Testing a Model of Abusive Supervision, Supervisor Perspective-taking, and Subordinate Job Performance



Amna Amjad

MS-HRM 2017

NUST Business School
National University of Sciences & Technology
Islamabad, Pakistan
2021

Testing a Model of Abusive Supervision, Supervisor Perspective-taking, and Subordinate Job Performance



Amna Amjad

MS-HRM 2017

A thesis submitted to NUST Business School for the degree of Master of Science in Human Resource Management

2021

Testing a Model of Abusive Supervision, Supervisor Perspective-taking, and Subordinate Job Performance



Amna Amjad

MS-HRM 2017

Supervisor

Dr Hussain Tariq

A thesis submitted to NUST Business School for the degree of Master of Science in Human Resource Management

Thesis Acceptance Certificate

It is certified that final copy of MSHRM thesis written by Ms Amna Amjad Registration No. 205612 of MS-HRM 2K17 has been vetted by undersigned. It is found complete in all aspects as per NUST Statutes/Regulations/MS Policy, is free of plagiarism and errors and is accepted as fulfilment for the award of MS degree. It is further certified that necessary amendments as pointed out by GEC members and foreign/local evaluators of the scholar have also been incorporated in the said thesis.

Signature of Supervisor with stamp:
Date:
Programme Head Signature with stamp:
Date:
Signature of HoD with stamp:
Date:
Countersign by
Signature (Dean/Principal):
Date:

Declaration

Amna Amjad at this moment states that no portion of work presented in this thesis is submitted for supporting the application of any other degree or qualification in this University or any other institution.

Name: Amna Amjad	

Signature:

Date: 23rd August, 2021

Abstract

Several studies have indicated that there are significant relationships between abusive supervision and various key organisational outcome variables such as organizational citizenship (Restubog and Rafferty, 2011), aggression (Burton and Hobbler, 2011), workplace deviance (Mitchell and Ambrose, 2007) and subordinate job performance (Tepper et al., 2011). Eminently, these outcomes are crucial for the success and survival of organizations as well as employee well-being and health. This body of research is of substantial interest to organisational researchers and practitioners. Different researchers have associated abusive supervision mostly as a workplace stressor given its negative nature and consequences. However, this study focuses on how the dark side of leadership (abusive supervision) can generate positive outcomes for employee and organization but under unique circumstances. For this, first, the relationship between abusive supervision and subordinate job performance has been examined. Additionally, supervisor perspective-taking is introduced as a moderator which is expected to minimise the negative relationship between abusive supervision and job performance. Furthermore, subordinate guilt is added as a mediator which is also hypothesized to have a positive impact on job performance via perspective-taking.

The data was collected from the education sector of Pakistan, mainly from the students at a large public university based in Islamabad, Pakistan. The data collection method used for this study is multi-wave, and survey technique was used. The data was analysed using SPSS v. 23 for regression analysis and PROCESS macro v. 3.0 was used for hypotheses testing.

The results of this study indicated that abusive supervision has a negative relationship with subordinate job performance. The results also indicated that perspective-taking moderate the relationship of abusive supervision and job performance in a way that it weakens their negative relationship. Subordinate guilt was also found to have a positive relationship with job performance. All these findings indicate the acceptance of the hypothesizes for this study.

Keywords: Abusive supervision, supervisor perspective-taking, subordinate job performance, subordinate guilt.

Table of Contents

Thesis Acceptance Certificate	i
Declaration	ii
Abstract	iii
Chapter 1	8
1 Introduction	8
1.1 Background of the Study	8
1.2 Problem Statement	10
1.3 Research Aim	10
1.4 Research Gap	11
1.5 Significance and Scope of the Study	11
1.6 Research Objectives	12
1.7 Research Questions	12
1.8 Contribution	13
1.9 Summary of the Chapter	13
1.10 Overview of the Dissertation	13
Chapter 2	14
2 Literature Review	14
2.1 Chapter Objective	14
2.2 Abusive Supervision	14
2.2.1 Consequences of Abusive Supervision	15
2.2.2 Antecedents of Abusive Supervision	16
2.3 Abusive Supervision and Subordinate's Job Performance	18
2.4 Moderating Role of Supervisor's Perspective-taking	21

	2.5 Mediating Role of Subordinate's Guilt	24
	2.6 Summary of the Chapter	28
Cha	pter 3	29
3	Methodology	29
	3.1 Chapter Objective	29
	3.2 Research Philosophy	29
	3.3 Research Design and Strategy	30
	3.4 Participants and Procedures	. 31
	3.5 Measures	32
	3.5.1 Abusive Supervision	32
	3.5.2 Supervisor Perspective-taking	33
	3.5.3 Subordinates' Guilt	33
	3.5.4 Performance Ratings	33
	3.5.5 Self-Rated Performance	33
	3.5.6 Control Variables	33
	3.6 Analytical Approach	34
	3.7 Data Screening	. 34
	3.8 Ethical Consideration	34
	3.9 Summary of the Chapter	35
Cha	pter 4	36
4	Results and Analysis	36
	4.1 Chapter Objective	36
	4.2 Demographic Statistics	36
	4.3 Descriptive statistics and Correlation coefficients	38
	4.4 Tests of Moderation	39

4.5 Summary of the Chapter	44
Chapter 5	46
5 Discussion	46
5.1 Limitations and Future Research Directions	50
5.2 Theoretical Contribution	52
5.3 Practical Implications	53
5.4 Conclusion	54
References	55
Annexure 1: Questionnaire	67
Annexure 2: Output Files	72

List of Figures and Tables

Figure 1 Theoretical Framework	28
Figure 2 Interaction of Subordinate Guilt and Supervisor Perspective taking o	n Abusive
Supervision	43
Table 1: Frequency, Mean and Standard Deviation of Demographic Variables	37
Table 2 Values of mean, standard deviation (SD) and correlation	38
Table 3 Regression results of Moderator (Model 1)	39
Table 4 Regression results for the overall model (Model 8)	41
Table 5 Conditional indirect effect of x on y across values of the moderator	42
Table 6 Hypothesis Evaluation	44

Chapter 1

1 Introduction

1.1 Background of the Study

It has been observed widely that leadership literature has focused more on the constructive side of the leader, however it is also observed that leadership positions have the motivation and capacity to be sometimes destructive (Tierney and Tepper 2007). The leadership research traditionally focuses on the quest to find out the most productive methods to lead (Schyns and Schilling, 2013). Even though leaders have a central role in work processes and their inherent imbalance of power in a supervisor-subordinate relationship, only few studies have focused on the abusive or oppressive behaviour on supervisor's part (Aryee et al., 2007; Hoobler & Brass, 2006; Tepper, 2000, 2007, 2001, 2006; Zellars et al., 2002).

There are two reasons due to which there is an increasing interest in studying the dark role of the leadership—first, the inquiry of prevalence of and the cost that is associated with destructive leaders. Several studies have shown a great prevalence of destructive behaviours of leaders in organisations and "abusive supervision" is a concept that has influenced research in this area (Schyns and Schilling, 2013). For example, according to Hubert and Veldhoven (2001) report, there is a prevalence rate of around 11% in the Netherlands, it is even higher in Norwegian studies where around a third of employees are subjected to abusive behaviours. These rates indicate the practical importance of research in this area.

The second reason is that destructive behaviours of the leaders are associated with negative impact on leader followers, such as workplace deviance, emotional exhaustion, job tension and employee well-being. The reasons of prevalence rate and its negative impact on the followers make it worth for a more in-depth examination (Schyns and Schilling, 2013).

Some of the adverse outcomes that result due to abusive supervision include organisational citizenship behaviours (Aryee et al., 2007), reduced job performance (Harris et al., 2007) and workplace deviance (Mitchell & Ambrose, 2007; Tepper et al., 2008; Thau et al., 2009). Behaviours which fall under abusive supervision are; explosive outbursts, undermining the employee, showing anger at them, lying to them, ridiculing employees and public denigration (Tepper, 2000, 2007). Given the hostile nature and adverse consequences of abusive supervision,

researchers have conceptualized it as a negative workplace stressor (Aquino & Thau, 2009). It has been theorised by Gilboa et al., (2008) that workplace stress, therefore, leads to reduced job performance. This notion, as a workplace stressor explains the relationship between abusive supervision and job performance (Gilboa et al., 2008).

Furthermore, while explaining supervisor perspective, Parker and Axtell (2001) said that embracing another person's point of view is one significant developmental trend that has been long acknowledged as essential and accountable for human social capacity. The concept is salient for modern organisations where there is a necessity to work collaboratively. Therefore, it is essential to understand different viewpoints and perspectives than your own and empathizing with others to move towards collaborative working.

The moderator in this study i.e., perspective-taking is said to boost interpersonal relations which brings an increase in employee helping behaviours, minimising aggression, cooperatively resolving conflict, and reducing prejudice (Batson et al., 1997). The extent to which employees do perspective-taking is significant to their job performance. There are several antecedents of perspective-taking that have been highlighted by research which explains this notion, such as flexibility in role orientation of an employee and breadth of knowledge about the workplace system. This flexible orientation will strengthen employees' performance. Furthermore, individuals who have flexible role orientation and have integrated understanding about their workplace systems are involved in perspective-taking (Parker and Axtell 2001)

To clarify the mediating role of guilt Leith and Baumeister (1998) said that while an individual is in the state of guilt, he can better make sense of the perspective of the other they conflicted with. Guilt-proneness is positively linked with perspective-taking ability, empathy and experiencing the feelings and concerns of others. Also, guilt is said to have positive workplace outcomes and positive motivation such as helpful behaviours, learning from mistakes and extra effort for future performance (Tangney et al., 1996; Ilies et al., 2013). Guilty employees will avoid disappointing others and work harder in future (Flynn and Schaumberg, 2012). This guilt-positive outcome relationship provides with the foundation to argue about guilt-job performance relationship.

Furthermore, in this section, problem statement, research aim, research gap, research objectives and research questions, significance of this study and contribution are discussed.

1.2 Problem Statement

In today's dynamic and complex work environment, supervisors hold a strategic role in employee and organizations' performance as a whole. It has been observed that while leaders have a constructive side, they also have the tendency to be abusive sometimes. Now-a-days one of the important concerns in the organizations is the mistreatment from individuals who are in power. The increasing interest in this is due to substantial impact it has on the employees physical and psychological well-being. Apart from this physical and psychological well-being, there is a huge financial cost associated with abusive leaders. It produces negative impact on the followers such as reduced job performance, workplace deviance, job tension, emotional exhaustion, and employee well-being.

Number of studies in the past have associated abusive supervision with negative outcomes but very few have associated it with possible positive outcomes it can also have. Abusive supervision can be motivating and positive. Mostly, leadership literature captured its negative impact, but there exists another side to it which needs to be studied as well. Due to difference in peoples' inherent characteristics and attributions they may perceive the same phenomenon differently. Positive attributions about the behavior will arise when a subordinate will be taking other's perspective that why a certain stimulus or situation has occurred. These attributions are significant as based on these subordinates successfully decide how to deal with abusive supervision. Besides this, thinking from others' perspective or point of view, employee also experience feelings of compassion and empathy and feeling of distress and unease are minimized. It helps an employee to think and deal the situation positively. Therefore, it is significant to understand the positive side of abusive supervision and minimize its negative impact and costs associated with negative behaviors. Keeping this in mind, the intent is to study those unique circumstances and phenomenon under which abusive supervision can function better, do more good, and generate positive outcomes for the employees. This study intends to explore different mediator and moderator which weakens the negative behavior and generate positive outcomes from abusive supervision.

1.3 Research Aim

Based on social exchange theory and attribution theory of emotion, the aim of this study is to examine the positive and constructive side of the abusive supervision in a workplace. In other words, how abusive behavior of the supervisor can lead to positive outcomes. This study

introduced a moderator and a mediator that are studied in relationship with abusive supervision and in the presence of those moderator and mediator abusive supervision is meant to generate positive effects on leader followers in terms of improved job performance. The current study aims to answer that not only abusive supervision generate negative outcomes, but it can also function better in the presence of certain phenomenon or variables.

