

A Goal Blockage – Irritation Model of Abusive Supervision: The Moderating Role of Social  
Problem-Solving Skills

by

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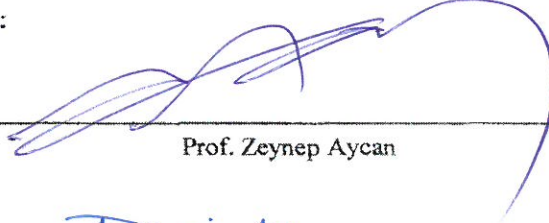
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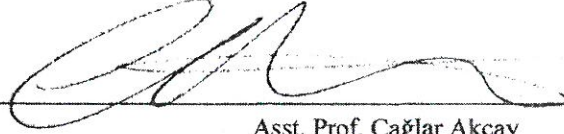
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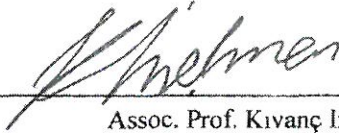
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## Abstract

Drawing upon the Stressor-emotion model (Spector & Fox, 2005), we developed and tested a model that examines the effect of a leader's goal blockage perception as an identity-threatening factor on his/her abusive supervision through the leader's irritation. The data were collected from 217 participants who hold leadership positions in different industries in the United States.

Results of the survey study support that a leader's goal blockage perception is associated with his/her abusive supervision through the leader's increased irritation. Moreover, the leader's social problem-solving skills attenuates the effects of perceived goal blockage and irritation on abusive supervision. Leaders with higher social problem-solving skills are less likely to abuse their subordinates even when they perceive goal blockage and they are irritated. In order to provide more robust evidence for the internal validity of the effect of leaders' goal blockage on abusive supervision, we attempted to conduct an experimental study as Study 2. However, our attempt was not successful; we elaborated on the reasons why it was not. We discuss the theoretical and practical implications of these findings, and future research directions.

*Keywords:* abusive supervision, goal blockage, social problem-solving skills, leadership, irritation, the stressor-emotion model

## Özet

Bu çalışmada Stres etkeni-Duygu modeline (Spector & Fox, 2005) dayanarak, liderlerin hedeflerine ulaşmak konusunda engellenmişlik hislerini (bir kimlik tehdidi olarak) istismarcı yönetimin bir öncülü olarak inceleyen bir model geliştirilip test edilmiştir. Araştırmanın örneklemini ABD'nin çeşitli yerlerinde değişik sektörlerde liderlik pozisyonlarında bulunan 217 çalışandan online bir platform olan Amazon MTurk aracılığıyla toplanmıştır. Uygulanan anket çalışmasının sonuçları liderlerin engellenmişlik hislerinin liderlerin istismarcı yönetimi ile pozitif ve anlamlı bir ilişki içerisinde olduğunu göstermektedir. Bulgular, bu ilişkinin liderlerin artan irritasyonu aracılığıyla gerçekleştiğini göstermektedir. Ayrıca, sonuçlar liderlerin sosyal problem-çözme becerilerinin irritasyon ve istismarcı yönetim arasındaki ilişkiyi güçlendirdiğini göstermektedir. Diğer bir ifade ile, bulgular sosyal problem-çözme becerileri yüksek olan liderlerin irrite olduklarında istismarcı yönetim sergileme olasılıklarının sosyal problem-çözme becerileri düşük olan liderlere göre daha fazla olduğunu işaret etmektedir. Neden-sonuç ilişkinden bahsedebilmek için yürüttüğümüz ikinci deneysel çalışmamız ise bağımsız değişkenin manipülasyonu aşamasında başarılı olamamıştır. Detaylı sebepleri çalışmada açıklanmaktadır. Ayrıca, bu çalışmanın literatüre olan teorik katkısı, pratisyenlere olan çıkarımları ve bu çalışma ışığında yapılabilecek gelecek çalışmalar da tartışılmıştır.

*Anahtar kelimeler:* istismarcı yönetim, hedefe ulaşmada engellenmişlik, sosyal problem-çözme becerisi, liderlik, sinirlilik, stres etkeni-duygu modeli

**DEDICATION**

*This thesis is dedicated to my wonderful parents. This would never have been possible without their support and encouragement along the way. No words to express my love and gratitude.*

*and*

*To souls who have suffered in the grips of an abusive supervisor. May this work, in some small way, help those souls and their supervisors.*



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## Chapter 1: Introduction

### A Goal Blockage – Irritation Model of Abusive Supervision: The Moderating Role of Social Problem-Solving Skills

A startling 27% of U.S. workers (approximately 65.6 million people) suffer from abusive supervision from their leaders (Workplace Bullying Institute & Zogby International, 2014). Abusive supervision is defined as “subordinates’ perceptions of the extent to which their supervisors engage in the sustained display of hostile verbal and non-verbal behaviors, excluding physical contact” (Tepper, 2000, p. 178). Abusive supervision has detrimental effects on both individual and organizational outcomes (Tepper, 2017). At the individual level, it is associated with subordinates’ decreased job performance and job satisfaction, increased psychological distress and emotional exhaustion, high voluntary turnover rates, poor organizational commitment, and increased counterproductive work behaviors among subordinates (Grandey, Kem, & Frone, 2007; Tepper, 2000; Tepper, 2007; Walter et al., 2015; Zellars, 2002). At the organizational level, abusive supervision leads organizations to experience decreased productivity and increased legal costs (Lian, Ferris, & Brown, 2012; Tepper, 2000). The estimated financial cost of abusive supervision is \$23.8 billion annually for U.S. corporations (Tepper et al., 2006).

Considering those significant impacts of abusive supervision, it is not surprising that researchers are encouraged to find out why some supervisors are abusive. Accordingly, researchers have paid increasing attention to the correlates of it (e.g., Byrne et al., 2014; Tepper, Moss, & Duffy, 2011; Walter et al., 2015). Tepper et al. (2017) proposed three core mechanisms – social learning, identity threat, and self-regulatory impairment – explaining the drivers of abusive supervision in the review synthesizing the accumulated evidence regarding antecedents and consequences of abusive supervision. The social learning mechanism explains that leaders come to believe - via social learning process - abusive behaviors are acceptable and/or rewarding (e.g., Kiewitz et al., 2012). The conceptualization of abusive supervision as a response to leaders’ own experiences with their

abusive supervisors (Liu et.al, 2012; Mawritz et.al, 2012) may exemplify the social learning perspective. Identity threat perspective suggests that leaders are more likely to abuse their subordinates when they experience threats to their leader-identity, their power or sense of control, or their competencies (e.g., Simon et al., 2015). For example, researchers argue that supervisors' abuse might result from unfavorable subordinate characteristics (Tepper, Moss & Duffy, 2011) because unfavorable subordinates might undermine their supervisors' functioning when their performance falls short of supervisors' standards. Self-regulation impairment perspective argues that complex and challenging work inherent in managerial roles use managers' mental resources (e.g., Collins & Jackson, 2015). Illustratively, abusive supervision might occur when leaders become depleted due to different reasons such as exceedingly difficult work goals (Mawritz et al., 2014), performing more acts consuming self-resources such as behaving ethically (Lin et al., 2016), decreased sleep quality (Barnes et al., 2015) and, family-to-work conflict (Courtright et al., 2016).

The present research aims to delve more deeply into the understanding of the antecedents of abusive supervision and its identity-threat mechanism by examining the missing link between leaders' perceived goal blockage and their abusive behaviors. Research explaining abusive supervision with leaders' identity-threat shows that leaders might be more likely to abuse their subordinates when they experience threats to their leader-identity, their sense of power, and their competence to fulfill their leadership responsibilities (e.g., Khan et al., 2016; Pundt, 2014). Supporting this line of research, social interactionist theory of aggression (Tedeschi & Felson, 1994) posits that when individuals perceive circumstances preventing them from experiencing the desired self- or social-identity, they might use abusive behaviors as a reparative strategy. This might be particularly true for leaders who perceive situations preventing them from experiencing the desired leader-identity by preventing them from fulfilling their leadership responsibilities. In the current study, leaders' perceived goal blockage is proposed as a possible antecedent of abusive supervision because goals are mostly presented as core elements of leaders' responsibilities (Yukl, 2006). In

other words, studies have emphasized goals and goal attainment as core criteria for leader-competency and as core elements of the leadership role (House & Shamir, 1993; Yukl, 2006). Therefore, progress toward the goal attainment has a significant effect on leaders' choices and actions (Yukl, 2006). Another line of the leadership research shows that holding a position of power may increase reactivity to threats to competency (Fast & Chen, 2009). Along those lines, a leader's perception of an adverse situation in terms of goal attainment which may threaten the leader's perceived competency and his/her leader-identity might motivate the leader to give a reparative reaction. That reaction might be abusive supervision because research shows that leaders' perceived pressure to prove that they are competent enough to fulfill their leadership responsibilities may make them sensitive to competence threats and prone to exhibiting defensive interpersonal aggression in a face of the adverse situation (Tepper et al., 2017). Moreover, Krasikova et al. (2013) support our argument by suggesting that a perception of an adverse situation in terms of goal attainment might motivate a leader to use a destructive approach to express or solve the blockage.

Beside the fact that the current study proposes a new antecedent to abusive supervision drawing upon a known mechanism of abusive supervision (i.e., identity-threat), we also seek to advance the identity-threat perspective. Research on antecedents of abusive supervision emphasizes identity-threat as leaders' experience of threat coming from below (e.g., incompetent subordinates interfering leaders' goal achievement or authority; Lian et al., 2016), coming from above (e.g., abusive superiors of leaders who threaten leaders' leader-identity; Hoobler & Hu, 2013) or coming from within (e.g., certain personality characteristic such as high need for power and control; Whitman et al., 2013). However, to our knowledge, no study has investigated the effect of those three sources of identity-threat together on abusive supervision. Thus, a more comprehensive or more balanced perspective that integrates those three sources of identity-threat is needed to provide additional insights into this mechanism (Tepper et al., 2017).

Perceived goal blockage is defined as leaders' subjective feeling that they are thwarted to

attain their organizational or/and personal goals and it might result from poor subordinate performance (threat from below), scarcity of resources of the organization (threat from above), and leaders' characteristics which negatively bias the interpretation of events (threat from within). Along these lines, the investigation of leaders' perceived goal blockage as an antecedent of abusive supervision would provide a richer perspective into the identity-threat mechanism of the occurrence of abusive supervision. In particular, we conceptualize leaders' perceived goal blockage as a threat to leaders' leader-identity because it might threaten their competency to fulfill their leadership responsibilities; we conceptualize abusive supervision as leaders' reparative reaction in the face of such a threat.

To shed light on the effect of leaders' perceived goal blockage on abusive supervision, we draw upon the Stressor-Emotion model (Spector & Fox, 2005). This model explains various counterproductive work behaviors (i.e., intentional harmful behaviors toward an organization or employees of the organization) as a function of perceived stressors at work through cognitive appraisals and negative emotions. The model argues that individual differences in terms of traits might serve as possible moderators to the model (see Figure 1). In the current study, we seek to explain abusive supervision as a function of leaders' perceived goal blockage (i.e., perceived stressor at work) via their increased irritation (i.e., negative cognitive appraisal of the stressor and negative emotion evoked by the appraisal).

Importantly, using the Stressor-Emotion Model addresses two main limitations associated with the prior identity-threat perspective on the occurrence of abusive supervision. First, although identity-threat perspective argues that leaders' perceived identity-threat might be related to leaders' abusive behaviors, there is little theoretical guidance for why such threats are associated with leaders' abusive acts toward their subordinates. In line with this, a recent review of the abusive supervision literature conceptualized much of the identity-threat research as theoretically underspecified (Tepper et al., 2017). In particular, although situations that create identity-threat for



leaders have been found directly related to abusive supervision, studies have yet to assess any theoretical mechanism associated with the relation. Accordingly, the stressor-emotion model highlights why leaders' perceived goal blockage as an identity-threat is associated with abusive supervision. In particular, the first linkage of the stressor-emotion model implies that cognitive appraisals and negative emotions arise when individuals perceive stressors at work. As such, leaders' irritation – defined as perceived emotional and cognitive strain in occupational contexts resulting from the discrepancy between a given situation representing thwarted goals and an important goal (Mohr, 1986) – is highlighted as the mediating process which motivates leaders to behave abusively towards their subordinates.

Second, although a small body of literature has shown that identity-related leader characteristics are associated with leaders' abusive behaviors (e.g., Whitman et al., 2013), studies have yet to examine leader characteristics as moderating factors that exacerbate or attenuate relationships between identity-threat related antecedents and abusive supervision. Accordingly, the Stressor-Emotion model highlights when this process might be exacerbated or attenuated. In particular, in this model, factors which either exacerbate or attenuate the linkage between perceived stressors and negative cognitive appraisals/emotions or factors which exacerbate or attenuate the linkage between negative cognitive appraisals/emotions and CWBs should influence the extent to which perceived goal blockage is associated with abusive supervision. As such, the stressor-emotion model highlights the potential moderating roles various factors might play. In particular, we have included two moderators in our study. First, *worries about leadership (WAL)* – worries about the possible negative consequences of holding a leadership role (Aycan & Shelia, 2018) – might serve to intensify the relationship between perceived goal blockage and irritation. Alternately, leaders' *social problem-solving skills* – defined as conscious processes of coping including problem-orientation styles and problem-solving strategies (D'Zurilla, 1986) – might serve to buffer over abusive supervision by providing leaders with ways to cope with irritation. While examining those relationships, we control some variables which might affect abusive supervision. Given that a

leader's age (Baron et al., 1999), his/her tenure with his/her team (Erdogan & Liden, 2002), and a leaders' perception of his/her subordinates' competency (Walter et al., 2015) affect their abusive behaviors toward subordinates, we controlled for the leaders' age, leaders' year of work with their current team, and their perception of their subordinates' competency level.

In proposing our model (see Figure 2), we aim to contribute to the literature in several ways. First, we aim to contribute to the leadership literature by exploring how leaders' perceptions of goal blockage might be a possible root of leaders' choices to be destructive toward their subordinates. Although studies argue that leaders' perceived goal blockage might be related to leaders' destructive behaviors toward their subordinates (Krasikova et al., 2013), we are not aware of any studies empirically tested 'perceived goal blockage' in the leadership literature. Second, the current study aims to extend the knowledge of antecedents of abusive supervision by examining leaders' perceived goal blockage as a possible antecedent of abusive supervision which is likely to threaten leaders' identity. Doing so, it aims to explain the mechanism and boundary conditions under which leaders' perceived goal blockage is related to their abusive behaviors. In this sense, the present study would be an important complement to extant identity-threat research on the antecedents of abusive supervision. Third, we aim to complement theoretical knowledge and empirical evidence of the Stressor-Emotion model by using a more granular approach to examine cognitive and emotional experiences as underlying mechanisms and leaders' worries about the leadership role and social problem-solving skills as boundary conditions of abusive supervision (Spector & Fox, 2005). Doing so, the present research also gives back to this model. Specifically, we expand the scope of the Stressor-Emotion model by identifying abusive supervision as a function of a perceived work stressor, cognitive appraisal, and negative emotions evoked by the stressor.

Moreover, this research aims to contribute to practice by providing suggestions on how to minimize abusive supervision in organizations. Given that there are significant consequences of abusive supervision for both organizations and employees (Mackey et al., 2017), organizations may

gain added benefits with a greater consideration of leaders' goal blockage, their worries about leadership and social problem-solving skills.

## **Chapter 2: Theoretical Rationale and Hypotheses**

Different streams of extant research might offer a theoretical rationale for the relationship between leaders' perceived goal blockage and abusive supervision via irritation. For example, work frustration - aggression theory (Fox & Spector, 1999) shows that situational constraints frustrating people's achievement of personal or organizational goals specifically in work environments leads to aggressive behaviors toward persons or the organization. Also, this relationship is mediated by affective reactions such as anger (Fox et al., 2001). Alternatively, Lazarus (1999) explains a stressor as an environmental condition which blocks or threatens to block the attainment of an important personal goal. When the stressor is appraised as threatening, it leads to a negative emotion which elicits an impulsive response. The present study draws on the Stressor-Emotion model (Spector & Fox, 2005) that is based upon work frustration - aggression theory and Lazarus's stress theory. Stressor-Emotion model suggests that perceived stressors at work are associated with aggressive responses through negative appraisals of those stressors and negative emotions. This model might provide a theoretical rationale for why leaders' perceived goal blockage as an identity-threatening factor may be associated with leaders' abusive behaviors via their irritation. We elaborate on the Stressor-Emotion model in the following section.

### **2.1. The Stressor-Emotion Model of Counterproductive Work Behavior (CWB)**

According to the Stressor-Emotion Model of CWB (Spector & Fox, 2005), if an employee perceives and interprets an objective condition at work as a stressor (e.g., constraint, conflict, injustice) which may challenge his goal achievement, that stressor is likely to trigger negative emotions; those negative emotions in turn increase the likelihood the employee will exhibit CWB (see Figure 2). Indeed, the stressors in the model are not the objective work environment, but

rather the employees' perceptions of environmental stressors and, cognitive appraisals of their ability to cope with those stressors (Lazarus, 1999). CWB is defined as intentional behaviors which hurt the organization or the members of the organization (McNeely & Meglino, 1994). Production deviance, sabotage, theft, and withdrawal may illustrate CWB toward the organization. Intention to harm, retaliation, revenge, hostile, aggressive, and abusive behaviors toward others (e.g., coworkers, subordinates, clients, and supervisors) in the organization exemplify CWB directed at people (Spector et al., 2006). In the model, negative emotions have a significant role in predicting CWB. Studies testing the present model have found robust support in such that these stress emotions experienced at work (e.g., anger, anxiety, envy) are likely to predict CWB directed at both organizations and people (Fox & Spector, 1999; Fox et al., 2001). Moreover, the model shows the moderation of individual differences of employees at all points. For instance, studies showed that trait anger and external locus of control strengthens the relationship between perceived stressors at work and abusive behaviors (Fox & Spector, 1999).

The present study draws on the Stressor-Emotion model (Spector & Fox, 2005) by explaining abusive supervision as a function of goal blockage (i.e., perceived work stressor), and irritation (i.e., negative emotions due to negative appraisals). In the sections that follow, we elaborate on the mechanism in which a leader's perceived goal blockage is associated with his/her abusive supervision.

