LOOMING COGNITIVE STYLE AS A PREDICTOR OF SOCIAL ANXIETY IN TÜRKİYE

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ÖZET

Bilişsel Abartma Tarzı kaygıya özgü bir bilişsel yatkınlık faktörü olarak öne sürülmüştür. Bu çalışmada Bilişsel Abartma Tarzının sürekli ve durumluk sosyal kaygı üzerinde yordayıcı rolünün araştırılması amaçlanmaktadır. Bu amaç doğrultusunda sosyal kaygı manipülasyonu için 30 katılımcıdan kendileri ile ilgili kısa bir sunum yapmaları istenmiştir. Sunum öncesi alınan bilişsel abartma ve sosyal kaygı ölçümleri ile amaçlanan ilişkinin araştırılması hedeflenmiştir. Bu bağlamda veriler Demografik Bilgi Formu, Liebowitz Sosyal Kaygı Ölçeği, Bilişsel Abartma Tarzı Ölçeği-Yeniden Değerlendirilmiş Türkçe Formu, Anlık Sosyal Abartma Ölçeği ve kaygı durumuna yönelik Görsel Analog Ölçeği aracılığı ile toplanmıştır. Uygulanan prosedürün değerlendirilmesi ve son halinin verilmesi için uzman görüşleri alınmış ve pilot çalışmalar gerçekleştirilmiştir. Korelasyon ile regresyon analizleri Bilişsel Abartma Tarzının sürekli sosyal kaygı ile pozitif yönde anlamlı bir ilişkisi olduğu ve durumsal sosyal abartmanın kaygıdaki artışı yordadığı bulunmuştur. Sürekli faktörler ve durumsal faktörler arasında ise anlamlı bir ilişki bulunamamıştır. Bulgular ilgili geçmişteki ilgili çalışmalar çerçevesinde değerlendirilmiş ve çalışmanın alanyazına ve klinik uygulamalara olası katkıları tartışılmıştır.

Anahtar Sözcükler: Sürekli sosyal kaygı, Durumluk sosyal kaygı, Sürekli Bilişsel Abartma Tarzı, Durumluk Bilişsel Abartma Tarzı

ABSTRACT

Looming Cognitive Style (LCS) has been proposed as a cognitive vulnerability factor specific to anxiety. This study aims to investigate the predictive role of LCS on trait and state social anxiety. With this purpose, for social anxiety manipulation, 30 participants were asked to make a short presentation about themselves. This relationship of concern was aimed to be investigated by assessing LCS and social anxiety assessments taken prior to the presentation. In this regard, the Demographic Information Form, Liebowitz Social Anxiety Questionnaire, Looming Maladaptive Style Questionnaire-Revised (LMSQ-R), State Social Looming Questionnaire, and Visual Analogue Scales for anxiety level were used to gather data from the participants. In order to test and finalize the applied procedure, pilot studies were conducted and expert opinions were taken prior to the main study. The results yielded by correlation and regression analysis showed that LCS and trait social anxiety were positively correlated, and state social looming predicted the change in anxiety. A significant relationship between trait LCS and state social looming or trait social anxiety and state social anxiety could not be found. The findings were debated in the light of relevant previous research, and possible contributions of the study to the literature and clinical practice were discussed.

Keywords: Trait social anxiety, State social anxiety, Trait Looming Cognitive Style, State Looming Cognitive Style

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LCS: Looming Cognitive Style

LMSQ: Looming Maladaptive Style Questionnaire

LMSQ-R: Looming Maladaptive Style Questionnaire Questionnaire-Revised

LSAS: Liebowitz Social Anxiety Scale

VAS: Visual Analogue Scale

SAD: Social Anxiety Disorder

1. INTRODUCTION

Social anxiety is a highly prevalent and debilitating problem affecting the lives of many people (Kessler et al., 2005). It significantly diminishes the quality of life in many domains causing a marked decrease in occupational, relational, or cognitive functioning (Acarturk et al., 2009; Alden & Taylor, 2004; Crum & Pratt, 2001; Eysenck et al., 2007; Moitra et al., 2011; Patel et al., 2002). Therefore, it is important to comprehensively understand social anxiety to be able to better help people who suffer from it.

Social situations are inherently threatening for socially anxious people causing great distress before, during, and after them. Feared social situations might vary from holding eye contact with someone to using a public restroom or making a presentation for a large group of people. Socially anxious individuals usually fear that they will embarrass themselves or people will criticize them when they encounter a social situation. Physical symptoms often accompany these fears such as blushing, trembling, or pounding heartbeats. These social situations are endured with great anxiety or avoided to a great extent if possible.

Individuals who suffer from social anxiety have biased cognitions regarding social situations such as attentional bias, memory bias, or interpretation bias. They tend to selectively focus on negative social cues, selectively recall negative information, or interpret neutral stimuli as threatening (Cody & Teachman, 2010; Heimberg et al., 2010; Mansell & Clark, 1999). For example, one might perceive a neutral face listening to them as being bored, or critical (Yoon & Zimbarg, 2008). To date, the significant contribution of these cognitive factors to the development and maintenance of social anxiety has been stressed in the relevant literature (e.g., Huppert & Foa, 2004; Hirsch et al., 2006; Penney & Abbott, 2014). The cognitive models of social anxiety disorder (SAD) propose that socially anxious individuals have certain beliefs or

assumptions about themselves, other people, or the world that are activated in social situations (Clark & Wells, 1995; Rapee & Heimberg, 1997) They predominantly engage in danger-related thoughts and their information processing is disturbed (Hirsch & Clark, 2004).

Certain cognitive vulnerability factors have been proposed in the literature such as anxiety sensitivity, fear of negative evaluation, or intolerance of uncertainty that play a role in the onset and maintenance of anxiety (e.g., Stopa & Clark, 2001; Taylor, 2014). Riskind (1997) introduced Looming Cognitive Style (LCS), initially proposed as Looming Maladaptive Style (LMS), as an overarching cognitive vulnerability factor for anxiety disorders. LCS is a danger schema emphasizing the dynamic nature of threat appraisals. This model focuses not only on the content of biased cognitions but the way in which they are experienced. It refers to a tendency of people to have perceptions, mental images, and scenarios that the actual or anticipated danger is rapidly approaching and increasing in risk. The model assumes that LCS acts as a danger schema leading to biased information processing which elicits anxiety.

LCS differentiates from broadly accepted cognitive models not only because it centers upon the dynamic nature of danger appraisals, but it is also believed to be an anxiety-specific vulnerability factor, unlike the previously formulated cognitive models. Previously formulated cognitive models predict both mood disorders like depression and anxiety-related disorders, while LCS is a vulnerability factor specifically predicting anxiety, not depression (Riskind & Williams, 2005). It shows that LCS is possibly an important cognitive antecedent or moderator of anxiety-related problems that are worthy of further exploration. Although numerous studies have provided support that LCS is associated with anxiety, much less has focused on more specific anxiety disorders and problems such as social anxiety. Therefore, the present study aims to explore LCS and its relationship to social anxiety.

1.1. Social Anxiety Disorder (SAD)

SAD is characterized by a persistent fear or anxiety of social situations in which there is possible scrutiny or evaluation of other people. Some examples of such situations can be eating in front of others, holding eye contact with strangers, or performing to a crowded audience. The potential negative judgements, humiliation or embarrassment evokes intense fear and anxiety which is disproportionate to the situation. People suffering from SAD usually either avoid such situations or endure them with intense fear and anxiety leading to significant impairments in many domains of life (American Psychiatric Association [APA], 2013). SAD is among the most common mental health disorders, and it is the second most prevalent anxiety disorder following specific phobias (Kessler et al., 2005; Bandelow et al., 2015).

Social anxiety is related to social expectations and standards which are dependent on the kind of culture one lives in. Therefore, the estimated prevalence of SAD varies across countries as well (Hofmann et al., 2010). For example, the 12-month prevalence of SAD in the United States is 7%, while the median prevalence rate is 2.3% in Europe (APA, 2013). In Turkey, studies report various prevalence rates of SAD ranging from 1.8% to 22% (İzgiç et al., 2000; Kılıç et al., 1998). The reasons for this variance in prevalence rates among different studies are explained by methodological differences (Wittchen & Fehm, 2001). According to DSM-5, social anxiety is more prevalent among females (APA, 2013). However, a number of studies demonstrate that in clinical samples gender rates tend to be higher for males compared to females, indicating a higher tendency for males to seek help for social anxiety (e.g., Asher et al., 2017; Dilbaz & Güz, 2001; Yonkers et al., 2001).

Individuals with SAD experience difficulty and impairment in social, occupational, and educational domains of their lives. These functional impairments often lead to a poor or

decreased quality of life (Dryman et al., 2016). For example, due to their social nature, workplaces tend to trigger SAD symptoms (Moitra et al., 2011); and people with SAD are at a greater risk of being unemployed or depending on financial support compared to the general population (Schneier et al., 1992). The most affected areas of life by social anxiety have been found to be romantic relationships, family relationships, education, and work-life (Wittchen et al., 2002). This reduction in quality is not only true for clinical samples, but it also affects non-clinical groups (Chartier et al., 1998). Individuals with high social anxiety often do not disclose how anxious they feel (Eng et al., 2005). In addition, since people with social anxiety are inclined to avoid social interactions, it is highly possible that social anxiety is underrepresented in clinical or research settings (Simon et al., 2002). In conclusion, not only is social anxiety among the most common disorders, it widely affects the quality of life of the non-clinical population causing significant impairments.