1.4 Research Gap

OH and Farh (2017) suggested the need to examine those unique circumstances and mechanisms that allow the negative impact of abusive supervision to be minimized. Tepper et al., (2017) also suggested enhancing the literature of abusive supervision by operationalizing abusive supervision using positive outcomes. Tepper et al., (2017) stated it as "performance-enhancing pathway" and called for more research to compare and integrate the positive effects of abusive supervision. He stated that "the desire to prove the supervisor to be wrong and avoid further hostility could be examples of the enhancing pathways that link abusive supervision and possible positive effects." (p. 135)

Several studies have been conducted to examine the negative outcomes associated with abusive supervision; rather, few have associated it with positive outcomes. Much of the leadership literature also emphasized on the dark side of the leadership and did not capture the possible positive impact it can have. Therefore, this research aims to examine the constructive role of leader or how abusive behaviour can generate positive job outcomes. It must also be noticed that abusive supervision cannot always generate positive effects, it is restricted to the presence of certain domains (Zhang and Liu, 2018).

1.5 Significance and Scope of the Study

The significance of this study lies in the fact that people have different opinions, interpretations, characteristics, and reactions. Similarly, the perceptions of the abuse are specific to an individual. In other words, it can be said that there are two sides to the coin. The significance also lies in the question that "is abusive supervision an absolute devil?" From a theoretical point of view, it's important to extend knowledge in the emerging field of abusive supervision to have a balanced view where the dark side and positive effects of abusive supervision both must co-exist. From a practical point of view, it will be helpful and insightful for practitioners to recognize when, how, and where such behaviours are relatively wrong and right. This has not been studied much yet,

which is limiting our understanding and knowledge in the field of abusive supervision (Zhang and Liu, 2018). Studies have suggested operationalizing concept of abusive supervision using positive outcomes or using such mediators and moderators that can minimize the negative impact of abusive supervision (OH and Farh, 2017). Zhang and Liu (2018) argued that these positive results must be guided by researching them empirically.

The current study guides on how abusive supervision can function better, i.e. doing more good for the subjected individuals rather than only bad in the presence of a moderator and a mediator. Due to difference in peoples' inherent characteristics and attributions they may perceive the same phenomenon differently or even opposite just as it is said that "bad apples for some may be good for others". These logics helps to establish the footing for a possible positive impact of abusive supervision. Also, the moderator and mediator in this study have not been tested with abusive supervision before so it is another significance of this study.

The current study imperially tests the causal relationships that are explained in the literature review chapter in detail. This study is first testing a simple IV and DV relationship along with it introducing a moderator as supervisor perspective taking which has not been tested in relationship with abusive supervision (IV) before and introducing a mediator as subordinate guilt which also has not been studied before. It is focusing to achieve a balanced view in the abusive supervision literature.

1.6 Research Objectives

Following are the research objectives of this study:

- To examine the impact of abusive supervision on subordinate's job performance
- To examine the moderating role of supervisor perspective-taking between abusive supervision and subordinate's job performance.
- To examine the moderating role of supervisor perspective-taking between abusive supervision and subordinate's guilt.
- To examine the mediating role of subordinate guilt between the interaction of abusive supervision and supervisor perspective-taking on the subordinate's job performance.

1.7 Research Questions

The research questions that my research aims to answer are as follows:

- What is the impact of abusive supervision on subordinate's job performance?
- Does the supervisor's perspective-taking moderate the relationship between abusive supervision and job performance?
- Does the supervisor's perspective-taking moderate the relationship between abusive supervision and subordinate's guilt?
- Does subordinates' guilt play as a mediator between the interactive effects of abusive supervision and supervisor perspective-taking on subordinate job performance?

1.8 Contribution

This research aims to make several theoretical contributions. First, the aim is to demonstrate the effects of abusive supervision on subordinate's job performance that vary as a function of the supervisor's perspective-taking that subordinate adopt. This examination is an important contribution to the abusive supervision literature as very less attention has been given to the notion that much of the effects of abusive supervision might rest within the employees' control through their use of perspective-taking which takes them to the state of guilt and ultimately brining positive outcomes rather than negative only. Secondly, previous research has illustrated the positive outcomes of guilt as a self-regulatory emotion. However, no studies have yet empirically examined its role as a mediator between abusive supervision and performance which influence employee's responses to supervisors' abusive behaviors.

1.9 Summary of the Chapter

The introduction chapter has focused its discussion about the background of this study. The background provides the introduction of the variables and causal relationships that will be studied. It involves discussion on the problem statement, research aim and gap, significance of this research, and scope of the study. It also highlights the aims and objectives of the study including the contribution the study is aiming to make in the abusive supervision literature.

1.10 Overview of the Dissertation

Chapter one covers the background and introduction of this research. It identifies the significance of this research, research gap and contribution, aims, objectives and scope of the study. Chapter two involves a detailed literature review of previous studies on the variables and relationships that are being examined in this study. Chapter three provides a discussion about the methodology adopted for this study. It identifies the research design and philosophy, participants and procedures

and analytical procedures that are carried out for the collected data. Chapter four presents the results and analysis that are conducted to test the hypothesis. This concludes by presenting discussion on limitations for the study and future directions, theoretical and practical implications.

Chapter 2

2 Literature Review

2.1 Chapter Objective

This chapter focuses on a detailed discussion about all the variables in the hypothesized model. It starts with an in-depth discussion on the literature of abusive supervision, followed by a discussion on the relationship between abusive supervision and subordinate job performance. Furthermore, it includes the literature on the moderator of this study which is supervisor perspective-taking. Finally, it ends on the discussion about the mediator of this study this is subordinate guilt.

2.2 Abusive Supervision

According to Tepper (2000) abusive supervision is defined as the "subordinates' perceptions of the extent to which supervisors engage in the sustained display of hostile verbal and nonverbal behaviours, excluding physical contact" (p.178). This definition depicts that any behaviour of the supervisor which intimidates the subordinates other than the physical contact can be categorized as abusive. Tepper (2000) added to this by categorizing rudeness, public criticism, breaking promises, and silent treatment as some of the examples of abusive behavior.

For further understanding of abusive supervision's definition, Harris et al. (2007) broke it in four different parts. First, it is an individual's assessment that means if one subordinate perceives his supervisor's behaviour as abusive, the other may not. Secondly, the definition also refers to it as "sustained display" which means it is not a one-time event only. Thirdly, it refers to both verbal and non-verbal bitter behaviours except for physical abuse which would otherwise fall under violent behaviours. Lastly, it refers to just behaviour themselves but not the intent of actions. It can be summarized that abusive supervision has four main features, relativity, continuity, nature of abuse, and behavioral conduct, which are important for the researcher to understand.

According to studies a wide range of behaviors fall under abusive supervision such as consistently being criticized by the supervisor in front of others, blaming employees inappropriately, inconsiderate, and rude behaviour towards employees, not giving fair credit to employees,

undermining employees, yelling, or invading their privacy can be viewed as abusive (Tepper, 2000; Tepper et al., 2006; Tepper et al. 2011). All these behaviours compliment the four features of abusive supervision's definition discussed above.

2.2.1 Consequences of Abusive Supervision

In many studies there are substantial and well-established negative consequences for employees who face abusive supervision. Throughout researchers have been discussing different aspects of these consequences.

Tepper (2000) says that employees who report their supervisors to be abusive tend to have lower life and job satisfaction and hence are more likely to quit their jobs (Tepper, 2000). Later, Tepper (2007) elaborated it further and pointed out that abusive supervision influences employee's performance, job attitudes, work-family conflict, and psychological distress.

On an individual level abusive supervision negatively impacts an employee's psychological well-being. Employee's psychological resources are consumed by the negative instances in the organization, so they are left with minimal resources to deal with their stress (Mitchell and Thau, 2010). Therefore, they face problems in terms of anger, anxiety, well-being, depression, low self-esteem, self-image, and emotional exhaustion which highly impacts their mental health. This stress not only depreciates subordinate's mental health but also causes physical health problems (Alexandar, 2012). Many studies also pointed out that abusive supervision contributes positively to insomnia (Rafferty et al., 2010) and drinking problems (Bacharach and Bamberger, 2006).

Abusive supervision also impacts the employee's performance. It negatively impacts subordinates' work relevant outcomes such as organizational commitment, turnover intention, and organizational identification. Workplace deviance is also increased due to abusive supervision. Sometimes employees directly retaliate towards supervisory abuse and display deviant behaviours towards their supervisors which eventually decrease the interaction between supervisor and subordinates. They avoid working with them and try to stay away from them. This deviant behaviour helps the subordinate decrease the chances of potential abuse and reduce their work stress. However, it impacts their work performance (Ambrose and Mitchell, 2012; Mitchell and Thau, 2010)

Abusive supervision and negative experience in workplace also trickle down to subordinate's family life. This displaced aggression has been pointed out in abusive supervision research. Employees dealing with an abusive supervisor experience kicking the dog effect and according to Hoobler and Brass (2006) such employees are likely to be more aggressive towards family members. Subordinates suffering from abusive supervision channel their negative emotions towards their family members as they are safe targets (Restubog et al., 2011).

Abusive supervision not only has individual-level consequences but indirectly and directly impacts the overall organization. Studies have found that employees who face abusive supervision starts gossiping and retaliating against their supervisor and organization such as stealing and sabotaging. They are inclined to perceive an unjust system in the organization (Tepper, 2000). Employees' perception of perceived support from supervisors also decreases (Shoss et al., 2013). As employees always consider their supervisors as representatives of the whole organization, when they face abusive behaviour from their supervisors, they attribute it to the whole organization (Mitchell and Ambrose, 2007). Eventually it reduces organizational justice perceptions of subordinates. When subordinates face abusive supervision, they blame the organizations' policy to not able to correct mistreatments and to fail to implement a policy to protect them from abusive behaviours (Tepper, 2000).

Zhang and Liao (2015) consolidated much of the research and sorted the consequences of abusive supervision into six categories that are workplace behaviour, well-beings, attitudes, perceptions of organizational justice, family-related outcomes, and performance outcomes.

2.2.2 Antecedents of Abusive Supervision

Throughout the literature, much importance has been given to the outcomes of abusive supervision. They have been researched thoroughly, but very little attention has been shown to its antecedents. Martinko et al. (2013) pointed it out, and during the last decade, research on abusive supervisions antecedents began to accelerate (Liu et al., 2012; Harris et al., 2011; Hu and Wu, 2009). According to Harris et al. (2007), this interest in examining abusive supervision's antecedents resulted from the previous literature about abusive supervision's deteriorating impact on employee performance. Zellars et al. (2002) and Lin et al. (2003) also highlighted organisational citizenship behaviours and employee well-being as escalators, respectively. Also, the depth of research on the consequences of abusive supervision means it is unlikely to add more significant theoretical

contributions. So, researchers have shifted their focus from consequences to studying abusive supervision's antecedents (Tepper et al., 2011; Martinko et al., 2013).

Zhang and Bednall (2015) classified the antecedents of abusive supervision into three categories, organisation related antecedents, supervisor related antecedents and demographic antecedents of employees and supervisors.

As discussed earlier, organisational norms are a potential contributor to abusive supervision. In Zhang and Bednall (2015) analysis, aggressive norms and organisational sanctions are two organisational antecedents in line with Tepper's (2007) hypothesis. The use of sanctions and aggressive norms are categorised under organisation related antecedents as these are the distinguishing variables that describe the organization. If organisations have stringent rules to punish aggression, there is a lesser chance of abusive supervision (Restubog et al., 2011).

The supervisor related antecedents include constructs based on the supervisor's characteristics such as the supervisors' state, personality traits and leadership style (Bass and Hoobler, 2006; Aryee et al., 2007).

