$ ; Y-BOCS:  $r = .68, p = .004$ ; OCI-R:  $r = .75, p < .001$ ). For the wait-list control group, test-retest reliability was slightly better (BDI-II:  $r = .75, p < .001$ , Y-BOCS:  $r = .88, p = .006$ , OCI-R:  $r = .80, p < .001$ ).

## Discussion

The present study aimed to assess the efficacy of a trans-therapeutic (integrative/eclectic) manual for an Arabic-speaking population with OCD and/or depression. Unlike prior trials on the myMCT, we did not restrict the inclusion to participants with OCD only because depression and OCD share a number of meta-cognitive beliefs and dysfunctional coping

mechanisms (see Introduction section). Moreover, we suspected that many individuals might not know their exact diagnosis in view of the poor awareness of mental illness and its treatment in Arab countries (Al-Darmaki et al., 2016; Al-Krenawi, 2005; Eapen & Ghubash, 2004; Karam et al., 2006). In the invitation, therefore, we described the core symptoms of OCD and depression to allow the participation of people who were unsure about the proper label for their problems.

We evaluated a self-help manual via an online study because the mental health infrastructure in most Arabic-speaking countries is poor (Okasha et al., 2012; World Health Organization, 2014) and, even if "Western" mental health treatment is available, other traditional or religious help is often sought, particularly due to stigma and knowledge gaps (see the Introduction). Although face-to-face therapy is usually recommended for standard treatment, several guidelines advocate media-delivered approaches or guided self-help if standard therapist-guided treatment is not available (for OCD, see, e.g., Hohagen, Wahl-Kordon, Lotz-Rambaldi, & Mucbe-Borowski, 2015; NCCMH, 2006) in view of promising findings related to this new line of treatment delivery.

As hypothesized, patients who had at least started reading the myMCT manual benefited from the intervention at a medium-to-large (Y-BOCS) or large (BDI-II; OCI-R) effect size relative to controls. Results are compromised by a number of factors, however, that raise strong questions about the feasibility of bibliotherapy in this language population. The completion rate (36%) was far lower than in prior trials of myMCT although the interval was the same. Moreover, this was the first unguided study on myMCT in which a financial incentive was provided in addition to another treatment manual at the end of the post assessment. Even worse, only 29% of those allocated to the intervention group read the manual. However, the retention rate was comparable for the two conditions, which tentatively speaks against dissatisfaction with the manual as the cause of the poor response rate (but does not prove it). If dissatisfaction were the cause, loss to post should have been largest for the myMCT condition.

Almost 90% of the individuals who read the manual reported they would use it again and would recommend it to a friend. Yet ratings were lower in comparison to a prior study (Moritz et al., 2018) for quality and happiness with the extent of the help received. Importantly, few patients used the manual

on a regular basis, and most patients endorsed that the approach would make more sense if combined with psychotherapy. At least two thirds endorsed that the manual is good for self-help, helpful, comprehensible, and satisfactory. Few received support from other people.

As an interim conclusion, the approach seems to be effective, but the medium is suboptimal. We have recently developed an online tool for myMCT; the portal consists of different modules with many exercises and allows patients to access information on a secure website. It needs to be tested whether such a medium would be more successful in terms of dissemination and adherence despite some disadvantages mentioned in the Introduction. Prior research showed that online intervention is feasible and successful in an Arab population when used in a guided fashion (Knaevelsrud et al., 2015). At the moment, we can only speculate about the reason for the low adherence. For example, technical problems (not having a pdf reader despite instructions on how to download one) could have been a contributing factor. Reservations against psychological treatment because of fear of stigma or religious affiliation may have also played a role (see Introduction). We do not think that the contents were problematic because the few participants who had begun to read the manual showed clear improvements.

Subsequent analyses showed no moderating effects of any of the variables, including diagnostic status (OCD vs non-OCD). A lower number of self-help books read previously and higher motivation predicted a larger decline on the BDI-II, irrespective of condition.

The study suffers from a number of limitations, some of which have already been acknowledged. Retention rate and treatment adherence were extremely poor relative to studies on myMCT in Western populations (Hauschildt et al., 2016; Moritz et al., 2010, 2018) but also relative to a Russian population (Moritz, Stepulovs et al., 2016), to whom much of its content was probably unknown to a similar degree. The low retention rate is especially problematic for the intention-to-treat analyses. Because of the low retention rate and treatment adherence, we did not conduct a follow-up, which would have likely yielded unreliable findings.

Although the approach seems to have been effective for the few who used or began to use it, we think a different medium should be attempted, such as a smartphone app or an online tool. In emerging and

developing countries, 37% of the population were in possession of a mobile device in 2015 compared to 68% in developed countries (Poushter, 2016). For Internet usage, the figures are higher (54% versus 87%), and the numbers have likely risen since then.

## Conclusion

Our results indicate that, in its present form, the myMCT manual represents an effective but not very pragmatic or feasible treatment program for obsessions, compulsions, and depression in an Arabic-speaking population. Other forms of treatment delivery may improve the rate of use of the intervention.

## Authors' Note

Steffen Moritz and Schaimaa Irshaid are joint first authors; Marit Hauschildt and Franziska Miegel are joint senior authors.

## Author contributions

All authors contributed to the study concept and design. Steffen Moritz and Marit Hauschildt wrote the original self-help manual *My Metacognitive Training*. Schaimaa Irshaid translated the manual and made cultural adaptations. She was also in charge of data collection and correspondence with participants. All authors contributed to data interpretation. Steffen Moritz drafted the manuscript, and Marit Hauschildt and Schaimaa Irshaid corrected the different versions. All authors approved the final manuscript for submission.

## Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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**Steffen Moritz** is professor of psychology and head of the neuropsychology unit at the department of psychiatry and psychotherapy at University Medical Center Hamburg (Germany). He is the coauthor with Marit Hauschildt of *myMCT*, the intervention examined in this article. He has developed a number of metacognitive interventions that can be downloaded at no cost via [www.uke.de/mct](http://www.uke.de/mct). His main research interests are cognitive biases in psychosis, OCD, and depression.

**Schaimaa Irshaid** is a medical student at University Medical Center Hamburg and is in her final year before receiving her medical degree. This article is part of her dissertation, which is being carried out under the supervision of Dr. Steffen Moritz. She has translated *myMCT* into Arabic.

**Annabel Beiner** is a master’s student in psychology. She participated in this study during her internship with the department of psychiatry and psychotherapy at the University Medical Center Hamburg.

**Marit Hauschildt** is a clinical psychologist working in both research and the clinical field. She has recently completed a post-doctoral residency at the School of Psychological Sciences at Tel Aviv University (Israel). She is the coauthor with Steffen Moritz of *myMCT*. Her main research interests are post-traumatic stress disorder and OCD.