DSM-V permits clinicians to make a SAD diagnosis based on several criteria (APA, 2013). The fundamental criterion is a marked anxiety or fear in one or many social situations in which there is potential scrutiny of others. The situation provokes intense fear or anxiety almost all of the time when encountered in which the individual fears that he or she will be humiliated, embarrassed, getting rejected, or offending others. Also, the individual might fear showing noticeable anxiety symptoms such as stuttering, blushing or trembling. The individual engages in avoidance behaviors to prevent feared outcomes or endure the situation with excessive fear or anxiety. For example, he or she might avoid eating in front of other people or have a hard time engaging in conversations with unfamiliar people. The experienced fear or anxiety is out of proportion tothe objective danger or threat in a given social situation. The sociocultural context should be considered while making a diagnosis. The anxiety of fear response is disproportionate

or inappropriate in the context of the sociocultural norms of the individual. To be able to make SAD diagnosis symptoms must be persistently present lasting over six months. The disturbances are disabling that cause marked distress or impairment in the individuals' functioning such as work life, relationships, or other important domains in life. In addition, any medical conditions, symptoms of other mental disorders, or physiological effects of any substance that can possibly cause the SAD symptoms should be ruled out before making a valid diagnosis. The fear, anxiety, or avoidance the individual is suffering from should not be better explained by any other factor than SAD.

1.1.1 Etiology

Social anxiety usually occurs early in life. The median age of onset of SAD typically coincides with adolescence (Rao et al., 2007), and it often persists later in adulthood (Stein & Stein, 2008). There are several vulnerability factors contributing to the onset and maintenance of social anxiety. Like most disorders, genetic influences are discussed as one of the main risk factors for the development of SAD that have been explored in the literature. A number of studies demonstrated the heritability of SAD, reporting first-degree relatives of individuals with SAD are more likely to be socially anxious (e.g., Stein et al., 2017). Another important factor is the temperament of the child which contains the factors that predispose the individual to develop and maintain SAD. For example, neuroticism, introversion, and behavioral inhibition are among the most prominent temperamental factors (Miers et al., 2013; Schwartz et al., 1999; Watson et al., 2005). However, the extent to which temperamental or genetic factors contribute to the development of a disorder is limited. There are also environmental factors that play a crucial role in the development of SAD. Especially parental rearing practices, attitudes, and familial environment, in general, demonstrated to be significant predictors of social anxiety in the

literature (Bandelow et al., 2004; Norton & Abbott, 2017; Ollendick & Benoit, 2012; Scaini et al., 2004). Environmental influences are not limited to family, but they include other domains of life such as school environment or peer relationships as well. Studies show peer rejection or victimization predicts SAD suggesting a reciprocal relationship that also contributes to the maintenance of it (e.g., Festa & Ginsburg, 2011; Teachman & Allen, 2007). Considering all these factors, it can be concluded that there is no one single causal explanation for the development of SAD. All genetic influences, temperamental and environmental factors partially account for it while inevitably interacting with each other.

1.1.2 Cognitive Vulnerability to Social Anxiety

In addition to biological and environmental factors that play a role in the development and maintenance of SAD, contemporary theories of social anxiety stress the importance of cognitive processes (Clark & Wells, 1995; Rapee & Heimberg, 1997) These cognitive approaches emphasize the importance of thoughts, assumptions, and beliefs the socially anxious individual holds that contribute to the maintenance of the disorder (Hofmann, 2008). However, social anxiety is expressed along a continuum, and SAD represents the higher end of this continuum. (Rapee & Heimberg, 1997); and cognitive vulnerability factors play a role in social anxiety in both clinical and non-clinical populations (Knappe et al., 2011). It is proposed that socially anxious individuals exhibit certain threat-related cognitive biases or distortions regarding potentially threatening social situations. For example, they have unrealistically high expectations of themselves regarding their performance; and they fear that they will not meet these standards (Clark & Wells, 1995). Socially anxious individuals perceive social situations as intrinsically threatening, and they tend to exaggerate the possible negative consequences of a social situation such as rejection or humiliation. Therefore, they are likely to avoid putting

themselves in a socially threatening situation that induces great anxiety developing self-protective strategies referred to as "safety behaviors" which contribute to the maintenance of the problem (Salkovskis, 1991). The biased perception of social situations interferes with cognitive functioning in many domains such as interpreting social cues, the memory of a social situation, or evaluating one's performance. For example, a socially anxious individual is more prone to interpret neutral behavior as a negative one, or selectively pay attention to negative cues and remember a social event based on this distorted perception (e.g., Amir et al., 2003; Krans et al., 2017; Mansel & Clark, 1999; Morrison & Heimberg, 2013). In order to understand cognitive processes underlying the maintenance of social anxiety, several models are introduced that provide a framework. Clark and Wells' (1995) and Rapee and Heimberg's (1997) cognitive models of social anxiety are the most influential models that contributed to the comprehension of social anxiety to a great extent.

1.1.2.1 Clark & Wells' Cognitive Model of Social Anxiety (1995)

Clark and Wells (1995) propose a cognitive model for social anxiety explaining the core factors contributing to the maintenance of the disorder. They explore what happens when a socially anxious individual encounters a feared situation, and what happens before and after that. First of all, it is suggested that when an individual encounters a feared social situation, a series of assumptions, beliefs, and rules are triggered about oneself, other people, or the world in general. For example, one might have thoughts or hold beliefs such as, "I am boring," "People are judging me," or " I must be perfect so that people will like me." This leads to biased appraisals of a given situation and leads to increased anxiety.

One of the fundamental factors contributing to the persistence of the disorder Clark and Wells (1995) propose is "self-focused attention." According to the model, in an

anxiety-provoking social situation, socially anxious individuals experience a shift in their attention. Their attention shifts from outer objective reality to their internal processes. It leads them to monitor themselves with high self-consciousness, neglecting what is happening externally. They often see themselves from other people's points of view as if they become an observer of themselves. This processing of the self as a social object prevents them from evaluating the objective social situation or other people's actual reactions. As a result, processing the external evidence contradictory to what is believed and experienced internally is prevented. Their negative beliefs can not be disconfirmed. Another important factor that contributes to maintaining social anxiety is "safety behaviors." Safety behaviors refer to any sort of behaviors, mental operations, or internal processes that help the individual avoid a feared situation. They can vary from not eating in front of other people to memorizing what one is going to speak about. When the feared catastrophe does not occur, it is attributed to these safety behaviors. Therefore, the individual fails to discover whether there is a real social danger, and their fears remain disconfirmed (Wells et al., 2016). Also, safety behaviors often confirm the fears. For example, when an individual does not speak much or make eye contact in order to avoid being received in a certain way; it is highly likely that they will not elicit positive feedback. In fact, it has been supported that socially anxious individuals are often perceived as less friendly or warm (Stopa & Clark, 1993) due to impairment in their performance. Even though they might have adequate social skills, they often fail to demonstrate them.

Finally, Clark and Wells' (1995) model focuses on biased information processing during and after social situations. It is hypothesized that socially anxious individuals retrieve distorted information about the encountered social situation. For example, selectively recall negative social cues instead of positive ones, and have a tendency to interpret ambiguous information as

negative. This biased post-event processing leads to strengthening their negative beliefs and assumptions contributing to the maintenance of social anxiety. All of the discussed factors interact with each other and create a vicious cycle. Safety behaviors often enhance internally directed attention. Due to this internal focus of attention, the information retrieved from the feared situation depends on one's own distorted experience. This biased post-event processing leads to avoidance behavior, making the individual hold on to safety behaviors.

1.1.2.2 Rapee and Heimberg's (1997) Cognitive-Behavioral Model of Social Phobia

The Rapee- Heimberg (1997) model of social anxiety is another fundamental theory providing a theoretical framework for exploring the emergence and maintenance of social anxiety. In line with Clark and Wells' (1995) model, they emphasize the importance of attentional processes and posit that self-focused attention plays a central role in the maintenance of social anxiety. It is argued that socially anxious individuals hold strong beliefs that other people are inherently critical, and they will be evaluated negatively. Also, they value other people's opinions about them. Encountering or anticipating a social situation, they have mental representations of themselves about their appearance, behavior, and how they might come up to other people. In addition to Clark and Wells' model, it is hypothesized that individuals do not direct their attention to internal processes neglecting the environment, but they pay close attention to external cues as well (Shultz & Heimberg, 2008). They monitor both internal and external information about the likelihood of their feared outcomes such as negative evaluation. These processes do not occur in isolation, instead, they often influence and interact with each other. For example, in a situation that calls for public speaking, the individual with cognitions like "I am boring," might selectively pay attention to confirming cues like someone yawning. Likewise, such external cues often lead to greater self-focused attention.

Another important component of the model is predictions regarding the audiences' standards. The audience does not refer exclusively to people listening to a public speech, but it includes any person who can form an opinion about the individual in a given social situation. Individuals with social anxiety have certain predictions about what the audience is expecting from them. They believe that they are being held to a certain high standard by other people. Then, they make a comparison between these presumed expectations and their mental representations of themselves in a social situation. When there is a great discrepancy between how the individuals think he/she came across, and the predictions about the standard expectations, the social situation elicits intense anxiety. As a result, a similar vicious cycle as Clark and Wells' model is proposed to be developed.

The original model has been updated later on (Heimberg et. al., 2010). In the updated cognitive-behavioral model for SAD, the importance of imagery has been discussed. It is argued that socially anxious individuals have mental images of themselves in social situations, and this imagery leads to increased anxiety. It elicits more emotional reactions compared to verbal processing and impairs their performance. Paralleling Clark and Wells' hypothesis, they discuss how socially anxious people engage in post-event processing compared to non-anxious individuals. Highly socially anxious people discuss how social events are analyzed after they encounter a social situation and review it in detail. However, they tend to remember ambiguous or neutral cues as negative or threatening; so they have a biased memory of the social situation. Another important point discussed is that social anxious individuals do not only fear negative evaluation, but they fear any type of evaluation. For example, a positive evaluation of the self creates more anxiety for future performance thinking they will not be able to sustain it.

1.2. Looming Cognitive Style (LCS)

Riskind (1997) introduced the looming maladaptive vulnerability model as another cognitive model of anxiety postulating that LCS is an overarching cognitive factor predicting anxiety symptoms and disorders. The model proposes that some individuals develop LCS due to a number of possible factors such as adverse childhood experiences, and this puts them at a greater risk for anxiety. LCS, also known as looming maladaptive style, is a danger schema referring to an individual's biased interpretations of danger and threat. It is characterized by a tendency to perceive threats and dangers as rapidly intensifying, escalating, and approaching. Individuals who are vulnerable to LCS construct mental scenarios and appraisals in which the danger rapidly approaches in time and space while rising in risk.