The affective state of the supervisors with higher authorities in the organisation impacts their attitude and behaviour towards their subordinates (Hu and Hoobler, 2013). As per Aryee et al. (2007), the trickle-down model determines that unfair treatment coming from higher authorities' impact supervisors and, ultimately, their subordinates. Such a negative state can also arise from the negative interactions and experiences with co-workers, eventually affecting the subordinates. Harris et al. (2011) determined that supervisors who undergo more conflict with their co-workers include in abusive behaviours towards their subordinates. Studies on displaced aggression explain the relationship between abusive supervision and supervisor's affective state, which supports that people showed aggressive behaviour when they were ill-treated (Restobug et al., 2011; Brass and Hoobler, 2006). All this trickling down of negativity is explained by Tepper et al. (2006) by referring to subordinates as safer targets as they have low power to retaliate. So, the supervisors channel their negative state towards them.

Analysing the current literature for supervisor's personality traits, researchers have studied the role of three types of characteristics: power, emotional intelligence, and Machiavellianism. Power dynamics present abundant possibilities to abuse their subordinates (Aryee et al., 2007).

Supervisors with high emotional intelligence can effectively regulate their aggression and they are less likely to abuse their subordinates. Kiazad et al. (2010) explain that the supervisors' Machiavellianism increases the chances of aggressive behaviour. Such traits can be destructive and lead to manipulative and exploitive behaviour.

Colbert et al. (2012) said that supervisors' leadership style is a static characteristic. Consequently, a supervisor will behave according to the leadership style he/she has adopted. A supervisor who has adopted the destructive leadership style will display more hostile behaviours such as publicly mocking the subordinate or not giving them the due credit for their work. While on the other hand, supervisors who adopt a constructive leadership style will display a helpful attitude towards their subordinates to achieve shared goals (DeRue et al., 2011).

Supervisor's and subordinates' demographic attributes are mostly treated as control variables in abusive supervision studies (e.g., Bamberger and Bacharach, 2006; Chi and Liang, 2013) but studies have shown a meaningful relationship between demographic characteristics and workplace hostility (Bowling and Beehr, 2006). Demographic differences between supervisors and subordinates lead to negative results. Supervisors favour subordinates who are more similar. Research has also suggested that age plays a vital role, and younger supervisors tend to be more aggressive. Similarly, younger employees are met with less dignity compared to older ones (Tepper et al., 2011). Therefore, Zhang and Bednall (2015) theorised that demographic characteristic have unique effects, placing them into separate categories.

2.3 Abusive Supervision and Subordinate's Job Performance

In the above discussion, it has been eminent that abusive supervision affects subordinates and have several adverse consequences. Job performance is one significant attribute of an employee which can be majorly affected by the supervisors' behaviour. Destructive behaviour in the organisations and their impact on employees' job performance are being given more and more attention every day (Griffin & Lopez, 2005; Griffin & O'Leary-Kelly, 2004). This attention is due to the increasing destructive behaviour at workplaces and its impact on valued individual and organisational outcomes (Griffin & Lopez, 2005). Such destructive behaviours can have adverse outcomes, especially when exhibited by someone in a leadership role (Duffy et al.,2002; Tepper, 2000). As already discussed, several previous studies have demonstrated the unfavourable impact of abusive supervision on various organisational outcomes, for instance, increased work-family conflict

(Tepper, 2000), a lower degree of commitment and satisfaction (Duffy et al., 2002, Tepper, 2000), and a greater degree of stress (Duffy et al., 2002, Tepper, 2000). Such well-established literature on consequences emphasised that it is critical to examine the relationship of leadership and performance, as it is significant to organisational success (Hadikin & O'Driscoll, 2000; Tepper, 2000). Another element that adds to its importance is the critical role of job performance in making essential employment decisions like promotions, bonuses, and pay raise (Rynes, Gerhart, & Parks, 2005).

The theory of social exchange serves as one possible explanatory framework to determine the impact of abusive supervision on subordinate job performance. One of the major principles of social exchange theory is repayment in kind or reciprocity. In analysis, reciprocity is often considered positive reciprocity, but Cropanzano & Mitchell (2005) have discussed how it can be negative. Individuals return adverse treatment or repay negative behaviour. Therefore, subordinates may pay back their abusive supervisors by declining their work performance. Based on the social exchange theory, researchers have stated that the quality of social exchange is decreased between the supervisor and the subordinate when an individual faces supervisory abuse (Xu et al., 2012). They may withdraw their efforts towards work when they perceive they have been given unequal treatment by their supervisors (Wang and Liu, 2013). Putting it differently, when subordinates perceive that they benefit from their supervisors, they tend to respond by giving favourable returns. However, when they perceive them as abusive, they tend to reciprocate by giving unfavourable returns (Xu et al., 2012).

Based on the social exchange principle, Wang et al. (2005) discussed that resources for exchange are brought in by both the supervisors and subordinates. If valuable contribution and resources lack from the supervisor, it will result in a weak exchange relationship, and the employee will not perform well. Also, they will be motivated to suppress their efforts in their jobs as an unfavourable offer to their supervisor. Schyns and Schilling (2013) suggested that destructive leadership has a negative relationship with individual job performance. The study argued that there might be several reasons due to which destructive leadership influences job performance. First, subordinates reduce their efforts at work in the face of an abusive boss, as explained with the social exchange principle. Secondly, the negative relationship between destructive leadership, and motivation and well-being can be why followers of an abusive leader have low job performance.

Previous studies have also found that supervisors and subordinates have a distinct set of expectations from each other. Supervisors expect their subordinates to be competent and capable, whereas subordinates expect positive interpersonal communication with their supervisors. In other words, subordinates expect that their supervisors share a mutual understanding with them, can influence others, are friendly and offer them learning and training opportunities Abusive supervisors are unlikely to fulfil these subordinates' expectations, eventually resulting in a poor quality exchange relationship, as discussed above. As supervisors are considered representatives of the whole organisation, and when subordinates have poor quality social exchange with them, they are unlikely to put extra efforts towards the organisation (Huang et al., 2008).

Natasha et al. (2018) argued that leadership style, trust in the leader and leader-follower exchange are the main predictors of job performance. The supervisor or leader's role in supporting the employee job performance is fundamental. However, when the supervisor is abusive and destructive towards the employee, causing stress and lack of emotional well-being, his or her job performance will be negatively impacted. In light of the social exchange research, abusive supervision is categorised as an unequal and destructive social exchange in an organisation. Resultingly employees reduce their quality efforts at work in response to such unequal exchange to reduce the distress of unequal treatment (Chen and Wang, 2017).

Literature has also discussed abusive supervision's impact on an individual's self-esteem. It is vital to study what impact abusive supervision can have on a subordinate's self-esteem since self-esteem is related to a subordinate's job performance which has been revealed in Judge and Bono's (2001) study. Shah and Schroth (2000) discussed how adverse events instead of positive have a more significant impact. Individuals tend to bear in mind the negative interactions with their supervisors and remember those interactions with intense emotions. So, the adverse events that trigger fluctuations in individuals' self-esteem are an episode of abusive behaviour. The relationship with abusive supervisors consists of continuous attacks on subordinate's self-esteem and self-efficacy, interpersonal conflicts due to which subordinates feel frustrated, helpless and lose control of their work, consequently impacting their job performance (Wu et al., 2012).

It is also argued that subordinates experiencing abusive treatment from their supervisors consider it an absence of interpersonal justice. Therefore, subordinates, to reinstate equity reduce their efforts towards work. When subordinates feel threatened or identify a loss of control, they tend to retain their sense of autonomy. They reduce their work efforts in response to abusive behaviour to reinstate their autonomy (Aryee et al., 2007; Zellars et al., 2002).

Aryee et al. (2008) conceptualised abusive supervision as a workplace stressor and predicted that abusive supervision would increase psychological stress leading to emotional exhaustion, which, as a result, reduces subordinate's job performance. When faced with abusive supervision, the subordinate might be spending their energy coping with the abuse instead of focusing on the work itself. Additionally, it is argued that abusive supervision depletes essential resources for job performance, and people utilise their limited emotional resources to control the supervisory abuse. Employees are emotionally exhausted, and in return, they deflect their efforts from core job responsibilities. (Zhou, 2016).

In essence, all the above literature has shed light on the adverse effects abusive supervision has on subordinate job performance. Abusive supervision affects the employee's relationship with the supervisor resulting in an ineffective exchange relationship. Subordinates see such behaviours as a failure of the organisation to provide justice, and as an outcome, they tend to retaliate and withhold work efforts. As a result, the employees' motivation, and organisational attachment decreases. This leads to increased stress and emotional exhaustion, and most of the employee's energy is spent in coping up with the it. Therefore, the subordinate is unable to focus, and performance is affected.

Thus, it is proposed,

Hypothesis 1: Abusive supervision is negatively related to the subordinate's job performance.

2.4 Moderating Role of Supervisor's Perspective-taking

The discussion above draws upon how abusive supervision hurts an employee's job performance. However, it is significant to explore beyond this simple effect of abusive supervision on job performance. Many studies have described the impact of perceived abuse as dysfunctional and disturbing, but Kramer (2006) discussed it from a different perspective. He argued that abusive supervision is emotionally stressful, but it is strangely motivating and charismatic. For example, a subordinate quoted in an article on the leadership of Steve Jobs, "you a***hole, you never do anything right. . . . Yet I consider myself the absolute luckiest person in the world to have worked with him" (Isaacson, 2012, p.100). Such evidence also signifies a need to examine those

mechanisms that allow for the reduced negative impact of abusive supervision on employee job performance and motivation (Oh and Farh, 2017). Many previous studies have also predicted that the negative effect of abusive supervision can be minimised or accentuated by introducing moderating variables in its relationship (Tepper, 2000; Tepper et al., 2001).

One moderating variable that might moderate the relationship between abusive supervision and job performance is the supervisor's perspective-taking. It can minimise the direct negative effect of abusive supervision and job performance. In the literature, it has been well established that abusive supervision impacts subordinate's job performance, but abusive behaviours do not need to affect all employees similarly. This tendency to respond differently also suggests the need to examine moderators in their relationship.

Perspective-taking is a cognitive process where an individual takes other's viewpoint to understand their values, preferences, and needs (Parker & Axtell, 2001). In this research, it is studied as subordinate's ability to take supervisor's perspective. Parker and Axtell (2001) found that perspective-taking has a significant relationship with job performance. It also has a significant relationship with reasonableness, sensitivity and patience and a negative relationship with sarcasm and aggressiveness. Perspective-taking has also reduced anger, retaliation, and feelings of blame towards the transgressor (Batson et al., 1997; Takaku, 2001). Rupp et al. (2008) also said that perspective-taking skill helps the employee to encounter a muted emotional response when he experiences injustice. As discussed, the cognitive reactions that emerge through mental processing happening during perspective-taking Hunter and Hunter (1984) say that cognitive ability is a valid predictor of job performance. The research found it to be the strongest predictors of job performance among other techniques. Earles and Ree (1992) also noted that general cognitive ability is a predictor for successful performance and training.

First, perspective-taking causes the observer to propose causal attributions, where he tries to understand the reason for the target's behaviour. Active efforts of role-taking diminish the effect of typical differences between the observer and the target. Secondly, when a subordinate adopts perspective-taking while being subjected to an abusive target, their emotional reactions also change. Typically, two emotional states are observed by the observer who is actively involved in perspective-taking: feelings of compassion and sympathy for the target and emotions of distress and unease. Research also supports that perspective-taking provides somewhat "favoured" status

to the one whose perspective is being taken; the observer explains the behaviour of the target like his own behaviour, and the observer is expected to undergo similar emotions as his target is (Parker and Axtell, 2001).

Past studies have concluded that there are several significant consequences for entertaining other's psychological perspectives (Davis et al., 1996). Parker and Axtell (2001) discussed that using and possessing the skill to adopt other's perspective is accountable for a great deal of human social capacity. This point also proclaims that a highly developed perspective-taking ability allows a person to control his typical egocentrism and adjust attitudes according to other's expectation to ensure smooth interpersonal relations.