**Franziska Miegel** is a PhD student under the supervision of Dr. Steffen Moritz. She works in the department of psychiatry and psychotherapy at University Medical Center Hamburg. She is currently conducting research on interventions for OCD. She was involved in the development and evaluation of the Metacognitive Training for OCD (MCT-OCD) and is currently conducting a study on using virtual reality exposure therapy (VR) to treat patients with checking and washing compulsions.

## 2. Darstellung der Publikation

### 2.1 Einleitung

Das psychotherapeutische Angebot in arabischen Ländern deckt nicht ausreichend den Bedarf der dort lebenden Bevölkerung. Dies betrifft sowohl Länder, die in der Klassifikation der Weltbank der hohen Einkommensgruppe angehören wie Katar (World Bank Income Groups, 2016), als auch Länder mit mittlerem bis niedrigem Bruttonationaleinkommen (BNE) pro Kopf (World Health Organization, 2017). In einigen arabischen Ländern, wie dem Irak, drängte die dort herrschende politisch instabile Konfliktsituation PsychologInnen und PsychiaterInnen zur Auswanderung oder hinderte sie daran, ihren Beruf aus Angst um das eigene Leben, auszuüben. Dies verschärfte die ohnehin bestehende psychotherapeutische Notsituation dieser Länder. Außerdem erhöhte die von Teilen der arabischen Bevölkerung täglich erlebte Gewalt in Folge kriegerischer Auseinandersetzungen die Nachfrage an psychotherapeutischen Interventionen (Knaevelsrud et al, 2015). Abgesehen vom desolaten Therapieangebot im arabischen Sprachraum sind andere Faktoren zu berücksichtigen, die ein Hindernis der Nutzung psychotherapeutischer Angebote darstellen, wie die mangelnde kulturelle Akzeptanz von (westlich geprägten) Interventionen (Gearing et al. 2013). Ferner wurde eine ungenügende Krankheitseinsicht, eigene finanzielle Probleme und soziale Scham als Gründe für eine insuffiziente Nutzung psychotherapeutischer Angebote in arabischen Ländern beklagt (Eapen & Ghubash, 2004; Karam et al., 2006). Um diesem besonderen Bedarf an psychischer Therapie im arabischen Sprachraum zu decken, bieten Internet-basierende Interventionen einen alternativen, leichter zugänglichen Therapieansatz für PatientInnen an (Knaevelsrud et al, 2015). Metaanalysen konnten eine ähnliche Wirksamkeit von Internet-basierenden Therapien im Vergleich zu traditionellen Therapieverfahren nachweisen (Andersson et al., 2014). Somit kann diese Therapieform die Stellung einer zweiten, kostengünstigen Stütze der Psychotherapie in arabischen Ländern einnehmen und die knappen psychischen Gesundheitsdienste zum Teil entlasten. Der Einsatz dieser anonym ausgerichteten Online-Interventionen bietet sich an, um dem Wunsch der PatientInnen auf Vermeidung einer Stigmatisierung gerecht zu werden (Luquiens et al., 2016). *My Metacognitive Training – Manual (myMCT)* zählt als solche Intervention.

Die vorliegende Studie „Acceptance and efficacy of a metacognitive self-help intervention in an Arabic-speaking mixed patient sample with depression and/or obsessive-compulsive disorder.“ erhebt die Effektivität sowie Akzeptanz der Selbsthilfeintervention *myMCT* im arabischen Sprachraum. Beim *myMCT* handelt es sich um eine westlich geprägte, gut untersuchte Form der Bibliothherapie, die vor allem bei Zwangsstörungen Verwendung findet (Moritz & Hauschildt, 2011, 2016). Das

randomisiert-kontrollierte Design dieser Studie involvierte eine Interventions- und eine Wartekontrollgruppe. Die umfangreiche Übersetzung des *myMCT*-Manuals erstreckt sich auf viele, zumeist westliche Sprachen; zudem erfolgte eine eingehende Untersuchung dieser Selbsthilfeintervention in westlich bzw. christlich geprägten Ländern, wie z.B. Deutschland, Großbritannien und Russland. Dabei wies *myMCT* in diesen Studien in Bezug auf Zwangssymptomatik signifikant positive Ergebnisse auf im Vergleich zu Kontrollgruppen (Moritz et al., 2018). Über die Seite [www.uke.de/mymct](http://www.uke.de/mymct) besteht die Möglichkeit, das Manual *myMCT* in unterschiedlichen Sprachen kostenfrei im PDF-Format mit den zugehörigen Arbeitsblättern herunterzuladen. Trotz guter Studienlage zu *myMCT* (Moritz et al., 2018) bestand eine Notwendigkeit zur Prüfung des *myMCT-Manuals* im arabischen Sprachraum, da laut Gearing et al. (2013) bei der Übertragung effektiver evidenzbasierter psychosozialer Interventionen in eine andere Kultur die Replikation positiver Befunde aufgrund kultureller Unterschiede und Überzeugungen scheitern kann.

Eine kulturelle Adaptation von psychotherapeutischen Interventionen hat in den letzten Jahren an Akzeptanz zugenommen. Auch in westlichen Ländern empfiehlt es sich, eine kulturelle Adaptation bei der Behandlung von PatientInnen mit kulturellen Abweichungen zur Mehrheitsgesellschaft vorzunehmen (Nygren et al., 2019). So stellen PatientInnen mit arabischem Migrationshintergrund, bei denen eine Anpassung an den westlichen Lebensstil nicht stattgefunden hat, ihre TherapeutInnen vor Herausforderungen durch ein oft fundamental anderes kulturelles Verständnis (Sayed, 2003). In einer Studie zu einer kulturell adaptierten, Internet-basierenden, kognitiven Verhaltenstherapie (internet-based cognitive behavior therapy (ICBT)) für Depression bei kurdischen ImmigrantInnen in Schweden, bei denen eine unzureichende Nutzung der psychischen Gesundheitsdienste beobachtet wurde, konnte eine signifikante Verbesserung der Symptome durch die kulturell adaptierte Therapie festgesellt werden (Nygren et al., 2019). Eine kulturelle Adaptation zur Übertragung von westlichen Therapien und Bewertungssystemen in den arabischen Sprachraum wird auch in anderen medizinischen Fachdisziplinen, wie z.B. in der Orthopädie, durchgeführt, um deren Effektivität für die arabischen Bevölkerung zu steigern (Algarni et al., 2017).