## **2.2. Goal Blockage and Abusive Supervision**

The leadership literature emphasizing that goals are the core elements of leadership (House & Shamir, 1993; Yukl, 2006) proposes alternative explanations on how leaders' progress toward their goal achievement shapes their decisions and actions. For instance, contingency theories of leadership support the influence of leaders' goal-orientation on leader behaviors (Hersey & Blanchard, 1982; House & Mitchell, 1974; Vroom & Yetton, 1973). Specifically, they suggest that when the situation aid goal attainment such as when followers are capable, and

decision problems are structured well, leaders use constructive ways of leading such as consultation, and delegation. However, when leaders think that their goals may be thwarted because of incapable or immature followers, they report less constructive methods of leading such as autocratic, and directive leadership as more appropriate (Vroom & Yetton, 1973).

Considering the research portraying goals as a key motivator for leaders' decision making, and the actions they pursue, blockage of those goals may be seen as an adverse situation which can provoke specific responses. Research suggests that when leaders are thwarted in their attempts to achieve their goals, they may react in a deviant way (Krasikova et al., 2013). Krasikova et al. (2013) has proposed that perceived *goal blockage* of the leader might be the key motivator to act destructively. They also suggest that perception of goal blockage may result from any organizational or subordinate-related factors such as scarcity of resources and poor subordinates. Based on that literature, this study proposes that a leader's perception of being blocked to attain his/her goals may turn to abusive supervision, a type of destructive leadership behaviors (Krasikova et al., 2013; Tepper, 2000).

Based upon the research which has proposed leaders' goal blockage perception as a risk factor to destructive leadership, perceived goal blockage of a leader might be two-fold. On the one hand, leaders may experience goal blockage for organizational goals so they might feel being thwarted in their attempts to achieve organizational goals. Since leaders are the person who is required to set goals for followers and the organization and, to mobilize followers to pursue those goals (House & Mitchell, 1975), any perception of goal blockage might lead leaders to be judged as ineffective by both themselves and others in the organization, who realize the situation. Thus, goal blockage might threaten leaders' positive self-image and perceived professional competence. Also, leaders may feel that they are not effective in guiding their followers to achieve their goals (e.g., Den Hartog et al., 1997; Eagly et al., 2003). This may lead leaders to concern about the success of their followers, organization, and their personal professional competence. Leaders might perceive all as ego threat, that is linked to aggression

(Baumeister & Boden, 1998). In such situations, the reaction of a leader may be destructive because of the aggression resulting from the frustrating blockage (Krasikova et al., 2013). On the other hand, leaders may be thwarted to achieve their personal goals. Then, the goal blockage may create the potential for leaders to fall short of their goals. Again, that situation may distort leaders' positive self-image and threaten their ego, which might turn to deviant and aggressive behaviors (Fox, Spector, & Miles, 2001; Salin, 2003).

Different lines of research support those arguments. For example, general strain theory argues that the blockage of managers' economic and status goals may lead to large-scale manager wrongdoing such as fraud and even 'white-collar crime' (Agnew, Piquero, & Cullen, 2009). Similarly, models of aggression emphasize how frustration resulting from un-attainment to personal goals lead to aggressive behaviors (Anderson & Bushman, 2002; Berkowitz, 1989). Alternatively, drawing upon the Stressor-Emotion Model (Spector & Fox, 2005), goal blockage may also be a situationally induced stressor, which might be tied to deviant and aggressive behaviors (Fox, Spector, & Miles, 2001; Salin, 2003). All in all, goal blockage may motivate the leader to choose deviant approaches to resolve that blockage (cf. Hershcovis et al., 2007; Krasikova et al., 2013), and the current study suspects that the deviant approach of leaders might be abusive supervision which has been characterized as leaders' nonphysical hostility toward their subordinates (Tepper, 2007). Although the research (Mawritz et al., 2014; Tepper et al., 2011) highlights factors (e.g., situational constraints due to scarcity of resources, exceedingly difficult goals, and the inability of subordinates) that is possible to interfere with leaders' goal achievement as possible antecedents of abusive supervision, to our knowledge, no research has looked at the effect of leaders' perceived goal blockage at work.

Additionally, considering the literature showing the relationship between workplace stressors and aggression at work including abusive supervision (e.g., Anderson & Bushman, 2002; Berkowitz, 1989; Eissa & Lester, 2017; Spector & Fox, 2005), we argue that the role of perceived goal blockage in predicting abusive supervision may be less straightforward. The

current work suggests that goal blockage may not necessarily be directly associated with abusive supervision. Rather, the relationship between goal blockage and abusive supervision may be indirect, operating through leaders' increased irritation. In the section that follows, it will be elucidated.

**2.2.1. The role of irritation as mediator.** In line with the Stressor-Emotion model (Spector & Fox, 2005), perceived goal blockage of the leader may be a perceived stressor, constraint at work, which could link to cognitive appraisals and negative emotions. This study suspects that the leader's cognitive appraisals and negative emotions might refer to *irritation* which is defined as subjectively perceived emotional and cognitive strain in occupational contexts (Mohr, 1986). More specifically, irritation refers to a state of mental impairment resulting from perceived goal-discrepancy (Mohr, 1986). A perceived obstacle to a goal could be appraised as a potential threat which may turn to a source of mental stress. The stress at work resulting from the discrepancy between a given situation representing thwarted goals and an important goal refers to irritation (Mohr, 1986). There are two aspects of irritation, which are *rumination* and *irritability* (Martin & Tesser, 1996). Rumination is the cognitive aspect of the concept, which is also called cognitive irritation (CI). It is defined as "a class of conscious thoughts that revolve around a common instrumental theme and that recur in the absence of immediate environmental demands requiring the thoughts" (Martin & Tesser, 1996, p. 7). In other words, rumination (CI) is the state in which individuals try to reduce the psychological discrepancy between work goals and their achievement conditions by mental simulations of solving the problem (Muller et al., 2004). Researches show that rumination is often ineffective and counter-productive in dealing with perceived goal-discrepancy, and it intensifies negative emotions (Lyubomirsky & Nolen-Hoeksema, 1993, 1995; Nolen-Hoeksema et al., 1997). The second aspect of irritation is irritability, also called emotional irritation (EI). It is characterized as feelings of nervousness accompanied by a slight aggressiveness. Studies on irritability (EI)

demonstrate it as a result of an enduring and ineffective rumination process, and so the non-reduction of goal discrepancy, like the concept of ‘frustration’ (Muller et al., 2004).

The connection between perceived goal blockage and irritation can be supported by theories examining the regulation of goal achievement processes. For example, the action regulation theory (Frese & Zapf, 1994; Hacker, 2003) suggests that the strain-eliciting nature of work stressors result from the existence of discrepancies between work goals and the situations for goal attainment. The discrepancies may result from obstacles on the way to goal attainment, such as organizational or subordinate-related obstacles. The theory argues that those discrepancies overtax the psychological regulation of the goal achievement process. Moreover, studies (Martin & Tesser, 1996; Muller et al., 2004) show that irritation can be considered as a specific psychological reaction to obstacles during the goal achievement process. They argue that if an individual does not reduce goal discrepancy, the risk of ruminating (i.e., cognitive irritation) about those failures increases. Based on these findings, it would be plausible to argue that perception of goal blockage may be associated with increased irritation in such that when leaders perceive they are thwarted to achieve their goals, they may be more likely to ruminate about their thwarted goals and experience negative emotions such as frustration due to those un-attained goals.

Within the Stressor-Emotion model of CWB framework (Spector & Fox, 2005), perceived goal blockage of leaders is viewed as a perceived constraint that may lead the leaders experience negative emotions due to negative cognitive appraisals with being unable to attain their personal or organizational goals. In this vein, goal blockage may become liable for creating irritation in such that leaders are likely to ruminate their un-attainment to their goals and experience feelings of nervousness or aggression as irritability. Thus, the following is hypothesized:

*Hypothesis 1.* Leaders’ goal blockage is positively associated with irritation of leaders.



At the heart of the Stressor-Emotion model of CWB (Spector & Fox, 2005) is the idea that certain negative emotions combined with cognitive appraisals of perceived constraints are likely to evoke certain CWB in response to those negative emotions. As a result, it would be plausible to assume that, as a negative emotional response combined with cognitive appraisal of the perceived constraint, irritation is likely to increase abusive behaviors, as a type of CWB toward subordinates (Spector et al., 2006).

On the one hand, previous studies support the detrimental effects of irritation experienced at work (Mohr, 1991). Muller et al. (2004) showed that irritation causes a permanent mobilization of mental resources with enduring negative mood, and thus decreases functioning at work. In line with those arguments, longitudinal studies also support that irritation mediates the association of work stressors with depression and psychosomatic complaints interfering work in the long run (Dormann & Zapf, 2002; Garst et al., 2000). On the other hand, another stream of research shows that negative emotions (e.g., frustration, anger, anxiety, hostility) evoked by leaders' appraising work stressors (e.g., exceedingly difficult goals and poor subordinate performance) as a threat to goal achievement lead to abusive supervision (Eissa & Lester, 2017; Liang et al., 2016; Mawritz et al., 2012).

Although, to our knowledge, irritation has not been studied in the CWB context, prior research suggests that when people are frustrated, they are often motivated to express these negative emotions by engaging in aggressive or counterproductive work behaviors (Fox et al., 2001; Harvey & Harris, 2010; Yang & Diefendorff, 2009). The direct association between frustration and aggression might be traced back to the classical frustration-aggression hypothesis (Dollard et al., 1939) arguing that "the occurrence of aggressive behavior always presupposes the existence of frustration" and that "the existence of frustration always leads to some form of aggression" (Berkowitz, 1989, p. 1). Specifically, research demonstrates that frustration is related to various type of workplace aggression such as antisocial workplace behavior and

counterproductive work behaviors including coworker abuse (Harvey & Harris, 2010; Spector, 1997). Given that irritation involves ruminative thoughts and negative emotions such as feelings of frustration, it is likely to create a situation which is difficult to handle. Therefore, when leaders are irritated, they may also be motivated to act in an aggressive or abusive way. That is, once irritated, leaders may be more susceptible to engage in abusive behaviors as a reparative strategy to deal with such ruminative thoughts and negative emotions. Therefore, the following is hypothesized:

*Hypothesis 2.* Leaders' irritation is positively associated with leaders' abusive supervision.

To complete the hypothesized model, it is further predicted that the relationship between goal blockage and abusive supervision is mediated by irritation. Consistent with Stressor-Emotion model of CWB (Spector & Fox, 2005), it is proposed that the indirect effect of goal blockage on abusive supervision occurs through the leader's increased irritation consisting of negative appraisals of un-attained goals and negative emotions evoked by those negative cognitive appraisals, that is likely to provoke abusive behaviors. Hence, the following is hypothesized:

*Hypothesis 3.* Leaders' irritation mediates the relationship between goal blockage and abusive supervision.

**2.2.2. Leaders' worries and social problem-solving skills as moderators.** An important aspect of the Stressor-Emotion model of CWB (Spector & Fox, 2005) is that individual differences of employees moderate the relationship between perceived stressors at work and CWB at all points. More specifically, the model suggests that individual differences may allow employees to be more or less reactive to perceived stressors at work than others. Moreover, it argues that an employee may be more or less likely to engage in CWB than others when he/she experiences negative emotions based on particular individual difference variables.

Applied to the present study, it is possible to argue that leaders' irritation in response to perceived goal blockage and their abusive behaviors due to increased irritation may vary depending on some individual differences. It seems important to further investigate conditions under which a leader's perception of goal blockage will instigate his or her abusive behavior toward a subordinate. This argument warns of the risk of assuming that all leaders are affected by perceived stressors in the same way and, behave in the same manner in response to negative emotions. Thus, consistent with the Stressor-Emotion Model, the current study emphasizes some individual difference variables of leaders as moderators of the hypothesized relationships. Specifically, it focuses on leaders' worries about their leadership roles and their social problem-solving skills as possible moderators.

**2.2.2.a. Goal blockage and irritation: the role of worries about leadership (WAL).** As a very new construct in the leadership literature, worries about leadership (WAL) refers to both leaders-to-be and current leaders' worries about possible negative effects of the leadership role on different domains of their lives (Aycan & Shelia, 2018). Considering the highly volatile, uncertain, complex and ambiguous (VUCA) environment describing the contemporary world (Johansen, 2012), the construct of WAL takes an agentic perspective to explain leaders' possible negative emotions associated with volunteering for or holding a current leadership position.

Drawing on the Self-Determination Theory (Deci & Ryan, 1985), WAL has three dimensions which are worries about failure, harm and work-life balance. Indeed, leaders' worries about failure corresponds to the threat to satisfy the need for competence, which is the need of people to feel that they can overcome the challenges and demands they often face in life (Deci & Ryan, 1985). Since WAL is a leadership-domain specific concept, leaders' worries about failure may pose a threat to the fulfilment of the need for competence in terms of leadership competency due to risks of failure the leadership role may possibly bring. Also, a leadership role may evoke worries about harm. On the one hand, it may create worries about harming others by making

destructive decisions for them such as firing an employee. On the other hand, leaders may be worried about being harmed by the intense nature of the work or others in the organization (Aycan & Shelia, 2018). In line with the Self-Determination Theory, worries about harm corresponds to threats to satisfying the need for relatedness which emphasizes having meaningful interactions and relationships involving both receiving and giving. Finally, the leadership position may come at a cost for leaders to satisfy the need for autonomy, implying a sense of psychological freedom, choice and volition in life, by making leaders feel being pressured and coerced with work overload and intense time commitment. Specifically, leaders may feel that they lose the control of their personal lives due to the interfering leadership role and, thus, may experience work-life imbalance. Therefore, a leadership role may create worries about an anticipated or experienced work-life imbalance accompanied with the dissatisfaction due to loss of autonomy in personal life (Aycan & Shelia, 2018).

Given that leaders with high WAL are prone to experiencing negative emotions and anxiety in uncertain and threatening situations including the position they hold (Aycan & Shelia, 2018), they would ruminate more about the perceived stressors related to the leadership role, and more likely to experience negative emotions for the same reason. More specifically, when leaders perceive a goal blockage, they may be more irritated if they are also worried about their leadership role which extra hampers the fulfillment of needs and dissatisfy leaders. Although there is no data considering the effect of WAL in terms of sensitivity to work stressors, three lines of research may support this argument.

First, previous research shows that worries in general lead to increase in rumination and negative affect (e.g., McLaughlin et al., 2007). Especially, worries and ruminative thoughts evoked by an interruption of a goal or by a perceived discrepancy between the current status and goals significantly exacerbate negative emotions (Segerstrom et al., 2000). Therefore, worries about the leadership position may exacerbate irritation including both rumination and negative

emotions in the face of goal blockage in the leadership role. Second, studies demonstrate that leaders who are high in neuroticism, which is moderately positively correlated with worries in general and with WAL (Aycan & Shelia, 2018) are more sensitive to workplace stressors, resulting in increased level of frustration (e.g., Eissa et al., 2017). High WAL might make leaders more sensitive to workplace stressors such as goal blockage. Third, the Stressor-Emotion Model (Spector & Fox, 2005) emphasizes individual differences in personality, perceived autonomy and personal resources are as possible moderators of the relationship between work-stressors and negative emotions. For example, leaders' perception of low autonomy in their personal lives increase their negative emotions in response to work stressors (Spector & Fox, 2005). Considering that WAL is associated with anticipated or experienced loss of autonomy in personal life (Aycan & Shelia, 2018), high WAL may allow leaders to respond with more irritation as they perceive goal blockage. In contrast, leaders with less WAL would tend to less ruminate about the thwarted goals and experience fewer negative emotions and, thus, are less likely to be irritated as they perceive goal blockage. In sum, it is predicted that high WAL will intensify the effect of perceived goal blockage on irritation.

*Hypothesis 4.* Leaders' worries about leadership roles will moderate the relationship between leader's perception of goal blockage and irritation, such that the relationship will be stronger when leaders have higher levels of worries about leadership (WAL), as opposed to lower.

**2.2.2.b. Irritation and abusive supervision: the role of social problem-solving skills.**

*Social Problem Solving* refers to problem-solving as it occurs in the real world. It is a self-directed cognitive-behavioral process to identify adaptive or effective ways of coping with problems encountered in daily life (D'Zurilla, 1986; D'Zurilla & Nezu, 1982). It is not the equivalent of the broad construct of 'coping' but a part of coping process which may also include other dimensions such as social support, wishful thinking and self-criticism (Folkman & Lazarus,

1980). Social problem solving has been defined as a conscious, effortful and purposeful coping process which could improve individuals' ability to deal with stressful situations faced in the course of everyday living while the broad construct of coping process also includes automatic, unintentional ways of problem orientation or strategies (D'Zurilla & Nezu, 1982). The reason why the present study assumes the effect of leaders' social problem-solving skills rather than more general coping styles is two-fold. First, considering that leadership represents a complex form of social problem solving on the way of goal attainment (Fleishman et al., 1991; Mumford & Connelly, 1991), leaders' social problem-solving skills should be investigated regarding their effects on behavioral outcomes. This has also important practical implications such that leaders' social problem-solving skills may be improved to develop adaptive responses to irritating, frustrating situations in real organizational settings. Second, prior research has already shown that problem-focused coping styles are more effective both to deal with workplace stressors and to prevent aggressive behaviors such as CWB (Allen & Greenberger, 1980). However, to our knowledge, no research about whether leaders' specifically purposeful problem-solving skills can help them to deal with negative emotions evoked by stressors and to act in a proper way in response to stressors.

According to the model of social problem solving (D'Zurilla & Nezu, 1982), social problem solving has two major independent processes which are problem orientation and problem-solving proper. *Problem orientation* – the motivational component of the problem-solving process – represents an individual's relatively stable cognitive schemas reflecting his or her perceptions of problems and the perception of own ability to solve everyday problems. In other words, individuals' problem orientation represents the way in which they generally appraise a problem (i.e., as a threat or challenge), their problem-solving self-efficacy expectancies (i.e., the perceived ability to solve a problem) or problem-solving outcome expectancies (i.e., an expectancy regarding the solvability of the problem). In terms of those cognitive schemas, there are two types of problem orientation, such that an individual may have

a positive or negative problem orientation. Although these cognitive schemas can enhance or inhibit problem-solving process, they do not involve strategies to cope with problems effectively. Regarding *problem-solving proper* dimensions – the behavioral component of problem-solving process –, D’Zurilla (1986) defined one constructive and two destructive problem-solving dimensions, which are rational problem solving, impulsivity/carelessness style and avoidance style, respectively. *Rational problem solving* may be characterized by efficient, deliberate, rational and systematic way of adaptive or effective problem-solving skills. It may involve rational techniques such as problem identification, systematic generation of alternative solutions, decision making, implementation of the solution and verification. *Impulsivity/carelessness style* may be defined as impulsive, careless, hurried, and incomplete active strategies and techniques to solve the problem. Lastly, *avoidance style* refers to avoidant problem-solving strategies such as putting off solving problems (i.e., procrastination), waiting for the problem to resolve itself (i.e., passivity) and attempting to give the responsibility for solving the problem to others (i.e., dependency).