Parker and Axtell (2001) explained that employees who are involved in perspective-taking are likely to exhibit emphatic behaviours, identifying and understating from their target's perspective, feeling concerned for their problems and enjoying their achievements as well. Perspective-taking also leads to making positive attributions about the behaviour of the target. While an employee takes the positive perspective of the target's behaviour, it is argued that it will weaken any negative impact of abusive behaviour on job performance. Parker and Axtell (2001) further explained that employees who adopt perspective-taking would improve performance, including cooperative and helping behaviours. Bartunek et al. (1983, p. 274) proposed that "as people progress developmentally, their thinking becomes more complex and abstract and, paradoxically, also more precise and specific. Correspondingly, they become increasingly able to empathise with others who hold conflicting views." It is argued that several people can better adapt others' perspective either by development or nature. It is also argued that perspective-taking can be changed or shaped by some organisational factors by influencing certain situations to which employees are exposed. Dispositional tendencies of employees vary when they put an effort to adopt other's perspective. The dispositional tendencies to adopt other's perspective in different situations vary as a function of employee's motivation. Their motivation will stimulate them to adopt other's perspective (Grant and Berry, 2011). Much of the studies in management and psychology argued that motivated employees tend to validate a range of other people's perspective, including their co-workers, supervisors, customers, suppliers, and clients (Axtell et al., 2007; De Dreu et al., 2000; Parker & Axtell, 2001). Such employees are more concerned and aware of other's preferences and goals. They listen and ask questions and observe others and find cues to help them effectively (De Dreu et al., 2000). Also, when employees adopt other's perspective, they can view the situation in an integrated manner, and they can align and consolidate those perspectives better (Parker and Axtell, 2001).

To clarify it further, the attribution theory of emotion says that subordinates develop explanations and perceptions of why a particular stimulus (i.e. attributions) has occurred and based on those attributions, they successfully decide how to deal with it. These attributions are significant as they guide the subordinate that further behavioural responses and emotional processing will follow up or not based on the scope to which subordinate has perceived supervisor to be abusive (OH and Farh, 2017). This theory of emotion is dynamic; building on it allows explaining how an adjustment in emotions, new perceptions and changes in responses happen over time.

In the literature discussed above, researchers have developed how a supervisor's perspective-taking can affect employee job performance. If an individual recognises the supervisor's point of view, they will be more considerate towards the abusive behaviour. The employees who have developed cognitive skills like perspective-taking develop empathetic and cooperative behaviours. Such behaviours can be encouraged through motivation, and the subordinate's way of coping with the abuse can be changed. Hence, it is argued that the supervisor's perspective-taking ability will weaken the relationship between abusive supervision and subordinate job performance.

Therefore, it is proposed:

Hypothesis 2: Supervisor perspective-taking moderate the direct negative relationship of abusive supervision and subordinate job performance; such that the direct negative relationship will be weaker (stronger) when Supervisor perspective-taking is high (low).

2.5 Mediating Role of Subordinate's Guilt

In the above discussion, it is eminent that abusive supervision has damaging outcomes for the organisation and its members. The literature also showed how if an employee takes the supervisor's perspective, this detrimental effect can reduce, and a strict negative relation with abusive supervision could have a positive effect. Further, to understand the impact of perspective-taking, it is crucial to understand the subordinate's guilt as a mediator to decrease the negative relationship between abusive supervision and job performance.

Guilt is one of the self-conscious behaviours. Self-conscious emotions are encountered in response to failure involving a breach of moral value or principle of transgressed behaviours. (Covert et al., 2003). Self-conscious emotions are crucial to regulating social behaviours. Guilt is not considered an automatic emotion; it is a conscious emotion to evaluate something, either good or bad. In guilt, one condemns a particular behaviour and assumes responsibility for it. Guilt is positively related to positive self-regulatory outcomes and adaptive functioning, psychological adjustment, handling anger effectively in practical ways, inhibit anti-social behaviours, inhibits an individual from substance abuse, establishing and maintaining interpersonal relationships and problem-solving skills (Covert et al., 2003; Tangey 1996).

It is argued that there is positive relationship between empathic behaviours and perspective-taking (Treeby et al., 2016). Leith and Baumeister (1998) researched how feelings of guilt help individuals to comprehend the perspective of others. When an individual is involved in perspective-taking, he has pro-social behaviours and empathy. In several other studies, guilt is positively associated with workplace settings such as helpful behaviours at the workplace, learning from mistakes and reparation (Tangney et al., 1996; Ilies et al., 2013). Self-conscious emotion such as guilt helps employees through their emotional experiences and impacts their behaviours later by boosting cognitive reflection and physiological changes (Baumeister et al., 2007). Liu and Xiang (2018) have also argued how guilt is associated with increased employee motivation towards job performance and learning activities and positively influences employee outcomes. Such emotion leads an employee to the processes of self-evaluation, which is associated positively with shaping their behaviours and changing cognition. This self-conscious and moral emotion of feeling guilty results from a negative self-assessment of a particular behaviour, or the contrast between the current situation to the desired situation (Morris and Keltner, 2000; Tracy and Robins 2006; Ilies et al., 2013). In this approach, guilty employees will identify that their behaviour has an unsatisfactory impact and will attempt to recognise behaviours to amend their errors (Tangney et al., 2007). The quality of self-conscious emotions will advance the individuals to progress more towards achieving maximum objectives. Guilt is associated closely with higher will power and higher cognition, leading an employee to improved work outcomes such as job performance and higher motivation levels (Covert et al., 2003; Goldsmith et al., 2012). Therefore, when an employee has feelings of empathy or understanding others point of view by adopting perspectivetaking, it will lead to feelings of guilt. Consequently, it will then lessen the impact of abusive

behaviour. In this way, the negative impact of abusive behaviour on employee's job performance will be reduced.

Researchers have also found that guilty employees involve more in reparative actions of improving their performance and wanting to amend their actions when faced with adverse events in the organisation. For example, when guilty employees are informed about their poor performance or failing to complete the task, they make extra efforts and work harder in future (Flynn and Schaumberg, 2012). The experience of guilt leads employees to be involved in reparative activities such as apologising, confessing, compensating for mistakes instead of exhibiting inaction or denial (Tangney et al., 1996). Guilt-prone people are more likely to repair their mistakes and avoid miscues in future. As argued earlier that when a subordinate adopts the perspective of his supervisor, he has feelings of empathy and tries to identify why a specific stimulus has occurred and how to respond towards it and doing so will lead the subordinate towards feelings of guilt which will improve his work outcomes such as job performance by taking reparative actions. In this perspective, the negative impact of abusive behaviour will be minimised through supervisor perspective-taking and subordinate guilt.

Troester and Quaquebeke (2020) drew on the emotional process theory of abusive supervision and argued that guilt would motivate the employees to take responsibility for the experienced abusive supervision and blame themselves. The guilt will motivate them to believe that their mistake has led to the abuse. Eventually, guilt motivates them to improve their performance. Liao et al. (2020), in the recent research, have argued that employees believe that supervisors want them to perform better; that is why they abuse them. Similarly, some employees might believe otherwise and think their supervisors want to harm them; that is why they abuse them. As discussed earlier, if the employees take the perspective of the supervisors and feel guilty, they are more likely to believe that the abuse has performance motives and then work to improve their job performance. Hence, by explicitly investigating the mediating role of guilt in improving job performance, when subordinates take the perspective of their supervisors, it can be understood how the negative relationship between abusive supervision and job performance can decrease. Following this reasoning, below hypothesizes are proposed:

Hypothesis 3: Supervisor perspective-taking moderate the relationship of abusive supervision and subordinates' guilt, such that, there is a relationship between abusive supervision and subordinates' guilt when subordinate is taking the supervisor's perspective.

Hypothesis 4: Subordinate guilt mediates the interactive effects of abusive supervision and supervisor perspective-taking on subordinate job performance.

Keeping in view the above discussion, below theoretical framework is proposed.

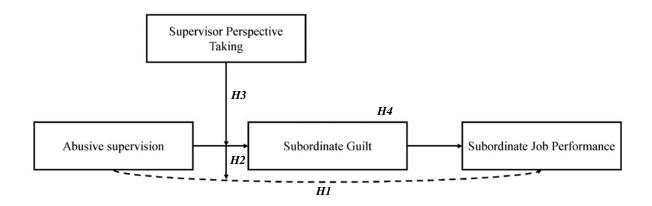


Figure 1 Theoretical Framework

2.6 Summary of the Chapter

This chapter involves discussion on in-depth literature review of all the variables and relationships under study. The dependent variable abusive supervision, its consequences and its antecedents are discussed in detail. Furthermore, the relationship of abusive supervision with subordinate job performance is discussed and this relationship is based on social exchange theory which has been discussed alongside. The role of supervisor perspective taking as a moderator is also discussed, which is meant to minimize the negative relationship of abusive supervision and subordinate job performance. This relationship is based on the attribution theory of emotion which has been talked through as well. This chapter involves a debate on subordinate guilt which is the mediator in this study along with its relationship with supervisor perspective taking and subordinate job performance. At the end, a theoretical framework is presented which has been concluded after the debates and reasoning from the literature review.

Chapter 3

3 Methodology

3.1 Chapter Objective

This chapter aims to address the complete methodology which has been used for this research. It presents discussion on research philosophy, design and strategy, participants and the procedure carried out for this study to answer the research questions and objectives. It also discusses the measures that has been used to collect the data for this research. This chapter ends with the discussion on what ethical measures were under consideration to carry out this research.

3.2 Research Philosophy

It is very important to understand the research philosophy before conducting a research. It helps to map out an appropriate strategy for the research methodology. It also helps a researcher to evaluate different methods and avoid inappropriate methods for a study. Before deciding on a methodology for a research, it is important for in-depth knowledge of two extremes of research philosophy, i.e., positivism and post-positivism.

The positivist approach assumes that there exists an objective reality which is not created by human minds and hence is independent of human behaviour (Crossan, 2003). Bond (1989), and Hughes (1994) says that there are several elements of a positivist approach such as it should be quantitative research, the decision of how to study and what to study should be chosen by objective criteria, the purpose should be to establish the causal explanations and the operationalization of concepts should be in a way that it allows the facts to be quantifiably measured. On the other hand, post-positivist approach argues that there is no rigid reality instead, the reality is created by those involved in the research (Hughes, 1994). In other words, in this approach reality is subjective, multiple, and it is constructed mentally by the individuals (Crossan, 2003).

This study adopts the positive research philosophy. The positivist approach has been utilized to objectively assess the causal relationship between abusive supervision and subordinate job performance in the presence of subordinate guilt as a mediator and supervisor perspective-taking as a moderator. This approach has been used because it will help to deductively assess the relationships between the variables with the support of existing theories of social exchange and attribution theory of emotion.

While discussing the philosophy of research, it is important to highlight the two ways of approaching it, i.e., ontology and epistemology. Scholars have defined ontology as study of "nature and being actuality" (Saunders, 2011). Ontology can be of two types, objectivism, or subjectivism. The research should clearly support one of the mentioned approaches. This research has been built on the objectivist or realist ontology as the aim is to search for objective knowledge. From the epistemological perspective, the standpoint is that to find out the truth about the social world, the researcher and those researched are separate entities that are not influencing each other either influenced by each other (Slevitch, 2011). They keep their values and beliefs detached during the complete research process to not influence the interest of their study (Saunders, 2011). Epistemologically, this research has adopted a positivistic approach, where the data has been deductively gathered and interpreted based on social exchange theory and attribution theory of emotion.

3.3 Research Design and Strategy

There are two research designs that are widely used for conducting research: quantitative and qualitative research design (Creswell & Creswell, 2017). The selection of research design primarily origins from the research philosophy and its epistemological and ontological stance that is adopted for studying a certain phenomenon (Slevitch, 2011). Therefore, for this study, the quantitative research design is followed, which involves statistical analysis and empirically testing of the hypothesized relationships. Quantitative research allowed the causal relationships of this study and the operationalization of concepts to be quantifiably measured.