Die arabische Übersetzung des *myMCT*-Manuals führte ich zu Beginn meiner Promotion durch. An einigen Stellen des Selbsthilfebuches hielt ich eine kulturelle Adaptation in Absprache mit dem Autor, Prof. Dr. Steffen Moritz, für notwendig. Da sich die Mehrheit der Bevölkerung Nordafrikas und des Nahen Ostens des Islams bekennt und die arabische Welt sich geographisch auf diese Region mehrheitlich erstreckt (Hackett et al., 2012; Hammoura & Ülger, 2018), entschieden wir uns, Teile, die eventuell in Widerspruch mit dem Islam bzw. seiner vorherrschenden Auslegung stehen, herauszunehmen, um drop-out bzw. Nonadhärenz zu vermeiden. So wurde

deutlich sensitiver auf blasphemische Zwangsgedanken eingegangen. Deutsche Namen habe ich in arabische umgewandelt. Zusätzlich habe ich deutsche Redewendungen sowie Sprichwörter durch arabische Redewendungen ersetzt. Diese waren im Sinn analog und der Zielgruppe unserer Therapie vertrauter. Beispiele, die Alkohol als Genussmittel enthielten, wurden durch Kaffee ersetzt. Auf diese Weise wollten wir eine durch kulturelle Unterschiede ausgelöste mögliche Ablehnung arabischer PatientInnen gegenüber unserer Therapie vermeiden sowie religiöse Neutralität vermitteln. Wie seinem Titel zu entnehmen ist, basiert das Manual *myMCT* auf metakognitiven Techniken, enthält aber auch andere effiziente Übungen anderer „Therapieschulen“ und verleiht PatientInnen ein besseres Verständnis über ihre metakognitiven Defizite und Verzerrungen. Das Skript umfasst Übungen zum Umgang mit Denkverzerrungen (z.B. ein überhöhtes Verantwortungsgefühl oder die Überschätzung der Wahrscheinlichkeit von Gefahr). Da Denkverzerrungen und dysfunktionale Bewältigungsstrategien von ZwangspatientInnen – wie das Unterdrücken von Gedanken – auch bei DepressionspatientInnen vorkommen (Hezel & McNally, 2016; Joormann & Stanton, 2016; Moritz et al., 2016), eignen sich ausgewählte Kapitel vom *myMCT* auch bei PatientInnen mit Depression. Die Buchabschnitte, von denen PatientInnen mit Depression nach unseren Erfahrungen profitieren könnten, haben wir entsprechend sichtbar markiert und in der Einleitung des Selbsthilfebuches darauf hingewiesen. Im Skript wird jeweils eine Denkverzerrung pro Kapitel bearbeitet (insgesamt 14 Kapitel). So wird die Denkverzerrung zu Beginn eines Kapitels definiert und anhand von Patienten-nahen Alltagsbeispielen erläutert. Im Anschluss werden Übungen vorgestellt, die eine Erleichterung des Umgangs mit der beschriebenen Denkverzerrung sowie die Verbesserung der Symptomatik erzielen. Die Arbeitsblätter dienen als unterstützende Ergänzung für die Bearbeitung der Übungen. Insgesamt umfasst das *myMCT* 26 Arbeitsblätter. Eine gesicherte Diagnose für Zwangsstörung stellte keine Voraussetzung für die Teilnahme an meiner Studie dar, da einige PatientInnen die genaue Bezeichnung ihrer Erkrankung nicht genau zuordnen können und die Symptome häufig als somatisch geschildert werden (Al-Darmaki et al., 2016; Al-Krenawi, 2005; Eapen & Ghubash, 2004; Karam et al., 2006). Auch wurden ProbandInnen mit Depression mit oder ohne Zwangsstörung rekrutiert, da, wie geschildert, *myMCT* Denkverzerrungen adressiert, die sowohl PatientInnen mit Zwangsstörungen als auch mit Depression teilen.

## **2.2 Methoden**

Die vorliegende Studie wählte ein randomisiert-kontrolliertes Studiendesign, welches eine Interventions- (*myMCT*-Gruppe) und Wartekontrollgruppe umschloss. ProbandInnen wurden von Oktober 2017 bis März 2018 für die Teilnahme rekrutiert.



Die Studie setzt sich aus einer Prä- und einer Post-Erhebung zu zwei Messzeitpunkten zusammen. Die Erstellung sowie Datenerhebung der Prä- sowie Post-Erhebung erfolgte über das online-Portal „Unipark“ und wurde von mir auf Arabisch verfasst.

Zunächst luden wir ProbandInnen, die Symptome einer Depression und/ oder Zwangsstörung aufwiesen, über arabischsprachige Depressions- und Zwangsstörungsforen des sozialen Netzwerkes Facebook, zur Teilnahme an unserer Studie ein; dieser leisteten nur wenige Forenmitglieder Folge. Dies veranlasste uns, eine Google AdWords Anzeige zu schalten, über welche schließlich die Mehrzahl der TeilnehmerInnen rekrutiert wurde. Die Stichprobe schließt 160 TeilnehmerInnen ein, die die Prä-Erhebung erfolgreich beendeten. Anschließend erfolgte eine Randomisierung in eine Wartekontrollgruppe und die *myMCT*-Gruppe. Der *myMCT*-Gruppe wurde innerhalb der ersten 24 Stunden nach Beendigung der Prä-Erhebung die arabische Version des *myMCT*-Manuals mit den dazugehörigen Arbeitsblätter im PDF-Format auf die hinterlassene E-Mail-Adresse zugesandt mit dem Hinweis, diesen innerhalb der nächsten sechs Wochen zu bearbeiten. Die Wartekontrollgruppe wurde dagegen darauf hingewiesen, dass sie Zugriff auf unsere Therapie über einen passenden Link erhält, sobald sie die Post-Erhebung beendete. Nach Ablauf der sechs Wochen luden wir beide Gruppen ein, an der Post-Befragung teilzunehmen. Eine von mir ins Arabische übersetzte Anleitung zur progressiven Muskelrelaxation nach Jacobsen in PDF-Format, inklusive eines Amazon Gutscheins im Wert von 15 Euro, dienten als Aufwandsentschädigung beider Gruppen *ex aequo*. Um die Symptomdynamik der ProbandInnen im Verlauf bestimmen zu können, wurde zuerst eine Prä-Erhebung und im Abstand von sechs Wochen eine Post-Erhebung eingesetzt.