What distinguishes LCS from conventional cognitive models and theories of anxiety is this emphasis on the temporal and dynamic nature of perceived threats and dangers. Similar to other widely cited models, it emphasizes the importance of maladaptive cognitions that contribute to the development and maintenance of anxiety symptoms; but it shifts the focus from the content of the cognitions to the way they are experienced. It is unique for highlighting the importance of not only what people think, but also how they think.

Another distinctive aspect of the model of looming vulnerability is that LCS is specific to anxiety. While other cognitive vulnerability factors such as fear of negative evaluation, anxiety sensitivity, or intolerance to uncertainty are considered to be predicting depression alongside anxiety (Calvete et al., 2015; Naragon-Gainey, 2010; Reardon & Williams, 2007), LCS is hypothesized as an anxiety-specific mechanism which predicts anxiety and anxiety disorders, but not depression. This hypothesis received support from a number of empirical studies (Adler & Strunk, 2010; Altan-Atalay, 2018; Reardon & Williams, 2007; Riskind et al., 2021). These

studies show not only how LCS distinguishes itself from other vulnerability factors, but how it can help better understand the differentiating etiology of depression and anxiety.

The Looming Maladaptive Style Questionnaire (LMSQ) which is developed in order to assess LCS (Riskind et al., 2000) has two subscales. It divides LCS into two components: physical looming and social looming. It has been shown that these two dimensions are highly correlated (Hong, et al., 2017), but there are certain domains in which one or the other dimension plays a more important role. For example, physical looming is a better predictor of dysfunctional freezing responses in the presence of a physical threat. It has been found that individuals with high physical looming, tend to interpret ambiguous stimuli as approaching, and they exhibit dysfunctional freeze-like responses to both threatening and non-threatening stimuli. However, there was no significant correlation between social looming and freeze-like responses (Riskind, et al., 2016).

1.2.1. LCS and Social Anxiety

Cognitive models of social anxiety stress the importance of threat appraisals and negative mental imagery in its development and maintenance. In the studies exploring these cognitions in socially anxious individuals, people describe the anticipated images or thoughts in dynamic terms (Brown & Stopa, 2008). These findings suggest that it might be important to focus on not only the content of cognitions socially anxious individuals have but also the way they process them (Clark & Wells, 1995; Rapee & Heimberg, 1997). Therefore, the looming model helps to better understand anticipatory processing in social anxiety by focusing on the dynamic nature of threat appraisals.

To date, a great deal of research has investigated the relationship between LCS and anxiety, demonstrating that there is a significant relationship between LCS and all kinds of

anxiety (Riskind & Williams, 2005b). It has been shown that people who demonstrated higher levels of LCS were more likely to have higher levels of anxiety (Riskind et al., 2000). However, studies examining its relationship with more specific anxiety-related problems such as social anxiety are not that extensive.

Considering LCS has a social looming subscale, it might be important to better understand social anxiety in particular among other kinds of anxiety. Although Riskind et al. (2005b) demonstrated that all kinds of anxiety were related to LCS on both physical and looming dimensions, it is also indicated by empirical studies that social anxiety is predicted by social looming in particular (Brown & Stopa, 2008).

One of the limited studies focusing on this relationship by Reardon and Williams (2007) shows that there is a significant link between LCS and social anxiety. It further demonstrates that LCS predicts anxiety symptoms but not mood disorder symptoms providing support that LCS is an anxiety-specific vulnerability factor. Haikal and Hong's (2010) experimental study is another one of the few studies that test the hypothesis that LCS predicts social anxiety. In this experimental study, they assessed the LCS of the participants; and assigned them either low LCS or high LCS conditions. When two groups are exposed to a social situation in which they are evaluated, a higher increase in anxiety is observed in participants who were already high in LCS.

Riskind et al. (2007) examined the moderator and antecedent role of LCS for changes in anxiety symptoms including social anxiety over a short duration of time supporting the hypothesis that LCS predicted short-term changes in OCD, worry, and social anxiety even when controlled for depression. Finally, in a longitudinal study, González-Díez et al. (2016) investigated the role of LCS in the development of social anxiety showing that LCS mediates the relationship between emotional maltreatment and social anxiety in adolescents. These limited

studies aim to explore the role of LCS trying to provide a better understanding of the generation and maintenance of social anxiety, and they encourage other studies to further investigate this relationship.

1.3. The Present Study

LCS has been proposed as a predictive factor specific to anxiety (Riskind et al., 2000). However, it has not attracted enough attention compared to other well-known cognitive models (Clark & Wells, 1995; Rapee & Heimberg, 1997) in the literature regarding cognitive vulnerability to anxiety. Studies investigating the relationship between LCS and specific anxiety-related problems such as social anxiety are even more limited. The present study aims to expand on previous studies and examine the predictive role of LCS in social anxiety. One of the main objectives of the study is to replicate the results of limited studies that provide evidence that LCS predicts trait social anxiety. In the relevant literature, the relationship between LCS and social anxiety has not been examined in the present time, in the presence of an actual social threat. Therefore, the secondary goal of the study is to address this gap in the literature. It aims to extend the previous findings by investigating this relationship in an anxiety-provoking environment. In order to accomplish this, the study exposes the participants to a presentation task in which they are expected to make a presentation about themselves. Prior to the presentation, participants were asked to fill out questionnaires regarding LCS and social anxiety similar to previous studies (e.g., Brown & Stopa, 2008; Haikal & Hong, 2010). What is unique to the present study is that in the second part where the levels of state social anxiety and state social looming of participants were assessed. Most, if not all, of the studies in the literature focus on the relationship between LCS and social anxiety, considered them only as trait characteristics. The present study is concerned about momentary states of anxiety and looming as responses to a

socially stressful situation. It aims to further examine the relationship between LCS and social anxiety as state-like characteristics by exposing the participants to an anxiety-provoking environment. This manipulation of anxiety allows observing whether and to what extent social looming accounts for the change in anxiety. In this way, gaining a better understanding of the relationship between LCS and social anxiety during a performance would be possible. In addition, LCS puts great emphasis on the dynamic nature of perceived threats (Riskind et al., 2005a), so measuring the level of social looming at a time in which the individual is engaging in it, might help to better capture this dynamic nature of it. Therefore, the current study also explored how trait-like characteristics present themselves in the presence of a social demand possibly inducing anxiety, and whether a similar relationship between social anxiety and cognitive looming style is observed.

In summary, the goal of the present study is to contribute to the literature and support the previous findings that LCS predicts social anxiety. The secondary purpose of the study is to test whether trait LCS and social anxiety predict momentary responses of anxiety and looming during a situation that provokes social anxiety. Finally, it aims to find out whether the increase in anxiety is predicted by the extent to which they engage in social looming at that moment.

The hypotheses of the study are as below:

1. It is expected that trait LCS is positively correlated with trait social anxiety.
2. It is expected that trait LCS is positively correlated with state social looming.
3. It is expected that trait social anxiety is positively correlated with state social anxiety.

4. It is hypothesized that state social looming predicts the change in anxiety levels after the manipulation.

2. METHOD

2.1 Pilot Study

In order to establish a valid and reliable procedure with regard to state social anxiety and social looming, several studies were conducted including the expert views and repetitive pilot tests with necessary updates. The details are provided below.

2.1.1. Procedure Evaluation

2.1.1.1. Expert View

Prior to the data collection, five psychologists were asked to evaluate the procedure that was going to be followed and the measurement tool for assessment of state social looming. A previous study including a similar procedure evaluation provided a basis for the current study (cf. Derin & Yorulmaz, 2021). The evaluators were given a brief description of the study, and presented with an evaluation form via Google Forms consisting of questions which were rated on a 10-point Likert-type scale. First of all, the evaluators were asked to rate the extent to which the instructions given to the participants were clear and understandable. It was agreed that instructions were quite clear and easy to follow (M= 9.80, SD= .45). They rated how much making participants prepare a presentation about themselves and the presence of a so-called evaluator during the presentation contribute to the procedure. Likewise, it was agreed that they were meaningfully contributing to the procedure (M= 9.00, SD= 1.23; M= 8.40, SD= 2.07). Then, they rated whether they found the procedure appropriate for assessing the relationship

between LCS and social anxiety; and the results showed a consensus that the procedure was overall appropriate (*M*= 9.20, *SD*= 0.84).

Finally, the evaluators were asked to rate each item of the state social looming questionnaire. All four items of the questionnaire were found to be appropriate to measure state looming cognitive style with mean scores of 9.2, 9.4, 8.6, 9.2, and standard deviations of 1.30, 0.55, 2.07, 1.30, respectively. After the ratings, written feedback was given by the experts at the end about the procedure as well. Overall, the procedure was evaluated as appropriate for assessing the state social looming of the participants and investigating its relationship to social anxiety. Based on the ratings and comments of the evaluators, minor revisions were made in the structure of certain sentences in the state social looming questionnaire and in the instructions to make it more clear for the participants.

2.1.1.2 Participant Feedback

After the expert view, participants who completed the pilot study were asked for their opinions about the procedure as well. After the participants completed the study, they were presented with an evaluation and feedback form. The form involved four questions rated on a 10-point Likert scale. The first question asked participants how clear the instructions and questions in the study were. Similar to the expert view, it was found quite understandable and clear (*M*= 9.42, *SD*= 0.69). The second question assessed the believability of the deception asking how persuasive it was being informed that an expert was evaluating them while presenting. The results supported that the deception worked properly (*M*= 8.42, *SD*= 1.26). The third and fourth questions asked participants how anxiety-provoking it was to make a presentation about themselves, and being presented with a 30-second countdown while preparing on a 5-point Likert type scale. The answers showed that the demands of the study evoked

moderate anxiety in the participants (*M*= 3.21, *SD*= 0.98; *M*= 3.63, *SD*= 1.01) Finally, participants also provided written feedback about their opinions of the study. Based on the expert views and participants' feedback requiring minor revisions,the procedure was finalized.