Accordingly, survey questionnaire was designed for data collection, which included close-ended questions. The participants had to choose from the pre-defined scale mentioned against each survey question. The questionnaire has three appendixes: Appendix A (demographics), Appendix B (Time 1 Study Measures), Appendix C (Time 2 study Measures). The statements in questionnaire about 'perceptions of your teacher' refers to the measures of abusive supervision. The statements about 'how you are feeling right at this moment' are about shame measures on odd numbers and guilt measures on even numbers. The statements about 'how you mostly feel' refers to anger measures. The statements about 'the extent to which you adopt your teachers' perspective' are about supervisor perspective taking. The reason of arranging some measures on even number and some on odd numbers is to avoid getting some significant pattern.

The data collection method used for this study is multi-wave. Johnson et al., (2011) and Podsakoff et al., (2003) argued that by using multi-wave data collection method the concern of common method biases could be minimized. Previous studies who studied abusive supervision for example Venus and Johnson (2012), Wang et al., (2014), Moin, Wei and Weng (2020) used multi-wave data collection method and suggested to utilize this method to find more objective results. Venus and Johnson (2012) defined multi-wave by collecting their data in three waves; in first wave they collected the data about demographics, in second wave they collected the data about leader behaviour, and in third wave they collected the data about leader effectiveness. Also, Moin, Wei and Weng (2020 defined multi-wave by collecting data in two waves. In time 1 study, employees rated supervisor abuse, emotional labor strategies, and demographics. In time 2 study, employees rated job satisfaction and emotional exhaustion. In the current study, the method is multi-wave in such a way that data has been collected at two points in time; during time 1 study, data was collected from students about independent variable (i.e. abusive supervision), mediator (i.e. subordinate guilt) and moderator (i.e. supervisor perspective-taking). In time 2 study, data was collected about the dependent variable only (i.e. job performance). The data were collected from February 2019 to April 2019. The reason of choosing multi- wave data collection method is to reduce the common method biases which is associated with cross-sectional study. Also, Tepper (2017) and Thau and Mitchell (2010) empathized that number of studies that are focused on abusive supervision are cross-sectional in nature, so he suggested to utilize multi-wave methods for more objective results. As the objective of this research is to study emotions and human behavior so in that case it is recommended by Tepper (2017) to collect the data with gaps in different waves. Multi- wave method also helps reduce a participants' likelihood to use previous answers to inform subsequent answers. In this research it is examined that what impact does abusive supervision has on subordinate job performance, so in order to get objective and free of bias data the questionnaire of abusive supervision and job performance was filled in two different times. In this way, the answers of abusive supervision does not have an impact on the answers of job performance.

3.4 Participants and Procedures

Current study participants were voluntary participants from a large public university situated in the region of Islamabad, Pakistan. The data is collected from 1150 students from different departments of both bachelor's and masters who are full-time students. The sample size is as per Krejcie and Morgan's (1970) and Bartlett, Kotrlik & Higgins (2001) recommendation. Also, the reason of a large data set was to find more accurate results.

Initially, the teachers were contacted, who are full time employed at the same university, who agreed to provide access to their students. After that, students were contacted in one of the classes and surveys were returned in the same class. Initially, in time 1 study, the data was collected from about independent variable (i.e., abusive supervision), mediator (i.e., subordinate guilt) and moderator (i.e., supervisor perspective-taking). After a week, in time 2 study, the data was collected from the same students about the dependent variable only (i.e., job performance). As the data was collected in two times hence, the questionnaires were alphabetically codded so that they can be matched with the respective respondent.

Before collecting the data, the process was well explained to the participants in order to ensure smooth data collection. For this study, non-probability sampling was incorporated and out of which purposive sampling technique has been utilized. The reason of using this technique allows the researcher to select the cases or participants by using his judgment which enables him to answer the questions and aims of his research (Kothari, 2004). The data is collected from students because they possess certain qualities which were relevant for this study. For example, the students are well informed about the phenomenon of abusive supervision which makes them information rich cases. Also, because students are expected to submit and bow to their teachers thus making it relevant to measure constructs like abusive supervision, perspective-taking and subordinate guilt. Furthermore, in educational institutes, professors are under time pressure and heavy demand for work which can cause them to be abusive towards their peers or students.

3.5 Measures

The survey was composed and administered in English. The items of each variable were adapted from relevant studies to ensure validity. Students (as subordinates) rated their teachers' (supervisor) abusive supervision, perspective-taking, their state of guilt and their performance.

3.5.1 Abusive Supervision

Tepper (2000) 15 item scale was used to measure student's perceptions of abusive supervision. Items and response scale include: "My teacher makes negative comments about me to others" (1 = "disagree strongly" and 5 = "agree strongly") and "My teacher expresses anger at me when he/she is mad for another reason." (1 = "disagree strongly" and 5 = "agree strongly").

3.5.2 Supervisor Perspective-taking

A four-item scale was adapted from Devis et al., (1996) perspective-taking scale. Participants were asked to indicate the extent to which they tried to adopt their teacher's perspective. Sample items and response scale include: "I made an effort to see the world through my teachers' eyes" (1 = "disagree strongly," and 5 = "agree strongly"), "I imagined how my teacher was feeling" (1 = "disagree strongly," and 5 = "agree strongly"), "I sought to understand my teachers' viewpoints" (1 = "disagree strongly," and 5 = "agree strongly") and "I tried to take the teachers' perspectives" (1 = "disagree strongly," and 5 = "agree strongly").

3.5.3 Subordinates' Guilt

Five item scale developed by Marschall, Sanftner & Tangney (1994) was used to measure students' guilt. Participants were asked to rate the statement based on how they feel at the moment. Sample items and response scale include: "I feel remorse, regret" (1 = Not feeling this way at all to 5 = feeling this way very strongly) and "I feel tension about something I have done" 1 = Not feeling this way at all to 5 = feeling this way very strongly).

3.5.4 Performance Ratings

To measure the relationship between abusive supervision and job performance, only the ratings of student's self-rated performance were taken.

3.5.5 Self-Rated Performance

To measure self-rated performance, I adapted 10 item scale from Wright, Kacmar, McMahan and Deleeuw (1995) on a five-point Likert scale. Since Wright et al.'s scale was used from the perspective of supervisor ("On this job, this subordinate exhibits an underlying concern for doing things or tasks better, for improving situations"), so it was phrased it to allow for students' self-ratings ("In this class, I exhibit an underlying concern for doing things or tasks better, for improving situations?") The response scale was: (1 = "strongly disagree," 5 = "strongly agree").

3.5.6 Control Variables

Based on the literature on subordinate's attitude towards abusive behaviour, gender and age of the students were controlled (Tepper, 2007; Wu & Hu, 2009; Zellars et al., 2002). Students' state of anger and shame were also controlled as it might influence work outcomes and their perceptions of interpersonal interactions at the workplace (Zellars et al., 2002). Anger was measured by three adjectives from the positive and negative affect schedule (PANAS) by Watson et al., (1988) such

as "upset", "hostile" and "irritable". The response scale was: (1= "not feeling this way at all", 5= "always feeling this way"). Shame was measured by using the 5-item scale by Marschall et al. (1994). The sample items were, "I want to sink into the floor and disappear" and "I feel small". The response scale was: (1= "not feeling this way at all", 5= "always feeling this way").

3.6 Analytical Approach

Several analytical procedures were carried out to acquire the desired results. First, the descriptive statistics were computed. Then the reliability and internal consistency of the variables were ensured by calculating the Cronbach alpha. Further, to test the full hypothesized model, a method reported by Preacher, Ruker and Hayes (2007) was utilized. The hypothesizes were specifically tested using PROCESS macro for SPSS, which is a SPSS macro extension developed by Preacher et al. (2007). Two sets of analysis were conducted, firstly Model 1 of PROCESS macro was utilized to test simple moderation analysis (hypothesis 1-2). Then the mediator and moderator were combined and tested the overall mediated moderation model (hypothesis 3-4) by utilizing the model 8 of PROCESS macro. Furthermore, the indirect effects of supervisor perspective taking on subordinate job performance through subordinate guilt were also tested and results are shown in table 5. The indirect effect shows the extent to which the X variable (abusive supervision) influences the Y variable (subordinate job performance) through the mediator. The interaction plot of Subordinate Guilt and Supervisor Perspective taking on Abusive Supervision were also drawn.

3.7 Data Screening

In order to prepare the data for analysis data was screened to observe any missing values, unengaged responses and identify outliers. Before any further analysis and testing SPSS and Microsoft Excel were used to perform the screening of the data. First, missing values were analyzed. As the Likert scale was used to measure responses, so, the missing values were treated by calculating and adding average against each missing response. The screening process resulted in 1150 responses which were eligible for data analysis.

3.8 Ethical Consideration

There are few ethical considerations that are important and obligatory for a researcher to keep in mind while conducting research. As dealing with humans and they are quite sensitive in sharing in their point of views, so a level of trust was important to establish so that they are willing to comfortably disclose what I was looking for. Also, abusive supervision as a phenomenon is quite

sensitive, and people do not easily share true response. Hence by establishing trust, I was able to access their life experiences and was able to get the desired responses. Secondly, the respondents were little hesitant and scared that their responses might be shared with their teachers as they were rating their teachers' behaviour, so the confidentiality and anonymity of the data were promised. As invading into someone's personal life experiences which they may not want to share otherwise, so data confidentiality was important. The respondents were clearly informed about the purpose of the research and where their responses will be used to have informed consent.

3.9 Summary of the Chapter

This chapter discussed all the components involved in research methodology. It presents the research philosophy, research design and strategy, the research procedure, sample size and participants of this research. It also involves the measures of each variable that has been used for the data collection. All the research methodology elements that are chosen for this study have been well explained with possible justification and references from past studies.

Chapter 4

4 Results and Analysis

4.1 Chapter Objective

In this chapter, the results of data analysis have been presented. It started with the compilation and refining all the data that were collected from the respondents. First of all, in the following chapter demographic statistics and its frequency are presented. After this, reliability of the scale and variables were measured. The correlation between the variables was checked and then hypothesizes were tested through the regression among the independent variable and dependent variables. Tests of moderation, conditional indirect and direct effects have been explained. Simple slopes for supervisor perspective taking have also been presented. The hypothesizes were tested by utilizing SPSS process macro. For all the statistical analysis of this study SPSS (Social Statistical Package for Social Science) software was used.

4.2 Demographic Statistics

A total of 1150 responses were collected. The respondents were required to fill out a survey in which they provided the information related to their gender, age, academic tenure with the university and academic tenure with the supervisor. The results showed that the total sample comprised of 82.6% males and 17.4% females. Respondents from age group less than 18 were 64.3%, age group 18-20 were 32.2%, age group 21-23 were 3.5%.

Based on academic tenure with university, 74.8% respondents had 1-12 months of tenure with the university, 20.9% respondents had 13-24 months of tenure with the university, 2.6% respondents had 25-36 months of tenure with the university, 0.9% respondents had 37-48 months of tenure with the university and 0.9% respondents had more than 48 months of tenure with the university. Furthermore, based on the academic tenure with supervisor 98.3% respondents had 1-12 months of working relationship with the supervisor and 1.7% respondents had 13-24 months of working relationship with the supervisor.

Gender was coded as 1 = Male, 2 = Female. Age (in years) was coded as 1 = less than 18, 2 = 18-2-, 3 = 21-23, 4 = 24-26, 5 = more than 25. Academic tenure with university (in months) was coded as 1 = 1-12 months, 2 = 13-24 months, 3 = 25-36 months, 4 = 37-48 months, 5 = More than 48

months. Academic tenure with supervisor (in months) was coded as 1 = 1-12 months, 2 = 13-24 months, 3 = 25-36 months, 4 = 37-48 months, 5 = 13-24 months.

