THE RELATIVE EFFECT OF “FIELD” AND “OBSERVER” PERSPECTIVE ON THE EXPERIENCE OF DISGUST

Graduation Thesis

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Supervisor:
Assist. Prof. C. Ekin Eremsoy

İstanbul, January 2015
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PREFACE

This thesis is submitted for the degree of Master of Arts in Clinical Psychology at the Doğuş University. The research described herein was conducted under the supervision of Assistant Professor Dr. Cemile Ekin Eremsoy between February 2014 and January 2015. This study is an original, unpublished, and independent work by the author.

This work aims to explore the relative effects of “field” and “observer” perspectives on the experience of disgust. In order to examine the effectiveness of experimental manipulation a One-Way between subjects analysis of variance (ANOVA) was used. Five separate one-way between subjects analysis of variance (ANOVA) were conducted to evaluate the effect of imagery perspective. Interaction between imagery perspective and disgust level on dependent variables were examined by using between subjects analysis of variances (ANOVAs).

Istanbul, January 2015

Ezgi TAN
Several researchers have studied the relative effects of ‘field’ and ‘observer’ perspectives on the experience of emotions such as social anxiety, anger, depression and trauma. A review of existing literature revealed that the effect of imagery shift on disgust has not been taken into account. The aim of this exploratory study is to investigate the effect of imagery perspective on experience of disgust. It was hypothesized that disgust level and imagery perspective would be associated with levels of imagination difficulty, disgust, unpleasantness run away and urge for neutralization, and accordingly, it was hypothesized that field perspective would predict higher levels of imagination difficulty, disgust, unpleasantness run away and urge for neutralization. 120 participants (22 male and 98 female) were recruited for the present study and were randomly assigned to four different experimental conditions which are High Disgust Stimuli-Field Perspective, High Disgust Stimuli-Observer Perspective, Neutral Disgust Stimuli-Field Perspective, and Neutral Disgust Stimuli-Observer Perspective groups. In order to examine pretest conditions and differences between groups prior to experimental manipulations, they were asked to complete self-report ratings. Then, they completed the visual analog scale following the imagination phase and picture presentation. The interaction between imagery perspective and disgust level was examined by using between subjects analysis of variances. Results of this study reveal that there is a significant difference between high and neutral disgust.
stimuli regarding disgust reactions while there is no association found between participants’ imagery perspective and experience of disgust. The findings also reveal that neither field nor observer perspective could differentiate imagination difficulty, unpleasantness, disgust, run away and urge for neutralization level. Although no significant effect of imagery perspective was found in this study, it is a pioneering study that focuses on the disgust, and imagery perspective. The results are discussed in terms of potential weaknesses and possible significance for future studies.

Keywords: Imagery and emotion, mental imagery, field perspective, observer perspective, disgust, disgust sensitivity, imaginal exposure.
ÖZ

ZIHİNSEL CANLANDIRMANIN AÇI NİTELİĞİNİN TİKSİNME DUYGUSU ÜZERİNE ETKİSİNİN İNCELENMESİ

Tan, Ezgi

Yüksek Lisans, Psikoloji

Danışman: Yrd. Doç. Dr. C. Ekin Eremsoy

Ocak, 2015

Kaçınma davranışı, nötralizasyon/temizlenme isteği üzerinde etkisi bulunmuşken, canlandırma açısının canlandırma netliği, rahatsızlık hissi, tıksinme düzeyi, kaçınma davranışı, nötralizasyon/temizlenme isteği üzerinde etkisi bulunmamıştır. Anlamlı bir bulguya ulaşılmamış olsa da canlandırma açısı ve tıksinme araştırmaları için öncülük eden bu araştırmanın sonuçları potansiyel sınırlılıkları ve gelecek araştırmalar için önemi çerçevesinde tartışılmıştır.

Anahtar Kelimeler: Zihinsel canlandırma- duygulu ilişkisi, zihinsel canlandırma, göz açısı, dış açı, tıksinme, zihinsel canlandırımda dayalı maruz bırakma.
ACKNOWLEDGEMENT

In the first place, I am very grateful to my supervisor, Assistant Professor Ekin Eremsoy for her endless support and guidance every step of the way. This dissertation would not have been completed without her understanding, patience and positive approach towards me.

Also, I am very thankful to Assistant Professor Müjgan İnözü for her valuable contributions and support for this study.

Next, I am thankful to all my teachers namely Assistant Professor Gülin Güneri, Ahmet Tosun, Associate Prof. Aylin İlden Koçkar for their role and support in my success during graduate years.

I also want to thank to each of committee member namely Assistant Professor Engin Arı, Assistant Professor Hasan Bahçekapılı for their feedback and support on this study. I want to thank them for accepting to be my committee member.

I also want to thank my family for their endless encouragement. I am grateful for their enduring care, respect, and love. Especially my parents provided me with a valuable support in the long run of my education life.

Finally, very special thanks to Deniz Dinsel for his encouragement and support.
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LIST OF ABBREVIATIONS

**OCD**: Obsessive Compulsive Disorder

**BDI**: Beck Depression Inventory

**BAI**: Beck Anxiety Inventory

**DS-R**: Disgust Sensitivity Scale- Revised Form

**PI-WSUR**: Padua Inventory-(Washington State University Revision)

**OBQ**: Obsessive Beliefs Questionnaire

**CCS**: Contamination Cognitions Scale

**PTSD**: Post-Traumatic Stress Disorder

**CBT**: Cognitive Behavioral Therapy

**DQ**: Disgust Questionnaire
1. INTRODUCTION

Among different cognitive processes, mental imagery has drawn relatively little attention in research. Kosslyn, Ganis and Thompson (2001) stated that mental imagery is “inherently a private affair, by definition restricted to the confines of the mind” (p. 635). Therefore, mental imagery was seen as a difficult field to study. Especially, in the domain of Behaviorism, mental imagery was not subjected to experimental research. Accordingly, in Skinner’s (1977) article named “Why I am not a cognitive psychologist?” he stated that “There is no evidence of the mental construction of images to be looked at or maps to be followed. The body responds to the world, at the point of contact; making copies would be a waste of time.” (p.6). Although, Allan Paivio (1971; Kosslyn, Ganis and Thompson, 2001) and his colleagues demonstrated the effects of mental imagery on memory improvement, in those years mental imagery used to be seen as a specific form of thought. However, ever-increasing attention on cognitive neuroscience made mental imagery an area of research (Kosslyn, Ganis, & Thompson, 2001). Functional resonance imaging (fMRI) and Positron emission tomography (PET) has developed over time (Kosslyn, Ganis, & Thompson, 2001). Developing such technologies enabled researchers to test mental processes more objectively (Kosslyn, Ganis, & Thompson, 2001). The increasing number of research with these techniques clearly distinguishes the influential role of imagery and imagery perspective on neurological basis. Therefore, mental imagery has gained further attention to be explored (e.g., Chatterjee, & Southwood, 1995; Farah, 1984; Kosslyn, Thompson, Kim, & Albert, 1995; Schacter, Addis, & Buckner, 2007).

Research revealed that mental imagery of a situation and real encounter with itself evoke similar responses in neurological basis (e.g., Driskel, Copper, & Moran, 1994; Kosslyn et al., 2001; Maring, 1990; Weiss, Hansen, Rost, & Beyer, 1994). In addition to this, studies revealed that effects of mental imagery not only can be seen in neurological basis, but also they can activate the autonomic nervous system. To illustrate, mental imagery causes increasing galvanic skin response, heartbeat and aspiration similar to the real contact with this situation (e.g., Miller et al., 1987; Lang, 1979; Lang, Bradley, & Cuthbert, 1998; Vrana, Cruthbert, & Lang, 1986).
The bulk of studies on mental imagery tend to focus on its relationship with emotions especially in the context of autobiographical memories. Also, studies on the effect of imagery perspective on emotions generally emphasized social anxiety and their derivatives. In addition, there is very little research on the role of field and observer perspective on depression (e.g., Lemogne et al., 2006; Bergouignan et al., 2008) and anger (e.g., Kross et al., 2005). Recently, increasing amount of research on imagery perspective reveals that imagery and imagery perspective have an influential role on the experience of emotions. Therefore, studies should consider more the effects of imagery perspective on a wider range of emotions.

In the current literature, there is no study on the relative effects of “field” and “observer” perspectives on the experience of disgust, one of the basic emotions that prevents organisms from noxious or contaminated stimuli (Ekman, 1992). Applying the concept of imagery perspective to disgust will be a new approach for mental imagery studies. Studies reveal that feeling of disgust is related to specific phobias, for example, spider phobia (e.g., Olatunji, Lohr, Sawchuk, & Westendorf, 2005; Sawchuk, Lohr, Tolin, Lee, & Kleinknecht, 2000). Accordingly post traumatic stress disorder (PTSD) was found to be associated with this feeling (McNally, 2002; Bomyea, & Amir, 2010). Research also shows that disgust have an meaningful role in the occurrence and severity of anxiety disorders (Izard, 1993). Another related condition is obsessive-compulsive disorder (OCD) (e.g., Moretz & McKay, 2008; Thorpe, Patel, & Simonds, 2003). Also, Olatunji & Sawchuck (2005) stated that feelings like anger, fear, and sadness were strongly associated with emotional disturbances; however, feeling of disgust is also a basic emotion that evokes very strong reactions. Despite its clinical importance, disgust is highly ignored by experimental studies and there are several unanswered questions concerning ‘disgust’ (Phillips, Senior, Fahy, & David, 1998; McNally, 2002; Olatunji, & Sawchuck, 2005). Therefore, this experimental study aims to explore the effects of imagery perspective on disgust. More specifically imagination difficulty, unpleasantness, disgust, run away and urge for neutralization levels will be examined through relative effects of field and observer perspective.
1.1 Mental Imagery and Emotions

It was proposed that cognitive processes such as interpretation, imagery have powerful impact on occurrence and form of emotions (e.g. Beck, 1985; Dadds, Bovbjerg, Redd, & Cutmore, 1997; Mahoney, 1993). The crucial function of mental imagery has been highlighted in CBT since its birth (Beck, 1976; Holmes et al., 2007). It is stated that words and phrases (cognitions in the verbal form) or images (cognitions in the visual form) can be mode of mental activity (Beck, Emert, & Greenberg, 1985; Holmes et al., 2007). The founder of Cognitive Theory, A. T. Beck, proposed that therapeutic work should focus on images, memories as well as verbal thoughts (Beck, 1976; Hackmann, Holmes, 2004). Therefore, not only words and thoughts but also images are quite crucial components of CBT. In Cognitive Behavioral Therapy (CBT), imagery interventions are used as a therapeutic technique to ease emotional distress because mental imagery is assumed to have a strong influence on emotions (Holmes et al., 2007). Beck also claimed that correcting annoying visual cognitions might enable people to experience serious cognitive and emotional transformations because emotional distress can be precisely related to those verbal or visual cognitions (Beck, Emert, & Greenberg, 1985; Holmes et al., 2007). Accordingly, it has been found that manipulating imagery would be beneficial for clinical practices (Hackmann, 1998; Hackmann, & Holmes, 2004). Despite the significance of images and mental imagery in psychopathology, there is not enough study on link between mental imagery and its emotions in clinical psychology (Hackmann, Holmes, 2004). Similarly, Holmes, Arntz, & Smucke (2007) stated that “While cognitive therapy has many well-disseminated techniques to deal with verbal thoughts, clinicians report that theirs skills in working with imagery stay behind” (p. 301).

Studies have recently showed that mental imagery has a significantly stronger effect on emotions compared to verbal processing (e.g., Hirsch, Clark, & Mathews, 2006; Holmes, Mathews, Dalegleish, and Mackintosh, 2006; Holmes, Mathews, Mackintosh, & Dalgleish, 2008; Kosslyn et al., 2001; Lang, 1979, 1987; Lang et al., 1998; Mathews and Mcleod, 2002; O’Craven and Kanwisher, 2000; Öhman and Mineka, 2001). For instance, Holmes et al. (2006) proposed that imagery rescripting interventions is more effective than verbal processing in treating and stimulating social anxiety. Accordingly, in one study, Holmes et
al. (2005) compared the effects of imagery and verbal processing instructions through anxiety-evoking situations. They discovered that mental imagination of negative things has stronger effects on self-reported anxiety than verbal instructions do. According to these findings, mental imagery can manipulate emotions quite effectively.

