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Abusive supervision and moral disengagement: The role of ethical climate and team size

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Dissertation submitted as partial requirement for the conferral of *Master in Social and Organizational Psychology* 

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Acknowledgments

To my mother and my grandmother, the two most important people in the world for me.

Without your support, patience and love this would not be possible. Both of you have seen my

light and darkness like no one else and I cannot remember a day without you. You are both

examples of what it means to be a woman and I hope I can make you proud. I would also like

to thank my grandfather, that, despite the physical distance, is always in my heart.

To Maria Ana and Sara for all the teamwork and friendship. To meet both of you was one

of the best moments of this academic experience. I am grateful for sharing moments of great

happiness, some frustration and the common love for Harry Potter with you. Your support made

everything easier. I will never forget you.

To Paula, Ana Rita and Marta from Academia FNAC, thank you for six amazing months

and for understanding me. We'll always have Paris.

To Afonso and Santiago for the teamwork during the last year. Thank you for all the help.

To Teresa Almeida, thank you for all your help and support. Your daily commitment,

effort and professionalism were essential to me. I wish you good luck to finish your PhD.

To professor Nelson Ramalho, thank you for all the support and learning through the last

year. Thank you for being my supervisor, it was a privilege. Your high standards for

performance and quality helped bring out the best of me and I feel lucky to say I am proud of

this work. I hope you know you are an inspiration to all your students, and that the impact you

have will prevail far beyond a class or dissertation.

I dedicate this work to all of you.

"Only a life lived for others is a life worthwhile."

Albert Einstein

ii

### Resumo

A desvinculação moral é um processo cognitivo associado à ética e que permite que os indivíduos tenham comportamentos imorais, sem a respetiva auto-sanção. Este processo e, em particular, o mecanismo de deslocamento da responsabilidade, tem sido associado à liderança, uma vez que o/a líder age como um modelo e influencia o comportamento do/a subordinado/a. Assim, a presente dissertação foca-se na influência que um tipo específico de liderança, a supervisão abusiva, tem na desvinculação moral dos subordinados, com a mediação do clima ético instrumental. Adicionalmente, a dimensão da equipa foi utilizada como uma variável moderadora devido à influência das dinâmicas de grupo em contextos organizacionais. Com uma amostra de 226 trabalhadores, os resultados mostram que o clima ético instrumental medeia totalmente a relação positiva entre a supervisão abusiva e a desvinculação moral. Além disso, os resultados refletem ainda um efeito direto condicional, sendo esta relação positiva em equipas até sete membros, mas negativa quando a dimensão da equipa é superior ou igual a 29 membros. Os resultados são discutidos tendo em conta as suas implicações para as organizações.

Palavras-chave: Desvinculação moral, supervisão abusiva, clima ético, dimensão da equipa

### **Abstract**

Moral disengagement is a cognitive process related to ethics that allows individuals to perform unethical behaviors without a moral burden. This process and, in particular, the mechanism of displacement of responsibility, has been linked to leadership since the leader acts as a role model, influencing followers' behavior. Therefore, this study focuses on the influence of a specific type of leadership, abusive supervision, on followers' moral disengagement, with the mediation of instrumental ethical climate. Additionally, team size was introduced as a moderator due to the influence of group dynamics in organizational contexts. With a sample of 226 employees, results show that instrumental ethical climate fully mediates the positive relationship between abusive supervision and moral disengagement. Findings also highlight a conditional direct effect, being the relationship positive for teams sized up to seven members but negative when the team size is larger than 29 members. The results are discussed in terms of their implications for organizations.

Keywords: Moral disengagement, abusive supervision, ethical climate, team size

## **Table of Contents**

Introduction	1
Chapter I - Literature Review	3
1.1. Moral Disengagement	3
1.2. Abusive Supervision	5
1.3. Ethical Climate	8
1.4. Team Size	10
Chapter II – Method	
2.1. Sample	15
2.2. Procedure	
2.3. Data Analysis Strategy	
2.4. Measures	16
2.4.1. Abusive Supervision	16
2.4.2. Ethical Climate	17
2.4.3. Moral Disengagement	17
2.4.4. Control Variables	17
2.5. Measurement model	17
Chapter III – Results	19
3.1. Descriptive and Bivariate Analysis	19
3.2. Hypotheses Testing	21
Chapter IV – Discussion	25
Conclusion	29
References	31
Appendix A	39
Appendix B	43

## **List of Tables**

Table 2.1. Results of model comparison (CFA)	18
Table 3.1. Descriptive and bivariate statistics	20
Table 3.2. Coefficients for the moderated mediation model	22
<b>Table 3.3.</b> Conditional effects of Abusive Supervision at values of the moderator	23
Table 3.4. Results of Johnson-Neyman analysis	23

# **List of Figures**

Figure 1.1. Research model	13
Figure 3.1. PROCESS Model 59	21
Figure 3.2. Interaction effects of Abusive Supervision at levels of Team Size	24

### **List of Abbreviations**

**AMOS** Analysis of Moment Structures

**AS** Abusive Supervision

**AVE** Average Variance Extracted

**CFA** Confirmatory Factor Analysis

**CFI** Comparative Fit Index

**CI** Confidence Interval

**CR** Composite Reliability

**DF** Degree of Freedom

**EC** Ethical Climate

**LLCI** Lower Limit of the Confidence Interval

M Mean

MD Moral Disengagement

**RMSEA** Root Mean Square Error of Approximation

**SD** Standard Deviation

**SE** Standard Error

**SRMR** Standardized Root Mean Square Residual

**TLI** Tucker-Lewis Index

**TS** Team Size

**ULCI** Upper Limit of the Confidence Interval

### Introduction

In the same manner organizational success mostly relies on human resources, so does the organization become permeable to hazardous individual decisions such as those pertaining to the boundaries of ethics. As an arbitrary value-based decision, ethics are a critical dimension of decision-making, which organizations and society aim to regulate through ethical norms. However, individual free-will creates margin for divergent ethics and decisions, and even when facing axiological dissonance, due to ethical dilemmas, individuals are known to activate self-protecting mechanisms by detaching from moral standards in what has become known as moral disengagement (Bandura, 1990). Both from a philosophical, ethical and practical point of view, it is not possible to reduce free-will to prevent ethical risk at the individual level. Thus, this phenomenon may translate into unethical behaviors (Detert et al., 2008), which may cause harm to others and ultimately to the whole organization.

Moral disengagement allows individuals to avoid distress when performing behaviors that violate their moral standards (Georgiou et al., 2020). A source of ethical pressure within organizations stems from those in power, namely, from direct leaders (Brown et al., 2005). Moral disengagement includes eight mechanisms, but displacement of responsibility is the one that most relates to leadership, since individuals act unethically because they displace their own responsibility for the consequences of their behavior to a leader based on occupying a legitimate authority position (Bandura 1990). In this sense, the follower feels no accountability (Bandura, 1999).

Due to the link between the mechanism of displacement of responsibility and authority, it is relevant to understand the role a leader may have in followers' ethics since leaders act as role models to their followers. One specific type of leadership, abusive supervision, may be closely related to moral disengagement. A supervisor may be defined as abusive due to subordinates' perceptions of hostile verbal and nonverbal behaviors, but a follower will not retaliate due to power differences (Tepper, 2000; Tepper et al., 2001). In this sense, the followers may use moral disengagement as a protection against cognitive dissonance by denigrating the target or denying the action (Aquino & Becker, 2005; Bonner et al., 2016; Festinger, 1957).

Concomitantly, leaders may have an impact at another ethics-concerned level: ethical climate. The ethical climate is a shared perception about what is the acceptable behavior and how ethical situations should be dealt with (Victor & Cullen, 1987). According to social learning theory, the climate will promote socialization because acceptable behaviors will be

reinforced, and the others discouraged, which in turn will influence individuals' attitudes and behaviors (Birtch & Chiang, 2014). The organizations' leaders help define the values and appropriate behaviors, which means they can promote the emergence of a determined type of ethical climate (Dickson et al., 2001; Schminke et al., 2005). In this sense, leaders with low moral development seem to be associated with instrumental ethical climates, a specific type of climate that is also linked to higher levels of moral disengagement (Schminke et al., 2005; Pagliaro et al., 2018).

Research has not sufficiently explored this indirect effect of the leaders' ethics on followers' moral disengagement (namely, displacement of responsibility) via the ethical climate, especially instrumental ethical climate. This is a substantial research gap because the direct effect is theoretically void in the sense that it does not account for the psychosocial nature of organizational behavior. Likewise, group phenomena tend to polarize individual behavior (Sunstein, 2002) in such a way that the most extreme individual decisions arise without much individual room for divergence, which may lead to riskier decisions (Cheng & Chiou, 2008). This is especially important where the group is sufficiently large to activate such psychosocial processes (Fraser, 1971; Qi, 2019). Group size is often used as a control variable in organizational studies, but extant research showing differences depending on team size makes it more adequately as a moderator variable rather than merely a control variable (Hausknecht et al., 2009).

Thus, this study is set to explore this research gap by testing the indirect effect that abusive supervision has upon displacement of responsibility via psychological instrumental ethical climate while incorporating, as a moderator, the team size.

This dissertation comprehends four chapters. Chapter I refers to the literature review, including the definition of the constructs and the relationships between them and examples of relevant empirical studies. Chapter II regards the method and includes the sample, procedure, and measures used to empirically test the conceptual model. Chapter III refers to the study results, and Chapter IV concerns the discussion of the results in light of social cognitive and social learning theories while acknowledging limitations and offering future research suggestions. The dissertation ends with a brief conclusion.