Table 1: Frequency, Mean and Standard Deviation of Demographic Variables

Variable	Code	Frequency	% of total sample	Mean	SD
Gender	Male	950	82.6	1.17	0.37
Gender	Female	200	17.4		
	Less than 18	740	64.3	1.39	0.55
Age	18-20	370	32.2		
	21-23	40	3.5		
	1-12	860	74.8	1.32	0.65
A 1 ' 77 ' 11 1	13-24	240	20.9		
Academic Tenure with the	25-36	30	2.6		
University (in months)	37-48	10	0.9		
	More than 48	10	0.9		
Academic Tenure with	1-12	1130	98.3	1.02	0.13
Supervisor (in months)	13-24	20	1.7		

Table 2 Values of mean, standard deviation (SD) and correlation

	Mean	SD	1	2	3	4	5	6	7	8
Age	1.39	0.55								
Gender	1.17	0.37	117**							
ATU	1.32	0.65	.516**	121**						
ATS	1.01	0.13	.146**	061*	.138**					
AS	1.86	0.92	087**	048	220**	.037	(0.816)			
G	3.46	0.86	.117**	.038	.201**	.005	506	(0.751)		
SP	3.49	1.11	.080**	.035	.200**	.049	513	.671**	(0.873)	
PT	1.88	0.43	060**	.000	076**	.037	080**	164**	182**	(0.577)

^{**.} Correlation is significant at the 0.01 level (2-tailed)

Notes: n=1150. ATU: Academic Tenure with university, ATS: Academic Tenure with Supervisor, AS: abusive supervision; G: Subordinate Guilt; SP: Subordinate Performance, PT: Perspective-taking. Cronbach's alpha values of each variable are in diagonal places (italic)

4.3 Descriptive statistics and Correlation coefficients

Table 2 shows the values of mean, standard deviation (SD) and correlation of all variables that were under study. Reliability analysis is essential to consider in data analysis to analyze the internal consistency of variables being used for data collection. According to Sekaran (2006), "consistency indicates how well the items measuring a concept hang together as a set". Cronbach alpha is used often for this purpose, and according to Dimovski (1994) and Nunnally (1967), the value ranging between 0.5 and 0.6 is considered sufficient studies and while most researchers consent with Kelly & Vokruka's (1998) with 0.7 being the acceptable value. Sekran (2006) also says that values above 0.7 are considered good. As per table 2, all the variables under study have Cronbach alpha values lying between 0.5- 0.8, which is an acceptable criterion. It indicates that the scale used is suitable for this study.

Pearson correlation among all variables is also presented in table 2. The correlation values specify that how much variables are correlated with each other having values lying between +1 and -1, where +1 indicates more positive relationships and -1 indicates a more negative relationship among

^{*.} Correlation is significant at the 0.05 level (2-tailed)

variables. The table indicates a negative relationship among all variables except guilt having a significant positive relationship with job performance.

4.4 Tests of Moderation

The findings for hypotheses 1 and 2 are presented in Table 3. In line with hypothesis 1, abusive supervision was found to be negatively associated with subordinate job performance (B=-.62, t=-20.3, p <0.001). In line with hypothesis 2, perspective-taking has a negative relationship with abusive supervision (B=-.54, p<0.001), but the interaction term of abusive supervision and perspective-taking has a positive relationship (B=.17, p< 0.05) with job performance, which means it can be said that when abusive supervision is there and a subordinate takes supervisor's perspective it can minimize the negative relationship of abusive supervision and job performance, thus providing support for hypothesis 2.

Table 3 Regression results of Moderator (Model 1)

Outcome Variable: Subordinate Job Performance	В	SE	t	R-Sq
				0.33
Constant	2.73	.24	11.44	
Age	04	.06	70	
Gender	.06	.07	.77	
ATU	.11	.05	2.29	
ATS	.60	.21	2.85	
Abusive Supervision (AS)	62	.03	-20.31***	
Supervisor Perspective-taking (PT)	54	.07	-8.29***	
AS * PT	.17	.07	2.39*	

Outcome Variable: Guilt	В	SE	t	R-Sq
				0.31
Constant	3.11	.19	16.62	
Age	.06 (.04)	.04	1.24	

Gender	.06 (.06)	.06	.98
ATU	.07 (.04)	.04	1.72
ATS	.13 (.16)	.16	.78
Abusive Supervision (AS)	46	.02	-19.52***
Supervisor Perspective-taking (PT)	36	.05	-7.09***
AS * PT	.17	.06	3.06***

Note: N=1150, Unstandardized regression coefficients are reported. Bootstrap sample size= 5000

 $[*]p{<}.05 \ level \ (two-tailed); \ **p{<}.01 \ (two-tailed); \ ***p{<}0.001 \ (two-tailed)$

Table 4 Regression results for the overall model (Model 8)

Outcome Variable: Guilt	В	SE	t	R-Sq
				.31
Constant	3.11	.19	16.62	
Age	.06	.04	1.24	
Gender	.06	.06	.98	
ATU	.07	.04	1.72	
ATS	.13	.16	.78	
Abusive Supervision (AS)	46	.02	-19.52***	
Supervisor Perspective-taking (PT)	36	.05	-7.09***	
AS * PT	.17	.06	3.06***	
Outcome Variable: Subordinate Job Performance	В	SE	t	R-Sq
				0.51
Constant	.66	.23	2.93	
Age	08	.05	-1.58	
Gender	.02	.06	.31	
ATU	.07	.04	1.62	
ATS	.51	.18	2.86	
Abusive Supervision (AS)	31	.03	-10.32***	
Supervisor Perspective-taking (PT)	30	.06	-5.27***	
AS * PT	.06	.06	.93	
Guilt	.66	.03	20.60***	

Note: N=1150, Unstandardized regression coefficients are reported. Bootstrap sample size= 5000

^{*}p<.05 level (two-tailed); **p<.01 (two-tailed); ***p<0.001 (two-tailed)

As explained earlier, the entire hypothesized model is tested by utilizing SPSS process macro developed by Hayes (2013) by integrating all the variables under study. The findings for hypothesis 3 and 4 are presented in Table 4. Abusive supervision has a significant negative relationship with subordinate guilt (B= - .46, p<0.001), but the interaction term of abusive supervision and perspective-taking has a positive relationship (B= .17, p<0.001) with guilt which means that it's weakening the negative relation of abusive supervision and guilt thus providing support for hypothesis 3. In line with hypothesis 4, guilt has a positive relationship (B=. 66, p<0.001) with job performance and the interaction term of abusive supervision and perspective-taking (B= .06, p<0.05) also has a positive relationship with subordinate job performance, thus providing support for hypothesis 4.

Table 5 Conditional indirect effect of x on y across values of the moderator

		Effect	SE	LLCI	ULCI
Guilt	-1 SD	36	.03	42	30
Guilt	M	31	.02	35	26
Guilt	+1 SD	26	.03	32	20

Note: N=1150, Unstandardized regression coefficients are reported. Bootstrap sample size= 5000. Range of values is abbreviated as LL= Lower Limit, UL= Upper Limit, CI= Confidence Interval.

mean) to analyze the conditional indirect effects of abusive supervision on subordinate job performance via subordinate guilt. The results of conditional indirect effects are shown in Table 4. As the table indicates, at higher levels (+1 SD) of perspective-taking, the indirect relationship of abusive supervision and subordinate job performance is weak (B= -.26, 95% CI [- .32, -. 20]).

The conditional indirect effect at higher levels (+1 SD) is significantly different from zero, which

Lastly, guilt was examined across three levels (at 1 SD above mean, at the mean and 1 SD below

also indicates the acceptance of our hypothesis 2. At lower levels (-1 SD) of perspective-taking, the indirect relationship of abusive supervision and job performance is strong (B= - .36, 95% CI [- .42, -.30]). The conditional indirect effect at lower levels (-1 SD) is significantly different from zero, which again indicates the acceptance of our hypothesis 1. Now, at the mean level, the conditional indirect effect of perspective-taking is also significantly different from zero (B= -.31, 95% CI [-.35, -.26]).

Finally, simple slopes for supervisor perspective taking were plotted (Figure 2) at 1 SD below the mean, at the mean and 1SD above the mean in order to present the evidence for moderating effect of supervisor perspective taking.

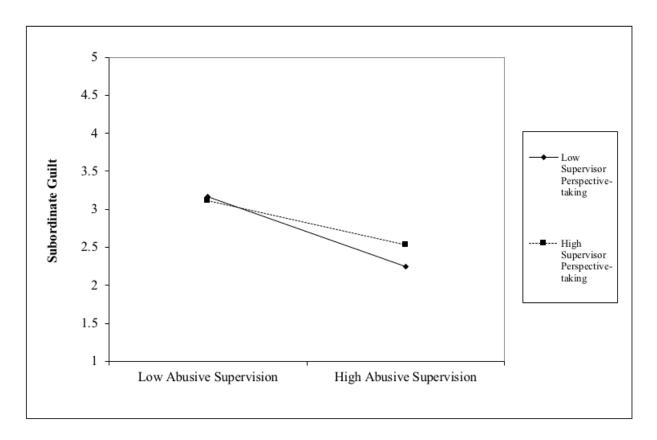


Figure 2 Interaction of Subordinate Guilt and Supervisor Perspective taking on Abusive Supervision

Based on research results and findings following table is developed to show the acceptance and rejection of hypothesis:

Table 6 Hypothesis Evaluation

	Hypothesis Statement	Accepted / Rejected
H1	Abusive supervision is negatively related to the subordinate's job performance.	Accepted
H2	Supervisor perspective-taking moderate the direct negative relationship of abusive supervision and subordinate job performance; such that the direct negative relationship will be weaker (stronger) when Supervisor perspective-taking is high (low).	Accepted
Н3	Supervisor perspective-taking moderate the relationship of abusive supervision and subordinates' guilt, such that, there is a relationship between abusive supervision and subordinates' guilt when subordinate is taking the supervisor's perspective.	Accepted
H4	Subordinate guilt mediates the interactive effects of abusive supervision and supervisor perspective-taking on subordinate job performance	Accepted

4.5 Summary of the Chapter

This chapter presented the research findings in detail. It began with presenting the demographic statistics and the frequency of demographic variables. Further, it presented the synopsis of mean, standard deviation, and correlation of all the variables under study. Reliability and Cronbach alpha's values are also presented. The hypothesizes were tested by using SPSS. Tests of

moderation and conditional indirect effects of supervisor perspective taking have been explained by using SPSS process macro. Lastly, simple slopes for supervisor perspective taking were plotted and this chapter concludes by explaining the acceptance and rejection of hypothesizes under study.

The findings of this study suggest that abusive supervision has a negative relationship with subordinate job performance. The results also indicated that perspective-taking moderate the relationship of abusive supervision and job performance in a way that it weakens their negative relationship which means it can be said that in the presence of perspective-taking the negative relationship of abusive supervision and job performance can be minimized. Subordinate guilt was found to have a positive relationship with job performance, and the interaction term of abusive supervision and perspective-taking also has a positive relationship with subordinate job performance. All these findings indicate the acceptance of the hypothesizes for this study.

Chapter 5

5 Discussion

Number of studies indicate that abusive supervision is related to employee dysfunctional or negative behaviours or attitudes (Mitchell and Ambrose, 2007; Tepper, 2000, 2007). However, this study is different in a way that it examined those unique mechanisms which allow the negative impact of abusive supervision to be minimized. A lot of studies have examined the negative outcomes of abusive supervision. However, very few have related this concept to producing positive outcomes. Drawing upon social exchange theory and attribution theory of emotion the aim of this study was to identify what impact abusive supervision has on subordinate job performance. Supervisor perspective-taking was introduced as a moderator that was supposed to either weaken or strength the relationship between abusive supervision and job performance. Another aim was to introduce subordinate guilt which was supposed to mediate between the interactive effects of abusive supervision and perspective-taking on job performance. Lastly, supervisor perspective-taking was also supposed to moderate between abusive supervision and subordinate guilt.

The results of this study indicated that abusive supervision has a negative relationship with subordinate job performance. The results also indicated that perspective-taking moderate the relationship of abusive supervision and job performance in a way that it weakens their negative relationship which means it can be said that in the presence of perspective-taking the negative relationship of abusive supervision and job performance can be minimized. Subordinate guilt was found to have a positive relationship with job performance, and the interaction term of abusive supervision and perspective-taking also has a positive relationship with subordinate job performance. All these findings indicate the acceptance of the hypothesizes for this study.