As mentioned before, studies which examine the relationship between mental imagery and emotions are very few and mostly focus on social anxiety (e.g. Ahmad, Clark, & Wells, 1998; Wells and Papageorgiou, 1999; Coles, Fresco, Heimberg, & Turk, 2001; Spurr & Stopa, 2003; Vassilopoulos, 2005; Hirsch et al., 2006; Terry and Horton, 2008). In order to extend findings, Holmes et al. (2006) examined the relationship between mental imagery and positive emotions. They asked one group of participants to imagine a positive event while other participants were expected to think about the verbal meaning of that positive event. Results revealed that participants in imagery condition showed higher increase in positive affect (Mackintosh, Dalgleish, Mathews, and, Holmes 2006). Such results also support the important effect of mental imagery on emotions.

1.1.1 Mental Imagery and Imagery Perspective

Mental imagery does not only occur when affective information is retrieved from memory. It can also be constructed by linking and adjusting reserved perceptual input in different methods (Kosslyn et al., 2001). When a person is supposed to remember an earlier event or imagery future situation, some features of imagery come into play. Studies on imagery perspective are relatively new but when we consider the daily language we can find several insights about its qualities. We often say “I remember like it was today”, “I can see it now” or “My life flashed before my eyes”. Field and observer perspective generally indicate these perspectives, or vantage points (Nigro & Neisser, 1983). Such statements about our memories tell us about the spatial manipulations that individuals do while retrieving those memories. In field perspective, people imagine the situation as if they were experiencing it from one’s original vantage point while they, in observer perspective, watch themselves outside of the situation and from the perspective of detached spectator. It was also called as third-person perspectives and first-person by some researchers to indicate these perspectives or vantage points (e.g., Rice & Rubin, 2009).
The concepts of field and observer perspective have existed for over a century. They were first coined by Henri (1896) and Freud (1899) in connection with early childhood memories. According to Freud, original impressions should be in field view, so memories from observer view must be a output of reorganization (Nigro & Neisser, 1983). Nigro and Neisser (1983) were some of the first to experimentally investigate the vantage point phenomenon, examining and confirming the qualitative characteristics and existence of separate observer and field memories. Participants were expected to recall and describe specific situations that they had previously faced with (e.g. “Being embarrassed”, “giving a public presentation”, “watching television” and so on). The pinitial target of this study was to find out which point of view taken in these memories. They found that when participants were focusing the emotions related to these memories, they tended to take a field perspective. However when focusing on the concrete, objective features of these situations, they tended to adopt an observer perspective. In addition to this, they found that when asked to recall older events, they tended to adopt an observer perspective. This results were expalined by the notion that as humans age, the vividness of their memories fade as well (Talarico & Rubin, 2003; Finnbogadóttir & Berntsen, 2014). Also, while imaging future events, people tend to take observer perspective (e.g., Berntsen & Bohn, 2010; Berntsen & Jacobsen, 2008; Finnbogadóttir & Berntsen, 2011; as cited in Finnbogadóttir & Berntsen, 2011).

Following Nigro and Neisser’s (1983) pioneering study, imagery perspective gained attention in studies of autobiographical memory and remembering. Autobiographical memory studies, in the context of visual perspectives focused on social anxiety to a great extent. Several studies revealed that people with high social anxiety tend to remember anxiety related memories from observer perspective (Berntsen and Rubin, 2006; Bywaters, Andrade, and Turpin, 2004; Coles and ark., 2001; Hackman and Holmes, 2004; Libby and Eibach, 2002; McIsaac and Eich, 2004; Spurr and Stopa, 2003; Sutin and Robins, 2008; Wells et al., 1998). It was also found out that effects of taking different perspective on memories relatively disappeared in cases that cause medium and low level of social anxiety.

Some studies investigated whether there is a link between traumatic emotions and mental
imagination (Foa, Alvarez-Conrad, Feeny, Hembre, & Zoellner 2002; McIsaac & Eich, 2004). These studies made claims for the effects of observer and field memories on preserving and treating the effects of trauma. McIsaac and Eich (2004) asked individuals that have PTSD to recollect traumatic events from both observer and field perspectives. They found that memories from observer field include more detailed information about the scene of the event, actions and appearance of participants, whereas memories from field view contained more affective reactions, bodily sensations, and psychological arousals.

Some studies have tested the relationship between depression and mental imagery (Bergouignan et al., 2008). Lemogne et al., (2006) also found the link between imagery perspective and depression. These studies proposed that episodic specificity while retrieving past events might have an effect on the current emotional state of depressed individuals. Bergouignan et al. (2008) compared the episodic specificity in euthymic depressed patients related to positive and negative autobiographical memories. They found that for positive memories related to positive events, euthymic depressed people showed less field perspective (Bergouignan et al., 2008). Findings of these studies suggested that field view deficit for positive memories might maintain an unfavorable view of their current self (Bergouignan et al., 2008). One study comparing depressed and never-depressed adolescents showed that depressed group tends to take observer perspective while recalling autobiographical memories (Kuyken and Howell, 2006). Also such findings support the relationship perspective and depressive feelings. Lemogne et al. (2006) compared depressed and non-depressed groups and found that depressed adults tended to remember from observer perspective while remembering positive memories. Such findings give insights to the therapy of depression and suggested that manipulating patients’ visual perspective might reduce discrepancies between present self and positive past self (Bergouignan et al., 2008). Similarly, in one study Kross, Ayduk, Mischel (2005), focused on the potential role of imagery view on anger and they found that type of self-perspective was related to reducing anger and negative affect.

In general, previous studies have showed that field perspective causes relatively higher engagement with emotion. Although there are findings about the enhancing effect of field perspective on emotions, studies reveal that observer perspective is very prevalent in
various emotional problems such as anxiety (Terry & Horton, 2007–2008), PTSD (McIsaac & Eich, 2004), social phobia, (Wells, Clark, & Ahmad, 1998) and depression (Williams & Moulds, 2007). However, the function of observer perspective in relation to emotional distress is not clear. While some hypothesis claim that it serves adaptive function to reduce emotional stress (McIsaac & Eich, 2004; Williams & Moulds, 2007, 2008; as cited in Finnbogadóttir, Berntsen, 2014) others claim that it serves maladaptive function (Clark & Wells, 1995). Terry and Horton (2008) claimed that people who have social anxiety tend to use observer view because it produces less distress than the other. For instance, it was stated that taking observer perspective in an anger-related situation to reduce anger serves an adaptive function (Kross, Ayduk, & Michel, 2005). Similarly, it was found that PTSD patients who remembered events from observer perspective experienced fewer anxiety (McIsaac & Eich, 2004). Accordingly, it was proposed that observer perspective enable individuals to defend themselves against the negative mood.

Controversial results about the relative effect of field and observer perspective on emotions limit us to draw causal conclusions. Some researchers proposed that observer perspective serves a protective function by reducing negative affects while others claimed that observer perspective decreases positive emotions. For this reason, it is not easy to reach definite conclusions.

Although the function of observer perspective is not clear, several studies revealed that field perspective cause relatively higher engagement with emotions. Similarly, in one study, Robinson and Swanson (1993) sampled personal memories form participants’ life in different periods. They were expected to change initial perspective of these memories. For instance, if they were supposed to remember from a field perspective, they were expected to remember the same event from observer view as well. In that study, they examined whether affective experience is altered when participants change their perspectives (Robinson & Swanson, 1993). It was reached that when participants change their view from field to observer view, the affective experience decreased (Robinson and Swanson, 1993). However, it was not the case when the shift was from observer to field perspective (Robinson and Swanson, 1993). When people imagine positive events from field perspective, it increases the positive mood, but observer perspective leads to decline in
positive mood (Holmes, Coughtrey, & Connor, 2008). In general, studies revealed that field perspective plays an effective role in uncovering emotions.

Generally, studies examining the relationship between field versus observer perspective and emotions revealed that remembering events from observer perspective lead to less emotional reliving (e.g., Nigro & Neisser, 1983; McIsaac & Eich, 2002; D’Argembeau, Comblain, & Van der Linden, 2003; Talarico, LaBar, & Rubin, 2004; Crawley & French, 2005; Berntsen & Rubin, 2006). Field memories contain more affective reactions, bodily sensations, participants’ psychological states (McIsaac & Eich, 2004). In addition to this, consistent with our hypothesis, studies on recalling negative events show that when compared with observer perspective, fielders tend to develop higher emotional reactions and anxious state (Terry and Horton, 2007). It was stated that imaging from field perspective is more similar to having the original experience, so it enhances emotional experience (Holmes, Coughtrey, & Connor, 2008). Additionally, observer view does not always create emotions similar to the real experience.

Previous findings support the influential role of imagery perspective on emotions. Similarly, from the light of these previous findings, target of this exploratory research is to extend findings about the relative effects of field and observer perspective. As mentioned above, present study aims to find out the effects of imagery perspective on disgust. Experience of disgust, its functions, related emotional problems and its domains will be examined in the following section.

1.2 Explanation of Disgust

In social and clinical psychology, studies on emotions are always the center of interest (Cacioppo and Gardner, 1999; Olatunji and Sawchuck, 2005). It was well supported that emotions are very effective in shaping thought processes and behavioral tendencies (Izard, 1993; John-son–Laird and Oatley, 1992; Olatunji and Sawchuck, 2005). Therefore, several researchers have investigated functions and structures of emotions. Even though disgust is one of the primary emotions and it is of clinical importance, it is highly ignored in the field of experimental research (Fahy, David, Senior, and Phillips, 1998; Teachman and Woody,
There are various theories explaining basic emotions. According to Robert Plutchik's theory of emotions there are eight basic emotions (1980). Disgust is one of these emotions. In addition to this, a theory that defines emotions and their relation to facial expressions proposed that number of fundamental emotions is six and sadness, happiness, anger, surprise, disgust and fear (Ekman, 1992; Phillips, Senior, Fahy, and David, 1998). Disgust originally means bad taste and it is often defined in its relation to the food (Phillips et al., 1998). Correspondingly, Darwin (1872; Haidt; 1994) stated that disgust “refers to something revolting, primarily in relation to the sense of taste, as actually perceived or vividly imagined: and secondarily to anything which causes a similar feeling, through the sense of smell, touch and even of eyesight” (p. 253). According to Rozin and Fallon (1987; Phillips et al., 1998), "revulsion at the prospect of (oral) incorporation of an offensive object" is definition of disgust emotion. Disgust is mainly seen as protector of mouth so disgust is unique form of emotion (Haidt, Rozin, McCauley, and Imada, 1997; Olatunji & Sawchuck, 2005).

Emotion of disgust was also defined outside the realm of food related concepts. According to Freud (1905/1953; Olatunji & Sawchuck, 2005), disgust is a way of reaction formation against sexual impulses and desired objects. In other words, disgust reaction is a way of denying sexual fantasies. Unlike Freud, Tomkins (1963; Olatunji & Sawchuck, 2005) proposed that disgust reactions prevent individuals from undesirable intimacy.

Rozin and Fallon (1987; Olatunji & Sawchuck, 2005) explained the difference between disgust and distaste. While disgust is driven by imaginative and potentially dangerous factors, distaste is driven by the sensory characteristics of food. For instance, contamination characteristic of food can elicit disgust and taste, smell and other sensory characteristics might elicit distaste. Distaste requires gustatory contact while disgust involves cognitively more complex process (Rottman, 2014). Some researchers proposed that disgust is a uniquely human emotion because of its cognitive complexity and evolving function (Kelly, 2011; Rozin et al., 2008; Rottman, 2014)
1.2.1 Disgust Reactions

Disgust reactions contain unique physiological, behavioral and interpretive elements (Olatunji & Sawchuck, 2005). Feeling of disgust elicits a certain kind of physiological reactions, different from anxiety and fear (Olatunji, McKay, 2009). Instead of activating effects of emotions such as fear, anger, disgust reactions lead to decrease in blood pressure (Sledge, 1978), hearth rate (Levenson, Ekman, & Friesen, 1990), respiration rate (Curtis & Thyer, 1983), and skin temperature (Zajonc & McIntosh, 1992). On the other side, disgust reactions cause salivation (Carlson, 1994) and gastrointestinal mobility (Ekman, Levenson, and Friesen, 1983). In other words, disgust reaction activates the parasympathetic nervous system (Rottman, 2014).

Neuroimaging studies that examined disgust and related brain structures revealed that multiple parts of brain were found to be involved in disgust reactions. Different from other emotions, parts of brain such as the amygdala, basal ganglia, orbitofrontal cortex, and occipito–temporal cortices were found related to disgust (Adolphs, 2002; Olatunji, Sawchuck, 2005). Particularly, insular cortex was found related to the regulation and expression of disgust reactions (Calder, Keane, Manes, Antoun, & Young, 2000; Olatunji & Sawchuck, 2005).