## **Chapter I - Literature Review**

The literature review focused on the mains constructs, their conceptual definition, and theoretical relationships guided by the research problem that matches the conceptual model. Thus, the literature review will cover firstly moral disengagement, to move on to abusive supervision, and its relationship with ethical climate to link these into a nexus. The literature review moves on to explore effects from team size as a boundary condition for such nexus. It ends by integrating all hypotheses into a coherent conceptual model.

## 1.1. Moral Disengagement

Moral disengagement has a long history of research (Newman et al., 2019) and has been first introduced by Albert Bandura's Social Cognitive Theory. According to this theory, while the moral self is developing, individuals adopt behavioral standards about what is right and what is wrong, analyzing their conduct and situational cues in which it occurs and comparing them to their moral standards, through a self-regulatory process (Bandura, 2002). Thus, people do things that satisfy them and avoid behaving against their moral standards by anticipating the consequences they would apply themselves. However, this is neither a fixed nor an autonomous process, since people are always immersed in social roles, and self-sanctions may be disengaged (Bandura, 2002; Osofsky et al., 2005). A behavior will be in line with moral standards if the self-sanctions are stronger than the external forces; otherwise, the conflict will cause a selective disengagement of sanctions (Bandura, 1990). By this means, moral disengagement prevents the activation of self-sanction processes (Beu & Buckley, 2004). Being progressive, after repeating small immoral acts, individuals' self-sanction process is diminished to a point where they can perform any immoral behavior with little or no self-reproof (Bandura, 2002).

Many cognitive mechanisms can be activated to re-signify unethical behavior. Bandura (1986) proposed a set of cognitive mechanisms that underly processes by which moral disengagement occurs. These mechanisms have distinct locus of disengagement (Bandura, 2002), concerning a behavioral locus (moral justification, euphemistic labeling, and advantageous comparison), the victim locus (dehumanization and attribution of blame), outcomes (disregarding or distorting the consequences) and agency locus (displacement of responsibility, and diffusion of responsibility).

The first group of cognitive mechanisms, defined as Reconstruing Detrimental Conduct, includes moral justification, euphemistic labeling, and advantageous comparison, and is used to reconstrue the conduct, making an immoral behavior be viewed as moral. Together, these

mechanisms are the strongest way to disengage moral control, since they not only eliminate self-censure but, simultaneously, promote self-approval (Bandura, 1990).

Another group of cognitive mechanisms includes dehumanization and attribution of blame and is defined as Blaming and Dehumanizing Victims. These mechanisms target recipients of harmful behavior in order to judge them not as victims of others but rather victims of themselves (Bandura, 1999).

A third group pertains to a single mechanism, defined as disregard or distortion of harmful consequences. According to this mechanism, people avoid seeing the harm they have caused to others or attempt to minimize it in order to avoid the activation of self-censure (Bandura, 1999).

Lastly, a group of cognitive mechanisms is referred to as Obscuring Personal Agency. It consists of distorting personal responsibility for the consequences of one's actions and includes two mechanisms: diffusion and displacement of responsibility (Bandura, 1990). These are of special interest when it comes to leadership and team relationships.

Diffusion of responsibility allows personal agency to be diffused among others, or in Bandura's words, "where everyone is responsible, no one is really responsible" (Bandura, 1990, p. 37). This may happen due to a division of labor since each person only performs a fraction of the task. Decision making in groups and collective action may also allow for diffusion of responsibility because, when in groups, people behave more cruelly (Bandura, 1999).

Displacement of responsibility is another important cognitive mechanism. An individual may have immoral behaviors when an authority accepts the responsibility for the consequences. In this case, the individual feels no responsibility because they are following orders (Bandura, 1990). Obedience to perform harmful actions may be obtained by explicit orders, or by subtle requests, being that the latter allows for the supervisor to protect themselves (Bandura, 1999). Legitimacy and proximity to the authority also enhance the level of obedience due to respect and coercive power (Bandura, 1990). Thus, the activation of this cognitive mechanism relies on leadership. For this reason, and since the research problem of this study lies in understanding how a leader may trigger followers' moral disengagement, displacement of responsibility is the key mechanism that most likely relates to abusive supervision.

There has been a long debate on whether moral disengagement is a process, in which case should be studied as a mediator, or if it is a trait, being studied as a moderator (see Moore, 2015 for a review). There is evidence that moral disengagement can play both roles (Wang et al., 2017), but the scale usually deployed originated from Bandura's work, who conceptualized it as a process (Bandura et al., 1996). Therefore, as there is evidence of many predictors (Newman

et al., 2019) including leadership (e.g., Valle et al., 2019) and group-level variables (e.g., ethical climate; Pagliaro et al., 2018), we opted to treat it as an outcome of a process.

The relevance of moral disengagement, both for individuals, groups, and organizations, led to a series of research studies. It is at the individual moral disengagement level that consequences are better identified and cover a wide range from issues such as low organizational citizenship behaviors, unethical decisions, workplace harassment, or accident underreporting (Newman et al., 2019). Moral disengagement has also been related to employee silence behaviors (i.e., intentional concealing of relevant information; He et al., 2019), and unethical pro-organizational behavior (i.e., unethical behaviors that protect the organization; Lee et al., 2019).

Compliance with external orders, such as hierarchical requests, is not an exercise of mere understanding and execution. It is rather subjected to a judgment about its legitimacy evaluated on feasibility grounds as well as on ethical grounds, as some requests can have ethical implications (Mesdaghinia et al., 2019). Therefore, leadership is a potential cause of moral disengagement (Newman et al., 2019).

## 1.2. Abusive Supervision

The definition of leadership has evolved in the past 100 years, and some scholars focused on different approaches. Therefore, leadership has been conceptualized as the focus of group processes, a set of personality traits, or as a behavior (Northouse, 2016). According to Yukl (2010, p. 29), leadership can be defined as "the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives". This is one example of a leadership definition, however, discussion amongst researchers will continue since leadership can be differently interpreted by each individual. Yet, some characteristics regarding this concept are commonly accepted: leadership is a process that involves the influence on a group in order to attain common goals (Northouse, 2016).

In exerting their functions of leadership, supervisors can resource to several tactics such as perceived authority, power and comparative status to make others obey, be manipulative and provide incomplete or misleading information, and they can also use moral disengagement mechanisms, in particular the mechanisms of displacement and diffusion of responsibility, in order to make an event seem ethical (Beu & Buckley, 2004; Moutousi & May, 2018).

Independently of the motives that underly a supervisor's decision to act unethically or encourage unethical actions, leaders' behavior can be *per se* a source of ethical pressure upon

subordinates. Followers react to their supervisors' demands by either conforming and performing the request or resisting. However, due to power differences, it is unlikely that a follower retaliates against the leader (Tepper et al., 2001). Yet, followers will react in different ways, and there are cases where leaders receive employees' support and trust when performing behaviors that are ethically questionable (Fehr et al., 2019).

According to Bandura's Social Learning Theory (1986), the behaviors learned through direct experience can also be learned by observing others' behavior and the consequences of those actions (i.e., vicarious experience or modeling). Thus, leaders act as role models of ethical conduct, and followers learn through observation, imitation, and identification (Brown et al., 2005). Followers pay attention to leaders' behaviors and emulate them since they are legitimate models and can look for punishments or rewards for (un)ethical behaviors (Mayer et al., 2010). Leaders' ethicality became a central focus of research and policymaking due to the many corporate scandals such as Enron (Beu & Buckley, 2004), the Ponzi scheme of Bernard Madoff (Kish-Gephart et al., 2014) and JPMorgan (Dang et al., 2017).

Ethical leadership has emerged as a much sought-after research topic, and findings indicate that highly ethical leaders may reduce followers' tendency to morally disengage (Liu et al., 2012). These leaders show their followers how to behave and remind them of the internal sanctions associated with immoral behaviors, thus hampering the displacement of responsibility. On the contrary, leaders with low ethicality may influence followers' moral disengagement by focusing on results, demanding obedience, or encouraging clients' exploitation (Moore et al., 2019). Abusive supervision is such an example of leaders' ethical breach. Abusive supervision is defined as a "subordinates' perceptions of the extent to which supervisors engage in the sustained display of hostile verbal and nonverbal behaviors, excluding physical contact" (Tepper, 2000, p. 178). Examples of these behaviors include yelling or screaming, threats, humiliation, and explosive outbursts (Keashly et al., 1994). It is important to stress that this definition involves constant and sustained displays of hostility and not just an occasional behavior. The supervisors' behavior is intentional and purposeful, yet their intentions may be other than causing harm (Tepper, 2007).

Abusive leaders can be associated with destructive leadership, which also includes types of leadership, such as narcissistic, toxic, or tyrannical (Erickson et al., 2015). Thus, this construct shares similarities with others, like petty tyranny or deviant organizational behavior (Schyns & Schilling, 2013). However, some dimensions of petty tyranny do not include downward hostility, and abusive supervision may occur in conformity with the organizations' norms, thus not being considered deviant (Tepper, 2000; 2007). Even though there is some

debate among researchers on whether the rates of abusive supervision are inflated or not, evidence shows that approximately 10% of the employees are abused by their supervisors (Tepper et al., 2017).