2.1.2. Participants

Nineteen participants (12 female, 7 male) in total who volunteered to participate in the study completed the pilot study. They were recruited from the general population by convenience sampling through social media. The mean age of the participants was 25.21 (*SD*= 1.93), and the age range was between 20 to 30. The demographic information of the participants is displayed in Table 1. None of the participants were reported to be diagnosed with a psychiatric disorder before, or currently suffering from one.

Table 1

Demographic Characteristics of the Pilot Study Sample

Demographic Variable	Type	n	%
Sex	Male	7	36.84
	Female	12	63.16
Previous Psychiatric Diagnosis	Yes	0	0
	No	19	100
Current Psychiatric Diagnosis	Yes	0	0
	No	19	100

2.1.3 Measures

In the first part of the study participants completed Looming Maladaptive Style Questionnaire (LMSQ-R), The Liebowitz Social Anxiety Scale, and a demographic information

form. In the second part, they were presented with Visual Analogue Scales, State Social Looming Scale followed by an evaluation and feedback form.

2.1.3.1 Looming Maladaptive Style Questionnaire (LMSQ-R)

LMSQ-R is a measure of LCS originally developed by Riskind et al. (2000) assessing an individual's tendency to appraise threatening situations as rapidly increasing in danger and escalating in risk. The scale has been adapted to Turkish by Altan-Atalay and Saritas-Atalar (2018). It includes six vignettes depicting potentially anxiety-provoking situations involving either a physical or social threat such as speaking in front of a large audience or having an unusual heart palpitation all of a sudden. The participants are asked to vividly imagine themselves in the described situations and answer three 5-point Likert-type questions following each vignette. The questions assessed the extent to which threats are constant or rapidly escalating, worsening, increasing in risk, and the extent they vividly imagine them (See Appendix 4)

The scale has two subscales of physical looming and social looming. The physical looming subscale includes depictions of stressful events involving a physical threat (e.g., a car crash), while the social looming subscale includes social threats (e.g., a potential breakup). Higher scores on the scales indicate a higher level of LCS. The original scale has a high level of internal consistency ($\alpha = .91$) and test-retest reliability ($r = .91$) over a 4-month time interval. In the present study, the Turkish form of the scale is used. The Turkish translation of the scale displays adequate levels of internal consistency and test-retest reliability. The internal consistency scores ranged from .85 and .90 while test-retest reliability scores are between .69 and .72 for the total scores and the subscale scores.

2.1.3.2 Liebowitz Social Anxiety Scale

The Liebowitz Social Anxiety Scale (LSAS) is a 24-item scale developed by Liebowitz (1987) to be able to assess individuals' fear or anxiety and avoidance behavior in a range of social situations such as making a phone call, maintaining eye contact, returning an item to the store, or expressing dislike/disagreement. The participants rate each item on a 4-point scale both for "fear or anxiety" and for "avoidance" from 0 (none, never avoided this in the last week) to 4 (severe, usually avoided this in the last week). These scores are summed to yield a total score with higher scores indicating greater social anxiety. The original scale demonstrated excellent internal consistency with a Cronbach's coefficient alpha of 0.96 (Heimberg et al., 1999). The Turkish adaptation of the scale was established by Soykan et al. (2003) reporting sufficient psychometric properties.

2.1.3.3. State Social Looming Measure

This is a measure derived from LMSQ-R constructed for assessing momentary social looming as it occurs. While LMSQ-R measures cognitive looming as a trait-like, persistent characteristic, this measure aims to capture the variance in state-like looming individuals engage in when exposed to an anxiety-provoking social situation. The measure is specific to the situation participants are in and reflects the potential social threat posed in the study. Participants are expected to make a presentation in front of two people, and they are informed that they will be evaluated. LMSQ-R had a vignette describing a similar situation involving public speaking as described before. The vignette was modified briefly to reflect the current real event (presentation). The same four 5-point Likert-type questions followed the brief vignette, again with little modifications (See Appendix 5). In the pilot study, the scale showed good internal consistency ($\alpha = .93$).

2.1.3.4. Visual Analogue Scale (VAS)

In order to assess participants' levels of anxiety, a visual analogue scale was presented at three different time points in the study. It asked participants to indicate the extent they feel comfortable, confident, and anxious (c.f., Haikal & Hong, 2010, Hirsch et al., 2003). The emotion intensity was rated on a scale ranging from 0 to 10 indicating not comfortable, confident, anxious at all; and extremely comfortable, confident, and anxious respectively. Level of anxiety is the main measure that was relevant for the study, and the other measures functioned as filler items.

2.1.3.5. Demographic Information Form

At the end of the study, a demographic information form was presented to participants. It included information regarding their age, gender, and whether or not they have ever been or currently are diagnosed with a psychiatric disorder (See Appendix 1).

2.1.4.Procedure

Ethical approval for all procedures was obtained from the Yeditepe University IRB committee prior to data collection. Participants for the pilot study were recruited by convenient sampling through social media. The study is conducted online via the video call software *Zoom* and the survey administration platform Google Forms in two parts. In the first part, participants who consented to participate in the study filled out the informed consent form followed by two questionnaires and a demographic information form using Google Forms. In the following week, for the second part of the study, participants were asked to join a Zoom meeting. First, the mood of the participants were assessed asking how happy, sad, and anxious they were feeling using visual analogue scales (VASs) ranging from 0 to 10 (Time 1). Then instructions were given to them regarding the presentation they are expected to make about themselves. They were asked to

make a 2-minute presentation about things they like and things they would like to change about themselves (cf. Chen et al., 2018; Haikal & Hong, 2010; Kocovski et al., 2011; Perini et al., 2006). It is said that another person, a so-called expert, will be joining the meeting soon. They were also informed that the experimenter and this other professional will be evaluating their speaking and presentation skills. After the instructions, they were given the VASs again (Time 2). The participants were given 30 seconds to prepare for the presentation, and a countdown was presented during this time (cf. Haikal & Hong, 2010). Then, the experimenter joined the session from another account, displaying a different name and acting like the so-called expert. Right before the presentation, the participants completed VASs (Time 3) one more time followed by a short questionnaire adapted from the LCS to the upcoming presentation in order to assess their state looming levels. Then they started their presentation and stopped by the experimenter when their time was up. After the presentation, they were all given positive feedback to lower presentation stress and boost positive mood. Participants re-rated their mood using the VAS (Time 4) to make sure they felt comfortable at the end of the study. Finally, they were thanked for their participation, and presented with a brief debriefing form followed by the evaluation and feedback form.

2.2. Main Study

2.2.1.Participants

Thirty-two participants were recruited via social media by convenience sampling. Two of the participants did not complete the second part of the study, and their data was not included in the analyses. The final sample consisted of 30 participants (22 female, 8 male). The mean age of the participants was 25.97 (*SD*= 1.69), and the age range was between 22 to 29. None of the participants were reported to be currently diagnosed with a psychiatric diagnosis, and 1 of the

participants has been diagnosed with depression in the past. The demographic information of the participants is demonstrated below in Table 2.

Table 2

Demographic Characteristics of the Participants

Demographic Variable	Type	n	%
Sex	Male	8	26.67
	Female	22	73.33
Previous Psychiatric Diagnosis	Yes	1[a]	5.26
	No	29	94.74
Current Psychiatric Diagnosis	Yes	0	0
	No	30	100

Note.[a] One of the participants was diagnosed with depression previously.

2.2.2. Measures

Participants completed the Turkish versions of the Looming Maladaptive Style Questionnaire-Revised (LMSQ-R), the Liebowitz Social Anxiety Scale, Visual Analogue Scales (VAS), the State Social Looming Scale, and the demographic information form as introduced previously. The evaluation form used in the pilot was not included in the actual study.

2.2.3. Procedure

A similar procedure was followed as in the pilot study with minor modifications with the exception of the evaluation form presented at the end. Also, the second visual analogue scale measure was eliminated in the present study. Participants rated the intensity of their moods at the beginning of the study, right before they started their presentation, and at the end of the study. At

the end of data collection, participants were sent a debriefing form informing them about the true aim of the study and the used deception.

3. RESULTS

Before starting the analyses, 2 of the participants' data had been eliminated since they did not complete the second part of the study. Then, the distribution of the variables was assessed for normality. The skewness and kurtosis values were in the acceptable range. The visual inspections were orderly in favor of the normal distribution. The following analyses (t-test, correlation, and regression) were performed with data from 30 participants using SPSS.

3.1 Descriptive Statistics

Means scores, standard deviations, and minimum and maximum scores for variables in the study are presented in Table 3**.**

Table 3

Descriptive statistics for the measures of the study

	N	Mean	SD	Min.	Max.
LSAS	30	86.70	22.18	52.00	153.00
LMSQ-R	30	67.67	16.32	37.00	96.00
State Social Looming	30	10.87	4.21	4.00	17.00
VAS2	30	4.63	2.20	1.00	9.00
Anxiety Change	30	1.47	1.85	-3.00	5.00

3.2 Manipulation Check

In order to test how the manipulation of social anxiety affected the participant, their change in anxiety levels was tested. VAS measurements assessing the anxiety levels of the participants were taken at the very beginning of the study (Time 1), right before the presentation (Time 2), and at the end of the study (Time 3). To examine the change in anxiety, VAS scores at three different time points were compared. It was expected that the manipulation would lead to a fluctuation in anxiety levels. A one-way repeated measures ANOVA was conducted to compare the anxiety level in Time 1, Time 2, and Time 3. As expected, results showed that there was a significant change in anxiety levels at different time points it was measured ($F(2,58)= 12.77$, $p < .001$).

It was predicted that the anxiety level of the participants was going to increase after they were given the instructions before they started their presentation. Therefore, it was expected that anxiety increases from Time 1 (at the beginning of the study) to Time 2 (right before the presentation). In order to test this, a paired samples t-test was conducted. The results confirmed that there was a significant increase in anxiety from Time 1 ($M= 3.17$, $SD= 2.20$) to Time 2 ($M= 4.63$, $SD=2.21$), ($t(29) = -4.34$, $p < .001$).