Rozin and Fallon (1987; Phillips et al., 1998) proposed that disgust reactions are expressed through facial expressions, verbal reactions and shudder response. When we look at the behavioral reactions toward disgust, behavioral avoidance is the most observable tendency (Izard, 1993). People display active and passive form of avoidance toward disgust. Active avoidance includes escape and run away while passive avoidance includes ignoring, pushing away, closing eyes (Olatunji & Sawchuck, 2005). Disgust serves evolutionary function, so it enables an animal to escape from bad-tasting or rotten food (Olatunji & McKay, 2009). Similarly, facial expressions and action tendencies that follow disgust
feelings are related to the functional value of disgust by preventing contact with aversive stimuli or removing it from body (Plutchik, 1980; Rozin et al., 2000; Olatunji & Sawchuck, 2005).

When we consider gender differences in experience of disgust, it is found that women showed higher levels of disgust after being disclosed to a disgust-evoking situation (e.g. Gross and Levenson, 1995, Schienle et al., 2005). Accordingly, women report higher habitual disgust sensitivity than men (Brooner, King, Templer, and Corgiat, 1984; Haidt, McCauley, Rozin, 1994; Oppliger and Zillmann, 1997; Quigley, Sherman, & Sherman, 1997; Druschel and Sherman, 1999; Tucker and Bond, 1997 as cited in Schienle, Walter, Stark, & Vaitl, 2002; Rohrmann, Hopp, & Quirin, 2008). However, neurophysiological studies revealed that there was no significant gender difference on neurophysiological level following an exposure to disgust-evoking stimuli (Schienle et al., 2005; Stark et al., 2003; as cited in Rohrmann, Hopp, & Quirin, 2008).

1.2.3 Disgust and Related Psychological Disorders

Even though feelings such as anger, fear, and sadness were found strongly associated with emotional disturbances, disgust also evokes very strong reactions (Olatunji and Sawchuck, 2005). Disgust is also a very important factor for etiology of several disorders (Phillips et al., 1998). Disgust is especially related to specific phobias, for instance, spider phobia (e.g., Olatunji, Sawchuk, Lohr, and Westendorf, 2005; Kleinknecht, Lohr, Lee, Tolin, and Sawchuk, 2000). Several studies determining the correlation between disgust and various fears of small animal were found positive moderate (Mulkens, de Jong and Merckelbach, 1996). Especially in spider avoidance, disgust feeling is the strongest predictor (Woody, McLean, and Klassen, 2005; Olatunji & Sawchuck, 2005). Also, it is found out that disgust have a very significant role in blood–injection–injury (BII) phobia (Page, 1994; Olatunji & Sawchuck, 2005). Additionally, disgust is found to be related to obsessive-compulsive disorder (OCD) (e.g., Moretz and McKay, 2008; Thorpe, Patel and Simonds, 2003). Moreover, research supports its relationship with depression (Gilbert, 1997), certain sexual dysfunction (Power & Dalgleish, 1997), dysmorpophilia (Thomas & Goldberg, 1995) and uncommon psychiatric syndromes (Phillips et al., 1998). Disgust is
also involved in severity and occurrence of eating disorders such as bulimia nervosa and anorexia nervosa (Troop, Murphy, Bramon, and Treasure, 2000). Another one is post-traumatic stress disorder that was found related to disgust (McNally, 2002; Bomyea & Amir, 2010). Furthermore, it was proposed that schizophrenic patients and people with psychotic symptoms tend to have enhanced disgust sensitivity (Schienle et al., 2003).

Models that explain the etiology of Anxiety Disorders are grounded on the evolutionary function of disgust: preventing organisms from contaminated stimuli (Izard, 1993). For instance, according to the “Disease Avoidance Model of Simple Animal Phobias”, disgust leads to avoidance response to the animals that actually will not attack or do harm but are perceived as disgusting (Davey, & Matchett, 1991; Davey, Jain, Burgess, and Ware, 1994). This model proposes that disgust reactions prevent people from contacting contaminated stimuli that causes infection, also disgust reactions trigger cleaning the current environment. Therefore, studies proposed the gradual decline of disgust threshold leading to pathological avoidance and disturbing its healthy function so it has a role in occurrence of anxiety disorders (Izard, 1993).

In addition to findings that support the relationship between disgust and psychological disorders, a theory suggested that when an individual strongly associates him/her self with disgust, it increases the risk of emotional problems (Power & Dalgleish, 1997). Accordingly, Phillips et al. (1998) stated that disgust is “important not only to many aspects of our daily lives but is also central to a range of psychiatric phenomena.” (p. 373).

1.2.4 Functions of Disgust

There have been different explanations in recent 20 years regarding the functions of disgust (Tybur, Lieberman, Kurzban, & DeScioli; 2013). Firstly, a group of researchers explained disgust with its evolutionary function that prevents individuals to contact with pathogens (Tybur et al., 2013). Secondly, researchers have focused on disgust functions other than evolutionary functions. Researchers started to explain functions and effects of disgust on several topics. For instance, relationship between disgust and psychopathology (Olatunji et al., 2007; Olatunji & McKay, 2009; Davey, 2011), cooperation and punishment
(Chapman et al., 2009; Moretti, di Pelligrino, 2010), also stigma and prejudice (Neuberg, and Cottrell 2005; Fessler, & Navarrete, 2006 Oaten et al., 2011; Lieberman, Tybur, & Latner, 2012;) have been studied.

When considered from evolutionary perspective, disgust has a protective function against contacting with pathogens (Calder, Keane, Manes, Antoun, and Young, 2000; Biran, & Curtis 2001). Evolutionary function of it is Curtis, Anunger, & Rabie, 2004; Marzillier & Davey, 2004; Fessler, Eng, and Navarrete, 2005; Fessler & Navarrete, 2003; Oaten et al., 2009; Curtis et al., 2011; Fleischman & Fessler, 2011; Kelly, 2011; Olatunji & Sawchuk, 2005; Rozin et al., 2008; Stevenson & Repacholi, 2005; Susskind et al., 2008; Tybur, Bryan, Magnan, Caldwell & Hooper, 2011; Tybur, Merriman, Caldwell, McDonald, & Navarrete, 2010; Tybur, Lieberman, Kurzban, & DeScioli; 2013). Stimulus that probably evokes disgust across several cultures such as fecal matter, mortal remains, body products accurately has a disease potential (Curtis & Biran, 2001; as cited in Tybur, Lieberman, Kurzban, & DeScioli; 2013). However, it is noticeable that even though potential threat of stimuli is eliminated, disgust reactions emerge. Therefore, it is clear that disgust is a heterogeneous emotion that can arise apart from pathogen avoidance (Tybur, Lieberman, Kurzban, & DeScioli; 2013).

Disgust does not only have influence on people’s food preferences, but also friend preferences, sense of morality and religion (Olatunji & McKay, 2009). Disgust is an observable emotion across every culture but “what is disgusting” highly depends on the learning experiences, genetic, personal and cultural differences (Olatunji & Sawchuck, 2005). In other words, cultural differences, social norms, personal differences, individual attributions can be very influential on disgust reactions (Olatunji & Sawchuck, 2005). If an object has contamination or infection-related features and disease–carrying characteristics, this object can be associated with disgust by individual interpretations (Olatunji & Sawchuck, 2005). In other words, while some people find the same stimuli very neutral, others might find it very disgusting. Biological tendency to disgust can be exceptionally overshadowed by cultural factors (McNally, 2002). For instance, body envelope violations are approved as a domain of disgust. However, in ancient Rome, it was a long tradition to exhibit body envelope violations, and it had been a theme of masterpieces in fine arts.
(McNally, 2002).

Most researchers agree that basic function of disgust is to avoid individuals not to contact with pathogens. However, disgust reactions apart from pathogen avoidance indicate its further functions (Tybur et al., 2013). According to Tybur et al. (2013), pathogen disgust prevents individuals to contact with contagious stimuli, while sexual disgust leads to avoidance of danger from sexual behaviors and partners. Therefore, Tybur, Lieberman, Kurzban, and DeScioli (2013) proposed that there are three domains of disgust that motivate disgust reactions which are pathogen avoidance, morality and mate choice. Moral disgust prevents individuals from breaking social norms (Tybur et al., 2013). As mentioned above, disgust has several adaptive functions.

1.2.5 Psychometric Assessment and Domains of Disgust

The first reliable self-report measure was developed by Rozin, Fallon, Mandell, (1984) in order to assess disgust sensitivity. The Disgust Questionnaire DQ measures disgust sensitivity through only food-related elicitors. However, disgust was seen as a multidimensional emotion so, the Disgust Scale, a more comprehensive measure, was developed by Haidt et al. (1994; Olatunji and Sawchuck, 2005). Later, Kleinknecht and Thorndike (1997) developed Disgust Emotions Scale which measures disgust according to Mutilation and Death, Injections and Animals, Blood Draws, Odors, and Rotting Foods domains.

Haidt et al. (1994) proposed that animals, food, body products, sex, envelope violations, death, and hygiene are the seven of disgust elicitors’ domains that are associated with disgust sensitivity. Research indicated that disgust is a multi-component emotion that has affective, cognitive, and physical dimensions (Haidt et al., 1994). Rozin and Fallon (1987; Haidt, 1994) proposed that oral-centered disgust which includes three domains of disgust elicitors (food, body products, and animals) is named as core disgust and other 4 domains of disgust elicitors named (personal hygiene, envelope violations, and death) as animal reminder disgust that reminds individuals of their animal origins (Rozin et al., 1993). As an alternative to two-factor model of disgust, Haidt et al. (1994), proposed that there are nine
of disgust elicitor domains: body products, food, animals, sex, body envelope violations, smell, death, hygiene and magical thinking and “Disgust Sensitivity Scale” is administered to gauge disgust sensitivity for every of disgust elicitor domains.

In one study, Olatunji et al. (2004) concluded that some domains of disgust elicitors are significantly related to contamination symptoms. That’s why, they identified the heterogeneous nature of disgust elicitors. These seven disgust elicitor categories include food, hygiene and death domains in Disgust Sensitivity Questionnaire and smell, injections, mutilation and death, animal domains in Disgust Emotion Scale (DES) (Walls & Kleinknecht, 1996).

1.3 Aims of the Study

In general, the present study aims to explore the effect of imagery perspective on disgust. There are very few studies that examine the relationship between imagery perspective and wide range of emotions. Similarly, less empirical attention has been devoted to disgust studies. Effect of imagery perspective on disgust also has not been studied before. Therefore, applying the concept of imagery perspective to the disgust sensitivity is a new approach for mental imagery studies. Accordingly, present study aims to explore the findings about disgust and mental imagery. As mentioned above, most of the studies focused on the effect of imagery perspective on social anxiety and their derivatives. Only a few researches explored the relationship between imagery perspective and depression, PTSD. For this reason, many unanswered questions about imagery perspective remain. More specifically, aims of this study are to explain and find out the effect of imagery perspective (field versus observer) and disgust level of stimuli (high versus neutral) on levels of imagination difficulty, unpleasantness, disgust, run away, urge for neutralization.

In general, the present study aims to explain the following research questions:

1. Does the imagination difficulty, unpleasantness, disgust, run away and urge for neutralization level change according to stimuli’s disgust level?
2. Does the relation between levels of unpleasantness, disgust, run away and urge for neutralization and stimuli’s disgust level change according to imagery perspective?

3. Are there differences across groups (High Disgust Stimuli-Field Perspective, High Disgust Stimuli-Observer Perspective, Neutral Disgust Stimuli-Field Perspective, and Neutral Disgust Stimuli-Observer Perspective) according to levels of imagination difficulty, unpleasantness, disgust, run away and urge for neutralization?

In the line with these literature, hypotheses of this study can be stated as follows:

1. High disgust stimuli groups will have significantly higher level of unpleasantness, disgust, run away and urge for neutralization as compared to neutral disgust stimuli groups.

2. Field Perspective groups will have significantly higher level of unpleasantness, disgust, run away and urge for neutralization as compared to observer perspective groups.

3. High Disgust-Field Perspective group will have higher levels of imagination difficulty, unpleasantness, disgust, run away and urge for neutralization as compared to High Disgust-Observer Perspective group and other two experimental groups.

4. Neutral Disgust-Field Perspective group will have higher levels of imagination difficulty, unpleasantness, disgust, run away and urge for neutralization as compared to Neutral Disgust-Observer Perspective group.