Previous studies demonstrate whereas positive problem orientation predicts adaptive problem-engagement coping style even controlling optimism and positive affectivity, negative problem orientation predicts psychological distress controlling for pessimism and negative affectivity. Moreover, regarding problem-solving strategies, rational problem solving is associated with adaptive coping strategies, while dysfunctional problem-solving dimensions are related to avoidant coping strategies (D’Zurilla & Chang, 1995; Larson et al., 1990; McNair & Elliott, 1992). Indeed, people who have higher positive problem orientation and use rational problem solving more frequently use more coping strategies attempting to alter the stressful situation for the better or change the meaning of the situation to make it less threatening. Furthermore, previous findings show that negative problem orientation and dysfunctional problem-solving dimensions are related to anger, hostility and physical aggression (D’Zurilla et al., 2003).

The Stressor-Emotion model (Spector & Fox, 2005) argues that emotion-focused coping which is related to negative problem orientation and dysfunctional problem-solving skills (D’Zurilla & Chang, 1995) may increase the likelihood of employees’ engaging in CWB by intensifying the effect of negative emotions due to perceived stressors. In line with the model, previous research shows that emotion-focused coping involving dysfunctional problem-solving strategies may lead to CWB as a manifestation of negative emotions associated with stressors (Allen & Greenberger, 1980). Alternatively, CWB may reflect attempts to prevent or reduce emotional exhaustion for people who use emotion-focused coping associated with negative problem orientation and dysfunctional problem-solving strategies (Krischer et al., 2010).

Along those lines, although it is expected that leaders’ irritation will be a driving factor of abusive supervision, the strength of this relationship may depend on leaders’ social problem-solving skills. Specifically, social problem-solving skills of leaders are expected to determine whether leaders act upon their irritation and, therefore, behave in an abusive way. Leaders who have positive problem orientation and constructive problem-solving skills would have higher self-efficiency, higher levels of positive affect, a more optimistic point of view to cope with the problems and less tendency to show aggression (D’Zurilla et al., 2003) even if they are irritated due to perceived stressors at work such as perceived goal blockage. Even when they have high levels of irritation due to their thwarted goals, they may act more wisely and rational instead of behaving in an impulsive or abusive way toward subordinates if they have high levels of social problem-solving skills. Therefore, the following is hypothesized:

*Hypothesis 5.* Leaders’ social problem-solving skills will moderate the relationship between leaders’ irritation and abusive supervision, such that the relationship will be stronger when leaders have lower levels of social problem-solving skills, as opposed to higher.

### **Chapter 3: Overview of The Current Research**



To test our model depicted in Figure 1, we conducted a field study (Study 1) and an experimental study (Study 2). We employed Study 1 to establish the external validity of our full model with the cross-sectional data coming from the field in the US. Study 2 was designed to investigate the causal effect of leaders' goal blockage perception on abusive supervision in a lab experiment in Turkey. Study 2 was conducted to provide robust evidence for the internal validity of the effect of leaders' goal blockage on abusive supervision. We aimed that those two studies comprise a mix of different designs and samples which can provide a nice combination of external and internal validity for our model.

### **3.1. Study 1 Methods**

#### **3.1.1. Participants and Procedure**

Data were collected from 288 participants employed in managerial roles in the U.S. through Amazon's Mechanical Turk (MTurk; Amazon, 2014). MTurk which is an online crowdsourcing market has similar psychometric properties as data obtained with traditional convenient sampling methods (Buhrmester et al., 2011; Paolacci et al., 2010; Steelman et al., 2014). As stated above, Study 2 was conducted with data from Turkey where the researcher is based. It may be questioned to use the US data instead of Turkish data in Study 1. Although our theoretical arguments were not culture-specific and we expected that the antecedents of abusive supervision will generalize to other cultures, it is possible that the observed effect of leaders' perceived goal blockage on their abusive behaviors may be less likely to emerge in high power distance cultures like Turkey where leaders might believe that verbally abusing subordinates is justifiable (Hofstede, 2001). Since abusing subordinates are more frequently observed and they are more justifiable in high power distance cultures (Hofstede, 2001), the variance in abusive supervision might decrease in such a culture. Thus, power distance might possibly suppress the relationship between goal blockage and abusive supervision as it attenuates the relationship creating a spurious correlation. Also, in high power distance cultures, goal blockage might be perceived more threatening for leaders to their 'powerful' leader-identities. Therefore, we

collected data from the US which represents a moderate level power distance culture (Hofstede, 2001). We expected that abusive supervision would be more normally distributed in a population where such behaviors are moderately observed and justifiable comparing to low- and high-power distance cultures.

As an inclusion criterion, all participants have been working in their current managerial position at least for six months. All participants live in the United States and their native language is English. All work full-time and have at least two subordinates. 57.2% of participants were male. Average age of participants was 40.53 years old (SD = 10.97). Participants' average work experience was 19.22 years (SD = 11.62). Average tenure in participants' current managerial role was 7.02 years (SD = 6.12). Average number of subordinates that each participant has was 29.57 (SD = 5.5). Participants work in various industries such as manufacturing, education and IT. Participants were administered six surveys through MTurk and, they were compensated \$1 USD for their participation.

### 3.1.2. Measures

**Goal Blockage.** Perceived goal blockage was measured using six items (Cronbach's  $\alpha = .87$ ) created for this study because, to our knowledge, there is no scale to measure perceived goal blockage in the literature. Following the definition of Krasikova et al.'s (2013) perceived goal blockage, we wrote six items. The items capture leaders' perception of blockage to both organizational and personal goals due to their subordinates or resource insufficiency. Additionally, one of those six items intends to measure leaders' general goal blockage perception in their work lives. After items were generated, they were revised based on the feedback given from six graduate students in the area of Social and Organizational Psychology. After that, it was finally revised based on the feedback given from a subject matter expert who is an expert in the leadership literature, holding a doctorate degree in Social and Organizational Psychology. A sample item of the scale is "I feel like I am hindered to achieve my personal goals at work". The

Likert scale ranges from 1 (*never*) to 5 (*always*). It should be noted that we did not conduct a validation study to check the scale (see Appendix C for this measure).

**Abusive Supervision.** Tepper's (2000) 15-item abusive supervision scale (Cronbach's alpha is .95) was used to measure leaders' intention to engage in abusive behaviors. We modified items to measure leaders' everyday abusive behaviors or their general intention to act in an abusive way. Respondents indicated how often they act or intent to act in abusive ways (1= *never* to 5= *very often*). Sample items are "I ridicule an employee" and "I give an employee the silent treatment". Additionally, 10 items capturing transformational leadership behaviors from the Multifactor Leadership Questionnaire (MLQ-Form 5X; Avolio & Bass, 2002) were added to the scale in order to neutralize the scale's negative look and to disguise the aim of the study. Sample items include "I encourage my subordinates to generate new ideas". The coefficient alpha for the current study is .80 (see Appendix C for this measure).

**Filler task 1.** Considering the possibility that reminding goal blockage-related situations and Abusive Supervision Scale may affect participants' responses on Social Problem-Solving Skills Scale, we used a 3 items category comprehension picture matching test to distract participants' attention. We also aimed that the filler task distracts participants from the true purpose of the study. In order not to cause fatigue, this easy and short task was chosen.

**Social Problem-Solving Skills.** We measured Social Problem Solving using the short version of the Revised Social Problem-Solving Inventory (SPSI-R) (D'Zurilla et al., 2002). The short version of the scale consists of twenty-five items (Cronbach's alpha is .83) representing 5-factor model, including positive problem orientation (PPO; Cronbach's alpha is .67), negative problem orientation (NPO; Cronbach's alpha is .78), rational problem solving (RPS; Cronbach's alpha is .75), impulsive/careless problem solving (ICS; Cronbach's alpha is .62) and avoidant/passive problem solving style (AS; Cronbach's alpha is .75) sub-factors. Respondents indicated how accurately a number of characteristics describe them (0= *completely inaccurate* to 4= *completely accurate*). Sample items include "I see problem as a challenge or opportunity"

(PPO), “A difficult problem makes me upset” (NPO), “I am too impulsive in making decisions” (ICS) (see Appendix C for this measure).

**Filler task 2.** For the similar reasons of using the filler task 1, we added 4 items shape matching test before the WAL scale. Like filler task 1, the test is in basic level.

**Worries About Leadership (WAL).** We measured WAL using 16 items (Cronbach’s alpha is = .94) which were developed and validated by Aycaan and Shelia (2018). The Likert scale consists of three sub-factors which are worries about failure, harm and work-life balance (Cronbach’s alpha reliability estimates are .85, .82, .87, respectively). Participants asked to report the extent to which each item worries them, considering their current leadership positions. Some example items from the scale are “While holding the leadership position, the possibility of losing face or feeling embarrassed in case of failure worries me,” and “While holding the leadership position, the possibility of having no private space or personal life worries me” (1=*a very little extent* to 5=*a very large extent*) (see Appendix C for this measure).

**Irritation.** Irritation was measured using eight-item Irritation Scale (Mohr et al., 2006) (Cronbach’s alpha is .84; the Likert scale ranged from 1= *strongly disagree* to 7= *strongly agree*) which is the English adaptation of the original German Irritation Scale (Mohr, 1986) (Cronbach’s alpha is .89). The scale (Cronbach’s alpha = .93) includes following sample items: “Even at home I often think of my problems at work,” (i.e., cognitive irritation) and “I anger quickly” (i.e., emotional irritation) (see Appendix C for this measure).

**Demographics.** We asked participants to report their gender, age, education level, the industry they work in, work experiences in years, years of work experience in their current managerial position, years of they work with their current team, and number of subordinates. Also, they reported how they evaluate the level of competence of their subordinates. Lastly, we asked them to report whether there are effective grievance mechanisms to protect employees from mistreatment and whether there are effective rewarding mechanisms for outstanding performance in their organization (see Appendix C for this measure).

**Controls.** We included 3 control variables in our analyses. First, since leaders' age might affect the propensity of using aggression at work (older leaders use less; Baron et al., 1999), we controlled for it. We asked leaders' age in the demographic form. Second, previous research shows that relationship tenure can affect interactions between leaders and subordinates (Erdogan & Liden, 2002), so we controlled for years of leaders' working with their current team. This was measured with the question of "How long have you been working with your current team? (please indicate as year/months)" in the demographic form. Third, we controlled for subordinates' task performance in the eye of their leaders. Since previous research suggests that leaders are more likely to abuse poor performers (Walter et al., 2015), we controlled for leaders' perception of their subordinates' competence. In the demographic form, participants were asked that "How do you evaluate the level of competence of your subordinates; 1 = *very incompetent*, 5 = *very competent*" (see Demographic form in Appendix C for this measure).

## 3.2. Study 1 Results

### 3.2.1. Treatment of the Missing Data

71 participants of 288 participants had missing data across all goal blockage, irritation, and abusive supervision measures. When comparing to the remaining 217 participants, individuals with missing data were not different in terms of age, gender, and tenure. The 71 individuals with completely missing data were removed from all analyses. Two percent of the data are missing on some variables, we used maximum likelihood EM algorithm with multiple imputation method to deal with the missing data. Maximum likelihood EM algorithm with multiple imputation is a statistical estimation method which calculates the population parameters that are most likely to produce missing values by using all available observations including those with the missing data (Messer & Loki, 2008).

### 3.2.2. Descriptive Statistics and Correlations

Descriptive statistics and zero-order correlations among the variables were reported in Table 1. All variables seemed to be normally distributed as they fell within normal skewness and

kurtosis ranges (Muthen & Kaplan, 1985). However, only one exception was abusive supervision. Skewness and kurtosis values of abusive supervision were  $\text{skewness}_{\text{abusive supervision}} = 2.15$  and  $\text{kurtosis}_{\text{abusive supervision}} = 4.42$ . Since its skewness was greater than 1 and its kurtosis was greater 3 which are the cut-off points, we might conclude that those values might violate the normality assumption of regression analysis (Hayes, 2013). The findings revealed that the tail on the right side of the distribution of abusive supervision in our sample is fatter or longer. This means that the mode is smaller than the mean and median. The findings showing that 27% percent of the population which is less than 50% experience abusive supervision (Workplace Bullying Institute & Zogby International, 2014) might justify the non-normality of the abusive supervision data. Moreover, research has suggested that only if the sample size is smaller than 200, severe normality violations might impact statistical results (Hayes, 1996). Therefore, we did not consider conduct transformations to variable of abusive supervision.

Exploring the data, we realized that WAL and goal blockage was significantly correlated with each other,  $\alpha = .504$ ,  $p < .001$ . This led us to check the multicollinearity which may pose problems in hypothesis testing (Grewal et al., 2004). To do so, we checked the values of tolerance and VIF. The tolerance of the predictor is used as an index of the redundancy of the variable with other predictors. Very high relationship among predictors is problematic. It causes the regression coefficients to be highly unstable, as indicated by their large standard errors. It means when the correlation between predictors are very high, it distorts the standard error and is likely to cause Type II error (Grewal et al., 2004). According to results, we found the tolerance value of WAL as .132 and the tolerance value of its interaction with goal blockage is .133, which are very low. Variance Inflation Factor (VIF) is a measure of the extent to which the redundancy of one predictor with all other predictors causes an increase in the standard error. Although there is no rule of thumb for these values, 6 for VIF is mostly used as a cutoff point (Ringle et al., 2015). According to results, we found  $\text{VIF}_{\text{WAL}} = 7.584$ ,  $\text{VIF}_{\text{Goal-Blockage}} = 7.500$ , and  $\text{VIF}_{\text{WAL} \times \text{GB}} = 18.831 > 6$ , so they are all considered as problematic. We may say that the relationship between

goal blockage and WAL are as high as to cause an increase in the standard error, and to lead type II error. This might cause that WAL did not interact with goal blockage as well as it might suppress the effect of goal blockage on irritation. Therefore, we decided to omit WAL from the model since it might be possible that WAL suppresses the relationship between leaders' goal blockage and irritation.

In order to check whether WAL suppresses the relationship between goal blockage and irritation, we conducted multiple regression analyses in SPSS. Results showed that leaders' goal blockage perspective was not significantly related to irritation ( $b = -.001, t = -.003, p = .998$ ) in the presence of WAL and covariates (i.e., leaders' age, their perceptions about subordinates' competence and years of leaders' working with their current team). However, the leaders' goal blockage perspective was significantly related to irritation ( $b = .994, t = 5.79, p < .001$ ) when we omitted WAL from the model (see table 2).

### **3.2.3. Examination of common method variance**

As we collected all data from a single source, the present study may be prone to common method variance. In order to determine the potential presence of common method variance, we used Harman's one-factor test. By doing this, we loaded all variables of the present study into a principal axis factoring analysis and restricted the number of factors extracted to one. The findings showed that one-factor solution accounted for 40% explained variance that was lesser than 50% which is the minimum threshold to check for common method variance as per Harman's one-factor test (Podsakoff et al., 2012). Therefore, we concluded that common method variance is not a potential threat for the present study.

### **3.2.4. Hypothesis Testing**

Since we omitted WAL from our proposed model, we had to eliminate Hypothesis 4 suggesting that WAL would strengthen the relationship between goal blockage and irritation. Thus, we analyzed the model proposing that a leader's perceived goal blockage would be associated with his/her abusive supervision through his/her irritation; the leader's social

problem-solving skills would attenuate the relationship between irritation and goal blockage.

Hypotheses were tested using model 15 from the PROCESS macro for SPSS (Hayes, 2012). In order to analyze indirect and conditional indirect effects using a bootstrapping approach, the PROCESS macro is preferable (Kisbu-Sakarya et al., 2014).

Results demonstrated that a leader's perceived goal blockage was significantly positively related to the leader's irritation ( $b = .99, t = 5.80, p < .001$ ). This finding supported Hypothesis 1. Hypothesis 2 predicted that the leaders' irritation is positively associated with his/her abusive supervision. In support of Hypothesis 2, there was a significant positive association between the leader's irritation and abusive supervision ( $b = .14, t = 3.53, p = .005$ ). Hypothesis 3 predicted that the leader's irritation would mediate the relationship between the leader's goal blockage and abusive supervision. Hypothesis 3 was supported in such that there is a significant positive indirect effect of the leader's goal blockage on his/her abusive supervision through irritation,  $b = .1386, CI_{95\%} [.0474, .2314]$ . Hypothesis 5 predicted that the leader's social problem-solving skills (SPS) would moderate the relationship between the leader's irritation and abusive supervision, such that the relationship would be stronger when leaders have lower levels of social problem-solving skills, as opposed to higher. Consistent with Hypothesis 5, the relationship between irritation and abusive supervision was significantly stronger for leaders who have lower SPS comparing to leaders who have higher SPS skills ( $b = -.01, t = -3.54, p = .005$ ).

In addition to what we expected, results showed that leaders' SPS moderate the indirect relationship between leaders' perceived goal blockage and abusive supervision ( $b = -.05, t = -6.94, p < .001$ ). Particularly, the result suggested that the indirect relationship between leaders' perceived goal blockage and abusive supervision was significantly stronger for leaders who have lower SPS comparing to leaders who have higher SPS skills. Moreover, findings showed that when controlling for leaders' age, their perceptions about subordinates' competence and years of leaders' working with their current team, the index of moderated mediation was significant at  $IMM = -.01, CI [-.0201, -.0028]$  (see figure 3). Considering the recommendation for



operationalizing the indirect effect at different levels of a moderator (Preacher et al., 2007), we obtained bootstrapped CIs at different levels of leaders' SPS. Results showed the operationalized indirect effect of leaders' goal blockage on abusive supervision via irritation was significant at low levels of SPS. This means that the conditional indirect effect of leaders' goal blockage was significant only at low values of leaders' social problem-solving skills (SPS).