The last VAS measurement was taken at the end of the study to make sure anxiety was induced only temporarily. Therefore, it was expected that the level of anxiety would drop from Time 2 to Time 3 (at the end of the study after positive feedback). To test this, another paired sample t-test was conducted. Likewise, the results of the analysis supported the expectation. There was a significant decrease in anxiety from Time 2 ($M= 4.63$, $SD=2.21$) to Time 3 ($M= 3.03$, $SD=2.06$), ($t (29) = 4.44$, $p < .001$).

3.3. Correlation Analysis

In order to test the correlations between study variables Pearson Correlation Coefficients were calculated. As Table 4 shows, LCS scores are positively correlated with trait social anxiety scores. It indicates that higher cognitive looming was found to be associated with higher social anxiety. However, the correlation between LCS and state social anxiety was not found to be significant. LCS was found to be significantly and positively correlated with change in anxiety. Trait social anxiety was not significantly correlated with VAS2 scores measuring the anxiety level before the presentation or with change in anxiety. Intercorrelations among the variables of the study are presented in Table 4.

Table 4

Intercorrelations among variables

	1	2	3	4	5
1 LSAS		0.67**	.19	1.15	1.20
2 LMSQ-R			.25	.23	.31.
3 State Social Looming				.76**	.38*
4 VAS2					.42*
5 Anxiety Change					

*p <.05; **p <.01

3.4 Regression Analysis

One of the primary aims of the study was to investigate the relationship between state social looming and state anxiety. It was hypothesized that state social looming predicts the change in anxiety levels. In order to test this main hypothesis of the study, a simple linear regression was calculated. In the regression analysis change in anxiety scores places as the independent variable, whereas the state social looming was placed as the independent variable. State social looming explained %14 of the variance, and a significant regression equation was found ($F(1,28)= 4.85$, $p < .001$) with an R^2 of .15. State social looming significantly predicted the change in anxiety level. The summary of the regression model is presented in Table 5.

Table 5

Regression Analysis Summary for State Social Looming Predicting Change in Anxiety

Variable	B	β	SE
Constant	-.37*		.89
Anxiety Change	.17*	.38	.08
R^2	.15		

*p <.05

3.5 Exploratory Analysis

As stated above, the results did not yield a significant correlation between LCS and the state social looming measure. Exploratory analysis was conducted to examine this relationship in

more detail. To test the relationship between the social looming sub-dimension of LMSQ-R and the state social looming measure, Pearson Correlation Coefficients were calculated. Similarly, the results did not yield a significant correlation between the social looming sub-scale of LMSQ-R and state social looming (r =.20, p > .05).

4. DISCUSSION

4.1 Overview

This study aimed to explore the relationship between LCS and social anxiety. It tried to investigate this relationship approaching LCS and social anxiety both as trait and state factors. By exposing the participants to an anxiety-provoking situation, it tried to understand whether LCS accounts for momentary changes in social anxiety in an anxiety-provoking situation. It contributed to the literature by drawing attention to LCS since the model offers a unique framework for understanding anxiety. Building on previous research, the present study tried to more thoroughly examine the role of LCS in social anxiety for a better understanding of the cognitive mechanisms underlying social anxiety. The results of the study and the clinical implications of them were discussed below along with limitations and future directions.

4.2 LCS and Social Anxiety

LCS is introduced as a transdiagnostic vulnerability factor to all kinds of anxiety in the literature (Riskind et al., 2000). To date, the relationship between LCS and anxiety has been examined broadly; but only a few studies have focused on its links to specific anxiety-related problems such as social anxiety (e.g., Haikal & Hong, 2010; Riskind et al., 2013). One of the main goals of the present study was to build upon previous studies and explore the link between LCS and social anxiety. The first hypothesis of the study was LCS and trait social anxiety are

positively correlated. Consistent with the expectation, the results of the present study supported this prediction that LCS was positively associated with trait social anxiety. This implies that people who perceive real or anticipated threats as rapidly approaching, increasing in risk, and getting closer in time tend to get more anxious in social situations and to engage in avoidance behaviors. These results are in accordance with previous studies that demonstrate a strong relationship between LCS and social anxiety. It contributes to the literature by showing that LCS plays an important role in more specific anxiety problems such as social anxiety.

What was novel about the present study is that it aimed to observe this relationship over the course of a social anxiety provoking situation. The design of the study exposed participants to a potentially socially threatening situation to observe short-term changes in anxiety. One of the studies examining the impact of LCS on short-time changes in anxiety was conducted by Riskind et al. (2007). Participants completed self-report measures multiple times in a short time interval. It was found that LCS predicted even a small amount of change in anxiety in a brief time interval. Likewise, it was hypothesized in the present study that LCS predicted change in state anxiety. As mentioned before, the highlight of the current study is that it attempts to examine this relationship in the presence of a threatening event. The study aimed to manipulate anxiety and test whether cognitive looming accounts for this momentary change in anxiety.

Based on the literature, a design was made that would allow observing both social looming and a change in social anxiety. Public speaking is one of the most common worries of socially anxious individuals, so the study involved a presentation task. In addition, it included a deception of being evaluated. Most, if not all, of the socially anxious people are worried that they will be evaluated in a negative manner in a social encounter. Fear of negative evaluation is a core component of social anxiety which is also one of the primary criteria in DSM-V

characterizing SAD (APA, 2013). Cognitive models (Clark & Wells, 1995; Rapee & Heimberg, 1997) of social anxiety support that this anticipation of negative evaluation of other people contributes to social anxiety as well. Based on the relevant literature, deception was used to be able to better manipulate anxiety. The participants were told that another evaluator would join the presentation, and they will be evaluated based on their speaking skills. It was assumed that the deception would contribute to the anxiety manipulation. In addition, to be able to make temporal looming more salient, a countdown was used emphasizing the time for presentation approaching. The procedure was pilot tested and found to be appropriate for its purpose. State social looming of the participants and their anxiety levels at different time points were assessed. The results were in accordance with the hypothesis that state social looming predicted the anxiety level of the participants before making a presentation and predicted the increase in anxiety.

As discussed previously, there is a gap in the literature examining the predictive role of LCS in specific kinds of anxiety. However, its relationship with different kinds of anxiety is not investigated thoroughly in the literature. The study expands the research on the relationship between LCS and anxiety and contributes to the literature with its focus on social anxiety both as a state and trait factor. It is beyond the scope of this present study to explore whether LCS is more strongly associated with social anxiety compared with other kinds of anxiety. However, it can be speculated that LCS might be a successful predictor of social anxiety in particular for several reasons. The looming model proposed by Riskind et al. (2000) provides a framework for understanding anxiety differentiating from other widely accepted cognitive models of anxiety (Clark & Wells, 1995; Rapee & Heimberg, 1997). The most prominent quality of the model is that LCS was proposed as an anxiety-specific vulnerability factor. Many studies in the literature

have demonstrated that LCS predicts anxiety, but not depression (for a review, see Riskind & Williams, 2005). Considering that LCS has a social looming sub-dimension that specifically focuses on social threat appraisals, it might be especially important in predicting social anxiety.

Another unique quality of LCS is important in understanding its relationship to social anxiety which is its focus on the dynamic nature of threat appraisals. Imagery plays a key role in the development and maintenance of social anxiety (Makkar & Grisham, 2011). Socially anxious individuals engage in negative imagery when exposed to a feared social situation or when they think about this feared situation (Hirsch & Holmes, 2007). In the literature, the content of the negative imagery has been greatly explored. For example, it has been explained that socially anxious people often construct visual images of themselves from an observer's point of view (Wells et al., 1998). In a semi-structured interview conducted by Hackmann et al. (2000), the images that occur to socially anxious people recurrently are explored. Recurring negative self-images were the most commonly reported images. Appearing anxious, being viewed negatively, or being judged are common themes of negative self-images (Chiu et al., 2022). Hinrichsen and Clark (2003) investigated anticipatory processing in social anxiety and found that individuals with high social anxiety have these negative imagery not only in real-life situations but when anticipating a social situation as well. However, the nature of these images is not paid that much attention in the literature regarding social anxiety. Broadly accepted cognitive models largely focused on static mental images. However, these images are often dynamic which elevates anxiety. For example, people who suffer from OCD and have contamination anxiety, do not only have static beliefs and images about contamination; but they have distorted beliefs that contamination is rapidly spreading and approaching in time (Tolin et al., 2004).

Another example given in the literature demonstrating the dynamic nature of imagery is the study conducted by Dorfan and Woody (2006) in which the participants were assigned to three different conditions, and contacted with a little bit of sterilized urine. In the first condition, the participants were instructed to imagine the germs in the urine as if they were moving and spreading. In the second conditions, participants were asked to visualize them as a static threat in which the germs do not move. Finally, in the third condition, they were asked to visualize the germs as not harmful. After 30-minutes of exposure, the stress levels of participants in the second and third conditions were decreased. However, the same results were not observed with participants who imagined germs as moving. LCS addresses this gap in previous cognitive models by the dynamic nature of mental imagery as the primary focus. In light of previous research, the present study draws attention to the importance of dynamic mental simulations of a feared situation on social anxiety. It suggests that imagining potential threats as approaching, getting closer, and getting more dangerous leads to an increased level of anxiety.

4.3 Trait and State Measures

As hypothesized the results showed that LCS and trait social anxiety were positively correlated. Similarly, state social looming predicted changes in state social anxiety. It was expected that trait measures would correlate with state measures. LMSQ-R measuring LCS involves hypothetical scenarios, and it was predicted that responses to these anticipated scenarios would be the same when encountering them in real life. However, the results did not support this expectation. There was not a significant positive correlation between the trait and state social looming.

One of the reasons that there was not a significant correlation between LCS and state social looming could have been explained by the fact that the LCS captures both physical and

social threats, while the study is about social threats only. In order to eliminate this possibility, further analysis was conducted. The scores from the sub-dimension of LMSQ-R regarding social situations were calculated separately. The state social looming questionnaire was directly derived from an item of LMSQ-R that is most closely related to the situation in which the participants are exposed in the study with minor modifications. Therefore, a positive correlation between them was expected. However, the results showed that there was not a significant correlation between state social looming and LCS or the social looming dimension of LCS either.