This type of leadership has several negative consequences for both followers and organizations. Abusive supervision has been related to lower levels of individual and group morale and psychological health (Tepper et al., 2017). Other authors showed a relationship between abusive supervision and subordinates' perceived organizational support, which, in turn, influences subordinates' counterproductive work behavior (Shoss et al., 2013). Another study shows that abusive supervision is positively linked with voluntary turnover, which was explained by subordinates' perceptions of organizational justice (Tepper, 2000). This type of supervision may also influence subordinates' sleep and emotional exhaustion, and consequently diminish their creativity (Han et al., 2017). At the organizational level, abusive supervision may trickle-down for the entire hierarchy since one supervisor imitates the behavior of their abusive supervisor, thus engaging in abusive conduct as well. This follows a chain from high-level leaders to employees (Mawritz et al., 2012). Overall, abusive supervision has been associated with many negative outcomes for individuals, groups, and organizations (Schyns & Schilling, 2013).

Subordinates may execute neutralization strategies such as minimizing the consequences of their action, denigrating the target, or simply denying the action, to protect themselves from cognitive dissonance (Festinger, 1957; Aquino & Becker, 2005). Therefore, followers can use moral disengagement as a dissonance reduction strategy (Bonner et al., 2016). Among the cognitive mechanisms proposed by Bandura (1996; 1999), those that put the locus of disengagement in external agents (e.g., the supervisor, the teammates) might matter the most in a hierarchical relationship. As the main factor of ethical pressure may derive from hierarchical unethical behavior, individuals most likely enact displacement of responsibility processes. According to this mechanism, individuals do not view themselves as agents of an immoral action and therefore do not feel responsible for the consequences, because the action is dictated by a legitimate authority (Bandura, 1999). The level of obedience increases with the legitimacy and proximity to the authority that requests immoral actions (Bandura, 1990). Likewise, proximity to the leader increases the effect abusive supervision has upon followers' moral disengagement (Valle et al., 2019). Such activation will not occur in a social void, as most subordinates develop their work within teams.

### 1.3. Ethical Climate

Moral disengagement has been considered intrinsically to be a collective phenomenon (Martin et al., 2014) precisely due to the inherent role groups play in facilitating or obstructing unethical decisions at the individual level due to what these authors name as "ethical infrastructure" (i.e., the organizational ethical climate and culture). According to Sims and Brinkmann (2002), there is an association between top managers' bottom-line mentality and several negative outcomes like toxic and unethical climates. Therefore, considering how groups feel and think about ethics might be called for understanding how leaders' unethical behavior trickles down into moral disengagement in subordinates.

Ethical climate helps to understand and solve ethically important issues and is the "shared perception of what is correct behavior and how ethical situations should be handled in an organization" (Victor & Cullen, 1987, p. 51). In this way, ethical climate demonstrates the values of the organization that may lead to moral behaviors or attitudes (Birtch & Chiang, 2014), and can operate both at a group level and individual level as psychological climate (Jones & James, 1979). Individual perceptions of ethical climate tend to strongly converge inside the same work unit (Mayer et al., 2010; Schminke et al., 2005).

Victor and Cullen (1988) identified five types of ethical climate: caring, instrumental, independent, laws, and codes. A caring climate is characterized by benevolent criteria, such as the importance given to the interests and well-being of other employees or the work team. In an instrumental climate, decision making is defined by self-interest. In an independent climate, the individuals' moral judgment is the most important criterion. Finally, the laws and codes climates are based on perceptions of whether a decision violates a law or is in line with the professional ethical code (Victor & Cullen, 1988). Each one has risks, whether people behave according to what is appropriate or not, but the organization may face higher risks when a problem emerges from behavior that is consistent with the ethical climate (Cullen et al., 1989). There are differences in the consequences of each type of climate. Dysfunctional behavior (e.g., lying, stealing) is more likely to occur in organizations with an instrumental climate, which is also negatively associated with organizational commitment (Martin & Cullen, 2006). Additionally, studies show that an ethical climate based on self-interest (i.e., instrumental) is associated with lower levels of organizational affective identification and higher levels of moral disengagement when compared with other types of ethical climate (Pagliaro et al., 2018).

Social learning theory may explain how an ethical context that promotes ethical behaviors will also facilitate its development (Brown & Treviño, 2006). The climate contributes to the individuals' socialization since it provides cues about the acceptable moral and ethical conduct,

and through that process may influence an individuals' attitudes and behaviors. A valued behavior will be repeated and reinforced, while an unethical behavior will be discouraged (Birtch & Chiang, 2014). Other authors propose that the organization ensures that all members behave according to what is desired by "intentionally establishing a strong organizational climate regarding ethics" (Dickson et al., 2001, p. 198), which is promoted by the organizations' founders and leaders, who will help define these values and, therefore, help develop a common perception of which behaviors are appropriate between all organizational members. Organizations must establish an ethical culture in order to ensure a corporate ethical image and sustainable growth, for which the leaders' attitudes are more important than established ethical codes or standardized procedures (Demirtas & Akdogan, 2015). Employees must know what is expected from them and how to meet those expectations, and for that reason, it is up to the management to decide the values and decision-making processes that support them (Cullen et al., 1989). In this sense, the climate provides group norms concerning appropriate conduct, and if an ethical climate emphasizes ethical behavior, the tendency to perform unethical actions will decrease (Mayer et al., 2010).

The leader has the power to influence the emergence of a certain type of ethical climate (Schminke et al., 2005). They shape ethical climate through communication and application of policies and practices regarding ethics, and by doing so, they will ultimately influence followers' perceptions of climate (Farouk & Jabeen, 2018; Mayer et al., 2010). Thus, leaders play an important part in this process because they can distract subordinates from moral issues by making them work around a common goal, where disobedience may be reduced due to pressures to achieve group consensus. Since individuals are part of the organizational structure, moral resistance is reduced because the behavior became a routine and, in this way, responsibility is not individual but collective, and those involved act without considering consequences or making decisions (Beu & Buckley, 2004). Additionally, the leaders' approach towards organizational problems can influence not only the organizations' practices, but also the workers' experience, which demonstrates a significant influence of leadership in organizational climate (Ozcelik et al., 2008). Research shows that higher levels of instrumental climate are associated with lower levels of leaders' moral development (Schminke et al., 2005).

Unethical requests or unethical behavior *per se* not only affect each subordinate as it can potentially foster a climate where a social compliance process amplifies such effect. If indeed, an instrumental ethical climate is favored by unethical leader's behavior or moral development (Schminke et al., 2005), such as abusive supervision, and knowing that social conformity plays an important role in opinion formation (Mallinson & Hatemi, 2018) then it is most likely that

some level of displacement of responsibility might be displayed (Gibson, 2000). Based on previous research, we choose to use instrumental ethical climate in the research model since it appears to be closely related to moral disengagement and lower levels of leaders' moral development. We, therefore, hypothesize that:

**Hypothesis 1:** Instrumental ethical climate will mediate the positive relationship between abusive supervision and displacement of responsibility.

### 1.4. Team Size

The social influence process requires, by definition, a group or collective that exerts actions upon an individual perception and behavior (Abrams & Hogg, 1990). Not all groups are equally able to exert such influence, and it depends, among other factors, on the sheer size of the group (Bond, 2005). Formerly, teams usually had less than 20 members, but today research shows that teams of more than 100 members may work together in complex tasks (Gratton & Erickson, 2007). So, team size is an important variable in the case of this research.

However, research on team size reveals contradictions regarding not only the optimal team size but also the effect of large versus small teams. For instance, studies show that individual productivity decreases when team size increases, which may occur due to demotivation since, in larger teams, each member feels like their contribution is less important to the teams' success (Chidambaram & Tung, 2005). A negative association between team size and safety climate was also found, which can be explained by a decrease in communication amongst members of larger teams (Seibert et al., 2019). Team size is also related to the team effort since results show that, in start-up teams with three or fewer members, individual efforts continue rising, while in larger teams, the free-rider effect becomes more salient (Backes-Gellner et al., 2006). Additionally, small teams, with nine or fewer members, are associated with higher team commitment and team-goal awareness (Bradner et al., 2005). Furthermore, a study regarding sports teams showed that perceptions of enjoyment and cohesion decreased as team size increased, being that this increment was also associated with decreased feelings of influence and responsibility (Widmeyer et al., 1990).

Some research has also suggested the reverse relationship: that team size is instrumental in achieving better team outcomes. Thus, larger teams may be linked to several positive consequences since the range of skills and knowledge available is wider, there are more individuals to obtain and process information, and there are more opportunities to establish rewarding interactions (Shaw, 1981). For instance, Cummings and colleagues (2013) found a

main effect of research teams' size on research productivity, and Rey-Rocha and colleagues (2006) also found, with scientific research teams, that larger teams had higher research productivity which they attributed to greater resources at the disposal of the team members, a better flow of information and more opportunities to connect and exchange experiences. Additionally, the results of a pilot study focused on space missions and polar expeditions reveal that teams of about nine members, are less dysfunctional and demonstrate lower levels of conflict and deviance (Dudley-Rowley et al., 2001). However, potential problems may also arise from large team size, due to the emergence of subgroups, a tendency for higher conflict, decreased member participation in activities, and higher conformity to group pressures (Shaw, 1981). A study conducted by Alnuaimi and colleagues (2010) reveals that larger teams had a higher risk of social loafing via moral disengagement mechanisms, namely diffusion of responsibility, attribution of blame, and dehumanization.

Thus, it appears that the ideal team size depends on the type of tasks. A larger team may achieve a better performance when members work independently or only share resources like tools since it involves less coordination. However, when a task requires a chain of sequential interdependencies, smaller teams may help reduce the risks (Molleman & Slomp, 2006).