### **3.2.5. Post Hoc Analyses: A Sequential Mediation Model via Rumination and Irritability**

Consistent with the Stressor-Emotion Model (Spector & Fox, 2005), we found that leaders' perceived goal blockage as a threat or stressor at work is associated with leaders' abusive behaviors through leaders' increased irritation. In particular, the model argues that stressors at work are related to cognitive appraisals of these stressful events which are associated with negative emotions. Therefore, the model actually posits a sequential process in which negative emotions follow negative cognitive appraisals of the work stressors. Given that irritation has two sequential aspects which are rumination (i.e., cognitive aspect of irritation) and irritability (i.e., emotional aspect of irritation), we further expected that two subdimensions of irritation would have a sequential mediating effect between leaders' goal blockage and abusive supervision. Therefore, we tested a model in which rumination (i.e., cognitive irritation) and irritability (i.e., emotional irritation) sequentially mediate relationship between goal blockage and abusive supervision. This model was tested using model 6 in PROCESS macro. Results revealed that there was a positive indirect effect of goal blockage on abusive supervision through rumination and irritability ( $b = .12$ ,  $CI_{95\%} [.0335, .2479]$ ). In particular, perceived goal blockage has a positive significant association with rumination ( $b = .35$ ,  $t = 4.48$ ,  $p < .001$ ). Rumination has positively significantly related to irritability ( $b = .92$ ,  $t = 12.90$ ,  $p < .001$ ) which is positively significantly associated with abusive supervision ( $b = .37$ ,  $t = 2.95$ ,  $p < .005$ ). In order to rule out the alternative model in which goal blockage has a positive indirect effect on abusive supervision through irritability and rumination (respectively), we also tested this alternative model. Results showed that there is no significant indirect effect of goal blockage on abusive supervision

through irritability and rumination ( $b = -.0006$ ,  $CI_{95\%} [-.1077, .0964]$ ). Although the linkages of goal blockage-irritability and irritability-rumination are significant ( $b = .64$ ,  $t = 5.90$ ,  $p < .001$ ;  $b = .47$ ,  $t = 12.90$ ,  $p < .001$ ), the findings revealed that rumination is not significantly associated with abusive supervision ( $b = -.001$ ;  $t = -.01$ ;  $p = .99$ ).

The above findings provided additional support for the stressor-emotion model. In the model, emotions are emphasized as arousals resulting from cognitive interpretation of work stressors. Although the current study could not infer any directions for the proposed relationships as it is was a correlational study, the findings might support the model's argument that cognitive appraisals of work stressors might evoke negative emotions. This is because while the indirect effect of goal blockage on abusive supervision through rumination and irritation was significant, the opposite sequential mediation model proposing that the indirect effect of goal blockage on abusive supervision through irritation and rumination was not significant.

### 3.3. Study 2 Methods

#### 3.3.1. Participants and Procedure

Participants included 27 undergraduate students from a private university in Istanbul, Turkey. 15 of the participants (55.56%) were female, their average age was 21 years ( $SD = 1.67$ ). At the beginning of the experiment, we randomly assigned participants to one of the two groups (experimental vs control group). 7 participants were assigned to the control group and 7 participants were assigned to the experimental group. However, when we realized a problem in our manipulation check, we assigned the last 13 participants to the experimental group in order to check the manipulation and fix the problem in the possible next version of our experiment. Participants were recruited from the university's online subject pool. Each participant was compensated with 1 extra credit for their one class they prefer. In order to achieve the most robust experimental design we can, we revised our experimental design three times. However, we conducted only the third (last) version. In the following sections, we explain each version and revisions specifically we made for each.

**Version 1.** The participants who signed up for the study were required to complete an online pre-study survey through an online survey website ([www.qualtrics.com](http://www.qualtrics.com)) and were assigned a nickname which was used to match their data during the study. Upon completion of the pre-study survey measuring WAL and social problem-solving skills, participants were directed to a sign-up sheet in order to choose an individual time slot to show up at the lab for the experiment. Participants were randomly assigned into one of two conditions (goal blockage condition vs. no goal blockage condition).

Upon arrival at the lab, the experimenter informed participants that the aim of the study was to examine the effect of supervisors' feedback on subordinates' future performance. They were then informed that each participant would interact with a second study participant (played by confederates trained by the researcher) during the experiment. After that, the administrator informed them who was assigned to which role (unbeknownst to participants, all participants had been assigned to supervisor role while all confederates had been assigned to the role of subordinate). Participants were informed that they would spend 5 minutes for the training-task in which they teach how to solve a sudoku puzzle to their subordinate. Then, the subordinate would have 5 minutes for the skill-test to successfully complete a new sudoku puzzle. Participants were informed that the subordinate's successful completion of the sudoku puzzle would be their common goal. Thus, if the supervisor properly teaches the puzzle and the subordinate successfully solve the puzzle, they both would be successful. However, if the subordinate does not complete the puzzle successfully, they both would be unsuccessful even if the supervisor properly trains the subordinate.

During the 5-minutes training task, supervisors trained subordinates using instructions that we created (see Appendix) and an example sudoku puzzle. The first manipulation (goal blockage or not) was administered at this time. Half of the participants (experimental group) trained a subordinate (confederate) who was playing an inattentive listener role, and the other half of the participants (control group) trained a subordinate (confederate) who was in role of an

attentive listener. The attitude of subordinates was designed to create a goal blockage perception (explained detailed in the *goal blockage manipulation* section).

During the 5 minutes skill-test, participants were given an uncompleted sudoku puzzle and told that once the skill-test began, they could not provide guidance to the subordinate or complete the puzzle. In the experimental group, confederates left the same section of the puzzle unfinished (a large portion of the puzzle). At the end of the experiment, the administrator told that they both became unsuccessful and would not get any reward. In the control group, confederates completed the same portions of the puzzle in the same order. They were told that they both became successful and would earn the reward. At the end of the skill-test, participants and subordinates (confederates) were informed that they would have one more task before finishing the experiment. Then, the subordinate (confederate) asked to experiment if he/she could go to the restroom. Experimenter let the subordinate go. In the experimental group, the subordinate became late; meanwhile, the administrator said to the participant that they should have started to final task of the experiment. In the control group, the subordinate returned in time; meanwhile, the administrator said nothing to the participant.

After the subordinate came back in the lab, participants asked to give feedback for the subordinate's performance on the puzzle. The administrator reminded that the aim of the study is to examine the effect of the supervisor's feedback on the learner's future performance; and indicated that the subordinate would retake a sudoku puzzle after taking the supervisor's (participant's) feedback. For the feedback session, participants were given an instruction including two independent feedback methods. Method 1 includes abusive feedback items while Method 2 consists of non-abusive feedback items. Participants were asked to choose 'only' one of the methods to use the instructions given for each method. After the feedback session, the experiment was over.

However, according to the feedbacks of two professors in the field of Industrial and Organizational Psychology, six PhD students in the same field, and four undergraduate students

in Psychology, we considered to revise the part we had tried to manipulate perceived goal blockage by creating an unattained goal condition with the sudoku task and by additionally frustrating the supervisor (participant) with the late subordinate (confederate). This is because two separate initiations to create irritation would not allow us to find out which one of those leads to increased irritation. Therefore, we created the second version of the experimental script which is explained in the following paragraph.

**Version 2.** The revision we made in the second version was that we omitted the part in which the subordinate (confederate) left the lab and was late to proceed the experiment (in order to irritate the participant). We omitted the part because we realized that it would confound the irritating effect of being unsuccessful in the sudoku task. Indeed, both being unsuccessful in the sudoku task and being late of the subordinate would irritate the participant. Thus, we would not differentiate the effects of those two on participants' irritation in a way that it might have created a double-manipulation situation.

Besides the revision regarding our manipulation, the same group of researchers who gave us feedback on our design found the feedback method we would use to measure abusive supervision very artificial. This is because there were only two options (abusive vs non-abusive) for participants to consistently behave toward their subordinates. Therefore, we went for a revision to fix this issue.

**Version 3.** The revision we made in the third version was on the measurement of the dependent variable which is abusive supervision. According to the comments of two professors in the field of Industrial and Organizational Psychology, six PhD students in the same field and six undergraduate students in Psychology, we considered to revise the measure as it would not allow participants to choose the abusive responses. In the first and second versions of the experimental design, participants were asked to choose one of two feedback methods to the subordinate according to the instruction we gave. The instruction included two different feedback methods (abusive vs non-abusive) to be given to the subordinate. Participants were

asked to choose ‘only’ one of the methods to use the instructions given for each method.

However, drawing on the research showing that abusive leaders are not abusive consistently toward their subordinates (Tepper et al., 2006), we decided to change the measurement of the abusive supervision. That is because the Method 1 representing participants’ abusive responses to the subordinate was too abusive with five bold and harsh instructions. It was too distinctly abusive with all five abusive items; when participants were presented the Method 2 including non-abusive instructions, they tended to choose the Method 2.

Therefore, in this version, after the skill-test, participants asked to give feedback for the subordinate’s performance on the puzzle. The administrator reminded that the aim of the study is to examine the effect of the supervisor’s feedback on the learner’s future performance; and indicated the participant’s feedback would be sent to the learner via e-mail with a follow-up sudoku puzzle in order to assess the improvement in the subordinate’s performance. In the feedback package, participants were administered irritation and abusive supervision feedback scale. Details about the instruction are explained in the Measures section.

**Goal blockage manipulation.** Goal blockage was the manipulated variable. Half of the subjects were in the goal blockage (experimental) group and the other half were in the no goal blockage (control) group. The manipulation was woven into the attitudes of subordinates (inattentive vs attentive) during the training session resulting in a failure (experimental group) or achievement (control group) at the end of the experiment. At the end of the experiment, participants told that they both failed the task and lost the rewards (experimental group) or they both were successful and got the rewards (control group). The administrator and confederates memorized pre-written scripts to ensure that the wording was delivered consistently in both groups throughout the study (see detailed scripts in Appendix). Additionally, a distracting sound for 30 seconds were given to the experimental group during the training session, as a representation of external insufficiencies that might cause goal blockage perception (Krasikova et al., 2013).

### 3.3.2. Measures

**Irritation.** Irritation level was measured using 3 items of Mohr's (1986) scale (Cronbach's alpha is .93) used in the Study 1. In order not to prime participants with irritation which might affect participants' abusive behaviors, we added 3 bogus items which ask participants positive emotions. A sample item is "I feel peaceful right now" (see Appendix C for this measure).

**Abusive supervision (version 1).** Abusive supervision was measured using a dummy coded scale (method 1= abusive vs method 2 = non-abusive). This measure was created for the current study. The measure included two different methods of feedback to be given to participants. Method 1 included 5 abusive feedback items while Method 2 included 5 non-abusive feedback items. Participants were asked to choose only one of those two feedback methods (the method including abusive feedback vs the method including non-abusive feedbacks to the subordinate). (see Appendix C for this measure).

**Abusive supervision (version 2).** Abusive supervision was measured using a 13-items scale created for the current study. The scale includes items representing feedback for the subordinate (confederate). 7 items created represents abusive feedback while the other 6 items are non-abusive items. Items created were rated as abusive or non-abusive feedback by 32 independent participants as a pilot study; and we used items which are consistently perceived as abusive or non-abusive by all participants. An example item for abusive feedback is "I am in the position of a terrible supervisor because of you". "You can improve your performance by practicing puzzle" is one of the non-abusive items. The scale's wording was tailored for the control group since participants gave feedback to successful subordinates. Example items are "You could have finished such an easy puzzle much more quickly" and "You finished the puzzle in time" for abusive and non-abusive items, respectively. Participants rated the extent to which they would like to give each feedback to their subordinates considering their subordinates' performance. Participants responded to those items using a 5-point Likert scale (1 = "I would

never like to give this feedback”, 5 = “I would very like to give this feedback”) (see Appendix C for this measure).

**Manipulation check.** Participants rated the extent to which the rewards at the experiment are important for their motivation to participate and pursue the experiment (1 = “It was not important at all”, 5 = “It was very important”). Also, they reported whether they have ever felt thwarted to attain that motivation source throughout the experiment (“Yes” or “No”)? (see Appendix C for this measure).

### 3.4. Study 2 Results

In our study, 18 participants of 20 (participants assigned to the experimental group) reported that they have never felt thwarted to attain that motivation source throughout the experiment, which means those participants did not perceive goal blockage. Thus, the manipulation for goal blockage perception did not work out. However, we still conducted independent t-test to examine if the experimental and control groups significantly differ from each other in terms of their scores on irritation and abusive supervision scales. Results revealed that there was no significant difference between the experimental ( $M = 18.20$ ,  $SD = 8.61$ ) and control ( $M = 13.42$ ,  $SD = 8.59$ ;  $t(25) = 1.26$ ,  $p = .219$ ) group in terms of irritation. Moreover, there was no significant difference between the experimental ( $M = 20.15$ ,  $SD = 7.88$ ) and control group ( $M = 19.42$ ,  $SD = 4.65$ ;  $t(25) = .227$ ,  $p = .822$ ) in terms of abusive supervision. We elaborate on the possible reasons why our experimental design did not work out and we provide the future research avenues to improve our design in the Discussion section.

## Chapter 4: Discussion

In the current study, we argued for the identity-threat perspective on antecedents of abusive supervision, wherein leaders might be more likely to abuse their subordinates when they experience threats to their leader-identity, their sense of power, and their competence to fulfill their leadership responsibilities (e.g., Khan et al., 2016; Pundt, 2014). Given that leaders’ goals and goal achievements are represented as core elements of leadership responsibilities (Yukl,



2006), we argued that leaders' perceived goal blockage might be an identity-threatening factor as leaders might perceive that they are incompetent to fulfill their leadership roles. We sought to examine if leaders' perceived goal blockage might be related to their abusive behaviors toward their subordinates as other identity-threatening factors that are related to abusive supervision (e.g., Simon et al., 2015). Drawing upon the Stressor-Emotion model of CWB (Spector & Fox, 2005), we developed and tested a model to examine abusive supervision as a function of leaders' goal blockage perception. Specifically, we investigate the mechanism through which leaders' goal blockage perception relates to their abusive supervision via leaders' increased irritation, as well as the roles worries about leadership (WAL) and leaders' social problem-solving skills play in strengthening and attenuating the leader's irritation and abusive supervision. Our results have indicated that leaders' goal blockage perception is associated with their abusive supervision through increased irritation. Also, leaders' social problem-solving skills (SPS) have attenuated the relationship between irritation and abusive supervision. In particular, leaders who have higher SPS are less likely to abuse their subordinates. In addition to our hypotheses, the results revealed that leaders' SPS also moderate the indirect relationship between perceived goal blockage and abusive supervision. Specifically, leaders who have higher SPS are less likely to abuse their subordinates when they perceive goal blockage that is associated with leaders' increased irritation. This finding has also supported by the work frustration - aggression theory (Fox & Spector, 1999) showing that situational constraints frustrating people's achievement of personal or organizational goals specifically in work environments leads to aggressive behaviors toward persons or the organization and individual difference variables might affect the strength of this association.

We hypothesized that WAL would moderate the relationship between goal blockage and irritation. Previous research has showed that worries in general lead to increase in rumination and negative affect (e.g., McLaughlin et al., 2007). Especially, they have emphasized that

worries and ruminative thoughts evoked by an interruption of a goal or by a perceived discrepancy between the current status and goals significantly exacerbate negative emotions (Segerstrom et al., 2000). Along these lines, we argued that worries about the leadership position may exacerbate irritation including both rumination and negative emotions in the face of goal blockage in the leadership role. However, since we have found a multicollinearity problem due to significantly high correlation between WAL and goal blockage, we had to eliminate the Hypothesis 4 suggesting that worries about leadership (WAL) strengthen the relationship between goal blockage and irritation. Our findings have supported this decision such that WAL did not interact with goal blockage to predict irritation as well as it suppressed the effect of goal blockage on irritation.

The significant association between goal blockage and WAL might be explained with their common ground in identity-threat. Leaders' perceived goal blockage might threaten leaders' leader-identity by threatening their positive self-image and perceived professional competence because leaders might feel that they are not effective in guiding their followers to achieve their goals (e.g., Den Hartog et al., 1997; Eagly et al., 2003). This may lead leaders to concern about the success of their followers, organization, and their personal professional competence. Leaders might perceive all as ego threat, that is linked to aggression (Baumeister & Boden, 1998). Likewise, leaders' worries about leadership (WAL) depend on leaders' perceived threats to fulfill their needs for competence, relatedness, and autonomy (Aycan & Shelia, 2018). Also, leaders who have high levels of WAL tend to experience more feelings of anxiety, respond to stressors poorly, and interpret situations more threatening than those who have low levels of WAL. Therefore, leaders who perceive a threat to their leader-identity, their positive self-image, and perceived professional competence due to goal blockage perception might perceive threats to fulfill their needs for competence, relatedness, and autonomy as well. Therefore, the WAL might be redundant in the presence of leaders' perceived goal blockage in our proposed model.

#### 4.1. Theoretical Implications

Our research makes several theoretical contributions to the abusive supervision, leadership, and stressor-emotion literature. First, by showing how leaders' goal blockage perception has an indirect effect on abusive supervision through leaders' irritation, this research advances knowledge about antecedents of abusive supervision. Besides the current study proposes a new antecedent to abusive supervision drawing upon a known mechanism of abusive supervision (i.e., identity-threat), it also advances the identity-threat perspective. Research on antecedents of abusive supervision emphasizes identity-threat as leaders' experience of threat coming from below (e.g., incompetent subordinates interfering leaders' goal achievement or authority; Lian et al., 2016), coming from above (e.g., abusive superiors of leaders who threaten leaders' leader-identity; Hoobler & Hu, 2013) or coming from within (e.g., certain personality characteristic such as high need for power and control; Whitman et al., 2013). However, to our knowledge, no study has investigated the effect of those three sources of identity-threat together on abusive supervision. Thus, the present study has provided a more comprehensive or more balanced perspective that integrates those three sources of identity-threat by examining leaders' perceived goal blockage as the antecedent of abusive supervision. Although previous research has implied that leaders' goals might be associated with their abusive behaviors in such that leaders' exceedingly difficult work goals (Mawritz et al., 2014) and their instrumentality beliefs in the pursuit of improving subordinates' performance (Watkins et al., 2018) predict their abusive supervision, our research is the first to directly assess the degree to which leaders' goal blockage perception is associated with abusive supervision. Our research extends the current theory as it evidences that some leaders' perception of being hindered to achieve one of the essences of the leadership position which is goal attainment might lead to leaders' abusive behaviors.