The results failing to demonstrate a significant correlation between LCS and state social looming could raise questions about the validity of the state social looming questionnaire at first. This is the first study known that tries to capture social looming as a state factor developing a new measure based on the original scale. However, a similar domain-specific measure for assessing looming was used in previous research, derived from the original scale as in the present study. Riskind et al. (1997) developed the Looming of Contamination Questionnaire to assess cognitive looming related to fear of contamination and examined its relationship with OCD symptoms. Similar to the present study, they modified the vignettes so that the scenario represents the type of anxiety focused on. Then, they asked similar questions as in the original scale. It can be suggested that modifying the vignettes of LMSQ-R according to the specific anxiety-provoking situation in interest, and asking the follow-up questions is an acceptable method for assessing domain-specific looming. In addition, the results did not show a significant correlation between trait anxiety and state anxiety either. Therefore, this discrepancy between trait and state measurements might be due to other reasons than simply being a validity issue.

The goal of the study design was to expose the participants to one of the anxiety-provoking situations. A public speech task was used in the study which was a situation

that was used in the LMSQ-R. It was expected that the responses to the anticipated scenario would parallel the real-life experience. Since the results did not support this expectation, the design of the study could have failed to successfully represent an anxiety-provoking situation and capture social anxiety. However, this possibility is substantially eliminated due to anxiety manipulation results.

The anxiety levels of the participants were assessed at three different time points. First, they rated their anxiety in the very beginning (Time 1), then right before making a presentation Time 2), and finally at the end of the study (Time 3). To measure the increase in anxiety, the difference between Time 2 and Time 1 ratings was calculated. The results yielded a significant increase in anxiety which shows that the design was successful in eliciting anxiety. In addition, for ethical reasons, the anxiety elicited in the study should not have remained at the end at high levels. Participants were comforted with positive oral feedback in the end in order to make sure they felt comfortable in the end. The results showed that the anxiety level of the participants decreased significantly at the end of the study. Therefore, it can be suggested that the study causes anxiety to some participants for a short amount of time which is not long-lasting as intended. Ultimately, the anxiety manipulation was successful. Making a presentation and being evaluated did elicit the intended increase in anxiety.

It is a plausible speculation that the study was too anxiety provoking and equally stressful for all participants. The task was to make a presentation to the experimenter and another professional. They were informed that their skills were going to be evaluated. It is possible that these demands of the task were anxiety-provoking for most people. This might explain the reason why the results did not yield a positive correlation between trait and state anxiety. The trait anxiety measures involve many social and interpersonal situations most of which might not

be threatening for people with low social anxiety. However, making a presentation might be threatening for many. In fact, the most commonly feared social situation for all people regardless of their social anxiety levels is public speaking (Rapee, 1995). There are studies in the literature that can support this explanation. For example, a public speaking task was used in a study conducted by Hinrichsen & Clark (2003) in which anxiety levels of people with high and low anxiety during the task were comparable to each other. The intention of the study was to expose the participants to an anxiety-provoking situation. The results testing the anxiety manipulation showed that the task caused an increase in anxiety levels. However, making a presentation might not be able to capture the differences between people with different levels of anxiety since it is a commonly feared situation for all.

In fact, Kessler et al. (1998) pointed out the fact that there are many people who are considered to be socially anxious that have exclusively public speaking fears. It is discussed that although people with solely public speaking fears do have impairments, people who fear a number of social situations instead of just public speaking results in more dysfunctions in their lives. In addition, compared with generalized social anxiety, public speaking anxiety alone shows different patterns of onset, recovery rates, or responses to treatment (Ruscio et al., 2008). For these reasons, they raise the question of whether people with only public speaking anxiety should be considered as a relatively mild form of social anxiety in the spectrum, or as a distinct problem on its own. Stein and Deutch (2003) supported the argument that public speaking anxiety is a distinct domain of social anxiety emphasizing the importance that it should be approached separately in the assessment and treatment of social anxiety.

Still, public speaking tasks are broadly used in social research for the assessment of social anxiety. In their review, Blöte et al. (2009) draw attention to these concerns and question

how suitable it is to use an impromptu public speaking task in studies as a measure of social anxiety. They argue that whether public speaking anxiety is considered a less severe form of social anxiety or a distinctive subtype of it has important implications for the interpretation and validity of social anxiety research involving a public speaking task. Although the classification of public speaking anxiety is beyond the scope of the present study, these concerns might be considered in the explanation of the findings that a significant correlation between trait anxiety and state anxiety could not be found. Hence, future research might investigate LCS and social anxiety in a variety of social situations other than public speaking.

4.4. Clinical Implications

Cognitive behavioral therapy (CBT) is a largely used and well-researched intervention technique for the treatment of social anxiety (Rodebaugh et al., 2004). This approach to treatment is based on the cognitive models of SAD (Clark & Wells, 1995; Rapee & Heimberg 1997). The treatment often includes psychoeducation, exposure, and cognitive restructuring (Hope et al., 2006). The main focus of these treatment techniques is maladaptive and distorted cognitive processes. They target thoughts, beliefs, or perceptions socially anxious people have trying to disconfirm them (Overholser, 2002).

The presented study focused on LCS as an overarching vulnerability factor for anxiety. It aimed to draw attention to relatively less researched cognitive factors for anxiety disorders to be able to understand the cognitive mechanisms that play a role in the development and maintenance of anxiety disorders. It can be suggested that reducing LCS can likely result in a decrease in social anxiety symptoms. Therefore, interventions for social anxiety, or other anxiety disorders, might focus more on the dynamic nature of threat perceptions. They might try to work with mental simulations socially anxious individuals anticipate, trying to target reducing LCS.

Riskind et al. (2012) explain several strategies that can be used in order to reduce LCS in treatment. It is suggested that psychoeducation can include information about the nature of cognitive distortions. Imagery exercises targeting dynamic threats can be used. Likewise, behavioral experiments or homework can be employed. The suggested methods are quite similar to the current treatment approaches, but they emphasize the dynamic nature of the cognitive processes. For example, when doing an imagery exercise, dynamic images can be worked with instead of static images. LCS emphasizes the temporal and spatial distortions in socially anxious people's perceptions. Therefore, similar techniques can be used with a focus on time and space. Imagery exercises trying to slow down time, or slow down an approaching danger are further suggested by Riskind et al (2012).

The study, along with previous studies, shows the importance of LCS as a risk factor for social anxiety. Incorporating LCS-oriented treatment techniques into CBT practice can help individuals to change their maladaptive cognitions, and reduce the social anxiety symptoms as a result. Targeting and reducing LCS might also be important in preventing social anxiety or other kinds of anxiety. Future research is required to assess the applicability and efficacy of LCS-focused cognitive-behavioral techniques in treatment.

4.5 Limitations and Future Research

There are certain limitations to the current study. First of all, the demographic characteristic of the participants did not include a wide range of variability. For example, most of the participants were in their mid-twenties. In addition, the gender distribution was uneven. The sample dominantly consisted of female participants. Social anxiety research regarding gender differences showed that females suffer from social anxiety more than males. Also, the age of onset of social anxiety is usually during adolescence (Kessler et al., 2005), and it affects people

who are in their twenties a lot. It is observed that social anxiety diminishes as people are aged. Therefore, the sample is believed to be an optimal one to be able to observe social anxiety and the antecedent cognitive mechanisms. The examination of gender differences and the presentation of social anxiety or its links to cognitive factors in different age groups were beyond the scope of this study. Nevertheless, future research can be conducted to better understand the similar or differentiating dynamics of the relationship between LCS and social anxiety in different groups of people.

Another limitation concerning the study sample was that it constituted predominantly healthy individuals with no past or current psychiatric diagnosis of any psychiatric disorder. The generalizability of the results to the clinical population might be tested in future studies. However, the study design poses a difficulty in having variability in social anxiety levels. There are many people who significantly suffer from social anxiety even in the non-clinical population. The present study might not have allowed to include these people with high anxiety due to the demands of the study design. For ethical concerns, participants were informed about the nature of the study that they were expected to make a presentation which can be highly anxiety provoking. It can be argued that people who were able to tolerate certain anxiety in making a presentation agreed to participate. It is demonstrated in the literature that two key factors determine the severity of social anxiety. The first factor is the amount of anxiety or fear one suffers from when encountering a feared social situation, and the other is the extent to which they avoid these situations. Given that socially anxious people tend to avoid situations that cause fear or anxiety, it is plausible to argue that people who are highly socially anxious might not want to voluntarily make a presentation about themselves. It is highly likely that people who are high in social anxiety were not willing to participate in a study like this. Therefore, the sample consisted

of people who could at least be willing to tolerate a certain amount of anxiety the nature of the study elicits, instead of avoiding it.

In addition to limitations related to sample characteristics, one of the main issues to be discussed is that the study fails to demonstrate a positive correlation between LCS and state social looming, or with trait anxiety and state anxiety. There are possible explanations as previously discussed, but future research might be necessary to understand the relationship between trait and state characteristics. This study was one of the few studies attempting to assess cognitive looming in a specific situation by deriving a domain-specific measure with certain adjustments to the LMSQ-R. Future studies replicating and extending the current study, or developing similar measures to assess physical or social looming as a state factor would contribute to better understanding how LCS functions and affects anxiety.

Another concern regarding the present study, and social anxiety research in general, is the close relation of social anxiety with other constructs such as shyness. Normal shyness and social anxiety have similar presentations sharing defining symptoms such as avoiding social interactions, or somatic problems like sweating or blushing (Heiser et al., 2009). It has been argued that the functioning of people with social anxiety are more severely impaired compared to shy individuals. For example, socially anxious individuals have a greater tendency to avoid social interaction (Turner et al., 1990). In the present study, it is hard to answer to what extent the increase in anxiety might be due to shyness. Shyness is often approached as a temperamental factor which was not assessed. However, the distinction between shyness and social anxiety is very elusive especially in the non-clinical population as in the current study. In the literature this issue has been discussed, and it has been demonstrated that distinguishing shyness from social anxiety with self-report measures is often not possible since there is a significant overlap

between how these two constructs are operationalized (Chavira et al., 2002). Future research can aim to provide empirical evidence of conceptual distinctions between social anxiety and shyness in non-clinical populations and provide distinctive assessment tools to be able to distinguish social anxiety from shyness in research.