As discussed above, abusive supervision was found to have a negative relationship with subordinate job performance. The possible explanation of this finding can be found in social exchange theory. Subordinates view supervisor's abusive behavior as actions of the entire organization. As a result of such negative treatment the subordinates reciprocate with low job performance (Harris et al., 2007). Xu et al., (2012) suggested that abusive supervision is likely to cause poor exchange between supervisors and their subordinates due to which abused subordinates

withhold their effort towards work. The link between abusive supervision and reduced employee performance is also troublesome because even the mildest indication may result in high financial and social cost for the organization (Tepper, 2000). In light of the social exchange research, abusive supervision is labeled as an unequal and destructive social exchange in an organisation. Resultantly, employees reduce their efforts at work in response to such unequal exchange to reduce the distress of unequal treatment (Chen and Wang, 2017).

Abusive supervision is regarded as a source of injustice by the subordinates, which in return has implications on their work attitudes (Tepper, 2000). Similarly, other researchers also argued that abused subordinates perceive negative treatment from their supervisors as lack of interpersonal justice. Hence, to achieve equity, they reduce their efforts at work leading to lower job performance (Xu et al., 2012). Furthermore, another reason for reduced efforts at work explained by Xu wt al., (2012) is withholding the sense of autonomy. When the subordinates recognize a loss of control so, in order to withhold their sense of autonomy, they react against their abusive supervisor by reducing efforts at work. In simpler words, subordinates who feel they are being ill-treated or exploited, they try to reciprocate by offering unfavorable returns such as reducing their work efforts.

Another explanation for the negative relationship between abusive supervision and job performance is explained by Natasha et al. (2018). She argued that leadership style, trust in the leader and leader-follower exchange are the main predictors of job performance. She also argued that leader's role in supporting employee job performance is fundamental for success. However, when the supervisor is abusive towards the employee, causing stress and lack of emotional well-being, his or her job performance will be negatively impacted. Moreover, Aryee et al. (2008) predicted that abusive supervision would increase psychological stress leading to emotional exhaustion, which, as a result, reduces subordinate's job performance. When employees face abusive supervision, they spend their energy coping with the abuse instead of focusing on the work itself.

This study also proved that supervisor perspective-taking moderate the relationship between abusive supervision and job performance in a way that it weakens the negative relationship of abusive supervision and subordinate job performance. One possible explanation for this finding can be found in the principles of attribution theory of emotion. The theory of emotion explains that

when employees perceive the supervisor's behaviour as abusive, they will experience distinct emotions based on that perception. It also helps to understand that because of those emotions experienced, employees validate different maladaptive and adaptive responses to neutralize the originator of abuse and thus move towards prosperity (OH and Farh, 2017). It has been well established in the previous literature that abusive supervision impacts subordinate's job performance, but based on attribution theory of emotion it can be said that abusive behaviours do not need to affect all employees similarly as they experience distinct emotion during the abuse.

To provide more reasoning, the attribution theory of emotion is dynamic, and it also explains that subordinates develop different perceptions of why a particular stimulus (i.e., attributions) has occurred and based on those attributions, they decide how to deal with it. These attributions are important as they guide the subordinate that further behavioural and emotional processing will follow up or not based on the scope to which subordinate has perceived supervisor to be abusive (OH and Farh, 2017).

Another reasoning can be that employees who engage in perspective-taking are most likely to empathize with people whose perspective is taken, develop feelings of concern and understand their viewpoint. Perspective-taking also has a significant relationship with reasonableness, sensitivity and patience. It has also found to minimize feelings of anger, retaliation efforts and feelings of blame towards the offender. This point suggests that a highly developed perspective-taking ability allows a person to control his egocentrism and adjust attitudes according to other's expectation to ensure smooth interpersonal relations. (Parker and Axtell, 2001).

When employees adopt other's perspective, they can view the situation in an integrated manner, and they can align and consolidate those perspectives better (Parker and Axtell, 2001). Hence, it leads to making positive attributions about the behaviour of the target. In this way, when an employee takes the positive perspective of the abusive behaviour, it is argued that it will weaken the negative impact of abusive behaviour on job performance.

In this study, subordinate guilt was introduced as a mediator, and it was hypothesized to have a relationship with abusive supervision but only in the presence of supervisor perspective-taking as a moderator. The hypothesis has been accepted, as explained in the results section. Guilt is one of the self-conscious behaviours. It is positively related to establishing and maintaining interpersonal relationships and problem-solving skills (Covert et al., 2003; Howell et al., 2012). Treeby et al.,

(2016) also argue to have its positive relationships with empathic behaviours and perspective-taking. Hence, it can be argued that feelings of guilt will lead an abused employee to take other's perspective of why a certain situation has occurred and will try to handle by being empathic rather than having negative job outcomes such as low job performance. Subordinate guilt leads an employee to learn from his mistakes, and this self-conscious behaviour also leads him to evaluate himself which in return shape their behaviours and change their perceptions (Tracy and Robins, 2006; Bohns and Flynn, 2013b).

Finally, this study also examined subordinate guilt to have a positive relationship with job performance via the interactive term of abusive supervision and supervisor perspective-taking. This hypothesis was also accepted as discussed in the results section. As discussed earlier, when an employee has feelings of empathy or understanding other's point of view by adopting perspective-taking, it will lead to feelings of guilt, and consequently it will lessen the impact of abusive behaviour. To explain the role of subordinate's guilt further, when an employee experience abusive supervision at the workplace and in response to that behaviour he/she adopts the perspective of his/her supervisor that why a certain stimulus has occurred, it will then lead positive outcomes such as improving performance via his/her feelings of guilt.

Other possible reasoning is explained by Liu and Xian (2018) that guilt is associated with positive organizational outcomes, and to positive emotions. Guilt is found to be associated with heightened expectations and increase employee motivation towards promotional activities such as job performance, learning activities and has a positive influence on employee outcomes. The feelings of guilt help the individual to comprehend the perspective of the one they conflict with, hence leading to generate positive outcomes (Leith and Baumeister, 1998). It is also found that guilty employees involve more in reparative actions of improving their performance and wanting to amend their actions when faced with negative events in the organization. For example, when a supervisor informs guilty employees about their poor performance or failing to complete the task, they make extra efforts and work harder in future (Flynn and Schaumberg, 2012). All these reasonings provide evidence that subordinate guilt has a positive relationship with job performance.

This study adds on the indication that abusive supervision has positive outcomes as well. However, those studies do not explain under what circumstances or in the presence of which variables

abusive supervision will result in positive outcomes. This study adds to the literature that in the presence of supervisor perspective taking and subordinate guilt, abusive supervision will result in positive employee outcomes. In other words, by taking perspective of the supervisor's behavior can instill feelings of guilt in the subordinate and impact his job performance in a positive manner. This is a significant contribution to the abusive supervision literature as very less attention has been given to the notion that much of the effects of abusive supervision might rest within the employees' control through their use of perspective-taking ability and subordinate guilt and ultimately producing positive outcomes.

5.1 Limitations and Future Research Directions

Like other studies, this study comes with several limitations too. The first limitation is related to the limited generalizability of the results. As the data has been collected from one organization, it may render as industry and culture-specific findings. Concerning culture, as in a Pakistani culture people are expected to respect their elderly, teachers, and mentors even if there is unfair treatment by them, we tend not to retaliate against them. Hence, the relationships in this study may be stronger than would be found in other cultures. Another factor may be the power distance in our culture that influence employee responses towards abusive behaviours. As such, Tepper (2007) said that reactions would be much less strong in countries with high power distance as compared to those in low power distance. For example, Lian et al., (2007) studies found that employees with high power distance culture are less likely to consider supervisory abuse as unfair. Given that Pakistani society has a high-power distance culture hence in such context responses towards abusive supervision would be much less strong than in western context. Therefore, future research can validate the present results in different cultures and industries, or comparative study can be conducted.

As for this study, one organization and only students were under investigation which means single-source data has been used hence for future studies it is recommended to use multi-source data to have more objectivity in the results. It will help to gain a more in-depth understanding. Data can be gathered from different kinds of organizations, dyadic relationships, different level of employees and from various regions to have more insightful and diverse results. Collecting data from different level of employees within the same organization will be interesting to do as it may generate diverse views in one organization.

Also, for this study, only student's subjective performance was assessed but to find more objective data student's actual performance in terms of their grades or performance rated by their teachers can be incorporated in future studies to compare student self-rated performance with their objective performance. Future research should also investigate whether there are other means than perspective-taking that can take an employee into the state of guilt and thus foster employee job performance. In other words, future research can benefit by expanding to other moderators that can impact the hypothesized model for this study.

Another limitation is concerned about the gender of the supervisors in this study since all the supervisors in this study were male which might have influenced the relationship found in this study. As males are considered to be more hostile and aggressive than women (Feshbach, 1997). Therefore, the detrimental impacts of abusive supervision may be stronger when the supervisor is male rather than the female. Interesting future research can be done to compare the effects when examined with female supervisors. Possible differences can be well explained when a gender perspective is attached to the study.

Concerning methodological suggestions to avoid further bias, a dairy method can be used where participants can identify instances of abusive behaviour by their supervisors so that their stress can be measured more objectively. Peer ratings of abusive behaviour can be another example where the colleagues are asked in about how much of a person is subjected to abusive behaviour rather than the person indicating that themselves.

Abusive behaviours impact overall team efficiency as well. There are very few studies except for (Duffy et al., 2002; Duffy et al., 2006; Fox & Stallworth, 2010; Hobman et al., 2009) which indicate the team consequences for abusive behaviour. Hence, it would be interesting to examine if abusive behaviour causes conflict in a team or weaken coworker support.

For this research static approach was used to collect the data; however, in future, experience sampling and momentary approach can be used to analyze the variance of abuse over time. As in the static approach, data is not collected on a daily or weekly basis; however, such behaviours fluctuate, and one cannot test the fluctuations within the behaviour while using a static approach.

Also, in this study, the reverse relationships haven't been tested. It only focused on the outcomes of abusive supervision, for example, it has been tested that abusive supervision causes lower job

performance, but it has not tested that what causes abusive behaviour to occur in the first place. Hence, future studies can focus on the antecedents or what causes abusive supervision.

5.2 Theoretical Contribution

The current study findings contribute by adding into the abusive supervision literature and extending it in the following way. Considerable amount of interest has been taken by many researchers in studying the dark side of the leadership (abusive supervision) due to its negative impact on the worker behaviours and increased cost for the organization in terms of turnover and absenteeism (Zhang and Bednall, 2016). In the past, many studies have examined the negative consequences such as low job performance, psychological stress, work family conflict etc. caused by abusive supervision. Little is known about how this dark side of leadership (abusive supervision) can still somehow generate positive results for subordinate's attitudes. The current study contributes by investigating how abusive supervision can function better. To study this, supervisor perspective-taking and subordinate guilt has been introduced in this study as a moderator and mediator respectively in relationship with abusive supervision. Based on the social exchange theory and attribution theory of emotion this study notably adds to the abusive supervision literature by highlighting how this negative phenomenon of abusive supervision can generate positive results. As Tepper (2007) also calls abusive supervision as "performanceenhancing pathway". He stated that "the desire to prove the supervisor to be wrong and avoid further hostility could be examples of the enhancing pathways that link abusive supervision and possible positive effects." (p. 135)

Another theoretical contribution is that these two variables; supervisor perspective taking and subordinate guilt, they have not been studied before in relationship with abusive supervision. Despite the extensive literature on abusive supervision, not many studies can be found which have examined how abusive supervision can produce positive results or minimize the negative impact caused by it. This study by examining these two variables as a moderator and a mediator has contributed to it. As Zhang and Liu (2018) also said that abusive supervision cannot always generate positive effects, it is restricted to the presence of certain domains. After examining the subordinate guilt and perspective taking with abusive supervision, another notable contribution is about the emotion resources. As discussed in the literature review, based on the attribution theory of emotion, this study presents a clear picture of how our emotional capability and emotion

resources impacts our response and way of dealing with supervisory abuse. This also highlights that the use of emotion resources can help an employee to produce better job outcomes in terms of either performance, stress, or work family conflict.