Second, our research further contributes to the broader leadership literature in three ways. First, it reveals that leaders' perception of blockage achieving their goals is associated with

destructive leadership behaviors, specifically abusive supervision. Thus, our findings support the leadership scholars who suspect that leaders' goal blockage perception might be a possible root of leaders' choice to be destructive toward their subordinates (Hersey & Blanchard, 1982; Vroom & Yetton, 1973). Moreover, the present findings are consistent with the general strain theory proposing that large-scale wrongdoing of managers (e.g., fraud, embezzlement) might be due to blockage of managers' economic and status goals (Agnew et al., 2009). Although the broad leadership literature suspects that goal blockage may motivate leaders to choose destructive approaches to solve the blockage (Hershcovis et al., 2007), empirical research on destructive leadership has been overlooked the impact of leaders' perceived goal blockage. Second, the current study responds to a recent call in the leadership literature. More recently, scholars have criticized the research on destructive leadership as it does not examine the destructive leader behaviors and their antecedents which are embedded in the process of leading and directly related to leadership position (Krasikova et al., 2013). Responding this call, we take an approach that examines abusive supervision as a function of leaders' goal blockage perception which threatens of the essences of the leadership role; goal attainment. In line with the previous research, we found that its perception might motivate leaders to behave in a destructive way toward their subordinates. Third, we seek to extend the line of thinking that leadership behaviors predominantly depend on leaders' ability to solve complex problems in workplace (Mumford et al., 2000). To do so, we examine leaders' social problem-solving skills as a possible buffer that might prevent leaders from behaving abusive, which leads to destructive consequences for both employees and organizations (Tepper, 2017).

As our third theoretical contribution, while the Stressor-Emotion model provides a useful lens through which to view a supervisor-level cognitive and emotional underlying mechanism of abusive supervision, the present research also gives back to this model. Specifically, we expand the scope of the Stressor-Emotion model by identifying abusive supervision as a function of a perceived work stressor, cognitive appraisal, and negative emotions evoked by the stressor.

Previous research drawing upon the Stressor-Emotion model has focused on counterproductive work behaviors (e.g., withdrawal) exhibited by employees (Bruk-Lee & Spector, 2006) due to perceived work stressors (e.g., perceived injustice) via negative emotions (e.g., anxiety).

However, we argued and found that a specific form of destructive leadership – abusive supervision – can be explained as a function of leaders’ perceived stressors regarding their leadership position via their appraisals and negative emotions.

Finally, our work contributes to the research on social problem-solving skills.

Specifically, we argued and found support for the notion that leaders’ personality traits influence the process at multiple points along the mediational path from leaders’ goal blockage to abusive supervision. This might emphasize social problem-solving skills as a crucial individual difference variable which might buffer aggressive behaviors at work.

#### **4.2. Practical Implications**

Our research findings provide several important managerial implications. Considering the abundance of evidence for costly consequences of abusive supervision in workplaces (Tepper et al., 2006), it is essential for organizations to understand what triggers leaders to behave in an abusive way. Our research sheds light on one possible reason why leaders act in an abusive way toward their subordinates. While abusive supervision may be triggered by many factors such as displaced aggression (Hoobler & Brass, 2006) and leaders’ self-depletion (Yam et al., 2016), the findings of the present study provide additional insight into sources for provoking leaders’ abusive behaviors. In this vein, organizations must carefully observe leaders’ perception of goal blockage. While certain negative perceptions or emotions may be inevitable, organizations might benefit from implementing leader-assistance programs that can offer support to leaders in their efforts to attain their goals. Furthermore, organizations might consider to proactively offering subordinate training programs or providing resource sufficiency that provide direction on leaders’ goal attainment in order to avoid abusive supervision. Additionally, senior level (i.e., skip-level) leaders’ monitoring and, when necessary, taking steps to manage their subordinates’

(i.e., leaders) goal blockage perception would attenuate the likelihood that frontline subordinates become victims of leaders' irritation releasing.

Moreover, given that leaders with high problem-solving skills handle goal blockage perception and irritation more efficiently, organizations may gain added benefits from recruiting and selecting leaders who are high in social problem-solving skills. While previous research shows that negative problem orientation and dysfunctional problem-solving dimensions are related to anger, hostility and physical aggression (D'Zurilla et al., 2003), the present findings explicitly suggest that leaders who have high social problem-solving skills behave more rational and wisely instead of lashing out and being abusive even when they perceive goal blockage and they are irritated.

#### **4.3. Limitations and Directions for Future Research**

The present study is not without limitations. First, given that the data collected in Study 1 is cross-sectional and our manipulation did not work out in the experimental study (Study 2), we could not make inferences about causality among the leaders' perceived goal blockage, irritation, and abusive supervision as well as we could not infer a directional ordering of our hypothesized model. Although, consistent with the Stressor-Emotion Model (Spector & Fox, 2005), we designed our proposed model in such that leaders' perceived goal blockage precedes leaders' irritation preceding abusive supervision, it is possible that directions of our hypotheses are different or there are reciprocal relationships between the hypothesized variables. To fully address this limitation, scholars should consider revising our experimental design in a way that we elaborate on in the following part.

Second, our experimental design (Study 2) did not work. We have four main concerns about the experimental study. First, we think that our subject pool might be one of the factors that prevents us from manipulating goal blockage. In the manipulation check, participants (college students who earn extra credits in exchange to their participation) reported their main motivation to participate and pursue the experiment as getting extra credits but not as the

possible rewards they could earn at the end of the experiment. Thus, we have concluded that participants' motivation to get credits has overshadowed the possible reward that had been designed for the manipulation. Second, a student's perceived goal blockage to attain a reward in a lab environment might not be strong enough to represent a leader's perceived failure to attain an important goal in an organizational environment. Thus, future research that uses a stronger manipulation in a more engaging experimental task for participants is needed. Third, in Study 2, we assigned a goal to participants who are in the role of leaders. The goal was to properly train the subordinate in order to enable the subordinate to successfully complete the sudoku puzzle in the test-session. Thus, we tried to create a blockage perception to attain the goal which we had assigned to them. The goal was imposed on the participant. However, in Study 1, participants (i.e., real leaders) were asked to report their real goal blockage experience they had faced in their work environment. We think that the effect of un-attainment to a goal which is assigned by others in an artificial environment might be different than the effect of un-attainment to a real goal which is set by the leaders themselves for leaders. There is a possibility in such that participants did not accept the 'goal' which was imposed on them as a goal in Study 2. Future studies might consider providing more than one tasks to participants in order to facilitate the goal acceptance of the task for the participant. Finally, besides difficulties in the manipulation of perceived goal blockage, generating abusive behaviors in a lab environment both have challenges and ethical concerns. To our knowledge, there is no experimental research measuring abusive supervision as the dependent variable. It is our hope that this attempt will open the door to future studies which can improve the experimental design and can measure abusive supervision in a controlled environment instead of relying on correlational and survey-based studies to explain antecedents of abusive supervision.

To fully address the second limitation, scholars should consider revising our experimental design in a way that participants are experienced goal blockage in a controlled lab environment and to what extent they behave toward their subordinates (i.e., confederates) abusively is

measured. Considering our concerns regarding why the manipulation did not work (i.e., task is not engaging enough, not enough room to be abusive), researchers can use life-like and more engaging tasks (instead of sudoku) in order to create a goal blockage perception for participants. Computer games, simulations, and visual-reality videos might create a more life-like experience and they might provide more room to manipulate the perception. For example, participants (in the role of leader) and confederates (in the role of subordinate) might have opportunities to communicate with each other on virtual chat groups or instant communication tools such as WhatsApp after participants are imposed to goal blockage or no goal blockage conditions via computer games, simulations, or visual-reality videos. Also, such methods may allow participants to behave in a sincerer way (abusive or non-abusive way) by providing leaders more space comparing to forcing them face-to-face interaction with the confederate in an artificial environment. Such methods might also prevent the subordinate characteristics (e.g., likeability, gender) from confounding the experimental design.

Besides experimental designs, scholars might consider utilizing various research designs (e.g., longitudinal design) that can provide further support for the predictive validity of the present study (Shadish et al., 2002). For example, responding to calls for a greater emphasis on temporal issues in the interpersonal mistreatment literature (Cole et al., 2015), a daily diary study could uncover how differing in perceived goal blockage and irritation levels may trigger variance in abusive supervision over time.

Third, the use of self-report may be a limitation of the current research. The data may suffer from social desirability bias (Mortel, 2008) due to the leaders' self-report of their intentions and history of abusive supervision. All data were collected from leaders. Except for the abusive supervision, all of the variables assessed were leaders' perceptions. Therefore, we collected the all data from leaders by following the research recommending perceptual variables are best measured by self-report surveys (Spector, 2006). However, we should note that dyadic data collection from leaders and their subordinates might mitigate the social desirability concerns



and might increase the reliability of the data. Moreover, some leadership research (e.g., Avolio et al., 2004; Bono & Judge, 2003) emphasizes the value of multilevel data given that leaders form different relationships with each subordinate, ranging from low-quality relationships based upon only employment contracts or economic exchanges to high-quality relationships representing reciprocal respect, liking, trust, and mutual influence (Graen & Uhl-Bien, 1995). Therefore, future research should also consider collecting multilevel data by collecting data from leaders, their subordinates at the group level, and their subordinates at the individual level.

Fourth, we did not conduct a separate study to validate our perceived goal blockage scale. Since there is no validated scale to measure Krasikova et al.'s (2013) construct of perceived goal blockage, we created a new scale for the current study. Following the strategies of the authors have used to develop new measures (e.g., Wang et al., 2018), after items were generated, they were revised based on the feedback given from six graduate students in the area of Social and Organizational Psychology. After that, it was finalised based on the feedback given from a subject matter expert who is an expert in the leadership literature, holding a doctorate degree in Social and Organizational Psychology. However, future studies should consider validating our scale with various samples.

Fifth, the data were collected from different cultures in our two separate studies. While we collected the data from employees in managerial roles in the U.S. through Amazon's Mechanical Turk (MTurk) in Study 1, the data were collected from college students in Istanbul, Turkey in Study 2. The reason why we used the Amazon MTurk in Study 1 is that the platform is an online crowdsourcing market has similar psychometric properties as data obtained with traditional convenient sampling methods (Buhrmester et al., 2011; Paolacci et al., 2010; Steelman et al., 2014). In Study 2, since we conducted an experiment in a lab environment in Istanbul, Turkey, the most convenient sample was Turkish participants for us. Although our theoretical arguments were not culture-specific and we expected that the antecedents of abusive

supervision will generalize to other cultures, it is possible that the observed effect of leaders' perceived goal blockage on their abusive behaviors may be less likely to emerge in high power distance cultures like Turkey where leaders might believe that verbally abusing subordinates is more frequent and more justifiable (Hofstede, 2001). As a result of this, the variance in abusive supervision might decrease in such a culture. Thus, power distance might have suppressed the relationship between goal blockage and abusive supervision by attenuating the relationship creating a spurious correlation. Moreover, it is possible that goal blockage is perceived more threatening for leaders to their 'powerful' leader-identities in high power distance cultures. Those are the reasons why we collected data from the US which represents a moderate level power distance culture. However, we believe that considering the role of culture while examining the antecedents of abusive supervision is a fruitful direction for future research.

Sixth, although we have theoretically argued that leaders' perceived goal blockage might be an identity-threatening factor for leaders, we did not measure to what extent leaders perceive identity threat due to perceived goal blockage. Research explaining abusive supervision with leaders' identity-threat shows that leaders might be more likely to abuse their subordinates when they experience threats to their leader-identity, their sense of power, and their competence to fulfill their leadership responsibilities (e.g., Khan et al., 2016; Pundt, 2014). Accordingly, future research should investigate to what extent leaders' perceived goal blockage is associated with their perceived threats to their leader-identity, their sense of power, and their competence to fulfill their leadership responsibilities. The stream of such research might empirically show that leaders' perceived goal blockage is a predictor of their identity-threat experience.

Finally, we have not examined specific roots of perceived goal blockage proposed by previous research (Krasikova et al., 2013). We have focused on a general perception of being thwarted to attain goals as a possible antecedent of abusive supervision. An interesting direction for future research might be to examine the role of different forms of goal blockage (e.g.,

perceived goal blockage due to resource insufficiency in the organization, due to poor subordinate performance, due to leaders' perceived incompetency) in abusive supervision. Moreover, given that leaders differ in their responses to goal blockage, additional dispositional factors (e.g., leaders' dark triad traits, social dominance orientation, need to belongness) could be considered as alternative boundary conditions in future studies. For example, leaders who have higher need to belong might be less likely to be irritated and to abuse their subordinates even when they perceive goal blockage. Besides leaders' dispositional traits, contextual factors (e.g., organizational changes, organizational control mechanisms against mistreatment, occupation or work sector) that might affect both occurrence of and response to perceived goal blockage could also be examined in future research. For example, occupational differences or sector might be possible contextual factors that are likely to affect the extent to which leaders behave abusively when they perceive goal blockage. Given that employees in relationship-oriented occupations such as hospitality sector, sales and marketing, and public relations reported higher levels of abusive supervision than employees in other occupations (Restubog et al., 2011), goal blockage might be perceived more threatening by leaders in such occupations as it is possible to damage leaders' positive leader-image among others (e.g., subordinates, coworkers, customers).

Although our data have information about participants' (leaders') sector, participants' responses to the open-ended sector question in our data are hard to classify according to sector. Thus, the data are not useable as are to investigate the effect of sector on our hypothesized model. Future research should examine its possible effect.

## Chapter 5

### 5.1. References

- Agnew, R., Piquero, N. L., & Cullen, F. T. (2009). General strain theory and white-collar crime. In S. S. Simpson & D. Weisburd (Eds.), *The criminology of white-collar crime*: 35-60. New York: Springer.
- Allen, V. L., & Greenberger, D. B. (1980). Destruction and perceived control. In A. Baum & J. E. Singer (Eds.), *Applications of personal control* (pp. 85–109). Hillsdale, NJ: Erlbaum.
- Amazon. (2014). Amazon Mechanical Turk. Retrieved from <https://requester.mturk.com>
- Anderson, C. A., & Bushman, B. J. 2002. Human aggression. *Annual Review of Psychology*, 53, 27-51.
- Aryee, S., Chen, Z. X., Sun, L.-Y., & Debrah, Y. A. (2007). Antecedents and outcomes of abusive supervision: Test of a trickle-down model. *Journal of Applied Psychology*, 92, 191–201.
- Avolio, B. J., & Bass, B. M. (2002). Manual for the multifactor-leadership questionnaire (Form 5X). Redwood City: Mindgarden.
- Aycan, Z. & Shelia, S. (2018). “Leadership? No, thanks!” A new construct: Worries about Leadership. *European Management Review*, 16, 21-35.
- Bamberger PA, Bacharach SB. (2006). Abusive supervision and subordinates’ problem drinking: taking resistance, stress, and subordinate personality into account. *Human Relations*, 59, 723–52.
- Baumeister, R. F., & Boden, J. M. (1998). Aggression and the self: High self-esteem, low self-control, and ego threat. In R. G. Geen & E. Donnerstein (Eds.), *Human aggression: Theories, research, and implications for social policy* (pp. 111-137). San Diego, CA, US: Academic Press.
- Baron, R. A., Neuman, J. H., & Geddes, D. (1999). Social and personal determinants of workplace aggression: Evidence for the impact of perceived justice and the Type A

- behavior pattern. *Aggressive Behavior*, 25, 281–296.
- Berkowitz, L. (1989). Frustration-aggression hypothesis: Examination and reformulation. *Psychological Bulletin*, 106, 59-73.
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon’s Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, 6, 3-5.
- Bruk-Lee, V., & Spector, P. E. (2006). The social stressors– counterproductive work behaviors link: Are conflicts with supervisors and coworkers the same? *Journal of Occupational Health Psychology*, 11, 145–156.
- Byrne, A., Dionisi, A.M., Barling, J., Akers, A., & Robertson, J. (2014). The depleted leader: the influence of leaders’ diminished psychological resources on leadership behaviors. *Leadership Quarterly*, 25, 344–57.
- Chang, E. C., & D’Zurilla, T. J. (1996). Irrational beliefs as predictors of anxiety and depression in a college population. *Personality and Individual Differences*, 20, 215-219.
- Cole, M. S., Shipp, A. J., & Taylor, S. G. (2015). Viewing the interpersonal mistreatment literature through a temporal lens. *Organizational Psychology Review*, 6, 273–302.
- Collins, M. D. & Jackson, C. J. (2015). A process model of self-regulation and leadership: how attentional resource capacity and negative emotions influence constructive and destructive leadership. *Leadership Quarterly*, 26, 386–401.
- Courtright, S., Gardner, R., Smith, T., McCormick, B., & Colbert, A. (2016). My family made me do it: a cross-domain, self-regulatory perspective on antecedents to abusive supervision. *Academy of Management Journal*, 59, 1630–52.
- Deci, E. L. and Ryan, R. M. (1985). “The general causality orientations scale: Self-determination in personality”. *Journal of Research in Personality*, 19, 109–134.
- Den Hartog, D. N., Muijen, J. J. V., & Koopman, P. L. (1997). Transactional versus transformational leadership: An analysis of the MLQ. *Journal of Occupational and Organizational Psychology*, 70, 19–34.