In the present study, participants encountered the experimenter and the so-called expert, and only saw the face of the experimenter. It can be speculated that seeing the face of the evaluating expert could make the potential threat of negative evaluation more salient. Future research might replicate the study with a real person evaluating the presentation of the participants considering the issue of standardization of the procedure in which the evaluator should respond in a similar manner to all participants regardless of their performance. Also, future studies might include different audience options to find the optimal scenario to manipulate performance anxiety. For example, Mostajeran et al., (2020) assessed people's anxiety levels using VR in different audience size conditions. Contrary to their prediction, it was found that the anxiety levels of the participants were higher when the audience size was the smallest. They found that speaking in front of three people was more anxiety-provoking than speaking in front of fifteen people. However, there are other studies with contradictory findings showing that large audience size was associated with higher anxiety (e.g.; Böheim et al., 2019; Lemasson et al., 2018) Therefore, future research will be important to understand the effects of audience characteristics on social anxiety.

In conclusion, the present study is important for exploring LCS as an alternative cognitive model and its role in social anxiety. It is unique in its attempt to examine this relationship in an experimental design. Similar research with different sample characteristics or with a specific focus on different kinds of anxiety can be conducted in the future. Understanding

the role of LCS in anxiety in these studies can help develop psychological interventions and improve the treatment of anxiety.

APPENDICES

APPENDIX 1. INFORMED CONSENT FORM

Bu araştırma Yeditepe Üniversitesi Klinik Psikoloji Yüksek Lisans Programı bünyesinde Berna Sarı danışmanlığında Ayşenaz Akbay tarafından yürütülmektedir. Lütfen çalışmaya katılmadan önce aşağıdaki bilgileri dikkatle okuyunuz ve bu bilgiler ışığında çalışmaya devam etmek isterseniz ilerleyeniz. Çalışmaya katılmamakta ve dilediğiniz zaman çalışmadan ayrılmakta özgürsünüz.

Bu iki aşamalı bir çalışmadır. Çalışma duyguların performans üzerindeki etkisini araştırmayı amaçlamaktadır. Çalışmanın ilk aşamasında sizden demografik bilgilerinizi içeren bir form doldurmanız istenecektir. Sonrasında kaygı verici durumlara yönelik tutumlarınız ile ilgili iki tane anket doldurmanız istenecektir. Çalışmanın ikinci aşamasında ise anketleri doldurduktan bir gün sonra belirlenen saatte Zoom oturumuna katılmanız beklenmektedir. Bu aşamada sizden kendiniz ile ilgili kısa bir sunum yapmanız beklenmektedir. Bütün çalışma toplamda yaklaşık 20 dakika sürecektir. Çalışmanın amacına ulaşması için sizden beklenen, bütün soruları eksiksiz ve size en uygun gelen cevapları işaretleyecek şekilde doldurmanızdır.

Çalışmaya katılmanız durumunda literatüre bu konu hakkında destek sağlayarak veri eklememize yardımcı olacaksınız. Pek çok insan sunum yapmayı kaygı uyandırıcı bulabilmektedir ancak kullanılacak olan prosedürün geçmişte uzun süreli olumsuz bir etkisine rastlanmamıştır. Çalışmadaki ölçüm araçlarını kullanan diğer çalışmalarda herhangi bir olumsuz etki rapor edilmemiştir. Ancak dilerseniz çalışmaya hiç katılmayabilir veya çalışmadan istediğiniz zaman ayrılabilirsiniz.

Çalışma dahilinde kimlik bilgileriniz gizli tutulacaktır. Sağladığınız diğer veriler yalnızca araştırmacılar tarafından ulaşılabilecektir. Kimlik bilgileriniz sağladığınız ölçek bilgilerinden verilerden ayrı olarak tutulacaktır. Elde edilecek bilgiler araştırmacılar tarafından toplu halde değerlendirilecek ve bilimsel yayımlarda rapor edilmek için kullanılacaktır.

Çalışmaya katılmayı kabul ediyorsanız anketleri doldurmak için "Kabul Ediyorum" seçeneğini işaretleyerek ilerleyebilirsiniz.

APPENDIX 2: DEMOGRAPHIC INFORMATION FORM

Yaş:

Cinsiyet:

Güncel olarak aldığınız bir psikiyatrik tanı var mı? Var ise belirtiniz:

Daha önce herhangi bir psikiyatrik tanı aldınız mı? Var ise belirtiniz:

APPENDIX 3: LIEBOWITZ SOCIAL ANXIETY SCALE (LSAS)

Yönerge

Aşağıdaki tüm seçeneklere geçen haftayı düşünerek-bugün de dahil olacak şekilde- puan veriniz. Eğer durumlardan biri geçen hafta içerisinde oluşmadıysa, durumla karşılaştığınızda göstereceğinizi düşündüğünüz tepkiyi puanlayınız. Her bir durum için (yaşanmış olan ya da yaşanmış olduğu varsayılan) **hem korku ya da anksiyetenin derecesini hem de kaçınma sıklığını puanlayınız.**

	Korku ya da anksiyete				**Kaçınma**			
	Yok	**Hafif**	**Orta**	**Şiddetli**	**Yok**	**Hafif**	**Orta**	**Şiddetli**
1. Topluluk içerisinde telefon etmek								
2. Küçük bir grupla beraber bir aktiviteye katılmak								
3. Toplulukta yemek yemek								
4. Toplulukta içecek içmek								
5. Yönetici konumundaki biri ile konuşmak								
6. Seyirci önünde rol yapmak, oynamak ya da konuşmak								
7. Bir partiye / davete gitmek								
8. Biri ya da birileri tarafından izlenirken çalışmak								
9. Biri ya da birileri tarafından izlenirken yazı yazmak								
10. Çok iyi tanımadığınız birine telefon etmek								
11. Çok iyi tanımadığınız biri ile yüz yüze konuşmak								

12. Yabancılarla tanışmak								
13. Genel bir tuvalette idrar yapmak								
14. Başkalarının oturuyor olduğu bir odaya girmek								
15. İlgi merkezi olmak								
16. Ön hazırlık olmadan bir toplumda konuşmak								
17. Beceri, bilgi ya da yetenek ile ilgili bir sınava girmek								
18. Çok iyi tanımadığınız birine karşı görüş bildirmek ya da onunla aynı fikirde olmadığınızı söylemek								
19. Çok iyi tanımadığınız birinin doğrudan gözlerinin içine bakmak								
20. Bir gruba sözlü rapor vermek								
21. Cinsel ya da romantik bir ilişki amacıyla biriyle yakınlaşmaya çalışmak								
22. Bir malı parası iade edilmek üzere geri götürmek								
23. Bir parti / davet vermek								
24. Israrcı bir satıcıyı reddetmek								

APPENDIX 4. LOOMING MALADAPTIVE STYLE QUESTIONNAIRE REVISED (LMSQ-R)- TURKISH FORM

Yönerge

Aşağıda bazı senaryolar sunulmuştur. Sizden istenen bu senaryoları okuduktan sonar aklınıza gelen ilk düşünceyi ya da tepkiyi yazmanızdır. Cevabınız üzerinde uzun sure düşünmeden, senaryoyla ilgili aklınıza gelenleri hemen yazınız. Her senaryoyu okuduktan sonra, senaryoyu açık ve net bir şekilde zihninizde canlandırmaya çalışın. Bu sahneyi zihninizde canlandırdığınızda ve düşündüğünüzde aklınıza ne geliyor? Senaryoya dikkatli bir şekilde odaklanın ve mümkün olduğunca açık ve net ya da canlı bir şekilde hayal etmeye çalışın. Senaryoya odaklanmayı bitirdikten sonra, zihninizde canlandırdığınız zaman neler olduğuyla ilgili soruları cevaplayınız. Lütfen mümkün olduğunca hiçbir soruyu boş bırakmayınız.

Özetle; 1. Her bir sahneyi açık ve net bir şekilde ya da canlı bir şekilde hayal edin. 2. Aklınıza gelen düşünce ve duygularla ilgili tüm soruları cevaplayınız.

Farz edin ki trafiğin çok yoğun olduğu bir saate çevreyolunda giderken arabanızın motorundan garip bir ses geldiğini duydunuz. Her iki yanınızdan da arabalar ve kamyonlar hızla geçiyor ve arabanızın motorundan her an motor bozulacakmış ya da ciddi bir problem varmış gibi sesler geliyor.

Bu sahneyi zihninizde canlandırmak sizi ne kadar endişelendirdi ya da kaygılandırdı?

Hiç değil 1 2 3 4 5 Çok fazla

Bu sahneyi zihninizde canlandırırken, arabanızın motoruyla ilgili bir sorunun olma olasılığı azalıyor mu yoksa her geçen dakika artıyor ve daha da güçleniyor mu?

Olasılıklar zamanla azalıyor 1 2 3 4 5 Olasılıklar zamanla fazlalaşıyor

Arabanızın motoru ile ilgili sorunun oluşturduğu tehdit oldukça sabit mi kalıyor, yoksa her geçen dakika hızla artıyor mu?

Tehdit sabit kalıyor 1 2 3 4 5 Tehdit hızla büyüyor.

Arabanızın motorundaki sorunun gittikçe daha da kötüleştiğini gözünüzde ne kadar canlandırıyorsunuz?

Hiç 1 2 3 4 5 Çok fazla

Farz edin ki mali (maddi) problemleriniz hakkında birisiyle konuşurken garip bir kalp çarpıntısı hissediyorsunuz. Daha önce hiç bu şekilde kalp çarpıntısı hissetmemiştiniz ve kalbinizle ilgili bir sorun ortaya çıkacakmış gibi görünüyor.

Bu sahneyi zihninizde canlandırmak sizi ne kadar endişelendirdi ya da kaygılandırdı?