Present exploratory study is the first attempt to explain link between imagery perspective and disgust. Present study integrates two separate research areas within a well-designed experimental design. Furthermore, this exploratory experimental approach allows us to find insights about two unexplored fields of research. Accordingly, present research can open new area for the mental imagery studies for broader range of emotions. In addition to this, present findings about imagery perspective and disgust might be applicable for emotional disorders that are caused or mediated by disgust sensitivity.
2. METHOD

2.1 Participants

120 participants, 22 of them male and 98 of them female, were selected from undergraduate students who were taken courses from Arts and Science faculty at Dogus University. Participants’ ages were from 20 to 42, with a mean age of 23.73 years ($SD = 3.43$). Number of students in field and observer perspective groups is presented in Table 1. Students were given a credit for their participation to this research. As seen in Table 1, male and female ratio in different experimental groups is equal.

<table>
<thead>
<tr>
<th>Perspective</th>
<th>Disgust Level</th>
<th>High</th>
<th>Neutral</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Perspective</td>
<td>Male</td>
<td>6</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>31</td>
<td>31</td>
<td>62</td>
</tr>
<tr>
<td>Observer Perspective</td>
<td>Male</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>24</td>
<td>24</td>
<td>48</td>
</tr>
</tbody>
</table>
2.2 Instruments

In the first step of the study, after the consent form (See Appendix A), participants were asked to complete in the following self-report scales.

2.2.1 Demographic Information Form:

In order to collect information regarding to gender, age, marital status, income level, religion, and religiosity level and religious practices of the participants and whether the participants have psychological problem Demographic information forms (See Appendix B) were given participants.

2.2.2 Beck Depression Inventory-II (BDI)

Beck Depression Inventory (See Appendix C) is one of inventories in battery. BDI is a 21-question self-report inventory (Beck, Rush, Shaw, & Emery, 1979). BDI is designed to understand the severity of depression and it is widely used instrument (Beck, Rush, Shaw, & Emery, 1979). Overall score is obtained by adding the every items’ ratings. Higher total scores indicate the severity of depression. BDI later revised as BDI-II (Beck, Steer, Ball, & Ranieri, 1996). The cross-cultural adaptation of original form of BDI for Turkish people was carried out by Hisli (1988) and Cronbach Alpha was .88 and test-retest reliability was .80. Revised form of BDI translated into Turkish by Kapçı (et al., 2008). Clinical and nonclinical Turkish adult populations’ internal consistencies were .90 and .89 Test-retest reliability was found as .94 (Kapçı et al., 2008). The BDI’s internal consistency is satisfying in the present study (α = .94).
2.2.3 Beck Anxiety Inventory (BAI)

Beck, Epstien, Brown, & Steer (1988) developed this 21-item self-report. This measure is designed to reach severity of anxiety symptoms. Particularly, this measure anxiety apart from depression symptoms (Beck, Epstien, Brown, & Steer, 1988). To calculate total score every item score is adding and higher scores gives us higher symptoms related to anxiety. BAI (See Appendix D) was adapted into Turkish by Ulusoy, Şahin, and Erkman (1998). Accroding to their adaptation study this inventory has cgood reliability and validity to the original validation sample. The BAI had good internal consistency in the present study ($\alpha = .94$).

2.2.4 Padua Inventory- Washington State University Revision (PI-WSUR)

Firstly, this form was developed assess obsessive-compulsive symptomatology (Burns et al., 1996). In this 39-item self-report measure, higher scores indicate higher OCD symptoms. PI has five subscales which are contamination obsessions and washing compulsions subscale, dressing/grooming compulsions subscale, checking compulsions subscale, obsessional thoughts of harm to self/others subscale and obsessional impulses to harm self/others subscale (Burns et al., 1996). PI-WSUR (See Appendix E) was translated into Turkish by Yorulmaz, Dirik, & Karancı (2007) and had good test-retest reliability and internal consistency. The PI's internal consistency in the present study is satisfactory ($\alpha = .94$). Also, internal consistency for subscale of washing compulsions and contamination obsessions was satisfactory in this present study ($\alpha = .89$).

2.2.5 Disgust Sensitivity Scale-Revised

Present scale was developed by Haidt, McCauley and Rozin (1994) and administered as 32-item Disgust Sensitivity Scale (See Appendix F) to assess sensitivity to different disgust elicitors. Those elicitors of disgust are including hygiene, body products, animals, food,
death, body envelope violations (e.g., injuries), and sex. Original form had only true-false items and Olatunji, Sawchuck, De Jong, & Lohr (2007) revised this scale. Revised form of Disgust Sensitivity Scale includes 13 true/false items. Other twelve questions were rated on a 3-point scale (Olatunji et al., 2008). Latest form of DS-R revised as 27-items that is chosen on 5-point scale (Olatunji et al., 2008). Turkish by Eremsoy and İnözü translated DS-R inventory into Turkish, (2013) and the Cronbach’s alpha coefficients of core animal reminder disgust, disgust, and contamination subscales, and DS-R Total Score were .76,.75,.64, and .87, respectively. In the present study DS-R had enough internal consistency ($\alpha = .89$).

### 2.2.6 Contamination Cognitions Scale (CCS)

Contamination Cognitions Scale (See Appendix G) was 13-items scale to assess the bias to exaggerate the possibility and asperity of contamination (Deacon & Olatunji, 2007). The scale includes 13 objects that OCD patients often associate with germs (toilet handles, toilet seats, sink faucets, door handles, workout equipment, telephone receivers, stairway railings, elevator buttons, animals, raw meat, money, unwashed produce, foods that others have touched) (Deacon & Olatunji, 2007). Firstly they were supposed to think about what would happen if they touched each of these object and subsequently were unable to wash their hands. Two separate measures were taken from each participant. Firstly, the probability that touching the object would cause contamination, and secondly “how bad it would be” if they were really contaminated (Deacon & Olatunji, 2007). Participants have chosen their answer form a 0–100 scale. Because both subscales are highly correlated, total score is calculated by taking average of 26 items. CCS’ test–retest reliability was 0.94 and internal consistency was .97 (Deacon & Olatunji, 2007). CSS translated into Turkish by Eremsoy and İnözü (2013). CCS’ test–retest reliability was .82 and internal consistency was found for the CCS which is satisfactory ($\alpha = .89$) (Eremsoy & İnözü, 2013). The CCS in the present study had enough internal consistency ($\alpha = .96$).

### 2.2.7 Obsessive Beliefs Questionnaire

This questionnaire (See Appendix H) was originally 87 items likert scale to evaluate
various maladaptive beliefs that indicate OCD designed by the Obsessive-Compulsive Cognition Working Group (OCCWG, 2001, 2003, 2005). In 2005, 44 items version of this questionnaire was developed. OBQ measure has three subscales and one of them is Responsibility/Threat Estimation (RT) The other two subscales are Certainty/Perfectionism (CP) and Control of Thoughts/Importance (CTI) (OCCWG, 2003, 2005; Woods et al., 2004). Researches revealed that present inventory has good and validity reliability. The OBQ was translated into Turkish by Yorulmaz & Gençöz (2008). It was found that reliability and validity of the translated version is comparable with the original validation sample (Yorulmaz & Gençöz, 2008). The OBQ had good internal consistency in this research ($\alpha = .95$).

2.3 Procedure

Firstly, study permission was requested from Dogus University Ethical Committee. Research was announced through e-mail and announcements in classrooms. Participants wrote their names to the list on the experiment room to appoint an hour to participate the experiment. When participants arrived their appointment, firstly, they were given information about the processes and the objective and plan of the study and were given the informed consent form. Each participant completed two phases of the experiment; namely self-report ratings, imagination phase, respectively.

In the first phase, participants were completed a battery including Demographic Information Form, Beck Depression Inventory-II (Beck et al, 1979), Beck Anxiety Inventory (Beck et al., 1988), Padua Inventory-Washington State University Revision (Burns et al., 1996), Disgust Sensitivity Scale-Revised Form (Haidt et al., 1994), Obsessive Beliefs Questionnaire (OCCWG, 2005), and Contamination Cognition Scale (Deacon et al., 2007). Researcher administered the experiment in the private room in Dogus University. Instruments were completed individually and the process of the study took 20 minutes to complete.

After completing self-rating scales, each participants were randomly assigned to experimental groups. These four experimental groups are:
1) High Disgust Stimuli from Field Perspective

2) High Disgust Stimuli from Observer Perspective

3) Neutral Disgust Stimuli from Field Perspective

4) Neutral Disgust Stimuli from Observer Perspective

Before starting the second phase of the study, participants were informed about the concept of mental imagination and different imagery perspectives. In more detail, they were informed that people can use different perspectives which are “field perspective” and “observer perspective” when we imagine situations. Additionally, they were also informed that in field perspective we imagine the situation as if we are experiencing it and in observer perspective we watch ourselves from the outside of the situation. After giving detailed information, participants were expected to make a trial by imaging themselves in a room sitting on a couch at home and watching TV by using field perspective and observer perspective and they were asked to explain what they see around them in this situation. This information was given more detailed to each participant. Explanation and trial of field perspective and observer perspective is given by opposite order to eliminate order effect. In other words instructions were given alternatively to the participants. Therefore, first half of the participants were informed first about the field view. Other half of the participants were given information first about the observer perspective first.

After participants were informed about different imaging perspectives, experimental phase started. They were presented 10 pictures to imagine themselves either in field or observer perspective. Pictures were different in terms of their contents as high disgust stimuli and neutral disgust stimuli. Pictures in high disgust group were chosen according to the kind of disgust elicitors. As mentioned in the literature review, disgust dimensions consist of body envelope violations (e.g., injuries), animals, food, death, products of body, hygiene, and sex. In neutral pictures were in similar content but they were not related any negative disgust feelings. Pictures of tomato, refrigerator, leech-ladybug, condom, toilet, hand, kissing from a stranger-partner, death person-sleeping person were presented with high
disgust content or neutral disgust content to the participants. For instances as seen in Figure 1, in high disgust-field perspective stimuli groups, moldy tomato, and in neutral disgust-field perspective stimuli groups, clean and fresh tomato were presented.

Firstly, subjects were asked to imagine themselves in the presented condition for 1 minute, either from the field or observer perspective as presented on the screen. Following the picture presentation, participants pressed the forward button and they were supposed to complete a set of visual analogue scale (e.g. Figure 2). In this phase, following 6 measures were obtained: (1) How easy to create the expected imagery situation by field/observer perspective, (2) How clear the images that was created by using field/observer perspective, (3) Level of unpleasantness because of being imposed to that imagined situation, (4) Likelihood of performing such situation in real life (the intensity of avoidance behavior), (5) Perceived contamination likelihood in that described situation, (6) Intensity of neutralization urge in that described situation.
Figure 2. Following the picture presentation, computer interface of visual analogue scale

After completing visual analogue scale, participants forwarded the next page. In the following page, participants were supposed to complete eight items on Likert scale to rate severity of different emotions related to the imagery exposure (Figure 3). Aim of this scale is to obtain whether these pictures were related to disgust or not. This procedure was repeated for each of the 10 pictures.
3. RESULTS

In this section results of the present study will be given in four different sections. First of all, pretest conditions and differences between groups before experimental manipulations and the correlations among the measures of the study will be presented. Then findings regarding the effectiveness of experimental manipulation (high disgust stimuli versus neutral disgust stimuli) will be given. Next in the third section, effects of imagery perspective (field versus observer perspective) on participants’ level of imagination
difficulty, unpleasantness, disgust, run away, urge for neutralization will be examined. Finally in the last section, the interaction between imagery perspective (field or observer) and disgust level (high or neutral disgust) on levels of imagination difficulty, unpleasantness, disgust, run away, urge for neutralization will be examined by using five separate 2 (disgust level: high vs. neutral) X 2 (imagery perspective: field vs. observer) between subjects analysis of variances (ANOVAs).

3.1 Examination of Pretest Measures and Differences Between Groups Before Experimental Manipulation and Correlations Among Measures

For the whole sample, to check the comparability of participants in the experimental conditions, the groups were compared on the background measures. As presented in Table 2, One-Way Analysis of Variance (ANOVA) results revealed that, for field and observer perspective groups, there is no significant difference between high and neutral disgust groups with regard to age and other self-report measures. Participants in different experimental groups, before experimental manipulations, did not indicate any difference in terms of age, depression, anxiety, obsessive-compulsive symptoms, obsessive beliefs, disgust sensitivity, and contamination cognitions. Table 2 shows means for self-report measures in different experimental groups before manipulation.