- Dollard, J., Doob, L. W., Miller, N. E., Mowrer, O. H., & Sears, R. R. (1939). *Frustration and aggression*. New Haven, CT: Yale University Press.
- Dormann, C., & Zapf, D. (2002). Social stressors at work, irritation, and depression: Accounting for unmeasured third variables in a multi-wave study. *Journal of Occupational and Organizational Psychology, 75*, 33–58.
- Dupre, K. E., Inness, M., Connelly, C. E., Barling, J., & Hopton, C. (2006). Workplace aggression in teenage part-time employees. *Journal of Applied Psychology, 91*, 987-997.
- D'Zurilla, T. J., & Nezu, A. M. (1982). Social problem-solving in adults. In P. C. Kendall (Ed.), *Advances in Cognitive Behavioral Research and Therapy, 1*: 201-274. New York: Academic Press.
- D'Zurilla, T. J. (1986). *Problem-Solving Therapy: A Social Competence Approach to Clinical Intervention*. Berlin: Springer.
- D'Zurilla, T. J., & Sheedy, C. F. (1991). The relation between social problem-solving ability and subsequent level of psychological stress in college students. *Journal of Personality and Social Psychology, 61*, 841-846.
- D'Zurilla, T. J. & Chang, E. C. (1995), The relations between social problem solving and coping. *Cognitive Therapy and Research, 19*, 549-564.
- D'Zurilla, T. J., Nezu, A. M., & Maydeu-Olivares, A. (2002). *Manual for the Social Problem Solving Inventory-revised (SPSI-R)*. North Tonawanda: Multi-Health Systems.
- D'Zurilla, T. J., Chang, E. C., & Sanna, L. J. (2003). Self-esteem and social problem solving as predictors of aggression in college students. *Journal of Social and Clinical Psychology, 22*, 424-440.
- Eagly, A. H., Johannesen-Schmidt, M. C., & Van Engen, M. L. (2003). Transformational, transactional and laissez-faire leadership styles: A meta-analysis comparing women and men. *Psychological Bulletin, 129*, 569–591.
- Einarsen, S., Aasland, M. S., & Skogstad, A. (2007). Destructive leadership behaviour: A

- definition and conceptual model. *Leadership Quarterly*, 18, 207-216.
- Eissa, G., & Lester, S. W. (2017). Supervisor role overload and frustration as antecedents of abusive supervision: The moderating role of supervisor personality. *Journal of Organizational Behavior*, 38, 307-326.
- Erdogan, B., & Liden, R. C. 2002. Social exchanges in the workplace: A review of recent developments and future research directions in leader-member exchange theory. In L. L. Neider & C. A. Schriesheim (Eds.), *Leadership*: 65–114. Greenwich, CT: Information Age.
- Eskin, M., & Aycan, Z. (2009). Gozden gecirilmis sosyal sorun cozme envanteri'nin Turckce'ye (Tr-SSCE-G) uyarlanmasi, guvenirlik ve gecerlilik analizi. [The adaptation of the revised social problem-solving inventory into Turkish (Tr-SPSI-R): a reliability and validity analysis]. *Turkish Psychological Articles*, 12, 11-13.
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175-191.
- Fleishman, E. A., Mumford, M. D., Zaccaro, S. J., Levin, K. Y., Korotkin, A. L., & Hein, M. B. (1991). Taxonomic efforts in the description of leader behavior: A synthesis and functional interpretation. *Leadership Quarterly*, 2, 245–287.
- Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior*, 21, 219-239.
- Fox, S., & Spector, P. E. (1999). A model of work frustration-aggression. *Journal of Organizational Behavior*, 20, 915–931.
- Fox, S., Spector, P. E., & Miles, D. (2001). Counterproductive work behavior (CWB) in response to job stressors and organizational justice: Some mediator and moderator tests for autonomy and emotions. *Journal of Vocational Behavior*, 59, 291–309.
- Frese, M., & Zapf, D. (1994). Action as the core of work psychology. A German approach. In

- H.C. Triandis, M.D. Dunnette, & M. Hough (Eds), *Handbook of industrial and organizational psychology* (pp. 271–340). Palo Alto, CA: Consulting Psychologists Press.
- Fritz, M. S., & MacKinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological Science, 18*, 233–239.
- Garst, H., Frese, M., & Molenaar, P.C.M. (2000). The temporal factor of change in stressor-strain relationships: A growth-curve model on a longitudinal study in East Germany. *Journal of Applied Psychology, 85*, 417–438.
- Grandey, A. A., Kern, J., & Frone, M. (2007). Verbal abuse from outsiders versus insiders: Comparing frequency, impact on emotional exhaustion, and the role of emotional labor. *Journal of Occupational Health Psychology, 12*, 63–79.
- Grewal, R., Joseph, A. C., & Hans, B. (2004), Multicollinearity and Measurement Error in Structural Equation Models: Implications for Theory Testing, *Marketing Science, 23*, 519–529.
- Hacker, W. (2003). Action Regulation Theory: A practical tool for the design of modern work processes? *European Journal of Work and Organizational Psychology, 12*, 105–130.
- Harvey, P., & Harris, K. (2010). Frustration-based outcomes of entitlement and the influence of supervisor communication. *Human Relation, 63*, 1639 – 1660.
- Heppner, P. P., Kampa, M. & Brunning, L. (1987). The relationship between problem-solving self-appraisal and indices of physical and psychological health. *Cognitive Therapy and Research, 11*, 155-168.
- Hersey, P., & Blanchard, K. H. (1982). *Management of organizational behavior: Utilizing human resources*. Englewood Cliffs, NJ: Prentice Hall.
- Herscovis, M. S., Turner, N., Barling, J., Arnold, K. A., Dupre, K. E., Inness, M., LeBlanc, M. M., & Sivanathan, N. (2007). Predicting workplace aggression: A meta-analysis. *Journal of Applied Psychology, 92*, 228-238.



- Higgins, E. T. (1997). "Beyond pleasure and pain". *American psychologist*, 52: 1280-1300.
- Hoobler, J., & Brass, D. (2006). Abusive supervision and family undermining as displaced aggression. *Journal of Applied Psychology*, 91, 1125-1133.
- House, R. J. (1971). A path goal theory of leader effectiveness. *Administrative Science Quarterly*, 16, 321-339.
- House, R. J., & Mitchell, T. R. (1974). Path-goal theory of leadership. *Contemporary Business*, 3, 81-98.
- House, R. J., & Mitchell, T. R. (1975). *Path Goal Theory of Leadership*. Washington: University of Washington, Seattle.
- House, R. J., & Shamir, B. (1993). Toward the integration of transformational, charismatic and visionary theories. In M. M. Chemers & R. Ayman (Eds.), *Leadership theory and research: Perspectives and directions*: 81-107. San Diego, CA: Academic Press.
- Johansen, R. (2012). *Leaders make the future: Ten new leadership skills for an uncertain world* (Second edi). San-Francisco: Berrett-Koehler Publishers.
- Kiewitz, C., Restobug, S. L. D., Zagenczyk, T. J., Scott, K. D, Garcia, P. R. J. M., & Tang, R. L. (2012). Sins of the parents: self- control as a buffer between supervisors' previous experience of family undermining and subordinates' perceptions of abusive supervision. *Leadership Quarterly*, 23, 869-82.
- Kisbu-Sakarya, Y., MacKinnon, D. P., & Miočević, M. (2014). The Distribution of the Product Explains Normal Theory Mediation Confidence Interval Estimation. *Multivariate Behavioral Research*, 49, 261-268.
- Krasikova, D. V., Green, S. G., & LeBreton, J. M. (2013). Destructive Leadership: A Theoretical Review, Integration, and Future Research Agenda. *Journal of Management*, 39, 1308-1338.
- Krischer, M. M., Penney, L. M., Hunter, E. M. (2010). Can counterproductive work behaviors be

- productive? CWB as emotion-focused coping. *Journal of Occupational Health Psychology, 15*, 154-166.
- Larson, L., Piersel, W. C., Imao, R., & Allen, S. (1990). Significant predictors of problem-solving appraisal. *Journal of Counseling Psychology, 37*, 482-490.
- Lazarus, R. S. (1982). Thoughts on the relations between emotion and cognition. *American Psychologist, 37*, 1019–1024.
- Lazarus, R. S. (1999). *Stress and emotion: A new synthesis*. New York: Springer.
- Lian, H., Ferris, D. L., & Brown, D. J. (2012). Does taking the good with the bad make things worse? How abusive supervision and leader-member exchange interact to impact need satisfaction and organizational deviance. *Organizational Behavior and Human Decision Processes, 117*, 41–52.
- Liang, L. H., Lian, H., Brown, D. J., Ferris, D. L., Hanig, S., & Keeping, L. M. (2016). Why are abusive supervisors abusive? A dual-system self-control model. *Academy of Management Journal, 59*, 1385–406.
- Liu, D., Liao, H., & Loi, R. (2012). The dark side of leadership: A three-level investigation of the cascading effect of abusive supervision on employee creativity. *Academy of Management Journal, 55*, 1187–1212.
- Lyubomirsky, S., & Nolen-Hoeksema, S. (1993). Self-perpetuating properties of dysphoric rumination. *Journal of Personality & Social Psychology, 65*, 339–349.
- Mackey, J. D., Frieder, R. E., Brees, J. R., & Martinko, M. J. (2017). Abusive supervision: a meta-analysis and empirical review. *Journal of Management, 43*, 1940 – 1965.
- MacNair, R. & Elliot, T. (1992). Self-perceived problem-solving ability, stress appraisal, and coping over time. *Journal of Research in Personality, 26*, 150-164.
- Martin, L.L., & Tesser, A. (1996). Some ruminative thoughts. In R.S. Wyer (Ed.), *Ruminative thoughts* (pp. 1–47). Hillsdale, NJ: Erlbaum.
- Mawritz, M. B., Mayer, D. M., Hoobler, J. M., Wayne, S. J., & Marinova, S. (2012). A trickle-

- down model of abusive supervision. *Personnel Psychology*, 65, 325–357.
- Mawritz, M. B., Folger, R., & Latham, G. P. (2014). Supervisors' exceedingly difficult goals and abusive supervision: The mediating effects of hindrance stress, anger, and anxiety. *Journal of Organizational Behavior*, 35, 358–372.
- McLaughlin, K. A., Borkovec, T. D., & Sibrava, N. J. (2007). The effects of worry and rumination on affect states and cognitive activity. *Behavior Therapy*, 38, 23–38.
- McNeely, B.L. & Meglino, B.M. (1994) 'The role of dispositional and situational antecedents in prosocial organizational behavior: An examination of the intended beneficiaries of prosocial behavior', *Journal of Applied Psychology*, 79, 836–844.
- Messer, K. & Loki, N. (2008). Maximum Likelihood, Multiple Imputation and Regression Calibration for Measurement Error Adjustment. *Statistics in Medicine*, 27, 6332 - 6350.
- Mohr, G. (1986). *Die Erfassung psychischer Befindensbeeinträchtigungen bei Industriearbeitern* [The assessment of mental strain of industrial workers]. Frankfurt: Lang.
- Mohr, G. (1991). Fünf Subkonstrukte psychischer Befindensbeeinträchtigungen bei Industriearbeitern: Auswahl und Entwicklung [Five sub-constructs of psychological complaints of workers: Selection and development]. In S. Greif, E. Bamberg, & N. Semmer (Eds), *Psychischer Streß am Arbeitsplatz* (pp. 91–119). Göttingen: Hogrefe.
- Mohr, G., Müller, A., Rigotti, T., Aycan, Z., & Tschan, F. (2006). The Assessment of Psychological Strain in Work Contexts: Concerning the Structural Equivalency of 9 Language Adaptations of the Irritation-Scale. *European Journal of Psychological Assessment*, 22, 198–206.
- Mortel, T.F.V.D. Faking it: Social desirability response bias in self-report research. *Australian Journal of Advanced Nursing*, 25, 40–48.
- Mumford, M. D., & Connelly, M. S. (1991). Leaders as creators: Leader performance and problem solving in ill-defined domains. *Leadership Quarterly*, 2, 289–315.

- Mumford, M. D., Zaccaro, S. J., Harding, F. D., Jacobs, T. O., and Fleishman, E. A. (2000). Leadership Skills for a Changing World: Solving Complex Social Problems. *Leadership Quarterly*, 11 (1), 11–35.
- Muthén, B. O., & Kaplan, D. (1985). A comparison of some methodologies for the factor analysis of non-normal Likert variables. *British Journal of Mathematical and Statistical Psychology*, 38, 171–189.
- Müller, A., Mohr, G. & Rigotti, T. (2004). Differentielle Aspekte psychischer Beanspruchung aus Sicht der Zielorientierung. Die Faktorstruktur der Irritations-Skala [Differential aspects of psychological strain with respect to goal orientation: The factor-structure of the Irritation Scale]. *Zeitschrift für Differentielle und Diagnostische Psychologie*, 25, 213–225.
- Nolen-Hoeksema, S., McBride, A., & Larson, J. (1997). Rumination and psychological distress among bereaved partners. *Journal of Personality & Social Psychology*, 72, 855–862.
- Paolacci, G., Chandler, J., & Ipeirotis, P. G. (2010). Running experiments on Amazon Mechanical Turk. *Judgment and Decision Making*, 5, 411–419.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63, 539–569.
- Ringle, C. M., Wende, S., & Becker, J. M. (2015). *SmartPLS 3*. Bönningstedt: SmartPLS.
- Salin, D. (2003). Ways of explaining workplace bullying: A review of enabling, motivating and precipitating structures and processes in the work environment. *Human Relations*, 56, 1213-1232.
- Schat, A. C. H., Desmarais, S., & Kelloway, E. K. (2006). Exposure to workplace aggression from multiple sources: Validation of a measure and test of a model. Unpublished manuscript, McMaster University, Hamilton, Canada.
- Segerstrom, S. C., Tsao, J. C. I., Alden, L. E. & Craske, M. G. (2000). Worry and Rumination:

- Repetitive thought as a concomitant and predictor of negative mood. *Cognitive Therapy and Research*, 24, 671-688.
- Shadish, W. (2002). Revisiting field experimentation: field notes for the future. *Psychological Methods*, 7, 3–18.
- Simon, L. S., Hurst, C., Kelley, K., & Judge, T. A. (2015). Understanding cycles of abuse: a multi-motive approach. *Journal of Applied Psychology*, 100, 1798–810.
- Spector, P.E. (1997). *Job Satisfaction: Application, Assessment, Causes, and Consequences*. United Kingdom: Sage Publications Ltd.
- Spector, P. E., & Fox, S. (2005). The stressor–emotion model of counterproductive work behavior. In S. Fox & P. Spector (Eds.), *Counterproductive work behavior: Investigations of actors and targets* (pp. 151–174). Washington, DC: American Psychological Association.
- Spector, P. E., Fox, S., Penney, L. M., Bruursema, K., Goh, A., & Kessler, S. (2006). The dimensionality of counter-productivity: Are all counterproductive behaviors created equal? *Journal of Vocational Behavior*, 68, 446–460.
- Steelman, Z. R., Hammer, B. I., & Limayem, M. (2014). Data collection in the digital age: Innovative alternatives to student samples. *Management Information Systems Quarterly*, 38, 355–378.
- Tamir, M. (2005). “Don't worry, be happy? Neuroticism, trait-consistent affect regulation, and performance”. *Journal of personality and social psychology*, 89, 449.
- Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Management Journal*, 43, 178–190.
- Tepper, B. J. (2007). Abusive supervision in work organizations: Review, synthesis, and research agenda. *Journal of Management*, 33, 261–289.
- Tepper, B. J., Moss, S. E., & Duffy, M. K. (2011). Predictors of abusive supervision: Supervisor perceptions of deep-level dissimilarity, relationship conflict, and subordinate

- performance. *Academy of Management Journal*, 54, 279–294.
- Tepper, B. J., Simon, L. and Park, H. M. (2017). Abusive Supervision. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 123 – 52.
- Vandenberg, S. G., & Kuse, A. R. (1978). Mental rotations, a group test of three-dimensional spatial visualization. *Perceptual and Motor Skills*, 47, 599 – 604.
- Vroom, V. H., & Yetton, P. W. (1973). *Leadership and decision-making*. Pittsburgh: University of Pittsburgh Press.
- Walter, F., Lam, C. K., van der Vegt, G. S., Huang, X., & Miao, Q. (2015). Abusive supervision and subordinate performance: Instrumentality considerations in the emergence and consequences of abusive supervision. *Journal of Applied Psychology*, 100, 1056–1072.
- Wang, L., Restubog, S. L., Shao, B., Lu, V., & Van Kleef, G. (2018). Does anger expression help or harm leader effectiveness? The role of competence-based versus integrity-based violations and abusive supervision. *Academy of Management Journal*, 61, 1050 – 1072.
- Watkins, T., Fehr, R., & He, W. (2018). Whatever it takes: Leaders' perceptions of abusive supervision instrumentality. *The Leadership Quarterly*, 30, 260 – 272.
- Workplace Bullying Institute & Zogby International 2014. *U.S. workplace bullying survey*. Available at: <http://workplacebullying.org/multi/pdf/2014-Survey-Flyer-A.pdf>. Accessed May 30, 2015.
- Wright, T. A., & Sweeney, D. A. (2016). The call for an increased role of replication, extension, and mixed-methods study designs in organizational research. *Journal of Organizational Behavior*, 37, 480–486.
- Yam, K. C., Fehr, R., Keng-Highberger, F. T., Klotz, A. C., & Reynolds, S. J. (2016). Out of control: a self-control perspective on the link between surface acting and abusive supervision. *Journal of Applied Psychology*, 101, 292–30.
- Yang, J., & Diefendorff, J. M. (2009). The relations of daily counterproductive workplace behavior with emotions, situational antecedents, and personality moderators: A diary

study in Hong Kong. *Personnel Psychology*, 62, 259-295.

Yukl, G. (2006). *Leadership in organizations*. Upper Saddle River, NJ: Prentice Hall.

Zellars KL, Tepper BJ, Duffy MK. (2002). Abusive supervision and subordinates' organizational citizenship behavior. *Journal of Applied Psychology*, 87, 1068-76.