Hiç değil 1 2 3 4 5 Çok fazla

Bu sahneyi zihninizde canlandırırken, kalbinizle ilgili bir sorunla karşılaşma olasılığı azalıyor mu yoksa her geçen dakika artıyor ve daha da güçleniyor mu?

Olasılıklar zamanla azalıyor 1 2 3 4 5 Olasılıklar zamanla fazlalaşıyor

Kalbinizle ilgili sorunun oluşturduğu tehdit sabit mi kalıyor, yoksa her geçen dakika hızla artıyor mu?

Tehdit sabit kalıyor 1 2 3 4 5 Tehdit hızla artıyor.

Kalbinizdeki sorunun gittikçe daha da kötüleştiğini gözünüzde ne kadar canlandırıyorsunuz?

Hiç 1 2 3 4 5 Çok fazla

Farz edin ki bir grup insan içinde oldukça gözde ve benmerkezci birine doğru yürüyorsunuz. Bu kişi sizi ilk süzdüğünde sizi görmekten rahatsız olmuş gibi görünüyor ve gruptaki birçok kişi de sizden tarafa bakıyor. Bu kişiyi bir partiye davet etmek istiyorsunuz ama sizin davetinizi geri çevirebilir.

Bu sahneyi zihninizde canlandırmak sizi ne kadar endişelendirdi ya da kaygılandırdı?

Hiç değil 1 2 3 4 5 Çok fazla

Bu sahneyi zihninizde canlandırırken, bir zorluk yaşama olasılığınız azalıyor mu yoksa her geçen dakika artıyor ve daha da güçleniyor mu?

Olasılıklar zamanla azalıyor 1 2 3 4 5 Olasılıklar zamanla fazlalaşıyor

Geri çevrilme olasılığının oluşturduğu tehdit sabit mi kalıyor, yoksa her geçen dakika hızla artıyor mu?

Tehdit sabit kalıyor 1 2 3 4 5 Tehdit hızla büyüyor.

Geri çevrilme olasılığınızın gittikçe daha da kötüleştiğini gözünüzde ne kadar canlandırıyorsunuz?

Hiç 1 2 3 4 5 Çok fazla

Farz edin ki tanımadığınız insanlardan oluşan büyük bir dinleyici grubunun önündesiniz. Çok iyi bilmediğiniz bir konu hakkında konuşuyorsunuz. Dinleyicilerden bazıları sıkılmış ve ilgisiz, bazıları ise rahatsız görünüyor. Dinleyicilerden oldukça olumsuz bir tepki alacakmışsınız gibi görünüyor.

Bu sahneyi zihninizde canlandırmak sizi ne kadar endişelendirdi ya da kaygılandırdı?

Hiç değil 1 2 3 4 5 Çok fazla

Bu sahneyi zihninizde canlandırırken, dinleyicilerle ilgili bir sorun yaşama olasılığınız azalıyor mu yoksa her geçen dakika artıyor ve daha da güçleniyor mu?

Olasılıklar zamanla azalıyor 1 2 3 4 5 Olasılıklar zamanla fazlalaşıyor

Seyircilerden kaynaklanan tehdit sabit mi kalıyor, yoksa her geçen dakika hızla artıyor mu?

Tehdit sabit kalıyor 1 2 3 4 5 Tehdit hızla artıyor.

Seyircinin tepkisinin gittikçe daha da olumsuz olduğunu gözünüzde ne kadar canlandırıyorsunuz?

Hiç 1 2 3 4 5 Çok fazla

Farz edin ki, saat akşam 6 -trafiğin en yoğun olduğu saat ve siz de otoyolda evinize doğru ilerliyorsunuz. Arkanızdan kırmızı bir kamyon belli ki sizi fark etmemiş, çok hızlı bir şekilde üzerinize doğru geliyor. Öyle görünüyor ki kaza yapma riskiniz oldukça yüksek.

Bu sahneyi zihninizde canlandırmak sizi ne kadar endişelendirdi ya da kaygılandırdı?

Hiç değil 1 2 3 4 5 Çok fazla

Bu sahneyi zihninizde canlandırırken, kırmızı kamyonla ilgili bir sorunun olma olasılığı azalıyor mu yoksa her geçen dakika artıyor ve daha da güçleniyor mu?

Olasılıklar zamanla azalıyor 1 2 3 4 5 Olasılıklar zamanla fazlalaşıyor

Bir kaza yapmanın sizin için oluşturduğu tehdit sabit mi kalıyor, yoksa her geçen dakika hızla artıyor mu?

Tehdit sabit kalıyor 1 2 3 4 5 Tehdit hızla artıyor.

Kaza riskinin gittikçe daha da kötüleştiğini gözünüzde ne kadar canlandırıyorsunuz?

Hiç 1 2 3 4 5 Çok fazla

APPENDIX 5. STATE SOCIAL LOOMING QUESTIONNAIRE

Yönerge

Birazdan tanımadığınız iki kişiden oluşan bir dinleyici grubu önünde olacaksınız. Kendiniz hakkında konuşacaksınız. Dinleyiciler sizin konuşma ve sunum yapma becerilerinizi değerlendirecek. Farz edin ki konuşmanız sırasında dinleyiciler sıkılmış, ilgisiz ve rahatsız görünüyor. Onlardan oldukça olumsuz bir tepki alacakmışsınız gibi görünüyor.

Bu sahneyi zihninizde canlandırmak sizi ne kadar endişelendirdi ya da kaygılandırdı?

Hiç değil 1 2 3 4 5 Çok fazla

Bu sahneyi zihninizde canlandırırken, dinleyiciler ile ilgili bir sorun yaşama olasılığınız azalıyor mu yoksa her geçen dakika artıyor ve daha da güçleniyor mu?

Olasılıklar zamanla azalıyor 1 2 3 4 5 Olasılıklar zamanla fazlalaşıyor

Dinleyicilerden kaynaklanan tehdit sabit mi kalıyor, yoksa her geçen dakika hızla artıyor mu?

Tehdit sabit kalıyor 1 2 3 4 5 Tehdit hızla artıyor.

Dinleyicilerin tepkisinin gittikçe daha da olumsuz olduğunu gözünüzde ne kadar canlandırıyorsunuz?

Hiç 1 2 3 4 5 Çok fazla

APPENDIX 6. VISUAL ANALOGUE SCALES

Şu anda kendinizi ne kadar rahat hissediyorsunuz?

Hiç rahat hissetmiyorum 0 —---------- 100 Çok rahat hissediyorum

Şu anda kendinizi ne kadar kaygılı hissediyorsunuz?

Hiç kaygılı hissetmiyorum 0 —---------- 100 Çok kaygılı hissediyorum

Şu anda kendinize ne kadar güvenli hissediyorsunuz?

Kendime hiç güvenli hissetmiyorum 0 —----------100 Kendime fazlasıyla güvenli hissediyorum

APPENDIX 7. DEBRIEFING FORM (1)

“Sosyal Kaygı ve Bilişsel Abartma Tarzı” başlıklı çalışmamız sona ermiştir. Bu araştırmada sunum yapmaya yönelik hislerinizi incelemek istedik. Katılımınız ile ilgili literatüre katkıda bulunduğunuz için teşekkür ederiz. Sizden bu çalışma kapsamında sağlanan veriler ve çalışmanın sonuçları bilimsel ve mesleki etik ilkeleri çerçevesinde korunacaktır. Sonuçlar toplu olarak yorumlanacak ve bilimsel yayın amacı ile toplu bilgiler halinde paylaşılacaktır. Çalışmanın katılımcılarda bir rahatsızlık yaratmayacak olduğuna inanılmaktadır. Ancak çalışmaya katılımınız ile ilgili bir problem yaşamanız veya bir sorunuz olması halinde araştırmacıya aşağıdaki e-posta adresinden ulaşabilirsiniz. Çalışmanın sağlıklı ilerleyebilmesi için çalışmaya katılacağını bildiğiniz diğer kişilerle çalışma ile ilgili detaylı bilgi paylaşımında bulunmamanızı dileriz.

APPENDIX 8. DEBRIEFING FORM (2)

“Sosyal Kaygı ve Bilişsel Abartma Tarzı” başlıklı çalışmamıza katıldığınız için teşekkürler. Bu çalışmada bilişsel abartma tarzının sosyal kaygı ile ilişkisini araştırmayı hedefledik. Sadece

kaygıya ait bir bilişsel hassasiyet modeli olan bilişsel abartma tarzına yatkın olan kişilerin tehlikeli ve kaygı verici durumları gerçekte olduğundan daha şiddetli ve giderek tehdit değeri artan bir biçimde algıladıkları düşünülmektedir. Bu çalışmada bilişsel abartma tarzının kişilerin sosyal kaygısındaki artışı tahmin etmesi beklenmektedir. Çalışmanın sosyal kaygı ve bilişsel yatkınlıklar ile ilgili literatüre katkı sağlayacağı beklenmektedir. Sizden bu çalışma kapsamında bir sunum yapmanız beklenmiştir ve bir profesyonel tarafından değerlendirildiğini söylenmiştir. Sunum esnasında aslında araştırmacı haricinde biri sizi izlememiş ve dinlememiştir ve yaptığınız sunum söylendiği gibi bir değerlendirmeye tabi tutulmamıştır. Sosyal kaygı hissedilen durumlarda nasıl hissettiğinizi incelemek istediğimiz için çalışmayı başka bir şekilde yürütme imkanımız olmadığı için bu prosedürü izledik. Bu sebeple bu bilgiyi size sonradan iletebiliyoruz. Anlayışınız için teşekkür ederiz. Sizden bu çalışma kapsamında sağlanan veriler ve çalışmanın sonuçları bilimsel ve mesleki etik ilkeleri çerçevesinde korunacaktır. Sonuçlar toplu olarak yorumlanacak ve bilimsel yayın amacı ile toplu bilgiler halinde paylaşılacaktır. Çalışmanın katılımcılarda bir rahatsızlık yaratmayacak olduğuna inanılmaktadır. Ancak çalışmaya katılımınız ile ilgili bir problem yaşamanız, bir sorunuz olması halinde araştırmacıya aşağıdaki e-posta adresinden ulaşabilirsiniz.

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