<table>
<thead>
<tr>
<th>Table 2. Differences Between Groups Before Experimental Manipulation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Disgust Level</strong></td>
</tr>
<tr>
<td><strong>Age</strong></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
In addition, correlations between measures of the study were examined. As expected and presented in Table 3, anxiety level was found to be related with contamination cognitions, obsessive beliefs and also obsessive-compulsive symptomatology related to cleaning. On the other hand, depression level was found not to be associated with contamination cognitions, disgust sensitivity and cleaning symptoms. Furthermore, as predicted, disgust sensitivity was linked with contamination cognitions and obsessive beliefs of participants.

Table 3. Correlations Between the Study Measures

<table>
<thead>
<tr>
<th>Measures</th>
<th>BDI</th>
<th>BAI</th>
<th>PI-Cleaning</th>
<th>DS-R</th>
<th>CCS</th>
<th>OBQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDI</td>
<td>.308**</td>
<td>.073</td>
<td>.068</td>
<td>.081</td>
<td>.219*</td>
<td></td>
</tr>
</tbody>
</table>
3.2 Comparison of Experimental Groups (Disgust and Neural Stimuli) In Terms of Unpleasantness, Disgust, Run Away and Urge for Neutralization

In order to check the effectiveness of experimental manipulation, high and neutral disgust
stimuli groups were compared in terms of levels of unpleasantness, disgust, run away, urge for neutralization.

According to our hypothesis, unpleasantness, disgust, run away, urge for neutralization levels between high disgust and neutral stimuli groups are expected to be significantly different. It was expected that high disgust stimuli group show higher disgust reactions levels.

In order to examine the group differences (High Disgust Stimuli vs. Neutral Disgust Stimuli), on all disgust reactions, a one way between subjects analysis of variance (ANOVA) was conducted. Thus, in each analysis, the level of unpleasantness, disgust, run away, urge for neutralization was obtained as the dependent variable and the disgust level of the stimuli as the independent variable. The analysis indicated a significant main effect of manipulation on levels of unpleasantness, $F(1,118) = 640.39, p < .05$, disgust $F(1,118) = 475.73, p < .05$, run away $F(1,118) = 287.06, p < .05$, and urge for neutralization $F(1,118) = 308.39, p < .05$. Parallel to the hypothesis, participants in high disgust stimuli group reported significantly higher levels of unpleasantness, disgust, run away, and urge for neutralization compared to participants in neutral disgust stimuli group (Table 4).

Table 4. Difference Between Groups in Unpleasantness, Disgust, Run Away, Urge for Neutralization After Experimental Manipulations.

<table>
<thead>
<tr>
<th>Disgust Level</th>
<th></th>
</tr>
</thead>
</table>
### Table 5. Main effect of Imagery Perspective on Imagination Difficulty Unpleasantness, Disgust, Run Away, Urge for Neutralization

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>High Mean (SD)</th>
<th>Neutral Mean (SD)</th>
<th>F (df)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unpleasantness</td>
<td>75.51 (15.08)</td>
<td>13.32 (11.62)</td>
<td>(1, 118) = 640.39*</td>
</tr>
<tr>
<td>Disgust</td>
<td>75.36 (18.23)</td>
<td>13.25 (12.19)</td>
<td>(1, 118) = 475.73*</td>
</tr>
<tr>
<td>Run away</td>
<td>62.18 (22.59)</td>
<td>8.15 (9.98)</td>
<td>(1, 118) = 287.06*</td>
</tr>
<tr>
<td>Urge to wash</td>
<td>86.42 (12.69)</td>
<td>37.40 (17.48)</td>
<td>(1, 118) = 308.73*</td>
</tr>
</tbody>
</table>

*p < .001

#### 3.3 Comparison Between Field Perspective and Observer Perspective Groups in Terms of Imagination Difficulty, Unpleasantness, Disgust, Run Away and Urge for Neutralization

Five separate one way between subjects analysis of variance (ANOVA) were conducted in the third phase of the analysis. Aim of this analysis to evaluate the group differences (field perspective, observer perspective) on the level of imagination difficulty, unpleasantness, disgust, run away and urge for neutralization as dependent variables.

According to our hypothesis, field perspective group was expected to show higher level of imagination difficulty, unpleasantness, disgust, run away and urge for neutralization. As seen in Table 5, in contrary to our hypothesis, the analyses did not showed a significant main effect of imagery perspective on levels of disgust reactions.
<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Imagery Perspective</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Field M (SD)</td>
<td>Observer M (SD)</td>
<td>F (df)</td>
</tr>
<tr>
<td>Imagination difficulty</td>
<td>21.68 (22.88)</td>
<td>17.88 (20.10)</td>
<td>(1, 118) = 0.93</td>
</tr>
<tr>
<td>Unpleasantness</td>
<td>45.40 (34.78)</td>
<td>43.36 (33.36)</td>
<td>(1, 118) = 0.11</td>
</tr>
<tr>
<td>Disgust</td>
<td>46.38 (34.82)</td>
<td>42.67 (34.99)</td>
<td>(1, 118) = 0.34</td>
</tr>
<tr>
<td>Run Away</td>
<td>37.40 (33.53)</td>
<td>32.78 (30.88)</td>
<td>(1, 118) = 0.62</td>
</tr>
<tr>
<td>Urge to Neutralization</td>
<td>63.79 (29.31)</td>
<td>59.90 (28.65)</td>
<td>(1, 118) = 0.54</td>
</tr>
</tbody>
</table>

3.4 Comparison of Groups According to Stimuli’s Disgust Level and Imagery Perspective on Imagination Difficulty, Unpleasantness, Disgust, Run Away and Urge for Neutralization

To test if there is a significant difference between high and neutral disgust groups in imagination difficulty, unpleasantness, disgust, run away and urge for neutralization depending on the effect of imagination perspective following analyses were performed.

For each dependent variable, one way between subjects analysis of variance (ANOVA) was administered to evaluate the group differences (High Disgust Stimuli-Field Perspective, High Disgust Stimuli-Observer Perspective, Neutral Disgust Stimuli-Field Perspective, and Neutral Disgust Stimuli-Observer Perspective). Thus, imagination difficulty, unpleasantness, disgust, run away and urge for neutralization score of participants were defined as the dependent variable. The disgust groups and imagery perspective were chosen as independent variables.

As shown in Table 6, the interaction effect of disgust level and imagery perspective was not significant for any of the disgust reactions taken as the dependent variable. As reported in Section 3.2, regardless of the imagery perspective, high disgust stimuli pictures resulted in higher levels of imagination difficulty, unpleasantness, disgust, run away and urge for neutralization reactions compared to neutral pictures.
Table 6. Interaction Effect of Imagery Perspective and Disgust Level on Imagination Difficulty, Unpleasantness, Disgust, Run Away and Urge for Neutralization

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Field</th>
<th>Observer</th>
<th>Interaction F (df)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High Mean (SD)</td>
<td>Neutral Mean (SD)</td>
<td></td>
</tr>
<tr>
<td>Imagination difficulty</td>
<td>32.29 (25.20)</td>
<td>11.07 (14.05)</td>
<td>28.69 (21.30)</td>
</tr>
<tr>
<td>Unpleasantness</td>
<td>77.80 (14.15)</td>
<td>13.00 (9.47)</td>
<td>73.06 (15.8)</td>
</tr>
<tr>
<td>Disgust</td>
<td>77.39 (16.39)</td>
<td>14.33 (11.82)</td>
<td>73.19 (20.06)</td>
</tr>
<tr>
<td>Run Away</td>
<td>64.55 (25.29)</td>
<td>10.26 (11.13)</td>
<td>56.65 (19.44)</td>
</tr>
<tr>
<td>Urge to wash</td>
<td>90.16 (8.73)</td>
<td>37.42 (15.26)</td>
<td>82.51 (15.04)</td>
</tr>
</tbody>
</table>

4. DISCUSSION

4.1 Main Aims and Major Findings
The primary goal of this exploratory research was to better understand the effects of “field” and “observer” perspectives on the experience of disgust. In order to address three main hypotheses, substantial analyses were carried. Overall results indicated that, there was no significant main effect of imagery perspective on imagination difficulty, unpleasantness disgust, run away and urge for neutralization level. Also, the interaction effect of disgust level and imagery perspective was not found as significant for any of the disgust reactions.

Before testing the hypothesis and examining the effect of experimental manipulations, pretest conditions and differences between groups were investigated. In addition to this, correlations among the study measures were examined. To examine group differences, participants’ level of age, depression, anxiety, obsessive-compulsive symptoms, obsessive beliefs, disgust sensitivity, contamination cognitions were assessed. According to analysis, there is no significant difference between all variables among groups. Participants in different experimental groups, before experimental manipulations, did not have any difference in terms of age, depression, anxiety, obsessive-compulsive symptoms, obsessive beliefs, disgust sensitivity, and contamination cognitions.

Secondly, correlations among measures were examined. Results revealed that anxiety level was found to be related with contamination cognitions, obsessive-compulsive symptomatology related to cleaning and obsessive beliefs. On the other hand, depression level was not found to be linked with contamination cognitions, disgust sensitivity and cleaning symptoms. Furthermore, as predicted, disgust sensitivity was associated with contamination cognitions and obsessive beliefs of participants.

Thirdly, for assessing the ability of the pictures to induce disgust, high and neutral disgust stimuli groups were compared in terms of levels of unpleasantness, disgust, run away, urge for neutralization. According to our hypothesis, unpleasantness, disgust, run away, urge for neutralization levels between high disgust and neutral stimuli groups are expected to be significantly different. High disgust stimuli group is expected to show higher levels of disgust reactions. Consistently with our hypothesis, participants in high disgust stimuli group reported significantly higher levels of unpleasantness, disgust, run away, and urge for neutralization compared to participants in neutral disgust stimuli group. These results
supported the effectiveness of experimental manipulation. In other words, pictures were effective to induce disgust feelings in this experimental research. Accordingly, results were supported that disgust feelings can be induced in the laboratory setting.

According to our hypothesis, field perspective group was expected to show higher level of imagination difficulty, unpleasantness, disgust, run away and urge for neutralization. Studies examining the relationship between field versus observer perspective and emotions revealed that remembering events from observer perspective lead to less emotional reliving (e.g., Rubin, Berntsen 2006; French & Crawley, 2005; McIsaac & Eich, 2002; D’Argembeau, Comblain, & Van der Linden, 2003; Nigro, and Neisser, 1983; Talarico, LaBar, & Rubin, 2004). Accordingly, it was also revealed that when subjects shifted their perspective from field to observer, their affective situation become less aroused (Robinson and Swanson, 1993) and field memories contain more affective reactions, bodily sensations, psychological states of the participants (McIsaac, Eich, 2004). Moreover, consistent with our hypothesis, study about recalling negative events from field and observer perspective reported that fielders tend to develop higher emotional reactions and anxious state (Terry & Horton, 2007).

In present study, it was anticipated that imagery instructions would create an increased differentiation between high disgust and neutral disgust inducing stimuli. Nonetheless, there was no significant main effect of imagery perspective, and no interaction effect of imagery perspective and stimuli’s disgust level were found in present study. Present findings revealed that, manipulation of imagery perspective did not yield any significant effect and it was inconsistent with our predictions. Potential limitations and future directions that can be effective in these results will be discussed further in following sections.

4.2 Conclusion

To conclude, there was not found significant effect of imagery perspective on experience of disgust in present study. Present findings indicated that either field or observer perspective
could not differentiate imagination difficulty, unpleasantness disgust, run away and urge for neutralization level. In sum, consistently with our hypothesis stimuli’s disgust level affected the measures of unpleasantness, disgust, run away, urge for neutralization differed since no comparable effects were found when imagery perspective was initiated by instruction.

4.3 Limitations of the Present Study

The purpose of this present research is to gain familiarity and acquire a new insight for this new phenomenon to be able to formulate a more precise hypothesis. To our knowledge, this is the first attempt to explain the relationship between imagery perspective and disgust. Since the relative effects of “field” and “observer” perspectives on experiencing disgust are an uninvestigated area in psychology, there are not well-supported enough research designs and assessment tools. Potential weaknesses of present study are relatively less research interest and lack of previous findings, which restricted us to draw definite conclusions.

Another reason for why there is a need to be cautious to generalize these findings is that it was administrated to a non-clinical university sample. Also, participants generally have middle and high socioeconomic family backgrounds. Therefore, it is difficult to generalize these findings to all population apart from university students. In order to reach more definite results, duplication of this design with a larger sample and heterogeneous groups is recommended.

Additionally, another reason for caution to generalize these findings is that, during imagination process, participants’ imagery from field and observer perspective was not examined objectively. Therefore, future studies should also consider the checking the participants’ imagery perspective capabilities.