## 5.2. Appendix A: Tables

**Table 1.**

*Correlations among Study Variables*

	1	2	3	4	5	6	7	8	Mean (SD)	[Min- Max]	Skewness	Kurtosis
Goal Blockage	1								14.30 (4.90)	[6-26]	.11	-.55
WAL	.504**	1							39.57 (14.38)	[16-77]	.23	-.58
Irritation	.486**	.711**	1						26.28 (12.50)	[8-56]	.27	-.73
Abusive Supervision	.579**	.523**	.484**	1					23.55 (11.96)	[15-75]	2.15	4.42
SPS	-.534**	-.453**	-.452**	-.703**	1				8.67 (13.0)	[-32-35]	-.63	-.33
Competence	-.453**	-.274**	-.303**	-.358**	.404**	1			3.92 (.792)	[1-5]	-.63	1.18
YCT	-.236**	-.243**	-.251**	-.208**	.255**	.115	1		6.05 (4.96)	[0-27]	1.69	2.81
Age	-.254**	-.257**	-.299**	-.302**	.342**	.216**	.431**	1	39.96 (10.04)	[24-69]	.51	-.45

*Notes.*  $N = 217$ ;  $p < .01$ ; Age = Leaders' age; YCT = years of leaders' working with their current team; Competence = Leaders' perception about their subordinates' competence



**Table 2.***Multiple Regression Analyses for Variables Predicting Irritation*

Variable	B	se	<i>t</i>	<i>p</i>	LCL	UCL	<i>F</i>	R <sup>2</sup>
Outcome: Irritation							41.60	.543
Goal Blockage	-.00	.326	-.003	.998	-.505	.727		
WAL	.410	.112	3.67	.000	.191	.611		
Goal Blockage X WAL	.006	.007	1.116	.266	-.006	.020		
Age	-.11	.066	-1.65	.100	-.234	.007		
YCT	-.08	.132	-.599	.550	-2.47	.695		
Competence	-.99	.836	-1.12	.233	-.283	.213		
Outcome: Irritation							20.62	.315
Goal Blockage	.994	.171	5.798	.000	.736	1.38		
Age	-.18	.082	-.144	.030	-.33	-.03		
YCT	-.22	.165	-1.33	.183	-3.10	.828		
Competence	-1.3	1.04	-1.30	.195	-2.07	.765		

*Notes.* *N* = 217; Age = Leaders' age; YCT = years of leaders' working with their current team; Competence = Leaders' perception about their subordinates' competence

**Table 3.**

*Regression Analysis Exploring Mediators and Moderators of Irritation and Abusive Supervision by Using Model 15 in PROCESS Macro*

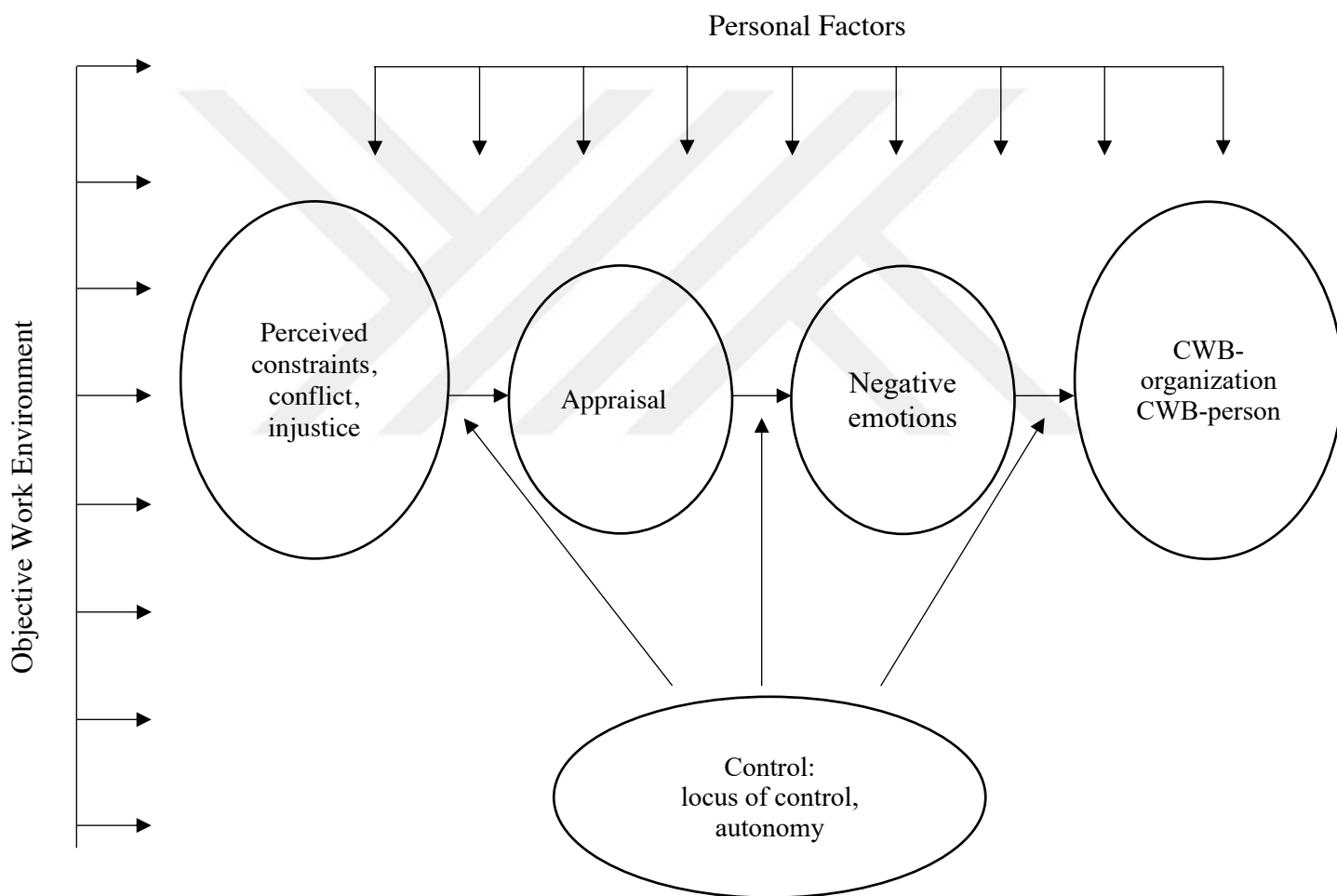
Variable	B	se	t	p	LCL	UCL	df1	df2	F	R <sup>2</sup>
Outcome: Irritation							4.0	212.0	20.63	.2801
Goal Blockage	.994	.171	5.79	.000	.656	1.331				
Age	-.17	.082	-2.1	.030	-.34	-.01				
YCT	-.22	.16	-1.3	.182	-.54	.104				
Competence	-1.3	1.03	-1.3	.195	-3.4	.697				
Outcome: Abusive Supervision							8.0	208.0	77.08	.7478
Goal Blockage	.748	.111	6.69	.000	.527	.968				
Irritation	.143	.040	3.53	.000	.063	.222				
SPS	-.24	.038	-6.4	.000	-.325	-.172				
Goal Blockage X SPS	-.04	.007	-6.9	.000	-.064	-.035				
Irritation X SPS	-.01	.003	-3.5	.000	-.016	-.004				
Age	.008	.048	.175	.860	-.087	.104				
YCT	-.08	.095	-.84	.399	-.268	.107				
Competence	-.38	.610	-.63	.526	-1.59	.816				

*Notes.*  $N = 217$ ; Age = Leaders' age; YCT = years of leaders' working with their current team; Competence = Leaders' perception about their subordinates' competence

## 5.3. Appendix B: Figures

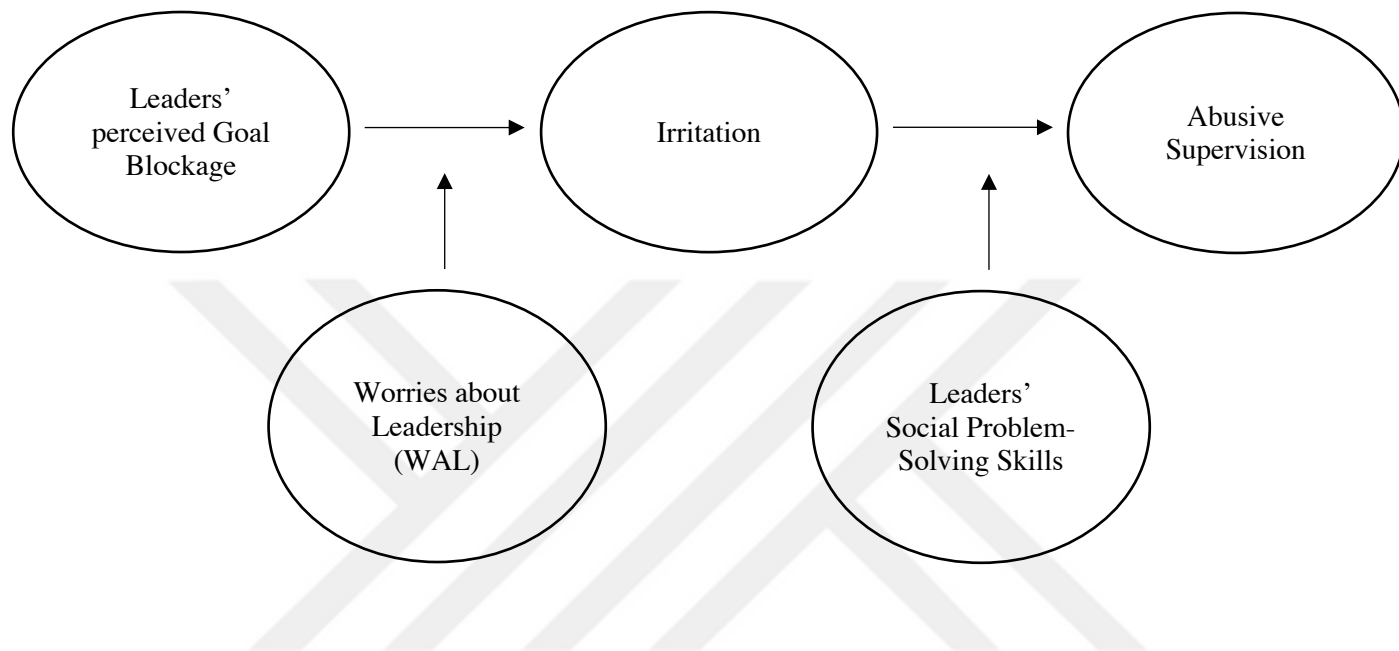
Figure 1.

*Stressor – Emotion Model of CWB (Spector & Fox, 2005, p.185)*



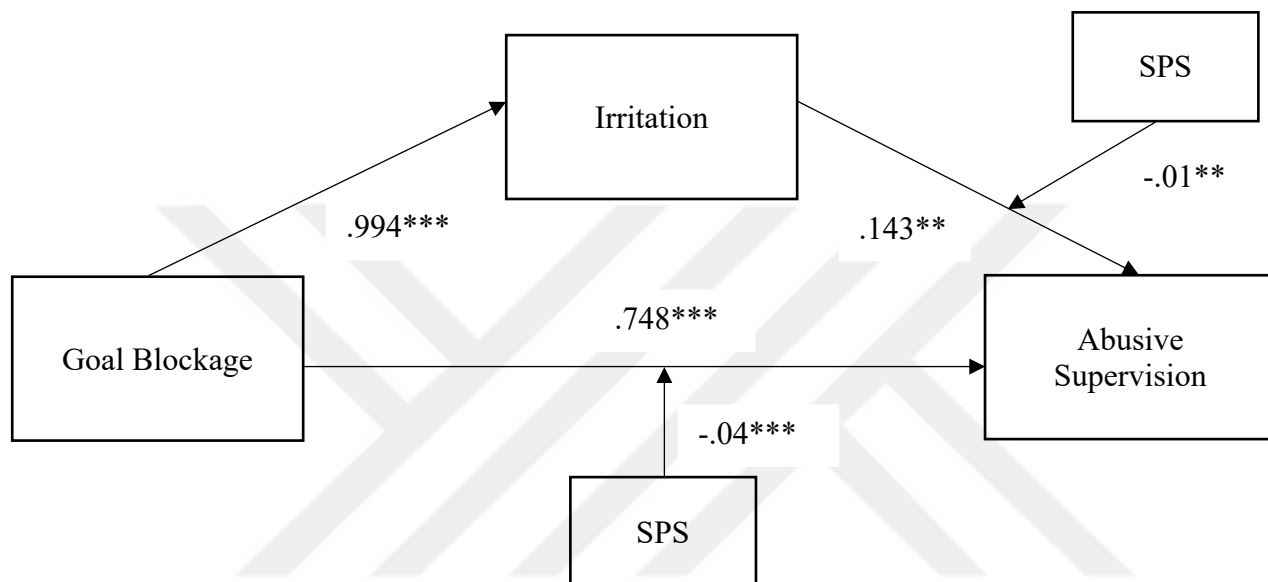
**Figure 2.**

*Hypothesized Model Illustrating Moderated Mediation*



**Figure 3.**

*Moderated Mediation Model: Irritation as Mediator Between Goal Blockage and Abusive Supervision, SPS Moderates this Relationship*



*Note.*  $*p < .05$ ,  $**p < .01$ ,  $***p < .001$

### 5.4. Appendix C: Scales

#### Goal Blockage Scale

Please indicate how often each of the following statements describes how you typically feel, **considering your last six months.**

1 = never

2 = seldom

3 = sometimes

4 = often

5 = always

	1	2	3	4	5
1. I feel like I can achieve most of my goals at work without hindrance.					
2. My subordinates prevent me from achieving my goals at work.					
3. I feel like I am blocked in my attempts to achieve organizational goals.					
4. I feel like we are hindered by our subordinates while trying to achieve our goals as an organization.					
5. I feel like I cannot achieve my goals due to insufficient resources.					
6. I feel like I am hindered to achieve my personal goals at work.					

### Worries about Leadership (WAL) Scale

Considering your current leadership position, to what extent does each of the following worry you?

each of the following would worry me:	to a very little extent	to a little extent	to some extent	to a large extent	to a very large extent
1. Mistakes I make being noticed more than before.					
2. Spending less time with my family.					
3. Treating employees unfairly.					
4. Having less time for myself (e.g., hobbies).					
5. Being exposed to more criticism.					
6. Being unable to balance work and family.					
7. Hurting the feelings of others in the work context by the decisions I make.					
8. Not having enough time for my friends.					
9. Always having to prove myself.					
10. Experiencing problems in my relationship with my spouse/partner.					
11. Becoming a hard-hearted and callous person.					
12. Developing stress-related health problems.					
13. Losing my self-esteem in case of failure.					
14. Being unable to fulfill my responsibilities to my family.					
15. Losing face or feeling embarrassed in case of failure.					
16. Having no private space or personal life.					

## Irritation Scale

Read the following statements carefully and indicate how much you agree/disagree with each statement, **considering your last six months**.

Response Format; 1 = strongly disagree to 7 = strongly agree

	1	2	3	4	5	6	7
1. I have difficulty relaxing after work.							
2. Even at home I often think of my problems at work.							
3. I get grumpy when others approach me.							
4. Even on my vacations I think about my problems at work.							
5. From time to time I feel like a bundle of nerves.							
6. I anger quickly.							
7. I get irritated easily, although I don't want this to happen.							
8. When I come home tired after work, I feel rather irritable.							



**INSTRUCTION:** In this questionnaire, you will read about some thoughts, feelings and behavior styles people may have when they are faced with difficult daily life experiences. The ‘problem’ mentioned in this questionnaire may be related to your managerial position or stressful situations you encountered in your work environment. The problem may be about your subordinates, coworkers, your workplace (e.g., insufficient resources etc.) or yourself. Please read each statement carefully and indicate the extent to which each of the following statements describes you. There is no correct or wrong answer in this questionnaire. As you read each statement, try to imagine yourself in that a problematic situation as vividly as possible, and think about how you would think, feel and behave in that situation.

**Response format: 1 (It does not apply to me at all) – 5 (It completely applies to me)**

	1	2	3	4	5
1. I avoid thinking about problems					
2. I spend more time avoiding solving problems					
3. I put off trying to solve problems as long as possible					
4. I go out of my way to avoid dealing with problems					
5. I put off solving problems until it's too late					
6. I do not take time to evaluate all results carefully					
7. I am frustrated if first attempt to solve problem fails					
8. I am nervous and unsure when making important decisions					
9. A difficult problem makes me upset					
10. I feel afraid when I have a problem to solve					
11. I become depressed and immobilized					
12. I examine mood, see how better it is after change					
13. I keep in mind the goal					

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
14. I weigh and compare the consequences of each option					
15. I use a systematic method for comparing alternatives					
16. I evaluate if the situation has changed for the better					
17. I go with first good idea that comes to mind					
18. I act on the first idea that comes to mind					
19. I do not take time to consider pros and cons of options					
20. I go with my "gut feeling" without thinking about effects					
21. I analyze the situation and identify obstacles					
22. I think of different solutions					
23. I believe a problem can be solved					
24. I deal with problems as soon as possible					
25. I do not give up trying to solve problems when first attempt fails					

### Abusive Supervision Scale (Version 1)

Please respond each of the statement **by considering your thoughts/behaviors over last 6 months**. How often *you behave or intent to behave* as indicated?

1 = never

2 = seldom

3 = occasionally

4 = moderately often

5 = very often

	1	2	3	4	5
1. I ridicule my subordinates.					
2. I tell my subordinates their thoughts or feelings are stupid.					
3. I give my subordinates silent treatment.					
4. I put my subordinates down in front of others.					
5. I go beyond self-interest for the good of staff.					
6. I express confidence on goal achievement.					
7. I invade my subordinates' privacy.					
8. I remind my subordinates of their past mistakes and failures.					
9. I seek deferent perspective in problem solving.					
10. I consider my subordinates as having different needs, abilities and aspiration.					
11. I don't give my subordinates credit for jobs requiring a lot					

of effort.					
12. I blame my subordinates to save my embarrassment.					
13. I break promises I make.					
14. I help my subordinates to develop their strengths.					
15. I express anger at my subordinates when I am mad for another reason.					
16. I display sense of power and confidence in my subordinates.					
17. I make negative comments about my subordinates to others.					
18. I am rude to my subordinates.					
19. I talk optimistically about future to my subordinates.					
20. I suggest new ways to completing my subordinates' work.					
21. I do not allow my subordinates to interact with their coworkers.					
22. I tell my subordinates they are incompetent.					
23. I lie to my subordinates.					
24. I spend time on training and coaching for my subordinates.					
25. I put a specific importance of having a strong sense of purpose.					

## Abusive Supervision Scale (Version 2)

### For the experimental group:

#### Metot 1

- Böyle kolay bir test daha kısa surede bitirilebilirdi.
- Böyle bilindik bir testi yapamamak bizi biraz garip bir duruma düşürdü.
- Ben iyi öğretmiş olmama rağmen deney sonunda para kazanamama ihtimalimiz var.
- Sudoku testini herkes bilir, daha az hatayla bitirebilirdin.
- Bir dahaki sefere biraz dikkat etsen iyi edersin.

#### Metot 2

- Zamanı iyi kullandığını düşünüyor musun?
- Sence neden testte hata yaptın?
- Test performansı doğrultusunda bize para vermemelerini nasıl yorumlarsın?
- Beklenen düzeyde performans sergilediğini düşünüyor musun?
- Bir sonraki testte herhangi bir şeyi farklı yapmalı mısın?

### For the control group:

#### Metot 1

- Böyle kolay bir test sence daha da kısa bir surede bitirilemez miydi?
- Böyle bilindik bir testi yapamamak mümkün olur muydu?
- Ben iyi öğretmemiş olsaydım ikimiz de kredi alamayacaktık değil mi?
- Acaba böyle bilindik bir testi daha az hatayla bitirebilir miydin?
- Bir sonraki testi birincisinden daha az düzeltme yaparak tamamlayabilir misin?

#### Metot 2

- Testi zamanında bitirdin.
- Bu düzeydeki bir sudoku için beklenen seviyede düzeltme yaptın.
- Başarılı olduğun için para alma şansımız oldu.
- Test basit de olsa heyecanına yenilmeyerek başarıyla tamamladın.
- Bir sonraki testi de başarıyla tamamlayabileceğini düşünüyorum.