Der erste Teil der Prä-Erhebung setzte sich aus soziodemographischen Fragen zu Herkunftsland, Geschlecht, Alter, Familienstand, eigener Kinder, Bildungsgrad, Arbeitsstatus (Vollzeit/Teilzeit/arbeitslos), Ausmaß der Internetnutzung, dem jährlichen Lesepensum und der Veränderungsmotivation zusammen. Im zweiten Teil der Prä-Erhebung wurden krankheitsbezogene Informationen erfasst. Diese beinhalteten Vorerkrankungen, aktuelle psychische Erkrankungen, körperliche und neurologische Erkrankungen, Zeitpunkte der Erstdiagnosen und erhaltene medikamentöse oder psychotherapeutische Therapien sowie Suizidalität. Dabei konnten psychische Erkrankungen als Mehrfachantwortmöglichkeiten angekreuzt werden. Aufgelistet wurden: Bipolare Störung/Manie, Schizophrenie, Depression, Zwangsstörung, generalisierte Angststörung, spezifische Phobie, soziale Phobie, Agoraphobie/Klaustrophobie/Panikstörung, Suchterkrankung(en), Essstörung und Persönlichkeitsstörung. Die Erhebung dieser Daten diente als fester Bestandteil der Teilnahmebedingungen unserer Studie. Ausschlusskriterien umfassten ein

Teilnahmealter unter 18 oder über 65 Jahren, bipolare Störung oder Schizophrenie und starke bzw. akute Suizidalität. Dabei wiesen wir PatientInnen mit einer starken bzw. akuten Suizidalität auf die Notwendigkeit eines sofortigen Aufsuchens professioneller Hilfe hin. Die Datenerhebung erfolgte zum Zwecke der Vergleichbarkeit beider Gruppen sowie zur Eruierung möglicher Korrelationen zwischen bestimmten soziodemographischen Angaben und dem vorzeitigen Beenden der Studie. ProbandInnen, die sich bereits einer Therapie unterzogen, wurden nicht von der Teilnahme ausgeschlossen. ProbandInnen, die die Antwortmöglichkeit „Zwangsstörung“ ankreuzten, wurde zusätzlich die *Yale-Brown Obsessive Compulsive Scale (Y-BOCS)* (Baer, Brown-Beasley, Sorce, & Henriques, 1993; Goodman, Price, Rasmussen, Mazure, Delgado et al., 1989; Goodman, Price, Rasmussen, Mazure, Fleischmann et al., 1989) vorgegeben. Hierbei handelt es sich um ein Tool zur Erfassung der Intensität von Zwangsgedanken und Zwangshandlungen in den letzten sieben Tagen. In den gängigen Publikationsplattformen sind keine Studien zur Validitäts- und Reliabilitätssicherung der Y-BOCS im arabischen Sprachraum publiziert worden. Im Gegensatz dazu wurde die *Arabic Obsessive - Compulsive Scale (AOCS)* in Bezug auf Zwangssymptomatik in vielen arabischen Ländern sowie in den USA geprüft und konnte mit einer guten Validität überzeugen. Die AOCS findet als zuverlässiges Instrumentarium in vielen an arabischen Stichproben gerichtete Studien zu Zwangsstörungen Anwendung (Abdel-Khalek, 2018; Abdel-Khalek & Lester 2002). Dennoch zogen wir die Y-BOCS in der vorliegenden Studie heran, um einen reproduzierbaren Vergleich zu vorangegangenen Studien über *myMCT* herzustellen, da diese die Y-BOCS zur Symptomerfassung nutzen. Jene ProbandInnen hingegen, die das Feld „Zwangsstörung“ nicht ankreuzten, wurden direkt zum *Beck Depression Inventory II (BDI-II)* (Beck, Steer, & Brown, 1996) zur Erfassung der Häufigkeit und Intensität depressiver Symptomatik mit 21 Items weitergeleitet. Aus mehreren in arabischen Ländern durchgeführte Studien geht hervor, dass der BDI-II eine zuverlässige Reliabilität und Validität besitzt und im arabischen Kontext gut durchführbar ist (Al-Musawi, 2001; Al-Turkait & Ohaeri, 2010; Alansari, 2006). Abschließend bearbeiteten alle ProbandInnen den *Obsessive-Compulsive Inventory-Revised (OCI-R)* (Foa et al., 2002), ein Maß zur Schätzung des Schweregrads der Zwangssymptome. Der OCI-R wurde in einer Studie an einer arabischen Stichprobe des südlichen Saudi-Arabiens validiert (Alsubaie et al., 2019). Die durchschnittliche Bearbeitungszeit der gesamten Prä-Erhebung betrug ca. 23 Minuten.

Die Post-Erhebung ähnelte im Aufbau der Prä-Erhebung. Sie umfasste neben der Y-BOCS, die nur ProbandInnen mit einer selbstberichteten Zwangsstörung bearbeiteten, den BDI-II, das OCI-R sowie zusätzlich einen Fragebogen zur Patientenzufriedenheit (*ZUF-8*). Der ZUF-8 (Schmidt & Wittman, 2008) wurde aus dem „*Client Satisfaction Questionnaire*“ (CSQ) (Attkisson & Zwick, 1982) entwickelt und für die Zufriedenheit

mit einer bibliothераpeutischen Intervention adaptiert. Dieser Selbstauskunftsbogen wurde ProbandInnen aus der *myMCT*-Gruppe vorgegeben, die angaben, das *myMCT*-Manual gelesen bzw. angefangen zu lesen zu haben. Im Gegensatz zur Prä-Erhebung stellt die Post-Erhebung keine soziodemografischen Fragen. Um die Post-Erhebungen den zugehörigen Prä-Erhebungen zuzuordnen, baten wir die ProbandInnen zu Beginn der Post-Erhebung, ihre E-Mail-Adresse und ihren persönlichen Code, die sie in der Prä-Erhebung hinterlassen haben, anzugeben. Nach der Bearbeitung der BDI-II, OCI-R und Y-BOCS wurde die Gruppenzuteilung erfragt. ProbandInnen aus der Wartekontrollgruppe wurden direkt zur abschließenden Symptom-Befragung weitergeleitet. Die ProbandInnen aus der *myMCT*-Gruppe erhielten zunächst Fragen zur Häufigkeit der Nutzung des *myMCT*-Manuals oder der Anzahl der gelesenen Kapitel. Bei nicht erfolgter Nutzung wurden die ProbandInnen wie die ProbandInnen aus der Wartekontrollgruppe zuvor zur abschließenden Symptombefragung weitergeleitet. Bei Angabe einer Nutzung des *myMCT*-Manuals wurden ProbandInnen zum ZUF-8 weitergeleitet. Die durchschnittliche Bearbeitungszeit für die Post-Erhebung betrug ca. 33 Minuten.