Team size has been used in several research studies due to its relevance in the organizational context, but usually it is used for control purposes, although it may play a more meaningful role as a moderator (Hausknecht et al., 2009). A first indication of interdependencies is given in studies that take team size as a predictor but found boundaries conditions. For example, Cummings and colleagues (2013) did find an interaction between team heterogeneity and the team size on research productivity where the main effect – already mentioned – was weakened by increased heterogeneity. Likewise, Peltokorpi and Hasu (2014) found low participative safety to nullify the team size's positive effect on team innovation. Studies that take team size as a moderator do report significant interaction effects. For example, Hausknecht and colleagues (2009) found that turnover detrimental effects on customer perceived service quality were stronger in larger teams when compared to smaller ones. Team size has also been used as a moderator in the relationship between transformational leadership and team-work quality, with results showing that this association is stronger in larger teams, with 20 members or more (Cha et al., 2015). Other studies explored curvilinear relationships regarding team size. For instance, team size appears to moderate the relationship between LMX differentiation and team coordination. In this case, at low levels of LMX, the positive relationship between LMX and team coordination is stronger in larger teams, and at high levels of LMX the negative relationship is weaker for larger teams rather than smaller teams (Sui et

al., 2016). This is in line with early findings of Ingham and colleagues (1974), whose results show a curvilinear effect between individual performance and group size, revealing that up to three members, performance is reduced; however, additional members do not produce additional decrements.

The relationship between team size and social conformity might not be linear as it tends to stabilize after a certain number of sources of influence (Bond, 2005) being stronger in groups below three sources. Personal interaction in larger teams is more complex and problematic (Riopelle et al., 2003) and, if team members are dispersed, the social cues are reduced, which may contribute to shift responsibility to other team members (Chidambaram, 1996), and reduces team engaging (Hinds & Mortensen, 2005). Additionally, in larger teams, it is harder to make interpersonal connections (Alnuaimi et al., 2010), and there is a greater tendency for each individual to blame the other members for their own faults (Zaccaro et al., 1987). Displacement of responsibility also seems to be favored by team size, where individuals in larger teams challenged to generate ideas were found to report higher levels of displacement of responsibility (Srinivasan et al., 2010). A study conducted by O'Connell and colleagues (2002) shows that the team leaders' behavior is related to team performance, however, this depends on team size, occurring only in small teams. The authors explain that this may occur because team size facilitates the diffusion or dilution of the team leaders' impact. In smaller teams, there is more frequent interaction with the leader, which decreases as team size increases and may diminish the perceived impact of the leader. Additionally, in larger teams, the leader is forced to delegate more responsibilities (O'Connell et al., 2002). Brown and Fields (2011) also showed that members of larger teams observe less their leaders' behavior.

According to LMX (Leader-member exchange) theory, the leadership process is based on the quality of the dyadic relationship established between the leader and each follower (Dansereau et al., 1975). Thus, the follower may develop a high-quality relationship with the leader, characterized by mutual trust, respect, and a sense of obligation (i.e., *in-group*). Otherwise, they will be part of the *out-group*. LMX differentiation can occur within the same team, which means that there are differences regarding LMX quality relationships amongst team members (Graen & Uhl-Bien, 1995). This can be heightened in larger teams because the leaders' resources and attention are sparser (Henderson et al., 2009). Furthermore, due to team size, the leader is constrained in terms of time to share information and other important resources for the development of the employees (Cogliser & Schriesheim, 2000). Due to this limitation, the leader must decide which followers will receive more attention and consideration (Thompson et al., 2016), and for that reason, experience more problems than they would feel

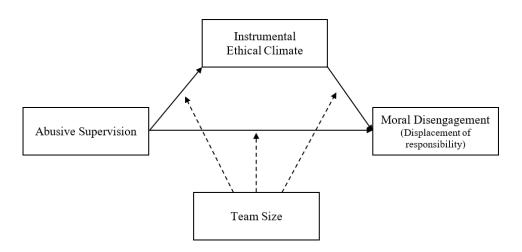
in smaller teams, because the leader must adjust to followers' expectations (Henderson et al., 2009). The leaders' large span of attention also influences their capacity to offer different types of support to the followers (e.g., emotional, informational; Mueller, 2012). In line with these findings, Kim and Vandenberghe (2018) results show that large team sizes affect the way a transformational leader influences the followers' attitudes in dyadic relationships. Regarding abusive supervision effects on teams, individuals usually feel personally victimized, and the abusive treatment perpetrated by the leader promotes an interaction norm that reinforces the emulation of behaviors amongst team-members (Farh & Chen, 2014). Additionally, peer support attenuates the individuals' perception of abuse (Hobman et al., 2009).

As team size seems to exert a substantial modulating effect on several psychosocial processes where leadership influence (e.g., abusive supervision) and individual responses to such influence (e.g., moral disengagement), we hypothesize that:

Hypothesis 2: Team size will moderate the positive direct and indirect relations between abusive supervision and displacement of responsibility via instrumental ethical climate such that smaller teams will exhibit higher displacement of responsibility in response to abusive supervision, and larger teams will exhibit lower displacement of responsibility in response to abusive supervision.

In order to integrate both hypotheses, Figure 1.1. represents the conceptual research model.

**Figure 1.1.**Research model



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## Chapter II - Method

This chapter comprehends a description of the sample, procedure, and the data analysis strategy. Additionally, it includes the measures used to empirically test the research model and the model CFA (Confirmatory Factor Analysis).

## **2.1. Sample**

A sample of 226 employed participants, with a direct supervisor, was collected through convenience and snowball methods. The sample comprises a majority of female participants (79.3%), with age ranging from 19 to 63 years (M = 34.9, SD = 10.9). Regarding educational level, most of the participants have either a bachelor's degree (45.7%), or a master's degree (30.8%). Almost half of the participants reported working with their current direct supervisor for three or more years (44.8%), and more than half have an open-ended employment contract (66.8%). Less than half of the sample (42%) works in organizations with at least 250 employees, and only a small percentage of participants (21.5%) have a leadership role.

### 2.2. Procedure

This study is comprehended in a larger research project. To collect the data, a questionnaire was developed using Qualtrics – Online Survey Software & Insight Platform and distributed through social and professional networks websites between early December 2019 and the end of February 2020. After reading the informed consent, the participants answered the scales below mentioned and a set of social demographic questions, with a fill-in time of approximately 10 minutes. The data was then analyzed using IBM SPSS Statistics 25, Hayes's PROCESS Macro 3.2 (2018) and AMOS 25 (Analysis of Moment Structures).

### 2.3. Data Analysis Strategy

To begin the data analysis, a psychometric test must be conducted to assess the validity and reliability of the measures. Construct validity is tested using a Confirmatory Factor Analysis (CFA), which should reach minimum thresholds to be considered as good. In line with Hair and colleagues (2010) recommendations, valid models with a  $\chi^2$ /df under 3 are expected to have a non-significant p-value, which can be explained due to sample size biases. We also expect a minimum threshold of .95 for Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI), as well as a Root Mean Squared Error of Approximation (RMSEA) under .07. However,

if only one of the composite indices falls short of a given threshold, it does not invalidate the entire model because we must consider the configuration (Hu & Bentler, 1999). If the model does not achieve minimum thresholds, a Lagrange Multiplier Analysis will be conducted in order to remove items that may be interfering with the psychometric quality of the constructs.

Constructs must have convergent validity and, if multifactorial, also divergent validity. Therefore, we use Average Variance Extracted (AVE), that should reach .50 (Fornell & Larcker, 1981). If the square root AVE of each construct is higher than the respective interfactor standardized correlation, the construct has divergent validity. If the constructs do not reach AVE threshold, we must consider Composite Reliability (CR) as an alternative indicator of acceptability, if above .70 (Fornell & Larcker, 1981). To determine construct reliability, we should consider Composite Reliability and Cronbach's Alpha, both with a .70 threshold.

After testing the validity and reliability of all measures in the full measurement model, we will test the hypotheses of our moderated mediation model using PROCESS Macro (Hayes, 2018), relying on a bootstrapping procedure with 5000 repetitions and a confidence interval of 95%. The lower and upper bounds must not comprehend the value "zero" in order to accept the effect as statistically significant. To test the moderation and mediation effects simultaneously, we will use model 59 of the PROCESS Macro (Hayes, 2018).

### 2.4. Measures

The questionnaire (Appendix A) included three sets of measures: abusive supervision, ethical climate, and moral disengagement. Team size was assessed through a single question regarding the respondents' team size.

## 2.4.1. Abusive Supervision

Abusive Supervision was measured using 11-items from Harris and colleagues (2007), adapted from Tepper's (2000) original 15-item scale (e.g., "Puts me down in front of others", "Is rude to me"). To assess the items, a 5-point Likert scale was used, ranging from 1 (Never) to 5 (Always).

According to Lagrange multipliers, it was necessary to remove item 11 ("Ridicules me"). The 10-item scale has convergent validity (AVE = .55) and good reliability (Cronbach's Alpha = .92; CR = .93).

### 2.4.2. Ethical Climate

Ethical Climate was measured using Cullen and colleagues (1993) 4-item subscale for instrumental ethical climate dimension that expresses self-interest with the individual focus (e.g., "In this company, people are mostly out for themselves"). A 6-point Likert scale was used to assess the items, ranging from 1 (Strongly disagree) to 6 (Strongly agree). Following the example of Decoster and colleagues (2019), we opted to measure it at the individual level, especially because same-group individuals tend to converge in perceived ethical climate (Mayer et al., 2010; Schminke et al., 2005). Due to Lagrange multipliers, item 4 was removed ("There is no room for one's own personal morals or ethics in this company"). The 3-item scale has good reliability (Cronbach's Alpha = .94; CR = .95) and convergent validity (AVE = .85).