Confederate bu sorulara nasıl cevaplar verecek;

- Bilemiyorum
- Daha önce böyle bir deneyimim olmadı
- Kestiremiyorum
- Pek bir fikrim yok
- Daha önce sudoku yapmadım, kestiremiyorum.

*(Confederate biraz sessiz kalıp biraz yukarıdaki cevapları verecek)*



## Demographic Forms

### Study 1 (Supervisors)

#### *Screening questions;*

1. *full time vs part time* job
2. How long have you been holding your current managerial position? (*at least 6 months*)

1. Age:
2. Gender:
3. The highest level of education you completed:
4. The industry you work in:
5. How many years of work experience do you have?
6. How long have you been working in your current organization? (please indicate as year/months):
7. How long have you been holding your current managerial position?
8. How long have you been working with your current team? (please indicate as year/months):
9. How many subordinates do you have?
10. How do you evaluate the level of competence of your subordinates?
11. In your organization:
  - a. Does an effective grievance mechanism exist to protect employees from mistreatment?
  - b. Does an effective mechanism exist for outstanding performers?

Deney günü için katılımcılar kura yöntemi ile iki farklı role atanacaklardır. Biri öğretmen diğeri ise öğrenci rolüdür. Eğer kurada size 'öğretmen' rolü çıkarsa öğrenci rolündeki katılımcıya aşağıda verilen envanteri kullanarak sudoku testini öğretmeniz beklenmektedir. Eğer kura sonucunda 'öğrenci' rolüne atanırsanız; öğretmen rolündeki katılımcı size bu testi öğretecektir.

### Sudoku Öğretme Envanteri

1	5	3	6	9				
	7		8	3				
8		4		2	1	9		
6				8		1	9	2
5		8	2		6	7		4
3	1	2		4				6
		6	9	7		5		1
				6	8		4	
				5	3	2	6	7

**Bu eğitimde amaç sudoku testi çözmeyi bilmeyen öğrencinize sudoku testinin nasıl çözüleceğini öğretmektir.**

Sudoku testinin amacı boşlukları doğru rakamlarla doldurmaktır. Bunu yaparken aklınızda bulundurmanız gerekenler;

- 1.) Sudoku bulmacasında amaç 1'den 9'a kadar olan rakamları her bir satır ve sütuna sadece birer kere gelecek şekilde yerleştirmektir.
- 2.) Sekil üzerinde çevresi koyu çerçeve ile çevrelenmiş her bir 3x3 karenin içerisinde 1'den 9'a kadar olan rakamlar birer kez bulunmalıdır.
- 3.) Sudoku çözenin en başarılı stratejilerinden biri öncelikle satır ya da sütunlardan başlamak ve her bir satır/sütunu tamamen tamamlayıp ilerlemektir.
- 4.) Hali hazırda en çok rakam bulduran satır/sütundan başlamak isinizi kolaylaştıracaktır.
- 5.) Testi çözerken, her bir kutucuk içerisine gelebilecek olası rakamları kutucuk içine not alıp satır/sütunda ilerledikçe yanlış opsiyonları eleyerek ilerleyebilirsiniz.



### Script for confederates

1. Deney günü katılımcı gibi lab'a gelir.
2. Informed consent'i doldurup experimenter'a verir. 'Öğrenci' rolünde olduğunu öğrenir.
3. Katılımcı gibi kendine açılan video 1'i izler.
4. Deney odasına girince;

### Experimental Group: İlk 5 dk. içerisinde öğrenci (confederate);

- Sık sık (4 kere) cep telefonunu kontrol eden
- Oturduğu yerde sürekli hareket edip pozisyon değiştiren
- Kalem ile oynayan
- Öğretmenin direktiflerine ilgisizce cevap veren
- Aralarda (3 kere) oflayıp puflayan
- Öğretmenin direktiflerini ciddiye almayan
- Son 2 dakikada bacak sallayan

İlgisiz isteksiz bir tavır sergileyecek.

### Control Group: İlk 5 dk. içerisinde öğrenci (confederate);

- Öğrenci öğretmenin direktiflerini ilgili bir şekilde dinleyip testi öğrenmeye çalışacak.
- 'Attentive listening' sergileyecek.

5. **Experimental Group:** 2. Ve 4. dk'larda diğer odadan 10'ar saniyelik rahatsız edici ses gelecek. Experimenter 1.sinde 'pardon' diye bağırarak. 2.sinde 'ay yine mi' diyecek.

6. **Experimental Group:** 5 dk'lık test süresince öğrenci (confederate);

- İlk 2 dakika hiç bir şey yazmadan sadece teste bakacak ve nereden başlasam bilemedim diyecek (hafif gülerek ve alçak bir ses ile)
- Telefonun saatine bakacak
- 3. Dakikada önce ilk kareden sonra 5. Kareden sonra da 2. Kareden birer boşluk dolduracak.
- Oflayacak
- Kalem ile oynayıp bacak sallayacak
- 5 dk dolduğunda karelerden sadece 3 tanesi dolmuş olacak.

**Control Group:** Öğrenci testi eksiksiz ve doğru bir şekilde tamamlar.

7. **Experimental Group:** Experimenter içeri girdiğinde;

- Experimenter geri gelir (elinde kontrol asetat kâğıdı; teste bakar) ve öğretmene dönerek “verdiğiniz eğitim pek iyi geçmiş gözüküyor, öğrenci Sudoku testini de tamamlayamamış, üzgünüm siz ikinizi başarısız olarak değerlendirmek zorundayım.”

**Control Group:** Experimenter içeri girdiğinde;

- Experimenter geri gelir (elinde kontrol asetat kâğıdı; teste bakar) ve öğretmene dönerek “verdiğiniz eğitim iyi geçmiş gözüküyor, öğrenci Sudoku testini başarıyla tamamlamış, siz ikinizi başarılı olarak değerlendirebiliriz.”

8. **Experimenter:** “Simdi sizi 3 dk’lik bir ara için bekleme salonuna alalım. 3 dk’lik aradan sonra çalışmamızın ikinci kısmı başlayacaktır”.

**Öğrenci:** “Benim çok acil (tualete gitmem gerekiyor), çıkabilir miyim?”

**Experimenter:** “(Öğretmene dönerek) Sizin yapmanız gereken bir şey var ama siz (öğrenciye dönerek) çıkabilirsiniz”.

9. Katılımcıya (öğretmene) ‘Irritation testi’ verilir.

10. **Experimental group:** Öğrenci geç kalacak (3 değil 5 dk. sonra gelecek), sallana sallana gelecek.

**Experimenter** onu beklerken “Nerede kaldı acaba, çalışmayı tamamlayabilmeniz için şimdi ikinci çalışmaya başlıyor olmanız gerekiyordu” diyecek.

**Control group:** Öğrenci vaktinde lab’a geri gelecek.

11. **Experimenter:** Simdi çalışmaya devam etmeden önce size çalışmanın ikinci kısmını anlatan bir video izletmek istiyoruz.

12. Experimenter katılımcıya geri bildirim formunu verecek (DV measurement).

Confederate ise yolcu edilecek, isi bitmiş oluyor. Experimenter confederate’a; sizi tekrar ikinci testi yapmak üzere çağıracağız diyecek (Test 2).

## Script for Experimenter

### EXPERIMENTER'IN GOREVLERI

1. Lab'a katılımcı geldiğinde öncelikle hem gerçek katılımcıya hem de confederate'a **informed consent**'i vermek.
2. Katılımcının önünde kura çizelgesinden kimin öğretmen kimin öğrenci rolüne atandığını kontrol edip katılımcının öğretmen rolüne atanmış olduğunu söylemek. (confederate'a katılımcı gibi siz de öğrenci rolündesiniz demek).
3. Simdi çalışmaya başlamadan önce, size deney ile ilgili detayları anlatan videomuzu izletmek istiyorum. Lütfen rolüne uygun olan klasördeki video 1'i izleyiniz. (Bu işlemi experimenter yapacak → **video 1 açılacak**). (Hem katılımcı hem de confederate izleyecek ayrı ayrı bilgisayarlarda video'yu → öğrenci videosunda da aynı video açılacak → iki kişi de kulaklık ile izleyecek → kulaklığa ihtiyacımız var.)
4. Daha sonra experimenter iki kişiyi deney odasına alacak. PVC kaplı yönergeleri gösterecek. "Burada yapmanız gerekenler yazılı, video'da anlatılanların maddeler halinde yönergeleştirilmiş seklidir." Lütfen bakınız ve bir sorunuz varsa bana sorabilirsiniz diyecek.
5. Experimenter saat alarmını 5 ve 10 dk'ya kuracak ve "Alarmın çalması eğitim surenizin bittiği anlamına gelir lütfen alarmı kapatın ve eğitimi sonlandırın. Bundan sonra öğrencinin Test 1'i tek başına çözmesi gerekecektir. Bunun için siz öğrencinin 5 dk'si olacak." diyecek. "10. Dk'da alarm ikinci defa çaldığında bu öğrencinin test 1'i tek başına tamamlaması için olan vaktin de sona erdiği anlamına gelecektir".
6. 'Sudoku Ogretme Envanter' ve Test 1'i katılımcılara verip dışarı çıkacak.
7. **Eğer grup experimental grup ise;** 2. Ve 4. Dakikalarda aşağıda linki verilen müziği açacak. İlkinde (2. Dk'da açıldığında 'pardon' diye bağırarak, ikincisinde 'ay yine mi' diye bağırarak).

<https://www.youtube.com/watch?v=2gGaa9gGnB8&index=3&t=0s&list=PLmKvfXUzCDh8paKKIUOcPu0ME3e2oD41z>

**Eğer grup control grup ise;** böyle bir uygulama yapılmayacak.

8. Experimenter 10. Dk'da saat alarmını duyduktan sonra içeri girecek;

**Experimental Group ise:** Experimenter içeri girdiğinde;

- Experimenter geri gelir (elinde kontrol asetat kâğıdı; teste bakar) ve öğretmene dönerek "verdiğiniz eğitim pek iyi geçmiş gözüküyor, öğrenci Sudoku testini de tamamlayamamış, üzgünüm siz ikinizi başarısız olarak değerlendirmek zorundayım."

**Control Group ise:** Experimenter içeri girdiğinde;

- Experimenter geri gelir (elinde kontrol asetat kâğıdı; teste bakar) ve öğretmene dönerek “verdiğiniz eğitim iyi geçmiş gözüküyor, öğrenci Sudoku testini başarıyla tamamlamış, siz ikinizi başarılı olarak değerlendirebiliriz.”

9. **Experimenter:** “Simdi sizi 3 dk’lik bir ara için bekleme salonuna alalım. 3 dk’lik aradan sonra çalışmamızın ikinci kısmı başlayacaktır”.

**Öğrenci:** “Benim çok acil (tualete gitmem gerekiyor), çıkabilir miyim?”

**Experimenter:** “(Öğretmene dönerek) Sizin yapmanız gereken bir şey var ama siz (öğrenciye dönerek) çıkabilirsiniz”.

10. Katılımcıya (öğretmene) ‘Irritation testi’ verilir.

11. **Experimental group:** Öğrenci geç kalacak (3 değil 5 dk. sonra gelecek), sallana sallana gelecek.

**Experimenter** onu beklerken “Nerede kaldı acaba, çalışmayı tamamlayabilmeniz için şimdi ikinci çalışmaya başlıyor olmanız gerekiyordu” diyecek.

**Control group:** Öğrenci vaktinde lab’a geri gelecek.

12. **Experimenter:** Simdi çalışmaya devam etmeden önce size çalışmanın ikinci kısmını anlatan bir video izletmek istiyoruz. Experimenter Video 2’yi hem öğrenciye hem de öğretmene acar (video 1 gibi).

13. Experimenter öğrenciyi deney odasına alır ve öğretmene ‘geri bildirim metotlari’ kâğıdını verir. Bunun için 5 dk.’lari olduğunu söyler.

14. 5 dk. Sonra experimenter içeri girer ve; çok teşekkür ederiz, simdi (öğretmene) sizi dışarı alabiliriz der. Öğrenciye (confederate) Test 2’yi verir. “Bu sizin geri bildirim sonrası tamamlamanızı istediğimiz test, 5 dk’niz var” der.

15. Öğretmen dışarı alınır;

‘Manipulation check’ kâğıdı verilir.

### Irritation Scale used in Study 2

Lütfen **şu anki durumunuzu göz önünde bulundurarak**, sizi en iyi yansıttığını düşündüğünüz cevabı işaretleyiniz. Lütfen anketi tam olarak doldurunuz, hiçbir soruyu atlamayınız.

1 = Kesinlikle katılmıyorum

2 = Katılmıyorum

3 = Biraz katılmıyorum

4 = Kararsızım

5 = Biraz katılıyorum

6 = Katılıyorum

7 = Kesinlikle katılıyorum

	1	2	3	4	5	6	7
Su anda kendimi normale göre daha rahat hissediyorum.	.	..	.	.		..	
Her gün böyle bir eğitim ortamı olsa akşamları eve/yurda döndüğümde kendimi daha gergin hissederdim.							
Su anda bir şeye normalde olduğumdan daha çabuk sinirlenebilirim.							
Su anda kendimi enerjik hissediyorum.	.	..	.	.		..	
Su anda istemememe rağmen çok kolay asabileşebilirim.							
Su anda kendimi huzurlu hissediyorum.	.						

### Abusive Supervision Scale for the Experimental Group

Bu deneyin amacını hatırlatmak gerekirse; öğrencilere eğitim ve test sonrası öğretmen tarafından verilen geri bildirim metodunun öğrencinin bir sonraki performansı üzerindeki etkisini görmektir.

**Öğrenciniz eğitimden sonra sizin yanınızda tek başına yaptığı ilk sudoku testinde başarısız oldu ve, siz ikincisi başarısız sayıldınız. Maalesef hediye çeki için kuraya girme hakkınızı ikincisi de kaybettiniz.**

Az önce sudoku eğitimi verdiğiniz öğrenciye belirteceğiniz öneriler doğrultusunda bir geri bildirim verilecektir. Lütfen öğrenciye vereceğiniz geri bildirimde aşağıdaki her bir önerinin bulunmasını ne ölçüde istediğinizi belirtiniz.

Geri bildirimler:	Hiç istemem	İstemem	Emin değilim	İsterim	Kesinlikle isterim
1. Sudoku testi üzerinde biraz daha çalışabilirsin.					
2. Böyle kolay bir test daha kısa surede bitirebilirdin!					
3. Böyle bilindik bir testi yapamamak bizi biraz garip bir duruma düşürdü.					
4. Test için verilen zamanı verimli kullanmalısın.					
5. Ben vaktimi harcamış olmama rağmen deney sonunda para kazanamadık.					
6. Sudoku testini genç-yaşlı herkes bilir, daha az hatayla bitirebilirdin.					
7. Sudoku stratejileri üzerine çalışmak test performansını arttırabilir.					
8. Dikkatsizliğinin bedelini ağır ödedik.					
9. Testi çözerken öğretmiş olduğum stratejileri akıllıca kullanamadın.					
10. Bir sonraki testte neyi farklı yapman gerektiğini düşünmelisin.					
11. Ben öğretmen olarak elimden geleni yaptığım için para ödülünü bana verebilirlerdi.					
12. Sen testi çözemediğin için ben öğretememiş durumuna düştüm.					
13. Pratik yaparsan performansın artacaktır.					

### Abusive Supervision Scale for the Control Group

Bu deneyin amacini hatırlatmak gerekirse; öğrencilere eğitim ve test sonrası öğretmen tarafından verilen geri bildirim metodunun öğrencinin bir sonraki performansı üzerindeki etkisini görmektir.

**İlk testte başarılı oldunuz ve deney sonunda verilecek 100 TL’lik D&R hediye çeki için kuraya girmeye hak kazandınız.**

Az önce sudoku eğitimi verdiğiniz öğrenciye belirteceğiniz öneriler doğrultusunda bir geri bildirim verilecektir. Lütfen öğrenciye vereceğiniz geri bildirimde aşağıdaki her bir önerinin bulunmasını ne ölçüde istediğinizi belirtiniz.

<b>Geri bildirimler:</b>	<b>Hiç istemem</b>	<b>İstemem</b>	<b>Emin değilim</b>	<b>İsterim</b>	<b>Kesinlikle isterim</b>
1. Test basit de olsa heyecanına yenilmeyerek başarıyla tamamladın.					
2. Böyle kolay bir test aslında daha da kısa bir surede bitirilebilirdi.					
3. Bu düzeydeki bir sudoku için beklenen seviyede düzeltme yaptın.					
4. Böyle bilindik bir testi yapamamak biraz garip olurdu.					
5. Ben iyi öğretmemiş olsaydım testi bu kadar iyi tamamlayamayabilirdin.					
6. Başarılı olduğun için para alma şansımız oldu.					
7. Testi daha az düzeltme yaparak tamamlaman gerekirdi.					
8. Testi zamanında bitirdin.					
9. Bir sonraki testi de başarıyla tamamlayabileceğini düşünüyorum.					
10. Testi çözerken öğretmiş olduğum stratejileri daha akıllıca kullanabilirdin.					
11. Sen testi çözemeseydin ben de öğretememiş konumuna düşecektim.					
12. Sudoku konusunda yetenekli olduğunu düşünüyorum.					
13. Sen testi çözemeseydin ben de boşu boşuna para ödülünü alamayacaktım.					

### Manipulation Check

1. Öğrenci rolündeki katılımcı bu dönem ders almadığı için kendisine ders kredisi veremiyoruz. Bu sebeple ona kredi yerine para ödülü vereceğiz katılımı için. Sizce öğrenci katılımı için ne kadar ödül almalı?

0 TL	1 TL	2 TL	3 TL	4 TL	5 TL	6 TL	7 TL	8 TL	9 TL	10 TL

2. Önceden aynı çalışmaya katılmış olan arkadaşlarınızdan çalışmaya dair bir şey duyduunuz mu?

Evet	Hayır

3. Cevabınız evet ise, lütfen ne duyduğunuzu açıklayınız:

4. Bu deneyden kredi/para almak bu deneye gelme motivasyonunuz açısından ne kadar önemliydi?

(1) Hiç önemli değildi	(2) Önemli değildi	(3) Orta derecede önemliydi	(4) Önemliydi	(5) Çok önemliydi

5. Deneyin herhangi bir aşamasında bu amaca ulaşma yolunda engellenmiş hissettiniz mi?

Evet	Hayır