Alle Fragebögen, dessen sich unsere Studie bediente, wurden durch mich für die Studie neu aus dem Deutschen ins Arabische übersetzt. Dadurch wurde eine mögliche inhaltliche Diskrepanz zu vorgefertigten arabischen Versionen vermieden und ein repräsentativer Vergleich zu anderen *myMCT*-Studien, die sich an dieselben Fragebögen anlehnten, gewährleistet. Die Probandendaten (Teilnahmedatum an der Prä-Erhebung, E-Mail-Adresse, individueller Probanden-Code, Gruppenzuteilung, Datum der Einladung zur Teilnahme an der Post-Erhebung sowie ggf. Datum aller Reminder zur Teilnahme an der Post-Erhebung) führte ich in einer Excel-Tabelle. Da wir stets auf eine anonyme Datenerhebung bedacht waren, wiesen wir die ProbandInnen vor der Teilnahmebestätigung darauf hin, eine E-Mail-Adresse gegebenenfalls neu zu erstellen, die keine auf die Person zurückzuführende Informationen beinhaltet. Die ProbandInnen erhielten die Möglichkeit, sich bei Fragen oder Anmerkungen mit uns per E-Mail in Verbindung zu setzen, welche ich aufgrund meiner bilingualen Arabisch-Deutsch-Kenntnisse beantwortete. Auch übersetzte ich die Kommentare, die sie am Ende der Erhebung hinterließen, sowie die Antworten, die in Freitextformat eingegeben wurden.

Die Datenanalyse wurde mittels IBM SPSS Statistics 24 durchgeführt. Dabei wurden sowohl ANOVAs durchgeführt für Intention-to-treat-Analysen (ITT) sowie Per-protocol-Analysen (PP). Die ITT schloss alle 160 Teilnehmer ein, während PP nur jene Probanden berücksichtigte, die die Post-Erhebung abgeschlossen und das *myMCT*-Manual zumindest angefangen zu lesen hatten und zogen diese zum Vergleich mit der Wartekontrollgruppe heran. Um mögliche direkte und indirekte soziodemografische

oder psychopathologische Subgruppen-Differenzen zu explorieren, wurden Moderatoranalysen mithilfe des SPSS-Makros PROCESS durchgeführt (Hayes, 2013). Dabei wurden Moderatoren für die Verbesserung der *depressiven* Symptomatik (Differenzwerte BDI-II) ermittelt.

## 2.3 Ergebnisse

Insgesamt nahmen 160 Personen an der vorliegenden Studie teil. Der Link zur Studie erhielt 506 Klicks, wobei mehrere Besuche durch dieselbe Person nicht auszuschließen sind. Insgesamt 276 SeitenbesucherInnen erreichten die Seite mit der Einverständniserklärung, elf SeitenbesucherInnen stimmten den Teilnahmebedingungen nicht zu. Die Wartekontrollgruppe umfasste 76 ProbandInnen, die *myMCT*-Gruppe hingegen 84 ProbandInnen. Der Tabelle 1 ist kein signifikanter Unterschied bezüglich soziodemografischer und psychopathologischer Daten zwischen Wartekontrollgruppe und Interventionsgruppe zu entnehmen. Somit ist ein Vergleich beider Gruppen hinsichtlich des Therapieerfolges möglich.

Tabelle 1. Demografische und psychopathologische Grundmerkmale der Stichprobe

	Kontrolle (n = 76)	myMCT (n = 84)	
Geschlecht (weiblich/männlich)	34/42	36/48	$\chi^2(1) = 0.06, p = .811$
Alter in Jahren	28.97 (8.69)	29.27 (7.55)	$t(158) = 0.23, p = .815$
Mindestens 12 Jahre Schule (ja/ nein/keine Angabe)	62/7/7	68/9/7	$\chi^2(1) = 0.13, p = .938$
Medikamente (ja/nein)	15/61	18/66	$\chi^2(1) = 0.07, p = .792$
Zwangsstörung (ja/nein)	30/46	38/46	$\chi^2(1) = 0.54, p = .461$
Major Depression (ja/nein)	52/24	55/29	$\chi^2(1) = 0.16, p = .693$
Aktuelle Psychotherapie (ja/nein)	5/71	4/80	$\chi^2(1) = 0.25, p = .618$

Trotz mehrfacher Erinnerung per E-Mail an die Teilnahme an der Post-Erhebung (bis zu drei Erinnerungen in einem Abstand von je sieben Tagen) beendeten nur 36% der TeilnehmerInnen die Befragung. Die Wiedererreichungsquote der Wartekontrollgruppe betrug 35,5%, die der *myMCT*-Gruppe hingegen 36,9% (kein signifikanter Unterschied) ProbandInnen, die die Studie abbrachen oder die Post-Erhebung nicht beendeten, wiesen – bis auf eine niedrigere Motivation zur Verbesserung ( $p = 0,019$ ) – im Vergleich zur Probandengruppe, die die Post-Erhebung beendete, keine signifikanten soziodemographischen oder psychopathologischen Unterschiede auf. Von den insgesamt 31 ProbandInnen der *myMCT*-Gruppe, die die Post-Erhebung beendeten, gaben nur 29% ( $n = 9$ ) an, das *myMCT*-Manual wenigstens zu lesen angefangen zu haben.

Die ITT-Analyse ergab keine signifikante Verbesserung in der Symptomreduktion bei ProbandInnen, die das *myMCT*-Manual erhielten (BDI-II: 0.12,  $p = 0.905$ ; Y-BOCS:  $B = 2.82$ ,  $p = 0.394$ ; OCI-R: 0.09,  $p = 0.336$ ). Dabei schwächte die niedrige Wiedererreichungsquote die Aussagekraft dieser Analysen. Bei gesonderter Berücksichtigung der Ergebnisse jener ProbandInnen, die die Post-Erhebung beendeten, ergibt sich eine signifikante Symptomreduktion auf Y-BOCS und BDI-II für die *myMCT* gegenüber der Wartekontrollgruppe. Hierbei verbesserte sich der BDI-II-Score in der Wartekontrollgruppe über den Wartezeitraum von 32.82 auf 28.70. In der *myMCT*-Gruppe verbesserte sich dieser von 32.81 auf 23.58 und betrug 18.11 in der PP-Analyse der Post-Erhebung ( $n = 9$ ),  $p = 0.011$ . Der Y-BOCS-Score fiel in der Wartekontrollgruppe von 22.30 auf 18.43, in der *myMCT*-Gruppe von 24.35 auf 18.22 ( $p = 0.531$ ) und betrug 12.20 in der PP-Analyse der Post-Erhebung ( $p = 0.309$ ). Während der OCI-R-Score in der Wartekontrollgruppe von 32.68 auf 33.96 anstieg, sank dieser in der *myMCT*-Gruppe von 32.57 auf 28.10 ( $p = 0.197$ ) und betrug 18.67 in der PP-Analyse der Post-Erhebung (Unterschied  $p = 0.001$ ). Anhand der aufgeführten Ergebnisse zeigte sich durch die *myMCT*-Intervention eine signifikante Symptomreduktion in den Protokollanalysen des BDI-II ( $p = 0.011$ ) sowie OCI-R ( $p = 0.001$ ); die Y-BOCS ( $p = 0.309$ ) zeigte keinen signifikanten Gruppenunterschied über die Zeit. Über die Moderatoranalyse mithilfe des SPSS-Makros PROCESS von Hayes wurde eine signifikante Interaktion zwischen sowohl der vorherigen Anwendung von Selbsthilfebüchern ( $p = 0.0031$ ), als auch einer höheren Motivation ( $p = 0.008$ ) und dem Ansprechen der Symptome auf unsere Intervention identifiziert. Für den ZUF-8 zeigte sich, dass acht von neun ProbandInnen bestätigten, dieses erneut lesen zu wollen, obwohl nur ein Drittel dieser Subgruppe angab, die erwartete Therapie durch das *myMCT*-Manual erhalten zu haben. Zudem würden acht von neun ProbandInnen das *myMCT*-Manual an einen Freund/Freundin mit ähnlicher Symptomatik weiterempfehlen. Gleichzeitig empfand ungefähr die Hälfte dieser ProbandInnen das Selbsthilfemanual als hilfreich für den Umgang mit den Symptomen und war insgesamt