Lastly, even though male and female ratio is equal in different experimental groups, there was higher number of female participants. Previous studies revealed that even though in subjective rating women tend to show increased level of disgust compared to men,
neurophysiological studies revealed that there is no significant gender difference on neurophysiological level after exposure to disgust evoking stimuli (Stark et al., 2003; Schienle et al., 2005; as cited in Rohrmann, Hopp, & Quirin, 2008). Nonetheless, limited male participation is another reason for not hastening to generalize present findings.

**4.4 Clinical Implications and Future Directions**

Applying the concept of imagery perspective to disgust sensitivity is a new approach for mental imagery studies. Even though this exploratory research did not yield any significant results about the effects of imagery perspective on disgust feelings, it opened a new area for mental imagery studies for broader range of emotions because manipulating imagery can be beneficial for clinical practices (Hackmann, 1998; Hackmann & Holmes, 2004). Accordingly, future findings about imagery perspective and disgust might be applicable for emotional disorders that are caused or mediated by disgust sensitivity.

Similarly, it has been demonstrated that exposure is a more effective way of treatment for disgust than using cognitive therapy techniques based on conversation (McNally, 2002). That’s why extending findings about imagery and disgust would be beneficial for treatment of disgust.

Notwithstanding the limitations, the present exploratory research makes a relevant addition to the literature on imagery perspective and disgust as it adds new knowledge. A review of literature also reveals that in the use of exposure based on imagery, the imagery perspective has not been taken into account. Therefore, extending findings about imagery perspective and disgust would be beneficial for treatment of disgust. Future studies should more detailly explain the nature of the relation between disgust feeling and perspective, as well as between perspective and emotional response to pinpoint when and how observer perspective is adaptive or maladaptive.

Even though it was found that disgust feelings could be induced in laboratory settings, in future studies imagery perspective of disgust-related memories can be studied in order to extend these findings.
In addition to this, Lozano, Hard, and Tversky (2007) found that not only imagery perspective, but also action versus static form of the imagery is very influential. Therefore, future researches might consider the relative effect of putting action on perspective. Adding to this effect of imagery size, colour, light level, distance in observer perspective might be examined in future studies.

To conclude, further experimental research with mental imagery in the future may increase our awareness for the role of field-observer perspective in the experience of feeling of ‘disgust’. In brief, future research should attempt to better integrate the cognitive, social, and clinical literatures on imagery perspective, both to better understand everyday mechanisms of visual perspective in experience of disgust and to examine to what extent these mechanisms apply to populations characterized by emotional disorders related to disgust sensitivity.
REFERENCES


Memory, 1, 169-184.


Araştırmanın Adı: Tiksinirici içerikli resimlerin göz ve diş açı ile canlandırılmasında kişilerarası farklılıklar

Araştırmacılar: Yard. Doç. Dr. Ekin Eremsoy & Ezgi Tan


Bu araştırma Doğuş Üniversitesi Etik Kurulu tarafından incelenmiş ve onaylanmıştır. Bu çalışma ile ilgili herhangi bir endişeniz ya da sorunuz olursa bu projenin araştırmacısı olan Yrd. Doç. Dr. Ekin Eremsoy (1249 ya da eeremsoy@dogus.edu.tr) ile iletişim kurabilirsiniz.

Eğer bu çalışmaya katılımınızı istiyorunuzsa, lütfen aşağıdaki onay formunu okuyarak imzalayınız.


Eğer bu bilgiler doğrultusunda araştırmaya katılımınızı istiyorunuzsa, lütfen Onay Formunun iki kopyasını da imzalayınız, ve bu formun bir kopyasını kendiniz için saklayın.

Katılımcının Adı-Soyadı (lütfen yazınız): ___________________________

Katılımcının İmzası: _______________________________

Tarih: ______________________

Araştırma projesine vermiş olduğunuz destek ve yardım için teşekkür ederiz.
APPENDIX B

DEMOGRAPHIC INFORMATION FORM

DEMOGRAFİK BİLGİ FORMU

| Katılımcı Kodu: | __________________________ |
| Tarih: | __________________________ |

**Yönerge:** Sizden, diğer ölçekleri cevaplandırmadan önce öncelikle aşağıda kişisel bilgilerinize ilgili olan soruları cevaplandiranızı rica ediyoruz. Kişisel bilgilerinizin ardından ayrıca sizin dini inancınız, tutumlarınız ve davranışlarınız hakkında da bazı sorular yer almaktadır. Lütfen bu soruları sizi en iyi ifade eden sayıyı yuvarlak içine alarak cevaplayınız.

| Cinsiyetiniz: | □ Erkek | Kadın □ |
| Yaşınız: | __________________________ ( Yıl olarak) |

**Medeni Durumuz:**

(1) Bekar (2) Evli/Birlikte Yaşıyor (3) Ayrılmış/Boşanmış (4) Dul

**Ailenizin gelir düzeyi:**

(1) Düşük (2) Orta (3) Yüksek
1- Şu anda sizi profesyonel bir yardım almaya yönlendiren ruh sağlığınızla ilgili bir probleminiz var mı?  EVET □  HAYIR □
Eğer cevabınız “evet” ise lütfen ruh sağlığınızla ilgili şu anki problemi/problemleri yazınız:
________________________________________________________________________

2- Dini inancınız nedir?
(1) Katolik
(2) Protestan
(3) Yahudi
(4) Ortodoks
(5) İslam
(6) Hiç bir dine inanmıyorum
(7) Ateist
(8) Diğer (Lütfen Belirtiniz): ____________________

3- Son bir yılda, dini ibadetinizin yapıldığı yerlere ne sıklıkla gittiniz? (Camii, Kilise, Sinagog vb.) (Genelde yaptıklarınızı en yakın çevabını işaretleyin)

<table>
<thead>
<tr>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiç</td>
<td>Ara sıra</td>
<td>Çoğu kez</td>
<td>Sıklıkla</td>
<td>Oldukça sık</td>
</tr>
<tr>
<td>(Ayda bir defadan az)</td>
<td>(Ayda en az bir)</td>
<td>(Haftada en az bir)</td>
<td>(Günde en az bir)</td>
<td></td>
</tr>
</tbody>
</table>

4- Son bir yılda, ne sıklıkla dua ettiniz? (Genelde yaptıklarınızı en yakın çevabını işaretleyin)

<table>
<thead>
<tr>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
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<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiç</td>
<td>Ara sıra</td>
<td>Çoğu kez</td>
<td>Sıklıkla</td>
<td>Oldukça sık</td>
</tr>
<tr>
<td>(Ayda bir defadan az)</td>
<td>(Ayda en az bir)</td>
<td>(Haftada en az bir)</td>
<td>(Günde en az bir)</td>
<td></td>
</tr>
</tbody>
</table>

5- Son bir yılda, dininizde gönderilmiş olan kutsal kitabı ne sıklıkla okudunuz? (Kuran, İncil, Tevrat vb.) (Genelde yaptıklarınızı en yakın çevabını işaretleyin)

<table>
<thead>
<tr>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiç</td>
<td>Ara sıra</td>
<td>Çoğu kez</td>
<td>Sıklıkla</td>
<td>Oldukça sık</td>
</tr>
<tr>
<td>(Ayda bir defadan az)</td>
<td>(Ayda en az bir)</td>
<td>(Haftada en az bir)</td>
<td>(Günde en az bir)</td>
<td></td>
</tr>
</tbody>
</table>

6- Son bir yılda, dini dernek, vakf, yada organizasyonlara ne sıklıkla maddi bağış yaparsınız yada etkinliklerine katılmak için gönüllü olarak zaman ayırırsınız? (Genelde yaptıklarınızı en yakın çevabını işaretleyin)

<table>
<thead>
<tr>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiç</td>
<td>Ara sıra</td>
<td>Çoğu kez</td>
<td>Sıklıkla</td>
<td>Oldukça sık</td>
</tr>
<tr>
<td>(Ayda bir defadan az)</td>
<td>(Ayda en az bir)</td>
<td>(Haftada en az bir)</td>
<td>(Günde en az bir)</td>
<td></td>
</tr>
</tbody>
</table>
7. Dini inancınızın davranış ve kararlarınızı belirlemede ne kadar önemli bir rolü vardır?
(Genelde yaptıklarınıza en yakın cevabı işaretleyin)

<table>
<thead>
<tr>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiç önemli değil</td>
<td>Biraz Önemli</td>
<td>Önemli</td>
<td>Çok önemli</td>
<td>Son derece önemli</td>
</tr>
</tbody>
</table>

APPENDIX C

BECK DEPRESSION INVENTORY

(BECK DEPRESYON ÖLÇEĞİ)

AŞAĞIDA, KİŞİLERİN RUH DURUMLARINI İFADE EDERKEN KULLANDIKLARI BAZI CÜMLELER VERİLMİŞTİR. HER MADDE, BİR ÇEŞİT RUH DURUMUNU ANLATMADIR. HER MADDEDE O RUH DURUMUNUN DERECESİNİ BELİRLEYEN 4 SEÇENEK VARDIR. LÜTFEN BU SEÇENEKLERİ DİKKATLE OKUYUNUZ. SON BİR HAFTA İçİNDEKİ (ŞU AN DÂHİL) KENDİ RUH DURUMUNUZU GÖZ ÖNÜNDE BULUNDURARAK, SİZE EN UYGUN OLAN İFADEYİ BULUNUZ.

1. □ Kendimi üzgün hissetmiyorum.
□ Kendimi üzgün hissediyorum.
□ Her zaman için üzmüşüm kendimi bu duygudan kurtaramıyorum.
□ Öylesine üzgün ve mutsuzum ki dayanamıyorum.

2. □ Gelecekten umutsuz değilim.
| | Geleceğe biraz umutsuz bakıyorum.  
| | Gelecekten beklendiğim hiçbir şey yok  
| | Benim için bir gelecek yok ve bu durum düzelmeyecek.  

3.  
- Kendimi başarısız görüyorum.  
- Çevremdeki birçok kişiden fazla başarısızlıklarım olduğu sayılır.  
- Geriye dönüp baktığında, çok fazla başarısızغذيmin olduğunu görüyorum.  
- Kendimi tümüyle başarısız bir insan olarak görüyorum.

4.  
- Her şeyden eskisi kadar zevk alabiliyorum.  
- Her şeyden eskisi kadar zevk almıyorum.  
- Artık hiçbir şeyden gerçek bir zevk alamıyorum.  
- Bana zevk veren hiçbir şey yok.

5.  
- Kendimi suçlu hissetmiyorum.  
- Arada bir kendimi suçlu hissettiğim oluyor.  
- Kendimi çoğunlukla suçlu hissediyorum.  
- Kendimi her an için suçlu hissediyorum.

6.  
- Cezalandırıldığı düşünmüyor.  
- Bazı şeyler için cezalandırılabileceğini hissediyorum.  
- Cezalandırılmayı bekliyorum.  
- Cezalandırıldığımı hissediyorum.

7.  
- Kendimden hoşnudum.  
- Kendimden pek hoşnut değilim.  
- Kendimden hiç hoşlanmıyor.  
- Kendimden nefret ediyorum.

8.  

---
Kendimi diğer insanlardan daha kötü görmüyorum.
Kendimi zayıflıklarım ve hatalarım için eleştiriyorum.
Kendimi hatalarım için çoğu zaman suçluyorum.
Her kötü olayda kendimi suçluyorum.

9.
Kendimi öldürmek gibi düşüncelerim yok.
Bazen kendimi öldürmeyi düşünüyorum, fakat buyu yapamıyorum.
Kendimi öldürebilmeyi isterdim.
Bir fırsatını bulsam kendimi öldürürdüm.

10.
Her zamankinden daha fazla ağladiumı sanmıyorum.
Eskisine göre şu sıralarda daha fazla ağlıyorum.
Şu sıralarda her an ağlıyorum.
Eskiden ağlayabilirdim, ama şu sıralarda istesem de ağlayamıyorum.

11.
Her zamankinden daha sinirli değilim.
Her zamankinden daha kolayca sinirleniyor ve kızıyorum.
Çoğu zaman sinirliyim.
Eskiden sinirlendiğim şeylerle bile artık sinirlenemiyorum.

12.
Diğer insanlara karşı ilgimi kaybetmedim.
Eskisine göre insanlarla daha az ilgiliyim.
Diğer insanlara karşı ilgimin çoğunu kaybettim.
Diğer insanlara karşı hiç ilgim kalmadı.