### 2.4.3. Moral Disengagement

Moral Disengagement was measured using the 4-item scale for the displacement of responsibility dimension, adapted from Bandura and colleagues (1996), and assessed using a 6-points Likert scale, ranging from 1 (Strongly disagree) to 6 (Strongly disagree). Furthermore, the scale has good reliability (Cronbach's Alpha = .82; CR = .82) and convergent validity (AVE = .53).

### 2.4.4. Control Variables

Subordinates' demographics and the context in which the relationship with the leader occurs may influence their perceptions of abusive supervision (Tepper, 2007). Therefore, we included the following as control variables: gender, age, education, dyadic tenure (Zellars et al., 2002), organizational size (Karagonlar & Neves, 2020), contract stability, and supervisor role.

### 2.5. Measurement model

The CFA for the original set of constructs showed below acceptation values ( $\chi^2_{(147)}$  = 377.277, p < .001; CFI = .928, TLI = .916, RMSEA = .079; 90% CI [.069, .089], PCLOSE = .000, SRMR = .0665). Lagrange Multipliers suggested the elimination of one item from Abusive Supervision and another from Instrumental Ethical Climate. After removing them, fit indices are acceptable ( $\chi^2_{(114)}$  = 233.809, p < .001; CFI = .955, TLI = .946, RMSEA = .065, 90% CI [.053, .077], PCLOSE = .000, SRMR = .0507).

Regarding model comparison, we conducted tests on the relative fit of possible alternative models (Table 2.1.).

Additionally, and since each participant responded to all scales simultaneously, we conducted Harman's test with an exploratory principal axis factor analysis, which showed an unrotated solution that accounted for 60% variance with the first factor explaining 35% but only composed by abusive supervision items. Therefore, Harman test suggests no common method occurred. Additionally, we conducted a latent single common method factor with a CFA which indicated a null regression weight, while not improving the overall model fit ( $\chi^2_{(113)} = 233.809$ , p < .001; CFI = .954; TLI = .945, RMSEA = .065, 90% CI [.053, .077], PCLOSE = .018; SRMR = .051;  $\Delta\chi^2_{(1)} = .0$ , p > .05;  $\Delta$ CFI = .001) thus ruling out common method bias (Podsakoff et al., 2012).

**Table 2.1.**Results of model comparison (CFA)

	$\chi^2$	df	CFI	TLI	RMSEA	90% CI	PCLOSE	SRMR	$ \Delta\chi^2 _{(df)}$	ΔCFI
Research model	233.81	114	.955	.946	.065	[.053, .077]	.022	.051	-	-
Single factor AS+EC+MD	1210.32*	119	.579	.519	.204	[.194, .215]	.000	.161	976.43 <sub>(5)</sub> *	.376
AS+EC	911.47*	118	.694	.647	.175	[.164, .187]	.000	.122	678.16(4)*	.261
EC+MD	946.74*	118	.680	.632	.179	[.168, .189]	.000	.150	712.93(4)*	.275
AS+MD	527.47*	118	.842	.818	.126	[.115, .137]	.000	.119	$294.66_{(4)}^{*}$	.113
Independent	258.55*	117	.946	.938	.069	[.058, .081]	.003	.113	24.74 <sub>(3)</sub> *	.009

Note. AS = Abusive Supervision; EC = Ethical Climate; MD = Moral Disengagement; CFI = Comparative Fit Index; TLI = Tucker-Lewis Index; RMSEA = Root Mean Squared Error of Approximation; 90% CI = 90% Confidence Interval; SRMR = Standardized Root Mean Square Residual.

p < .001

## Chapter III - Results

This chapter includes the descriptive and bivariate statistics of the variables included in the research model, as well as the control variables, and the results concerning the hypotheses tested.

## 3.1. Descriptive and Bivariate Analysis

The descriptive statistics and correlations between all variables are presented in Table 3.1. Among the variables used in the research model, it is important to mention that the moderating variable Team Size has a high mean (M = 11.5, SD = 10.6). In the case of the variables measured through a scale, the Ethical Climate has the highest mean, which is above the midpoint (M = 3.8, SD = 1.3,  $t_{(225)} = 3.59$ , p < .001), followed by Moral Disengagement (M = 2.4, SD = 0.93,  $t_{(225)} = -17.69$ , p < .001), that is below the midpoint. As expected, Abusive Supervision has a mean below scale midpoint (M = 1.4, SD = 0.6,  $t_{(225)} = -36.79$ , p < .001).

The bivariate analysis shows some correlations between the research variables. As expected, the independent variable Abusive Supervision and the mediating variable Ethical Climate are significantly and positively correlated (r = .29, p < .001). Additionally, Ethical Climate is also correlated with the dependent variable Moral Disengagement (r = .18, p = .004). Results also show that Abusive Supervision is significantly and negatively correlated (r = -.14, p = .026) with Supervisor Role (i.e., if the respondent has a supervisory role in their organization), which means that those with supervisory roles have a tendency to report higher levels of perceived abusive supervision regarding their leaders. As for the moderating variable Team Size, it is only significantly correlated with Organizational Size (r = .23, p = .001) and respondents' Education (r = .16, p = .018), both control variables.

**Table 3.1.**Descriptive and bivariate statistics

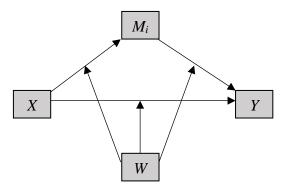
	M	SD	Min-Max	1	2	3	4	5	6	7	8	9	10
1. Gender	79.3% ♀	-	1-2	-									
2. Age	34.9	10.9	19-63	14*	-								
3. Education	3.2	0.9	1-5	.04	19**	-							
4. Dyadic Tenure	4.6	5.8	0-32	.002	.49**	25**	-						
5. Organizational Size	2.9	1.1	1-4	02	.11	.10	08	-					
6. Contract Stability	66.8% Stable	-	1-2	.09	42**	.23**	32**	10	-				
7. Supervisor role	78.5% No	-	1-2	.22**	26**	.002	16*	02	.20**	-			
8. Abusive Supervision	1.4	0.6	1-5	01	.01	.08	.01	03	.03	14*	-		
9. Ethical Climate	3.8	1.3	1-6	.04	.09	.02	.01	.07	04	04	.29**	-	
10. Moral Disengagement	2.4	0.9	1-6	.10	11	06	.06	01	05	004	.10	.18**	-
11. Team Size	11.5	10.6	1-55	.09	.10	.16*	.09	.23**	003	02	.03	.13	06

<sup>\*</sup>p < .05; \*\*p < .01; Gender (1 = Masculine, 2 = Feminine), Age (in years), Education (1 = up to 9 years, 2 = High-School, 3 = Univ. Degree, 4 = Master, 5 = PhD), Organizational Size (1 = up to 10 employees, 2 = 10-49, 3 = 50-250, 4 = 250 or more), Dyadic Tenure (in years), Contract Stability (1 = Stable, 2 = Unstable), Supervisory Role (1 = Yes, 2 = No).

### 3.2. Hypotheses Testing

In order to test the moderated mediation, we used PROCESS Macro (Hayes, 2018) Model 59 (Figure 3.1.), that allows us to establish possible interaction effects between the moderator (Team Size) and all the mediation pathways, in an exploratory way (the complete PROCESS output can be found in Appendix B).

**Figure 3.1.** *PROCESS Model 59* 



In our first hypothesis, we expect that Ethical Climate mediates, partially or totally, the positive relationship between Abusive Supervision and Moral Disengagement (H<sub>1</sub>). Results show a significant positive indirect effect (B = .07; 95% CI [.001, .15]), and a non-significant positive direct effect (B = .12; 95% CI [-.11, .34]), which indicates a total mediation and provides support for H<sub>1</sub>. The total explained variance is 11% ( $R^2 = .11$ , p = .026).

The second hypothesis adds the moderator Team Size to the previous model, and all possible interactions were analyzed. Results show that only the interaction effect of Abusive Supervision and Team Size on Moral Disengagement is significant (B = .03; 95% CI [-.05, -.009]). Table 3.2. shows all the results for the moderated mediation model.

**Table 3.2.**Coefficients for the moderated mediation model

		Ethica	l Climate		Moral Disengagement				
** * * * * * * * * * * * * * * * * * * *		a.e.	959	95% CI			95% CI		
Variables	В	SE	LL	UL	В	SE	LL	UL	
Direct effect									
Constant	66	.88	-2.39	1.07	2.69***	.67	1.36	4.01	
Gender	.14	.23	31	.59	.17	.17	17	.51	
Age	.01	.01	01	.03	02*	.01	03	002	
Education	.03	.11	19	.25	.05	.09	12	.22	
Dyadic Tenure	03	.02	07	.02	.02	.02	01	.05	
Organizational Size	.06	.08	10	.23	02	.07	15	.10	
Contract Stability	15	.22	58	.27	14	.17	47	.19	
Supervisor Role	02	.24	48	.45	03	.18	38	.33	
Abusive Supervision [AS]	.61***	.14	.33	.89	.12	.11	11	.34	
Ethical Climate [EC]					.11*	.06	.001	.22	
Team Size [TS]	.01	.01	01	.03	01	.01	02	.01	
Interaction effect									
AS * TS	01	.02	04	.01	03**	.01	05	01	
EC * TS					002	.01	01	.01	
		$\mathbb{R}^2$	= .12			$R^2 =$	.11		
	$F_{(10, 196)} = 2.67^{**}$ $F_{(12, 194)} = 1.99^{*}$								

Note. SE = Standard Error, LL = Lower Limit of the 95% Confidence Interval, <math>UL = Upper Limit of the 95% Confidence Interval.