mit dem *myMCT*-Manual zufrieden. Acht von neun ProbandInnen erachteten eine Anwendung des *myMCT*-Manuals in Kombination mit einer Psychotherapie als sinnvoller und effektiver.

## 2.4 Diskussion

Ziel der vorliegenden Studie war es, die Wirksamkeit sowie Akzeptanz der Internet-basierenden, in christlich geprägten Ländern gut untersuchten Selbsthilfeintervention *myMCT* im arabischen Sprachraum zu ermitteln. Da das psychotherapeutische Angebot in arabischen Ländern nicht die Nachfrage der dort lebenden Bevölkerung ausreichend deckt (World Health Organization, 2017), bedarf es alternativen Behandlungsformen, die diese Gesundheitssysteme entlasten können, um den Zugang der PatientInnen zu Hilfen in Form von *e-mental health services* zu verbessern (Knaevelsrud et al., 2015). Obwohl Metaanalysen eine ähnliche Wirksamkeit von Internet-basierenden Therapien im Vergleich zu traditionellen Therapieverfahren nachweisen konnten (Andersson et al., 2014), können diese bei der Übertragung in eine andere Kultur aufgrund kultureller Unterschiede und Überzeugungen an Effektivität einbüßen (Gearing et al. 2013). Für die vorliegende Studie lässt sich zusammenfassend sagen, dass bei jenen ProbandInnen, die das *myMCT*-Manual zumindest angelesen haben, die PP-Analyse des BDI-II sowie OCI-R eine signifikante Wirksamkeit dieser Intervention nachweisen konnte. Die niedrige Wiedererreichungsquote führte zu einer geringen Sensitivität der ITT-Analyse, die keine signifikante Symptomreduktion in der *myMCT*-Gruppe gegenüber der Wartekontrollgruppe erbringen konnte. Jedoch ist zu erwähnen, dass sich die Symptomatik zwischen der Bearbeitung der Prä- und der Post-Erhebung in beiden Gruppen sowohl in der ITT-Analyse als auch in der PP-Analyse signifikant verbesserte.

Nicht geklärt werden konnte in der vorliegenden Studie, ob eine Bibliothherapie wie das *myMCT*-Manual tatsächlich eine akzeptierte Intervention im arabischen Sprachraum darstellen kann. Dieser Vorbehalt ist durch die schlechte Wiedererreichungsquote sowie die niedrige Inanspruchnahme der Therapie (29%) begründet. Eine durchschnittliche Drop-out Rate von 26% zeigt eine gute Akzeptanz einer Intervention an (van Ballegooijen et al., 2014). Eine Metaanalyse zu kognitiven Verhaltenstherapien konnte ähnliche Werte bestätigen (Fernandez et al., 2015). Die Drop-out Rate der vorliegenden Studie lag mit 64% deutlich über dieser Schwelle.

Studien sowie Metaanalysen, die internet-basierende kognitive Verhaltenstherapien im arabischen Sprachraum untersuchten, belegten die Umsetzbarkeit dieser Therapieformen westlichen Ursprungs (Kayrouz et al., 2018; Knaevelsrud et al., 2015).

In einer vergleichbaren Studie der Freien Universität in Berlin von Knaevelsrud et al. (2015), die arabischsprachige PatientInnen mit posttraumatischer Belastungsstörung mit einem aus dem niederländisch übersetzten Manual über kognitive Verhaltenstherapie untersuchte, war die Drop-out Rate ebenfalls erhöht und betrug 41%. Die Therapie erzielte dabei signifikante Ergebnisse in Hinblick auf die Symptomreduktion in der Interventionsgruppe gegenüber der Wartekontrollgruppe (Knaevelsrud et al., 2015). Studien zur Therapieadhärenz in der arabischen Population kommen zu divergenten Ergebnissen. So ist die Therapieadhärenz in somatischen Behandlungsstudien besser als in psychiatrischen oder psychologischen Therapiestudien (Al-Ramahi, 2015; Talaat, 2015; Yoel et al., 2013).

Des Weiteren gaben nur ein Drittel jener ProbandInnen, die das *myMCT*-Manual zumindest (an)gelesen haben, im ZUF8 zur Patientenzufriedenheit an, die erwartete Therapie durch das *myMCT*-Manual erhalten zu haben. Eine mögliche Begründung dafür ist, dass viele arabische psychiatrische PatientInnen von ihren TherapeutInnen eine vollständige Beseitigung ihres Leidens erwarten (El-Islam, 2005). Auch das *myMCT*-Manual in seiner bibliothераapeutischen Form beruht auf Selbstverantwortung in der Bearbeitung seiner Kapitel und Arbeitsblätter. Diese beschriebene Einstellung arabischer PatientInnen gegenüber ihren TherapeutInnen erschwert die in der kognitiven Verhaltenstherapie übliche eigenständige Durchführung von Übungen (El-Islam, 2005).