13.
Kararlarımı eskisi kadar kolay ve rahat verebiliyorum.
Bu sıralarda kararlarını vermemi erteliyorum.
Kararlarını vermekte oldukça güçlük çekiyorum.
<table>
<thead>
<tr>
<th>Sayı</th>
<th>Görsel</th>
<th>Metin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yaşlandığımı ve çekiciliğini kaybetğini düşündüğüm ve üzülüyorum.</td>
<td>Dış görünüşümde artık değiştirilmesi mümkün olmayan olumsuz değişiklikler olduğunu düşünüyor.</td>
</tr>
<tr>
<td></td>
<td>Çok çirkin olduğunu düşünüyorum.</td>
<td>Çok çirkin olduğunu düşünüyorum.</td>
</tr>
<tr>
<td></td>
<td>Bir işe başlayabilmek için eskisine göre kendimi daha fazla zorlamam gerekiyor.</td>
<td>Bir işe başlayabilmek için eskisine göre kendimi daha fazla zorlamam gerekiyor.</td>
</tr>
<tr>
<td></td>
<td>Hangi iş olursa olsun yapabilme için kendimi çok fazla zorluyorum.</td>
<td>Hangi iş olursa olsun yapabilme için kendimi çok fazla zorluyorum.</td>
</tr>
<tr>
<td></td>
<td>Hiçbir iş yapamıyorum.</td>
<td>Hiçbir iş yapamıyorum.</td>
</tr>
<tr>
<td></td>
<td>Şu sralarda eskisi kadar rahat uyuyamıyorum.</td>
<td>Şu sralarda eskisi kadar rahat uyuyamıyorum.</td>
</tr>
<tr>
<td></td>
<td>Eskisine göre 1 veya 2 saat erken uyanıyor ve tekrar uyumakta zorluk çekiyor.</td>
<td>Eskisine göre 1 veya 2 saat erken uyanıyor ve tekrar uyumakta zorluk çekiyor.</td>
</tr>
<tr>
<td></td>
<td>Eskisine göre çok erken uyanıyor ve uyuyamıyorum.</td>
<td>Eskisine göre çok erken uyanıyor ve uyuyamıyorum.</td>
</tr>
<tr>
<td>17.</td>
<td>Eskisine kıyasla daha çabuk yorulduğunu sanıyorum.</td>
<td>Eskisine kıyasla daha çabuk yorulduğunu sanıyorum.</td>
</tr>
<tr>
<td></td>
<td>Eskisinden daha çabuk yoruluyorum.</td>
<td>Eskisinden daha çabuk yoruluyorum.</td>
</tr>
<tr>
<td></td>
<td>Şu sralarda neredeyse her şey beni yoruyor.</td>
<td>Şu sralarda neredeyse her şey beni yoruyor.</td>
</tr>
<tr>
<td></td>
<td>Öyle yorgunum ki hiçbir şey yapamıyorum.</td>
<td>Öyle yorgunum ki hiçbir şey yapamıyorum.</td>
</tr>
<tr>
<td>18.</td>
<td>İştahım eskisinden pek farklı değil.</td>
<td>İştahım eskisinden pek farklı değil.</td>
</tr>
<tr>
<td></td>
<td>İştahım eskisi kadar iyi değil.</td>
<td>İştahım eskisi kadar iyi değil.</td>
</tr>
<tr>
<td></td>
<td>Şu sralarda istahım epey kötü.</td>
<td>Şu sralarda istahım epey kötü.</td>
</tr>
<tr>
<td></td>
<td>Artık hiç istahım yok.</td>
<td>Artık hiç istahım yok.</td>
</tr>
</tbody>
</table>
19.  
- Son zamanlarda pek fazla kilo kaybettigim söylenemez.  
- Son zamanlarda istemedigim halde üç kilodan fazla kaybettim.  
- Son zamanlarda istemedigim halde beş kilodan fazla kaybettim.  
- Son zamanlarda istemedigim halde yedi kilo verdim.  

20.  
- Sağlığım beni pek endişelendirmiyor.  
- Son zamanlarda ağrı, sızı, mide bozuklugu,kabızlık gibi sorunlarım var.  
- Ağrı, sızı, gibi bu sıkıntılarım beni epey endişelendirdiği için başka şeyler düşünmek zor geliyor.  
- Bu tür sıkıntılar beni öyle endişelendiriyor ki, artık başka hiçbir şey düşünemiyorum.  

21.  
- Son zamanlarda cinsel yaşantımda dikkatimi çeken bir şey yok.  
- Eskisine oranla cinsel konularla daha az ilgileniyorum.  
- Şu sralarda cinsellikle pek ilgili değilim.  
- Artık, cinsellikle bir ilgim kalmadı.
Aşağıda insanların kaygılı ya da endişeli oldukları zamanlarda yaşadıkları bazı belirtiler verilmiştir. Lütfen her maddeyi dikkatle okuyunuz. Daha sonra, her maddedeki belirinin bugün dahil son iki haftadır sizi ne kadar rahatsız ettiğiini aşağıdaki ölçekte yararlanarak maddelerin yanındaki uygun yere (x) işaret koyarak belirleyiniz.

<table>
<thead>
<tr>
<th>Sizi ne kadar rahatsız etti?</th>
<th>Hiç</th>
<th>Hafif derecede</th>
<th>Orta derecede</th>
<th>Ciddi derecede</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bedeninizin herhangi bir yerinde uyuşma veya karıncalanma .....</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Sıcak / ateş basmaları.................................................................</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Bacaklarda halsizlik, titreme.......................................................</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Gevşeyememe..............................................................................</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Çok kötü şeyler olacak korkusu...............................................</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Aşağıdaki ifadeler, günlük hayatta herkesin karşılaşılabileceği düşünce ve davranışlar ile ilgilidir. Her bir ifade için, bu tür düşünce ve davranışların sizde yaratacağı rahatsızlık düzeyini göz önüne alarak size en uygun olan cevabını seçiniz. Cevaplarınızı aşağıdaki gibi derecelendiriniz:

<table>
<thead>
<tr>
<th>Ifade</th>
<th>0 = Hiç</th>
<th>1 = Biraz</th>
<th>2 = Oldukça</th>
<th>3 = Çok</th>
<th>4 = Çok Fazla</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Paraya dokunduğum zaman ellerimin kirlendiğini hissederim</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Vücut sıvıları (ter, tükürük, idrar gibi) ile en ufak bir temasın bile giysilerimi kirleteceğini ve bir şekilde bana zarar vereceğini düşünürüm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Bir nesneye yabancıların yada bazı kimselerin dokunduğunu biliyorsam, ona dokunmakta zorlanırım</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Çöpler veya kirli şeylerle dokunmakta zorlanırım</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Birlikte veya birlikte korktuğum için umumi tuvaletleri kullanmakta kaçınırım</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Birlikte veya birlikte korktuğum için umumi telefonları</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**APPENDIX E**

**PADUA INVENTORY-WASHINGTON STATE UNIVERSITY REVISION**

(PADUA ENVANTERİ-WASHİNGTON EYALET ÜNİVERSİTESİ REVİZYONU)

Aşağıdaki ifadeler, günlük hayatta herkesin karşılaşılabileceği düşünce ve davranışlar ile ilgilidir. Her bir ifade için, bu tür düşünce ve davranışların sizde yaratacağı rahatsızlık düzeyini göz önüne alarak size en uygun olan cevabını seçiniz. Cevaplarınızı aşağıdaki gibi derecelendiriniz:
| 7. Ellerimi gerektirirken daha sık ve daha uzun süre yıkarım | 0 1 2 3 4 |
| 8. Bazen kendimi, sırf kirilenmiş olabileceğim ya da pis olduğum düşüncesiyile yıkanmak ya da temizlemek zorunda hissediyorum | 0 1 2 3 4 |
| 9. Mikrop bulaşmış veya kirli olduğunu düşündüğüm bir şeye dokunursam hemen yıkanmam veya temizlenmem gerekiyor | 0 1 2 3 4 |
| 10. Bir hayvan bana değerse kendimi kirli hissedipim ve hemen yıkanmam yada elbiselerimi değiştirmem gerekiyor | 0 1 2 3 4 |
| 11. Giyinirken, soyunurken ve yıkanırken kendimi belirli bir sıra izlemek zorunda hissediyor | 0 1 2 3 4 |
| 12. Uyumadan önce bazı şeyleri belli bir sırayla yapmak zorunda oluyorum | 0 1 2 3 4 |
| 13. Yatmadan önce, kıyafetleri özel bir şekilde asmalı ya da katlamalıyım | 0 1 2 3 4 |
| 14. Doğru dürüst olduğu düşünebilmem için yaptıklarımı bir kaç kez tekrarlamam gerekiyor | 0 1 2 3 4 |
| 15. Bazı şeyler gereçte olduğunda daha sık kontrol etme eğilimindeyim | 0 1 2 3 4 |
| 16. Gaz ve su musluklarını, elektrik düğmelerini kapattıktan sonra tekrar tekrar kontrol ederim | 0 1 2 3 4 |
| 17. Düzgün kapatılan kapatılmadıklarından emin olmak için eve dönüş kapları, penceleri ve çekmeceleri kontrol ederim | 0 1 2 3 4 |
| 18. Doğru doldurduğumdan emin olmak için formları, evrakları, ve çekleri ayrıntılı olarak tekrar kontrol ederim | 0 1 2 3 4 |
| 19. Kibrit, sigara vb’nin iyice söndürüldüğünü görmek için sürekli geri dönerim | 0 1 2 3 4 |
| 20. Elime para aldığım zaman birkaç kez tekrar sayarım | 0 1 2 3 4 |
| 21. Mektupları postalamadan önce bir kaç kez dikkatlice kontrol ederim | 0 1 2 3 4 |
| 22. Asında yaptığı bildiğim halde, baza yapmış olduğumdan emin olamam | 0 1 2 3 4 |
| 23. Okurken, önemli bir şeyi kaçırdıktan sonra gideri dönerim, ve aynı pasajı iki veya üç kez okumam gerekiyor | 0 1 2 3 4 |
| 24. Dalgalıüğünün ve yaptığı küçük hataların felaketle sonuçlanacağını hatalı ederim | 0 1 2 3 4 |
| 25. Bilmeden birini incitmecez konusunda çok fazla düşünürem ve endişelenmem | 0 1 2 3 4 |
| 26. Bir felaket olduğu düşünmekte hemen en sonu yeni bir çekilde benim hatam olduğunu düşünürem | 0 1 2 3 4 |
| 27. Bazen sebinsiz yere kendimi zarar verdigime veya bir hastalığın olduğuna dair fázlaca endişelenirim | 0 1 2 3 4 |
| 28. Bıçak, hançer ve diğer sivri uçlu nesneleri gördüüğümde rahatsız olur ve endişelenirim | 0 1 2 3 4 |
| 29. Bir intihar veya cinayet vakası duygusu olduğunda uzun süre üzülür ve bu konuda düşünmekten kendimi alamam | 0 1 2 3 4 |
| 30. Mikroplar ve hastalıklar konusunda gereksecez endişeler yaratırım | 0 1 2 3 4 |
| 31. Bir köprüden veya çok yüksek bir pencereden aşağı baktığında kendimi boğula atmak için bir dürtü hissediyorum | 0 1 2 3 4 |
| 32. Yaklaşmakta olan bir tren gördüğümde, baza kendimi trenin altında atabileceğimi düşünürem | 0 1 2 3 4 |
| 33. Bazı belirli anlarda umuma açık yerlerde kıyafiletiyiытаçmak için aşırı bir istek duyarım | 0 1 2 3 4 |
| 34. Araba kullanırken, baza arabayi birinin veya bir şeyin üzerine sürme dürtüsü duyarım | 0 1 2 3 4 |
| 35. Silah görmek beni heyecanlandırır ve şiddet içeren düşünceleri akılma getirir | 0 1 2 3 4 |
36. Bazen hiçbir neden yokken bir şeyleri kırmak ve zarar verme ihtiyacı hissedemiyorum 0 1 2 3 4
37. Bazen işime yaramasa da, başkalarına ait olan şeyleri çalmak dürtüsü hissedemiyorum 0 1 2 3 4
38. Bazen süpermarketten bir şey çalmak için karşı konulmaz bir istek duyarım 0 1 2 3 4
39. Bazen savunmasız çocuklara ve hayvanlara zarar vermek için bir dürtü hissedemiyorum 0 1 2 3 4

APPENDIX F

DISGUST SENSITIVITY SCALE-REVISED
(TİKSİNME ÖLÇEĞİ-REVİZE EDİLİŞ FORMU)

Her bir ifadenin sizi ne ölçüde tanımladığını ya da her bir ifadeye ne ölçüde katıldığınızı aşağıda verilen ölçekteki rakamları kullanarak değerlendiriniz ve uygun olan numarayı (0-4 arasında) ilgili maddenin yanındaki boşluğu yazınız.