Exploring the conditional effects for this interaction, the results of the Johnson-Neyman analysis (Tables 3.3. and 3.4.) show that the relationship between Abusive Supervision and Moral Disengagement is significantly positive when the Team Size is lower than seven teammembers and is significantly negative when the Team Size is higher than 29 team-members, being non-significant between this two cut-points.

p < .05. p < .01. p < .01. p < .001.

**Table 3.3.**Conditional effects of Abusive Supervision at values of the moderator

Team Size	В	SE	95% CI		
ream Size		SE	LL	UL	
-10.43	.45*	.17	.11	.79	
.00	.12	.11	11	.34	
10.46	21	.16	52	.10	

*Note. SE* = Standard Error, LL = Lower Limit of the 95% Confidence Interval, UL = Upper Limit of the 95% Confidence Interval.

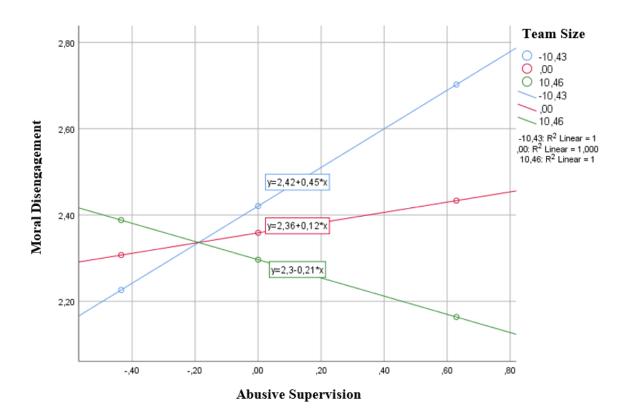
**Table 3.4.** *Results of Johnson-Neyman analysis* 

Toom Circ	В	CE	4		95%	CI
Team Size	В	SE	t	p	LL	UL
-10.43	.45	.17	2.59	.011	.11	.79
-7.73	.36	.15	2.40	.017	.07	.66
-5.03	.28	.13	2.09	.037	.02	.54
-4.20	.25	.13	1.97	.050	.00	.50
-2.33	.19	.12	1.62	.107	04	.43
.37	.11	.11	.95	.344	12	.33
3.07	.02	.12	.19	.850	21	.25
5.77	06	.13	50	.616	31	.19
8.47	15	.14	-1.04	.299	43	.13
11.17	23	.16	-1.43	.155	56	.09
13.87	32	.19	-1.69	.091	69	.05
16.57	40	.21	-1.89	.059	82	.02
17.99	45	.23	-1.97	.050	89	.00
19.27	49	.24	-2.03	.043	96	02
21.97	57	.27	-2.14	.034	-1.10	05
24.67	66	.29	-2.22	.028	-1.24	07
27.37	74	.33	-2.28	.024	-1.39	10
30.07	83	.36	-2.33	.021	-1.53	13
32.77	91	.39	-2.37	.019	-1.67	15
35.47	99	.42	-2.41	.017	-1.82	18
38.17	-1.08	.45	-2.43	.016	-1.96	21
40.87	-1.17	.48	-2.46	.015	-2.11	23
43.57	-1.25	.51	-2.48	.014	-2.25	26

Note. SE = Standard Error, LL = Lower Limit of the 95% Confidence Interval, <math>UL = Upper Limit of the 95% Confidence Interval.

<sup>\*</sup>p < .05.

**Figure 3.2.** *Interaction effects of Abusive Supervision at levels of Team Size* 



Despite the existence of a meaningful interaction effect, represented in Figure 3.2., findings only partially support H2, as the interaction is only observed in the direct effect (the indirect effect remains stable independently of team size).

## Chapter IV - Discussion

The last chapter of this dissertation aims to discuss the results in light of the tested hypotheses and previous research, as well as to present the current study contributions to the existing body of literature. Additionally, study limitations and suggestions for future research are discussed.

Research on the leader-follower relationship has been showing a link between leaders' ethicality and followers' moral behavior. In particular, leadership has been indicated as a cause of moral disengagement, and studies show that followers' tendency to morally disengage is reduced through the influence of ethical leaders (Liu et al., 2012; Newman et al., 2019). On the contrary, abusive supervision has been associated with negative outcomes for both followers and organizations, including the increased counterproductive work behaviors (Shoss et al., 2013). This association is expected to occur through a process of psychological climate, especially if unethical such as instrumental ethical climate, as this specific type of climate has been associated with higher levels of moral disengagement and lower levels of leaders' moral development (Pagliaro et al., 2018; Schminke et al., 2005). Because leaders also help define the values and climate of an organization (Dickson et al., 2001), this is an expected mediation that this study intends to test. Additionally, team size was added as a moderator to the model. This decision is explained by several research studies that show differences regarding team size, which may influence leadership perceived impact, since the leaders' resources and attention are limited, thus having to choose how to distribute them (Henderson et al., 2009; O'Connell et al., 2002).

Findings show that instrumental ethical climate fully mediates the positive relationship between abusive supervision and followers' displacement of responsibility, thus corroborating the first hypothesis. This means that followers who perceive their supervisor as being abusive, also report higher levels of instrumental climate, showing that this mediator is fundamental in the role abusive supervision plays on followers' moral disengagement. This is in line with the literature that states that an organizations' ethical climate promotes socialization and establishes acceptable behaviors and values (Birtch & Chiang, 2014; Victor & Cullen, 1987). The organizations' leaders set the basis for the ethical climate and leaders who are low on moral development may help promote an instrumental ethical climate that will, in turn, induce followers' moral disengagement (Dickson et al., 2001; Ozcelik et al., 2008; Pagliaro et al., 2018). Thus, despite the influence the leader exerts as a role model (Moore et al., 2019), their

potential influence is not directed exerted as results show a non-significant direct relationship between abusive supervision and followers' moral disengagement.

Concerning the second hypothesis, we expected to find a moderation effect in both the direct and indirect relations between abusive supervision and moral disengagement, as well as some differences regarding team size. However, results show that this interaction effect is only significant in the direct effect, which means that the mediation effect of ethical climate is not affected by team size, partially supporting hypothesis 2.

Findings concerning moderation effects also show other rather interesting conclusions. Employees who perceive their supervisor as abusive also report higher levels of moral disengagement when their team has seven members or less. Yet, the reverse situation happens when teams have 29 members or more. In this case, individuals report lower levels of moral disengagement when they perceive their supervisor as abusive. Although most studies on team size focus on outcomes associated with task performance (e.g., Backes-Gellner et al., 2006; Chidambaram & Tung, 2005) instead of moral dimensions, some assumptions can be made regarding these results. In smaller teams, the division of the leaders' resources and attention is easier, making it possible to establish more frequent interactions with the followers and increase perceived leader impact (O'Connell et al., 2002). This proximity, like Valle and colleagues (2019) study demonstrated, may increase the effect of abusive supervision in followers' moral disengagement. Contrarily, in larger teams, the leader is forced to choose who will receive more attention (Thompson et al., 2016) due to constraints in time to share resources (Cogliser & Schriesheim, 2000). In this sense, a phenomenon of LMX differentiation may occur (Henderson et al., 2009), which means that each follower will establish a different quality relationship with the leader (Graen & Uhl-Bien, 1995). Additionally, if members of large teams observe less their leader behavior (Brown & Fields, 2011) and if the influence of leadership occurs through modeling, we thus can assume that, just like in O'Connell and colleagues' (2002) study, the perceived leadership impact will decrease as team size increases. These results are also in line with the findings of Kim and Vandenberghe (2018), which show that another type of leadership (transformational) is limited in larger teams. It is worth noticing that abusive supervision goes against the well-being of subordinates (Schyns & Schilling, 2013; Tepper et al., 2017), and thus it creates a tension that can resolve into defiance or subordinate retaliation (Decoster et al., 2019).

This study has some limitations which may be addressed in future research. One limitation refers to the fact that data collection was conducted online with a snowball strategy, thus gathering data from individuals working in different organizations and teams. This

prevents the study of climate at its group level (as against the psychological, individual level; Baltes et al., 2009), although it also avoids a problem with that approach, which stems from low variance. This also precludes testing the role of culture (one of the ethical infrastructural components stated by Martin et al., 2014). Therefore, it would be interesting to apply the same research model to different teams in the same organization or set of organizations in order to control these dimensions.

Another limitation to be considered relates to the measure of moral disengagement. Due to the relationship between displacement of responsibility and the authority, this was the only moral disengagement mechanism targeted in the present study. However, it may be important to investigate if other mechanisms operate under the influence of leadership and ethical climates. Since this study also focused on team dimension, diffusion of responsibility may be a good candidate to be assessed in future studies.