Ob nun Vorbehalte gegen psychologische Behandlungen aus Angst vor Stigmatisierung oder Religionszugehörigkeit (Eapen & Ghubash, 2004; Gearning et al. 2013; Karam et al., 2006) oder technische Probleme mit dem PDF-Format des *myMCT*-Manuals Faktoren für die mangelnde Nutzung unserer Therapie sind, konnte durch die vorliegende Studie nicht eindeutig geklärt werden. Jedoch wurde ein enger Zusammenhang zwischen kulturellen Traditionen und Zwangssymptomatik, mehr als bei anderen psychischen Störungen, wissenschaftlich belegt (Hollander et al., 2007). Hieraus ließe sich ableiten, weshalb eine auf evidenzbasierter kognitiver Verhaltenstherapie beruhende Bibliothераapie bei Zwangsstörungen, wie in der vorliegenden Studie beschrieben, im Gegensatz zu z.B. einer posttraumatischen Belastungsstörung (Knaevelsrud et al., 2015), eine niedrigere Teilnahmerate zeige. In Saudi-Arabien sowie Ägypten durchgeführte Studien konnten einen Zusammenhang zwischen kultureller Tradition und dem Ausprägungsgrad einer Vielzahl an Zwangssymptomen nachweisen. So kann die kulturelle Tradition Einfluss auf die Diversität der Symptome und die Haltung der PatientInnen gegenüber ihrer Zwangsstörung ausüben (Mahgoub & Abdel Hafeiz, 1991; Okasha, 1966). Zwangsgedanken werden von vielen Muslimen gewohnheitsmäßig dem „Teufel“ zugeschrieben. Das arabische Wort „Uisuas“ trägt sowohl die Bedeutung „Teufel“ als

auch Zwangsgedanke (El-Islam, 2006). Im Gegensatz zu einer westlichen Stichprobe aus Großbritannien konnte in einer saudi-arabischen Stichprobe ein Zusammenhang zwischen religiösen Praktiken und der Inhalte der Symptome nachgewiesen werden (Mahgoub & Abdel Hafeiz, 1991; Stern & Cobb, 1978). Dieses unzureichende Verständnis psychischer Erkrankungen sowie die mangelnde kulturelle Akzeptanz von (westlich geprägten) Interventionen bildet eine große Barriere für die Nutzung effektiver evidenzbasierter psychosozialer Interventionen (Gearing et al. 2013). Aus den Ergebnissen der PP-Analysen, die eine deutliche Verbesserung der Symptome jener ProbandInnen nachwies, die das *myMCT*-Manual zumindest angelesen haben, leitet sich ab, dass die Inhalte dieses Manuals für die LeserInnen unproblematisch waren.

Ich möchte schlussfolgern, dass das *myMCT*-Manual zwar ein effektives, aber in einer arabischen Population weniger akzeptiertes und weniger gut durchführbares Behandlungsprogramm bei Zwangsstörung und Depression darstellt. Andere Formen der Vermittlung können die Anwendungsrate dieser Intervention eventuell verbessern, was durch weitere Studien zu belegen wäre.



## 2.5 Literaturverzeichnis

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### 3. Zusammenfassung

#### 3.1 Deutsche Zusammenfassung

Obwohl Metaanalysen eine ähnliche Wirksamkeit von Internet-basierenden Therapien wie traditionelle Therapieverfahren nachweisen konnten (Andersson et al., 2014), können diese bei der Übertragung in eine andere Kultur aufgrund kultureller Unterschiede und Überzeugungen versagen (Gearing et al. 2013). Für die vorliegende Studie wurde eine arabischsprachige Population von PatientInnen mit einer Zwangsstörung und/oder Depression untersucht. Zusammenfassend lässt sich feststellen, dass unsere Intervention bei jenen ProbandInnen, die in das *myMCT*-Manual zumindest hineingelesen haben, über die Per-protocol (PP)-Analyse der Y-BOCS eine moderate und die PP-Analyse des BDI-II sowie OCI-R eine signifikante Wirksamkeit gezeigt hat. Die niedrige Wiedererreichungsquote führte zu einer geringen Aussagekraft der Intention-to-treat (ITT)-Analyse, die keine signifikante Symptomreduktion in der *myMCT*-Gruppe gegenüber der Wartekontrollgruppe erfassen konnte. Ob nun Vorbehalte gegen psychologische Behandlungen oder technische Probleme mit dem PDF-Format des *myMCT*-Manuals beitragende Faktoren für die mangelnde Akzeptanz unserer Therapie sind, konnte durch vorliegende Studie nicht eindeutig geklärt werden. Aus den Ergebnissen der PP-Analysen, die eine deutliche Verbesserung der Symptome jener ProbandInnen nachwiesen, die in das *myMCT*-Manual zumindest hineingelesen haben, leitet sich ab, dass die Inhalte dieses Manuals für die LeserInnen unproblematisch waren. Somit stellt das *myMCT*-Manual zwar ein effektives, aber in einer arabischen Population weniger akzeptiertes und weniger gut durchführbares Behandlungsprogramm bei Zwangsstörung und Depression dar.

#### 3.2 English summary

Although meta-analyses have shown that Internet-based therapies have similar efficacy compared to traditional therapies (Andersson et al., 2014), efficacious psychosocial evidence-based interventions may fail when adapted from one culture to another (Gearing et al., 2013). For the present study, we examined a mixed population of Arabic-speaking participants with obsessive-compulsive disorder and/or depression. I found that for those participants who read or at least started to read the *my Metacognitive Training – Manual (myMCT)*, the per-protocol (PP) analysis of the Y-BOCS showed a moderate and the PP analysis of the BDI-II and OCI-R a significant efficacy of this intervention. The low completion rate compromised the intention to treat (ITT) results, which could not detect any significant symptom reduction in the *myMCT* group compared to the waiting control group. It could not be clearly clarified by the present study whether reservations against psychological treatments or technical problems with the PDF format of the *myMCT* manual are contributing factors for the lack of acceptance of this approach. From the results of the PP analyses, which showed clear symptom improvement in the *myMCT* group, it can be concluded that the contents of this manual were unproblematic for the readers. The present study shows that *myMCT* represents an effective but not very pragmatic or feasible treatment program for obsessions, compulsions, and depression in an Arabic-speaking population.

#### **4. Abkürzungsverzeichnis**

ANOVA: Varianzanalyse

AOCS: Arabic Obsessive - Compulsive Scale

BDI-II: Beck Depression Inventory II

BNE: Bruttonationaleinkommen

CSQ: Client Satisfaction Questionnaire

ICBT: internet-based cognitive behavior therapy

ITT: Intention-to-treat-Analyse

*myMCT*: My Metacognitive Training – Manual

OCI-R: Obsessive-Compulsive Inventory-Revised

PP: Per-protocol-Analysen

Y-BOCS: Yale-Brown Obsessive Compulsive Scale

ZUF-8: Fragebogen zur Patientenzufriedenheit

## **5. Erklärung des Eigenanteils**

### **5.1 Übersetzung**

Für die Durchführung der vorliegenden Studie war eine Adaptation sowie Übersetzung des my Metacognitive- Training- Manuals (*myMCT*) mit seinen 29 Arbeitsblättern aus dem Deutschen in die arabische Sprache vorausgesetzt. Dies erfolgte durch mich. Zudem übersetzte ich die Erhebungsinstrumente: Beck Depression Inventory II (BDI-II), Yale-Brown Obsessive Compulsive Scale (Y-BOCS), Obsessive-Compulsive Inventory-Revised (OCI-R) und den Fragebogen zur Patientenzufriedenheit (*ZUF8*) neu, da wir eine Übernahme vorgefertigter arabischer Versionen in unsere Studie ablehnten, um einen Vergleich zu vorangegangenen Untersuchungen von *myMCT* zu ermöglichen.