0 = Kesinlikle katılmıyorum (Benim için hiç geçerli değil, %0)
1 = Kısmen katılmıyorum (Benim için kısmen geçerli değil)
2 = Ne katılmıyorum ne katılmıyorum (%50)
3 = Kısmen katıldığımı (Benim için kısmen geçerli)
4 = Kesinlikle katıldığımı (Benim için kesinlikle geçerli, %100)

1. Bazı durumlarda, maymun eti yemeyi deneyebilirim.
2. Fen bilimleri dersinde (Fizik, Kimya, Biyoloji vb) kavanozun içinde bir insan eli görmek beni rahatsız eder.
4. Umumi tuvaletlerin oturulacak yerine vücudumun herhangi bir yerinin değişmesine asla izin vermem.
5. Mezarlığın içinden geçmemek için yolumu değiştireşim.
7. Ölü bir bedene dokunmak beni son derece rahatsız eder.
8. Kusan birini görünsem midem bulanır.
9. Devamlı gittiğim favori restoranının aşçısının grip olduğunu öğrenirsem muhtemelen oraya gitmekten vazgeçirim.
10. Protez (takma) göz kullanan birini bu gözü yuvasından çıkarırken görmek beni rahatsız etmez.
11. Parkta yürürken önümde koşarak geçen bir fare görmek beni rahatsız eder.
13. En sevdiğim çorbanın kullanılmış ancak çok iyi temizlenmiş bir sineklikle karıştırdığımı biliyorsam, ne kadar aç olursam olayın, o çorbayı içmem.
14. Eğer bir gece önce bir adamın kalp krizi nedeniyle, kaldığım odada öldüğünü biliyorsam orada uyumak beni rahatsız eder.

Lütfen aşağıda verilen durumları ne ölçüde tiksindirici bulduğunuzu aşağıdaki ölçeğe yer alan 0 ile 4 arasındaki rakamları kullanarak belirtiniz.

0 = Hiç tiksindirici değil
1 = Çok az tiksindirici
2 = Kısmen tiksindirici
3 = Oldukça tiksindirici
4 = Son derece tiksindirici

15. Dışarıdaki çöp kovasının içinde üzeri kurtlanmış bir et parçası gördünüz.
16. Elmayı čatal bıçak ile yiyen birini gördünüz.
17. Demiryoluunun altındaki tünelden geçerken idrar kokusu aldınız.
18. Sodanızdan bir yudum aldiktan sonra içtiğiniz bardağın arkadaşına ait olduğunu fark ettiniz.
19. Arkadaşınının ölü kedisini çıplak elinizle tutmak zorundasınız.
20. Vanilyalı dondurma üzerine ketçap döküp yiyen birini gördünüz.
22. Arkadaşınızın iç çamaşırını haftada sadece bir kez değiştirdiğini öğrendiniz.
23. Arkadaşınız size köpek kakası şeklinde yapılmış bir parça ikram etti.
24. Yakılarak defnedilecek bir ölenin külere yanlışlıkla dokundunuz.
25. A cup of milk, while you were drinking it, you realized that the milk had gone bad.
26. During a sex education class, you were asked to rinse a (non-scientific) condom with your mouth.
27. While walking with your bare feet on the concrete, you stepped on a solucan.

**APPENDIX G**

**CONTAMINATION COGNITIONS SCALE**

*(BULAŞMA/KİRLENME BİLİŞLERİ ÖLÇEĞİ)*

*Note: Below is a list of objects. Please read each object and imagine touching it without the possibility of washing your hands. Then answer the following two questions for each object:*

1. How likely is it that touching this object might lead to contamination/kontamination? Please rate your answer using the following scale where 0 = Not at all likely and 100 = Extremely likely.

2. How bad would it be if you actually did get something on you from touching this object? Please rate your answer using the following scale where 0 = Not at all bad and 100 = Extreme bad.

<table>
<thead>
<tr>
<th>Hiç mümkün</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mümkün</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Son Derece</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hiç Kötü</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kötü</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Son Derece</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Bu nesneye** | **Eğer gerçekten**
**APPENDIX H**

**OBSESSIVE BELIEFS QUESTIONNAIRE**

**(OBSESİF İNANIŞLAR ÖLÇEĞİ)**

Bu ankette, insanların zaman zaman takındıkları bir dizi tutum ve inanış sıralanmıştır. Her bir ifadeyi dikkatlice okuyunuz ve ifadeye ne kadar katılıp katılmadığınızı belirtiniz.

*Her bir ifade için, nasıl düşündüğünüz en iyi tanımlayan cevaba karşılık gelen rakam seçiniz. İnsanlar birbirinden farklı olduğu için evanterde doğru veya yanlış cevap yoktur.*

*Sunulan ifadenin, tipik olarak yaşamı baka açıdan yansıtan yasatıp yansıtmadığına karar vermek için sadece **çoğu zaman** nasıl olduğunu göz önünde bulundurunuz.*

Derecelendirime yaparken, ölçekteki orta değeri işaretlemekten (4) kaçınıyorsunuz; bunun yerine, inanış ve tutumlarınızla ilgili ifadeye genellikle katılıp katılmadığınızı belirtiniz.

<table>
<thead>
<tr>
<th>Nesne</th>
<th>dokunduğunuzda size bir şey bulaşma olasılığı (0-100 ölçeği)</th>
<th>bir şey bulaşmışsa bu durum ne kadar kötü olabilir? (0-100 ölçeği)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Umumi bir tuvaletteki kapı kolu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Umumi bir tuvaletteki oturulacak yer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Umumi bir tuvaletteki musluk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Umumi yerlerdeki kapı kolları</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Herkesin kullanımına açık araç ve gereçler (örneği kütüphanedeki masalar, sandalyeler, bilgisayarlar vb.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Herkesin kullanımına açık telefon ahizeleri</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Merdiven korkulukları/trabzanları</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Asansör düğmeleri</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Hayvanlar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Çiğ et</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Para</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Yıkanmamış ürünler (örn: sebze meyve gibi)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Başkaların dokunduğu yiyecekler</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kesinlikle                Katılıyorum</td>
<td>Biraz katılıyorum</td>
<td>Ne katılıyorum</td>
<td>Biraz katılıyorum</td>
<td>Katılıyorum</td>
<td>Tamamen katılıyorum</td>
<td></td>
</tr>
<tr>
<td>Katılıyorum                Katılıyorum</td>
<td>Katılıyorum</td>
<td>Ne katılıyorum</td>
<td>Biraz katılıyorum</td>
<td>Katılıyorum</td>
<td>Ne katılıyorum</td>
<td></td>
</tr>
</tbody>
</table>

1. Sıklıkla çevremdeki şeylerin tehlikeli olduğunu düşünürüm

   1 2 3 4 5 6 7
| 2. | Bir şeyden tamamıyla emin değilsem, kesin hata yaparım | 1 2 3 4 5 6 7 |
| 3. | Benim standartlarına göre, her şey mükemmel olmalıdır | 1 2 3 4 5 6 7 |
| 4. | Değerli biri olmam için yaptığım her şeyde mükemmel olmalyım | 1 2 3 4 5 6 7 |
| 5. | Herhangi bir fırsat bulunduğunda, olumsuz şeylerin gerçekleşmesini önlemek için harekeçe geçmeliyim | 1 2 3 4 5 6 7 |
| 6. | Zarar verme/görme olasılığı çok az olsa bile, ne yapıp edip onu engellemeliyim | 1 2 3 4 5 6 7 |
| 7. | Bana göre, kötü/uygunsuz dürtülere sahip olmak aslında onları geçerleştirmek kadar kötüdür | 1 2 3 4 5 6 7 |
| 8. | Bir tehlikeyi önceden görmeme karşın bir harekette bulunmazsa, ne yapıp edip onu engellemeliyim | 1 2 3 4 5 6 7 |
| 9. | Birşeyi mükemmel biçimde yapamayacaksam hiç yapamamalıyım | 1 2 3 4 5 6 7 |
| 10. | Her zaman sahip olduğum tüm potansiyelimi kullanmalıyım | 1 2 3 4 5 6 7 |
| 11. | Benim için, bir durumda ilgili tüm olası sonuçları düşünmek çok önemlidir | 1 2 3 4 5 6 7 |
| 12. | En ufak hatalar bile, bir işin tamamlanmadığı anlamına gelir | 1 2 3 4 5 6 7 |
| 13. | Sevdiğim insanlarla ilgili sardıran düşünceleri veya dürtülerin varsa, bu gizlice onları incitmeyi istediğim anlamına gelir | 1 2 3 4 5 6 7 |
| 14. | Kararlarımndan emin olmalıyım | 1 2 3 4 5 6 7 |
| 15. | Her türlü günlük aktivitede, zarar vermeyi engellemekte başarırsız olmak kasten zarar vermek kadar kötüdür | 1 2 3 4 5 6 7 |
| 16. | Ciddi problemlerden (örneğin, hastalık veya kazalar) kaçınımak benim açımdan sürekli bir çaba gerektirir | 1 2 3 4 5 6 7 |
| 17. | Benim için, zararı önlememek zarar vermek kadar kötüdür | 1 2 3 4 5 6 7 |
| 18. | Bir hata yaparsam üzüntülü olmalıyım | 1 2 3 4 5 6 7 |
| 19. | Diğerlerinin, kararlarımı veya davranışlarınımdan doğan herhangi bir olumsuz sonucun korunduğundan emin olmalıyım | 1 2 3 4 5 6 7 |
| 20. | Benim için, herşey mükemmel olmaza işler yolunda sayılmaz | 1 2 3 4 5 6 7 |
| 21. | Müstehcen düşüncelerin aklından geçmesi çok kötü bir insan olduğum anlamına gelir | 1 2 3 4 5 6 7 |
| 22. | İlave önlemler almazsam, ciddi bir felaket yaşanma veya felakete neden olma ihtimalim, diğer insanlara kıyaslara daha fazladır | 1 2 3 4 5 6 7 |
| 23. | Kendimi güvende hissetmek için, yanlış gidebilecek herhangi bir şeye karşı olabildiğince hazırlıklı olmalıyım | 1 2 3 4 5 6 7 |
| 24. | Tuhaf veya iğrenç düşüncelerim olmamalı | 1 2 3 4 5 6 7 |
| 25. | Benim için, bir hata yapmak tamamen başarısız olmak kadar kötüdür | 1 2 3 4 5 6 7 |
| 26. | En önemlisi konularda bile herşey açık ve net olmalıdır | 1 2 3 4 5 6 7 |
| 27. | Din karşıtı bir düşünceye sahip olmak, kutsal şeylere karşı saygı göstermek kadar kötüdür | 1 2 3 4 5 6 7 |
| 28. | Zihnimdeki tüm istenmeyen düşüncelerden kurtulabilirmeliyim | 1 2 3 4 5 6 7 |
| 29. | Diğer insanlara kıyaslara, kendime veya başkalarına kazara zarar vermem daha muhtemeldir | 1 2 3 4 5 6 7 |
| 30. | Kötü düşüncelere sahip olmak tuhaf veya anormal biri olduğum anlamına gelir | 1 2 3 4 5 6 7 |
31. Benim için önemli olan şeylerde en iyi olmalıyım
32. İstenmeyen bir cinsel düşünce veya görüntüünün aklına gelmesi onu gerçekten yapmak istedigim anlamda gelir
33. Davranışlarınım olası bir aksilik üzerinde en küçük bir etkisi varsa sonuçtan ben sorumluyum demektir
34. Dikkatli olsam da kötü şeylerin olabileceğini sıklıkla düşünürüm
35. İstenmeyen biçimde zihnimde beliren düşünceler, kontrolü kaybetmek anlamına gelir
36. Dikkatli olmadığım takdirde zarar verici hadiseler yaşanabilir
37. Bir şey tam anlamıyla doğru yapılmışa kadar üzerinde çalışmaya devam etmeliyim
38. Şiddet içerikli düşüncelere sahip olmak, kontrolü kaybedeceğim ve şiddet göstereceğim anlamına gelir
39. Benim için bir felaketi önlemek ona sebep olmak kadar kötüdür
40. Bir işi mükemmel biçimde yapamazsam insanlar bana saygı duymaz
41. Yaşamımın sıradan deneyimler bile tehlike doludur
42. Kötü bir düşünceye sahip olmak, ahlaki açıdan kötü bir şekilde davranmaktan çok da farklı değildir
43. Ne yaparsam yapmayım, yaptığı iş yeterince iyi olmayacaktır
44. Düşüncelerimi kontrol edememse cezalandırılır

CURRICULUM VITAE

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