Lastly, still regarding moral disengagement, the results may be biased due to social desirability since this is a sensitive variable associated with ethics and morality, which may lead to answers regarding what people think is socially acceptable and not the truth. This was previously dealt by the recommended assurances of anonymity, highlighting there are no right or wrong answers, but the mere possibility cannot be discarded. The choice for targeting a snowball sample was also made in preventing fear from unwilling disclosure of answers, which could easily occur if the study targeted a single organization. The scale of abusive supervision, however, may be revised as it includes behaviors that would hardly be observed in abusive supervision due to its extreme or legal liability nature such as "Ridicules me" (which may justify why this item was removed). A limitation that may have occurred linked to the scale is suggested by the moderately low means of abusive supervision, which is also observable in most of the published studies (e.g., Tepper, 2000). The low variance can preclude finding effects, and these issues should deserve methodological research in the future. In this sense, future research might approach the measurement of abusive supervision via priming techniques that could bypass cognitive barriers.

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## **Conclusion**

It is a known fact that people are fundamental for an organizations' success but also that such success cannot be achieved at any cost, especially ethical costs. Thus, it is important to understand what factors may influence their conduct in order to prevent unethical and counterproductive work behaviors that may have negative consequences at different levels. Therefore, this study was set to better understand how an abusive supervisor may enhance followers' moral disengagement via ethical climate. Furthermore, it extends knowledge by comprising boundary conditions due to team size.

The findings obtained showed that ethical climate plays a crucial role in followers' tendency to morally disengage. In particular, that instrumental climate favors employees' displacement of responsibility. Also, team size appears to have a more important role than originally considered, since differences were found regarding team dimensions. While in small teams, up to seven members, abusive supervision seems to be effective in increasing moral disengagement, larger teams, with 29 or more members, may act as a protective factor against abuse from supervisors.

Thus, these results represent a positive contribution to theory. Firstly, by highlighting the role instrumental ethical climate plays as an important mediator of the relationship between abusive supervision and employees' displacement of responsibility. Secondly, by extending team size moderation to a moral-based outcome in relationship to supervisors' behavior. To our knowledge, there is no single study published addressing this sort of conceptual model, although the implications for organizational Psychology are undisputable. The curvilinear interaction is of special interest for setting organizational design as it may help to prevent nefarious effects from destructive or abusive leadership.

Due to the negative consequences moral disengagement may have for organizations and individuals, it is important to better understand its predictors. In this sense, this study may serve as a basis for future research to explore these processes, which ultimately may help organizations preventing or reducing the occurrence of unethical conduct, even in the presence of an abusive supervisor.

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## Appendix A

## Appendix A – Questionnaire

# ISCTE 🛇 Instituto Universitário de Lisboa No âmbito do Mestrado em Psicologia Social e das Organizações, no ISCTE-IUL- Instituto Universitário de Lisboa, foi criada uma equipa de investigação com o objetivo de compreender a relação chefia-colaborador dentro das organizações. Desta forma, vimos pedir a sua colaboração através do preenchimento de um questionário com a duração aproximada de 10 minutos. As suas respostas sinceras são fundamentais para garantir a qualidade deste estudo. O preenchimento do questionário garante o total anonimato dos participantes e confidencialidade dos dados. A sua participação é totalmente voluntária e não envolve qualquer despesa e/ou riscos. Para qualquer esclarecimento por favor contacte: Prof. Nelson Ramalho (nelson.ramalho@iscte-iul.pt) Agradecemos, antecipadamente, a sua participação. Sandra Martins Neste momento trabalha em alguma organização e tem uma chefia direta? Sim Não

Há quantos anos trabalha com a sua chefia direta (aproximadamente)

Agora, por favor, <u>pense na sua atual chefia</u> e indique em que medida cada uma das situações descritas ocorre.

A minha chefia direta					
	Nunca	Algumas vezes	Cerca de metade das vezes	A maioria das vezes	Sempre
Faz comentários negativos sobre mim aos outros.	0	$\circ$	0	0	$\circ$
Descarrega a sua raiva em mim quando a sente por outro motivo.	0	0	0	0	0
Diz que os meus pensamentos ou sentimentos são estúpidos / não fazem sentido.	0	0	$\circ$	0	0
Diz-me que sou incompetente.	$\bigcirc$	$\bigcirc$	$\circ$	$\bigcirc$	$\bigcirc$
Relembra-me dos meus erros e falhas no passado.	0	$\circ$	0	0	$\circ$
Quebra as promessas que faz.	$\bigcirc$	$\circ$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Por favor, para este item, selecione a opção "sempre".	0	$\circ$	0	0	$\circ$
É rude comigo.	$\bigcirc$	$\circ$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Ignora-me.	$\bigcirc$	0	$\bigcirc$	$\bigcirc$	$\bigcirc$
Invade a minha privacidade.	$\bigcirc$	$\circ$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Trata-me mal em frente a outras pessoas.	$\bigcirc$	$\circ$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Ridiculariza-me.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Os comportamentos sobre os quais acabou de r	responder	são			
Tipicamente manifestados pela chefia com quase t	odos os col	aboradores d	a equipa.		
Tipicamente manifestados pela chefia só com algu	ns colabora	dores da equi	ра.		
Tipicamente manifestados pela chefia só em relaçã	ăo a mim.				

Tendo em conta o seu local de trabalho, por favor diga em que medida concorda com as seguintes afirmações.

Na minha	organização
----------	-------------

	Discordo totalmente	Discordo	Discordo em parte	Concordo em parte	Concordo	Concordo totalmente	
Cada um protege, acima de tudo, os seus próprios interesses.	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	0	
Cada um se preocupa, acima de tudo, com o que é melhor para si próprio.	0	0	0	0	0	0	
As pessoas estão muito preocupadas com o que é melhor para si próprias.	0	0	0	0	0	0	
Não há espaço para os valores morais nem para a ética pessoal.	0	0	0	0	0	0	
Por favor, indique em que medida c	oncorda com	n as seguint	es afırmaçõ	ies.			
	Discord totalmen		Discordo o em parte			Concordo totalmente	
Uma pessoa que apenas sugira a outra que quebre uma regra, não deve ser responsabilizada se esta o fizer.	<u> </u>	0	0	0	0	0	
Se as pessoas estão a trabalhar em m condições, não podem ser culpadas p se comportarem de forma agressiva.		0	0	0	0	0	
Se as pessoas não forem adequadamente supervisionadas, não podem ser culpadas por se comportarem indevidamente.	0	0	0	0	0	0	
Ninguém pode ser culpado por utilizar linguagem incorreta, se os outros também o fizerem.	0	0	0	0	0	0	
As pessoas não podem ser culpabilizadas por terem comportamentos indevidos se tiverem sido pressionadas para fazê-lo.	0	0	0	0	0	0	
Para terminar, gostaríamos de lhe solicitar alguns dados sociodemográficos, indispensáveis ao tratamento estatístico dos questionários.							
Sexo							
Maculino							
Feminino							
Idade							
Quantas pessoas trabalham na sua equipa, sob a mesma chefia?							

Qual a dimensão da organização
< 10 trabalhadores
< 50 trabalhadores
< 250 trabalhadores
>= 250 trabalhadores
O seu vínculo de trabalho corresponde ou pode ser equiparado a um contrato de efetivo (sem termo)?
Sim
Não
Escolaridade
Ensino básico
Ensino secundário
Licenciatura
Mestrado
Doutoramento
Exerce funções de chefia?
Sim
Não
O questionário terminou! Muito obrigado pela sua colaboração preciosa para este estudo.  (por favor, pressione a seta para submeter as suas respostas)