Da ich sowohl der deutschen als auch der arabischen Sprache mächtig bin übernahm ich auch die Funktion ProbandInnenfragen zu beantworten.

Die Übersetzung der Anleitung zur progressiven Muskelrelaxation nach Jacobsen, die uns unter anderem als Zeitaufwandsentschädigung diente, erfolgte auch durch mich.

### **5.2 Instrumentenerstellung**

Angelehnt an die an einer deutsch-sprachigen Stichprobe durchgeführten Studie zu *myMCT*, erstellte ich auf dem Portal Unipark sowohl die Prä- als auch die Post-Erhebung in arabischer Sprache. Zudem habe ich alle Hinweistexte des Programms ins Arabische übersetzt und für nachfolgende Studien an arabisch-sprachigen Stichproben gespeichert, um eine problemlose Bearbeitung der Erhebungen zu gewährleisten.

### **5.3 Datenerhebung**

Zu Beginn der ProbandInnen-Rekrutierung teilte ich den Link zu unserer Studie mit einer kurzen Beschreibung in unterschiedlichen arabischen Foren psychisch Erkrankter auf dem Sozialen Netzwerk Facebook. Anschließend legte ich die Wörter für die Google AdWords Anzeige fest, die wir für die Rekrutierung aktivierten. Mithilfe einer für das randomisiert-kontrollierte Studiendesign vorgefertigten Excel-Tabelle, die ich führte, wurden Studienteilnehmer in eine *myMCT*- und eine Wartekontrollgruppe eingeteilt. Innerhalb der ersten 24 Stunden nach Beendigung der Prä-Erhebung erhielten ProbandInnen der *myMCT*-Gruppe eine E-Mail von mir, die das Manual in PDF-Format beinhaltete. ProbandInnen der Wartekontrollgruppe erhielten von mir per E-Mail einen Hinweis, dass ein Zugriff auf unsere Therapie über einen passenden Link für sie möglich wäre, sobald sie die Post-Erhebung beendet haben. Nach Ablauf von sechs Wochen nach Rekrutierung sendete ich den ProbandInnen eine Einladung zur Teilnahme an der Post-Erhebung. In einem siebentägigen Abstand erhielten ProbandInnen, die unserer Bitte nicht nachgingen, bis zu drei Reminder von mir.

### **5.4 Datenanalyse**

Auch übersetzte ich für die Ergebnisauswertung die Antworten der ProbandInnen in den Freitextfeldern der Prä- und Post-Erhebung und kontrollierte, dass die Variablen mit der Interpretation übereinstimmten.

### **5.5 Schreiben des Manuskripts**

Ich beteiligte mich am Schreiben vorliegender Publikation mit dem Heraussuchen von in ihr zitierten Studien, die die Validität sowie Reliabilität diverser Interventionen im arabischen Sprachraum prüften. Zudem entnahm ich dem Mental Health Atlas 2014 der World Health Organization Daten über das psychotherapeutische Angebot in arabischen Ländern, die wir in die vorliegende Publikation integrierten.



## 6. Danksagung

An dieser Stelle möchte ich mich bei all denjenigen bedanken, die mich während der Anfertigung dieser Dissertationsarbeit unterstützt und motiviert haben.

Zuerst gebührt mein Dank Herrn Prof. Dr. Steffen Moritz, der meine Dissertationsarbeit gewissenhaft hervorragend betreut und begutachtet hat. Für die Hilfestellung und die konstruktive Kritik bei der Erstellung dieser Arbeit möchte ich mich herzlich bedanken.

Ich bedanke mich bei der Arbeitsgruppe Neuropsychologie, besonders Lilian Krasberg für die Unterstützung bei der Erstellung dieser Arbeit.

Außerdem möchte ich Mira Natalie Berthold, Madena Attar, Meryem Çelebi und Kaser Ahmed für das Korrekturlesen meiner Dissertationsarbeit danken.

Ein besonderer Dank gilt meinen Eltern, die mir mein Studium durch ihre Unterstützung ermöglicht haben und stets ein offenes Ohr für mich hatten. Für die Motivation zur Erlangung eines Dokortitels und den Einstieg in das wissenschaftliche Arbeiten möchte ich mich herzlich bedanken.

Abschließend möchte ich mich bei meinen Geschwistern und ihren Familien bedanken, die mir ihr Interesse an meiner Arbeit schenkten und mir durch Diskussionen halfen, meine Dissertationsarbeit in vorliegender Form zu erstellen.

Schaimaa Hamdallah Irshaid

Hamburg, 19.12.2019

## **7. Lebenslauf**

**„Lebenslauf wurde aus datenschutzrechtlichen Gründen entfernt“.**

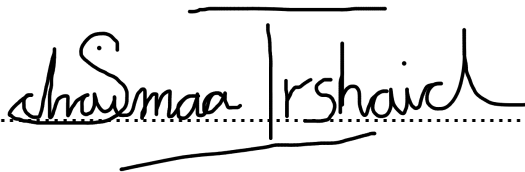
## 10. Eidesstattliche Versicherung

Ich, Schaimaa Hamdallah Irshaid, versichere ausdrücklich, dass ich die Arbeit selbständig und ohne fremde Hilfe verfasst, andere als die von mir angegebenen Quellen und Hilfsmittel nicht benutzt und die aus den benutzten Werken wörtlich oder inhaltlich entnommenen Stellen einzeln nach Ausgabe (Auflage und Jahr des Erscheinens), Band und Seite des benutzten Werkes kenntlich gemacht habe.

Ferner versichere ich, dass ich die Dissertation bisher nicht einem Fachvertreter an einer anderen Hochschule zur Überprüfung vorgelegt oder mich anderweitig um Zulassung zur Promotion beworben habe.

Ich erkläre mich einverstanden, dass meine Dissertation vom Dekanat der Medizinischen Fakultät mit einer gängigen Software zur Erkennung von Plagiaten überprüft werden kann.

Unterschrift: .....

The image shows a handwritten signature in black ink on a white background. The signature is written in a cursive style and reads 'Schaimaa Irshaid'. The signature is positioned above a horizontal dotted line, which is part of the 'Unterschrift: .....' label. There are horizontal lines above and below the signature, possibly indicating the start and end of the signature area.