## Appendix B

## Appendix B - PROCESS Statistical Outputs

```
*********** PROCESS Procedure for SPSS Version 3.4 ************
               Written by Andrew F. Hayes, Ph.D. www.afhayes.com
      Documentation available in Hayes (2018). www.guilford.com/p/hayes3
*******************
Model : 59
     Y : MorDis
     X : AL10it
      M : CE3it
     W : Q27
Covariates:
 Q26 Q22 Q23 Q28 Q24 Q30 Q29
Sample
Size: 207
******************
OUTCOME VARIABLE:
 CE3it
Model Summary
         R R-sq MSE F df1 df2 p
,3463 ,1199 1,5718 2,6701 10,0000 196,0000 ,0044

        coeff
        se
        t
        p
        LLCI

        -,6616
        ,8776
        -,7538
        ,4519
        -2,3924

        ,6069
        ,1410
        4,3049
        ,0000
        ,3289

        ,0099
        ,0088
        1,1307
        ,2596
        -,0074

        -,0107
        ,0146
        -,7344
        ,4636
        -,0396

        -,0262
        ,0209
        -1,2512
        ,2123
        -,0675

        ,1412
        ,2277
        ,6200
        ,5360
        -,3079

        ,0142
        ,0100
        1,4187
        ,1576
        -,0055

        ,0644
        ,0844
        ,7637
        ,4460
        -,1020

        ,0256
        ,1115
        ,2299
        ,8184
        -,1943

        -,0193
        ,2355
        -,0820
        ,9348
        -,4838

        -,1546
        ,2154
        -,7178
        ,4737
        -,5794

Model
                                                                                                      1,0692
constant
AL10it
                                                                                                       ,8850
                                                                                                         ,0273
Q27
                                                                                                         ,0181
Int 1
                                                                                                         ,0151
Q26
                                                                                                         ,5903
Q22
Q23
                                                                                                         ,0340
Q28
                                                                                                         ,2308
                                                                                                        ,2456
Q24
                                                                                                       ,4452
Q30
Q29
                                                                                                         ,2702
Product terms key:
 Int 1 : AL10it x Q27
Test(s) of highest order unconditional interaction(s):
        R2-chng F df1 df2
         ,0024
                            ,5393 1,0000 196,0000 ,4636
X*W
     Focal predict: AL10it (X)
               Mod var: 027
Data for visualizing the conditional effect of the focal predictor:
Paste text below into a SPSS syntax window and execute to produce plot.
DATA LIST FREE/
   AL10it Q27 CE3it
```

```
BEGIN DATA.
          -,4348 -10,4300
                                                 -,4135
           ,0000 -10,4300
                                                  -,1010
           ,6296 -10,4300
                                                     ,3517
                            ,0000
           -,4348
                                                  -,2612
           ,0000
                            ,0000
,0000
                                                   ,0027
           ,6296
                                                      ,3848
            ,0000 ,3848

-,4348 10,4577 -,1084

,0000 10,4577 ,1066

,6296 10,4577 ,4181
           -, 4348 10, 4577
           ,0000 10,4577
END DATA.
GRAPH/SCATTERPLOT=
  AL10it WITH CE3it BY Q27
 *****************
 OUTCOME VARIABLE:
 MorDis
Model Summary
            R R-sq MSE F df1 df2 p
,3315 ,1099 ,9168 1,9966 12,0000 194,0000 ,0264
                                                                                                                           ULCI
4,0104
,3<sup>A</sup>

        Model
        coeff
        se
        t
        p
        LLCI

        constant
        2,6865
        ,6713
        4,0021
        ,0001
        1,3626

        AL10it
        ,1185
        ,1131
        1,0484
        ,2957
        -,1045

        CE3it
        ,1086
        ,0547
        1,9852
        ,0485
        ,0007

        Q27
        -,0060
        ,0068
        -,8739
        ,3833
        -,0194

        Int_1
        -,0315
        ,0116
        -2,7232
        ,0071
        -,0543

        Int_2
        -,0022
        ,0046
        -,4716
        ,6378
        -,0112

        Q26
        ,0214
        ,0161
        1,3355
        ,1833
        -,0102

        Q22
        ,1698
        ,1741
        ,9752
        ,3307
        -,1736

        Q23
        -,0167
        ,0077
        -2,1683
        ,0314
        -,0319

        Q28
        -,0237
        ,0646
        -,3668
        ,7141
        -,1511

        Q24
        ,0490
        ,0852
        ,5757
        ,5655
        -,1190

        Q30
        -,0282
        ,1806
        -,1563
        ,8760
        -,3843
    <
Model
                                                                                                                                  ,2164
                                                                                                                                    ,0075
                                                                                                                                  -,0087
                                                                                                                                  ,0069
                                                                                                                                  ,0531
                                                                                                                                     ,5131
                                                                                                                                  -,0015
                                                                                                                                 ,1037
                                                                                                                                  ,2171
                                                                                                                                  ,3279
                                                                                                                                  ,1895
Product terms key:
 Int_1 : AL10it x Q27
  Int 2
                                  CE3it
                  :
                                                                     Q27
                                                    X
 Test(s) of X by M interaction:
            F df1 df2 p,7475 1,0000 193,0000 ,3883
 Test(s) of highest order unconditional interaction(s):
             R2-chng F df1 df2
              ,0340 7,4160 1,0000 194,0000 ,0071
,0010 ,2224 1,0000 194,0000 ,6378
 X*W
      Focal predict: AL10it (X)
                   Mod var: Q27 (W)
Conditional effects of the focal predictor at values of the moderator(s):
                             Effect se t p LLCI ULCI ,4472 ,1730 2,5854 ,0105 ,1060 ,7883
                027
      -10,4300
```

,0000 10,4577	,1185 -,2109	,1131 ,1576	1,0484 -1,3381	,2957 ,1824	-,1045 -,5218	,3415 ,1000
Moderator value -4,1998 17,9977	% below % below 49,2754 91,3043	ining Johnso % above 50,7246 8,6957	on-Neyman sig	gnificance	region(s):	
Conditional	effect of f	focal predic	ctor at value	es of the m	oderator.	
027	Effect	se	t	р	LLCI	ULCI
-10,4300	,4472	,1730	2,5854	,0105	,1060	,7883
-7,7300	,3621	,1506	2,4041	,0172	,0650	,6591
-5,0300	,2770	,1319	2 <b>,</b> 0996	,0371	,0168	,5372
-4,1998	,2509	,1272	1 <b>,</b> 9723	,0500	,0000	,5017
-2,3300	,1920	,1187	1,6174	,1074	-,0421	,4260
,3700	,1069	,1127	,9480	,3443	<b>-,</b> 1155	<b>,</b> 3293
3 <b>,</b> 0700	,0218	<b>,</b> 1153	<b>,</b> 1893	<b>,</b> 8501	<b>-,</b> 2055	<b>,</b> 2492
5 <b>,</b> 7700	- <b>,</b> 0632	<b>,</b> 1258	<b>-,</b> 5028	,6156	<b>-,</b> 3113	,1848
8,4700	<b>-,</b> 1483	<b>,</b> 1425	-1,0409	,2992	-,4293	<b>,</b> 1327
11,1700	<b>-,</b> 2334	<b>,</b> 1635	-1 <b>,</b> 4273	<b>,</b> 1551	<b>-,</b> 5559	,0891
13,8700	-,3184	<b>,</b> 1874	<b>-1,</b> 6993	,0909	- <b>,</b> 6881	,0512
16,5700	<b>-,</b> 4035	,2132	-1 <b>,</b> 8926	<b>,</b> 0599	-,8240	,0170
17 <b>,</b> 9977	<b>-,</b> 4485	,2274	<b>-1,</b> 9723	<b>,</b> 0500	-,8970	,0000
19,2700	<b>-,</b> 4886	,2403	-2 <b>,</b> 0332	,0434	<b>-,</b> 9625	- <b>,</b> 0146
21,9700	<b>-,</b> 5737	,2683	-2,1381	,0338	-1,1028	<b>-,</b> 0445
24 <b>,</b> 6700	-,6587	<b>,</b> 2969	-2 <b>,</b> 2183	<b>,</b> 0277	-1,2444	-,0731
27 <b>,</b> 3700	<b>-,</b> 7438	,3261	-2,2811	<b>,</b> 0236	-1 <b>,</b> 3869	<b>-,</b> 1007
30,0700	-,8289	<b>,</b> 3555	-2 <b>,</b> 3312	<b>,</b> 0208	<b>-1,</b> 5301	-,1276
32 <b>,</b> 7700	<b>-,</b> 9139	,3853	-2 <b>,</b> 3719	,0187	-1,6738	<b>-,</b> 1540
35 <b>,</b> 4700	<b>-,</b> 9990	<b>,</b> 4153	-2 <b>,</b> 4056	<b>,</b> 0171	-1,8180	<b>-,</b> 1799
38 <b>,</b> 1700	-1,0841	,4454	-2,4337	,0158	-1,9626	<b>-,</b> 2055
40,8700	-1,1691	<b>,</b> 4757	-2 <b>,</b> 4576	,0149	-2,1074	<b>-,</b> 2309
43,5700	-1,2542	,5061	-2,4780	,0141	-2,2524	<b>-,</b> 2560

Data for visualizing the conditional effect of the focal predictor: Paste text below into a SPSS syntax window and execute to produce plot.

```
DATA LIST FREE/
   AL10it Q27
                          MorDis
BEGIN DATA.
     -,4348 -10,4300 2,2264
,0000 -10,4300 2,4208
,6296 -10,4300 2,7024
     -,4348 ,0000
,0000 ,0000
,6296 ,0000
                            2,3072
                            2,3588
     ,6296 ,0000
-,4348 10,4577
,0000 10,4577
                            2,4334
                            2,3882
                           2,2965
      ,6296 10,4577
                            2,1637
END DATA.
GRAPH/SCATTERPLOT=
AL10it WITH MorDis BY
                                      Q27 .
    Focal predict: CE3it
                              (M)
          Mod var: Q27
                               (W)
```

Data for visualizing the conditional effect of the focal predictor: Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/
CE3it Q27 MorDis .

,0000 1,3035 -1,3035 ,0000 1,3035 -1,3035	,0000 ,0000	2,4208 2,5917 2,2173 2,3588 2,5003 2,1845 2,2965				
1,3035 END DATA.	10,45//	2 <b>,</b> 4086				
GRAPH/SCATTER		7.1	007			
CE3it WIT	TH MorDis	ВҮ	Q2 /	•		
*****	***** DIRECT	AND INDIR	RECT EFFECTS	OF X ON Y	*****	****
Conditional o	direct effect	(s) of X o	on Y:			
Q27	Effect	se	t	р	LLCI	ULCI
-10,4300				,0105		
	<b>,</b> 1185					
10,4577	<b>-,</b> 2109	<b>,</b> 1576	-1,3381	,1824	<b>-,</b> 5218	,1000
Conditional	indirect effec	cts of X c	on Y:			
INDIRECT EFFE	ECT:					
AL10it	-> CE3it	->	MorDis			
-10,4300 ,0000	Effect ,0942 ,0659 ,0425	,0670 ,0381	<b>-,</b> 0221	,2421 ,1521		
*****	********* AN	NALYSIS NC	TES AND ERR	ORS *****	* * * * * * * * * * *	*****
Level of confidence for all confidence intervals in output: 95,0000						
Number of bootstrap samples for percentile bootstrap confidence intervals: 5000						
W values in conditional tables are the minimum, the mean, and 1 SD above the mean.						
NOTE: One SD below the mean is below the minimum observed in the data for W, so the minimum measurement on W is used for conditioning instead.						
NOTE: The following variables were mean centered prior to analysis: Q27 AL10it CE3it						
NOTE: Standardized coefficients not available for models with moderators.						
END MATRIX						