To explain it further subordinate guilt, which is a self-conscious emotion, via the effects of perspective-taking was conceptualized as a factor to neutralize and lessen the negative effects of abusive supervision on subordinate job performance. Based on attribution theory of emotion, the finding that abusive supervision's negative effect on job performance can be minimized through perspective-taking suggests that the negative effects of abusive supervision can be minimized leading to improved job performance. This contribution and discovery can help researchers to understand how a subordinate who has been abused can control his job performance to not decrease.

5.3 Practical Implications

It is widely accepted that abusive supervision is harmful for any organization and there is abundant evidence for its consequences in the workplace (Martinko et al., 2013; Tepper, 2007). Therefore, decision-makers and organizations need to understand the consequences and outcomes that can result from abusive behaviour. For both theory and practice, there are several important implications for these results. As the findings showed that abusive supervision causes employees to lower their job performance; hence the organizations must put in efforts to reduce such behaviours by selecting, monitoring and training their employees. Supervisors must be encouraged to take additional training if needed on anger management or interpersonal relationship management (Aryee et al., 2007; Harries et al., 2007).

Furthermore, training supervisors will make them aware of the stress their abusive behaviour causes towards their subordinates and help them to be involved in healthy managerial behaviours. Training will avoid the consequences of abusive supervision on employees' job performance, as indicated by the results of this study. Therefore, organizations must invest more in relevant manager training. This finding should also be a significant warning for all organizations to banish all forms of supervisory abuse through the legal system or their own disciplinary system. Organizations should also refrain from hiring and promoting such managers who are historically involved in hostile behaviours.

Decision-makers can also benefit from personality testing while selecting and hiring managers. There is evidence suggesting that employees high in neuroticism, agreeableness and conscientiousness are more prone to aggressive behaviours (Anderson and Barlett, 2012; Brees et al., 2014). Therefore, organizations can select such individuals who are low in neuroticism and high in agreeableness and conscientiousness.

Another implication for this study is related to supervisor perspective-taking with respect to abusive supervision. The results of this study indicate that successful use of perspective-taking reduces the impact of abusive supervision on subordinate job performance. Therefore, organizations should provide employee training and assist them to evaluate abusive supervision proactively. They can also teach employees' mechanisms to deal with helplessness and how to stay optimistic and assertive during such negative events. Employees should also be trained to take perspective and not only focus on their goals and objectives. Finally, there must be an employee grievance system in an organization so that employees can come and speak about their abusive supervisors so that it does not cause them further stress. In this vein, organizations must be transparent and communicate to the employee how they value and puts efforts for fair treatment.

5.4 Conclusion

In conclusion, this study explained the effect of abusive supervision on employee job performance and made an important contribution to abusive supervision literature by introducing such unique mechanisms under which the negative effects of abusive supervision can be minimized. Those mechanisms are supervisor perspective-taking and subordinate guilt which have been used as moderator and mediator respectively in this study. In a nutshell, this study identified supervisor perspective-taking and subordinate guilt as important contingencies to weaken the negative the impact of abusive supervision and subordinate job performance. The results of this study also provide practical insights into the dark side of the leadership of how abusive supervision can also sometimes drive positive outcomes. This study also confirms the urgency for organizations to help both supervisors and subordinates on how to engage in healthy managerial behaviours and for subordinates on how to stay optimistic under stressful situations, adopt perspective and not only focus on their goals and objectives.

References

- Alexander, K. 2012. Abusive supervision as a predictor of deviance and health outcomes: The exacerbating role of narcissism and social support. Dissertation Abstracts International: Section B: The Sciences and Engineering, 72(12-B): 7731.
- 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(1), 191–201.
- Aryee, S., Sun, L. Y., Chen, Z. X. G., & Debrah, Y. A. (2008). Abusive supervision and contextual performance: The mediating role of emotional exhaustion and the moderating role of work unit structure. Management and Organization Review, 4(3), 393-411.
- Axtell, C. M., Parker, S. K., Holman, D., & Totterdell, P. 2007. Enhancing customer service: Perspective-taking in a call centre. European Journal of Work and Organizational Psychology, 16: 141–168.
- Bamberger, P. A., & Bacharach, S. B. 2006. Abusive supervision and subordinate problem drinking: Taking resistance, stress and subordinate personality into account. Human Relations, 59(6): 723–752.
- Barlett, C. P., & Anderson, C. A. (2012). Direct and indirect relations between the Big 5 personality traits and aggressive and violent behaviour. Personality and Individual Differences, 52, 870–875.
- Batson, C. D., Early, S., & Salvarani, G. 1997. Perspective-taking: Imagining how another feels versus imagining how you would feel. Personality and Social Psychology Bulletin, 23: 751-758.
- Bartunek, J. M., Gordon, J. R., & Weathershy, R. P. 1983. Developing "complicated" understanding in administrators. Academy of Management Review, 8: 273-284
- Baumeister, R.F., Vohs, K.D. and Funder, D.C. (2007), "Psychology as the science of self-reports and finger movements: whatever happened to actual behaviour?", Perspectives on

- Psychological Science, Vol. 2 No. 4, pp. 396-403, doi: 10.1093/acprof:oso/9780195377798.003.0002.
- Bohns, V.K. and Flynn, F.J. (2013b), "Underestimating our influence over others at work", Research in Organizational Behaviour, Vol. 33 No. 3, pp. 97-112, doi: 10.1016/j.riob.2013.10.002
- Bond S (1993) Experimental research nursing: necessary but not sufficient. In: Kitson A (Ed) Nursing. Art and Science. London, Chapman and Hall.
- Bowling, N. A., & Beehr, T. A. (2006). Workplace harassment from the victim's perspective: A theoretical model and meta-analysis. Journal of Applied Psychology, 91(5), 998–1012.
- Brees, J., Mackey, J., Martinko, M., & Harvey, P. (2014). The mediating role of perceptions of abusive supervision in the relationship between personality and aggression. Journal of Leadership and Organizational Studies, 21, 403–413.
- Brehm, J. (1966). A theory of psychological reactance. New York, NY: Academic Press.
- Brehm, J., & Brehm, S. (1981). Psychological resistance: A theory of freedom and control. New York, NY:. Academic Press.
- Burton, J. P., & Hoobler, J. M. (2011). Aggressive reactions to abusive supervision: The role of interactional justice and narcissism. Scandinavian Journal of Psychology, 52, 389–398.
- Chen, Z. X., & Wang, H. Y. (2017). Abusive supervision and employees' job performance: A multiple mediation model. Social Behavior and Personality: an international journal, 45(5), 845-858.
- Chi, S. C. S., & Liang, S. G. (2013). When do subordinates' emotion-regulation strategies matter? Abusive supervision, subordinates' emotional exhaustion, and work withdrawal. The Leadership Quarterly, 24(1), 125-137.

- Colbert, A. E., Judge, T. A., Choi, D., & Wang, G. (2012). Assessing the trait theory of leadership using self and observer ratings of personality: The mediating role of contributions to group success. The Leadership Quarterly, 23(4), 670–685.
- Covert, M.V., Tangney, J.P., Maddux, J.E. and Heleno, N.M. (2003), "Shame-proneness, guilt-proneness, and interpersonal problem-solving: a social cognitive analysis", Journal of Social and Clinical Psychology, Vol. 22 No. 1, pp. 1-12, doi: 10.1521/jscp.22.1.1.22765.
- Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications.
- Crossan, F. (2003). Research philosophy: towards an understanding. Nurse Researcher (through 2013), 11(1), 46.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. Journal of management, 31(6), 874-900.
- Davis, M. H. (1994). Empathy: A social psychological approach. Dubuque, IA: Brown & Benchmark.
- Davis, M. H., Conklin, L., Smith, A., & Luce, C. 1996. Effect of perspective-taking on the cognitive representation of persons: A merging of self and other. Journal of Personality and Social Psychology, 70: 713–726.
- De Dreu, C. K. W., Weingart, L. R., & Kwon, S. 2000. Influence of social motives on integrative negotiation: A meta-analytic review and test of two theories. Journal of Personality and Social Psychology, 78:889–905.
- DeRue, D. S., Nahrgang, J. D., Wellman, N., & Humphrey, S. E. (2011). Trait and behavioural theories of leadership: An integration and meta-analytic test of their relative validity. Personnel Psychology, 64(1), 7–52.
- Duffy, M. K., Ganster, D., & Pagon, M. (2002). Social undermining in the workplace. Academy of Management Journal, 45(2), 331-351.

- Flynn, F.J. and Schaumberg, R.L. (2012), "When feeling bad leads to feeling good: guilt-proneness and affective organizational commitment", Journal of Applied Psychology, Vol. 97 No. 1, pp. 124 133, doi: 10.1037/a0024166.
- Fogaça, N., Rego, M. C. B., Melo, M. C. C., Armond, L. P., & Coelho Jr, F. A. (2018). Job performance analysis: scientific studies in the main journals of management and psychology from 2006 to 2015. Performance Improvement Quarterly, 30(4), 231-247.
- Gilboa, S., Shirom, A., Fried, Y., & Cooper, C. (2008). A meta-analysis of work demand stressors and job performance: examining main and moderating effects. Personnel psychology, 61(2), 227-271.
- Goldsmith, K., Cho, E.K. and Dhar, R. (2012), "When guilt begets pleasure: the positive effect of a negative emotion", Social Science Electronic Publishing, Vol. 49 No. 6, pp. 872-881, doi: 10.2139/ssrn.1917080.
- Graen, G. B. (1976). Role making processes within complex organizations. In M. D. Dunnette (Ed.), Handbook of industrial and organizational psychology (pp. 1201-1245). Chicago, IL: Rand-McNally.
- Graen, G. B., & Cashman, J. F. (1975). A role-making model of leadership in formal organizations:

 A developmental approach. In J. G. Hunt & L. L. Larson (Eds.), Leadership frontiers

 (pp. 143-166). Kent, OH: Kent State University Press.
- Graen, G. B., & Scandura, T. A. (1987). Toward a psychology of dyadic organization. In L. L. Cummings & B. M. Staw (Eds.), Research in organizational behaviours (pp. 175-208). Greenwich, CT: JAI Press.
- Grant, A. M., & Berry, J. W. (2011). The necessity of others is the mother of invention: Intrinsic and prosocial motivations, perspective-taking, and creativity. Academy of management journal, 54(1), 73-96.
- Greenberg, J. (1987). A taxonomy of organizational justice theories. Academy of Management Review, 12, 9-22.
- Griffin, R. W., & O'Leary-Kelly, A. M. (2004). An introduction to the dark side. The dark side of organizational behavior, 1-19.

- Griffin, R. W., & Lopez, Y. P. (2005). "Bad behavior" in organizations: A review and typology for future research. Journal of Management, 31(6), 988-1005.
- Harris, K. J., Harvey, P., & Kacmar, K. M. (2011). Abusive supervisory reactions to coworker relationship conflict. The Leadership Quarterly, 22(5), 1010–1023.
- Harris, K. J., Kacmar, K. M., & Zivnuska, S. (2007). An investigation of abusive supervision as a predictor of performance and the meaning of work as a moderator of the relationship. The leadership quarterly, 18(3), 252-263.
- Hoobler, J. M., & Brass, D. J. (2006). Abusive supervision and family undermining as displaced aggression. Journal of Applied Psychology, 91(5), 1125–1133.
- Hoobler, J. M., & Hu, J. (2013). A model of injustice, abusive supervision, and Colbert, A. E., Judge, T. A., Choi, D., & Wang, G. (2012). Assessing the trait theory of leadership using self and observer ratings of personality: The mediating role of contributions to group success. The Leadership Quarterly, 23(4), 670–685.negative affect. The Leadership Quarterly, 24(1), 256–269.
- Huang, X., Wright, R. P., Chiù, W. C. K., & Wang, C. (2008). Relational schémas as sources of evaluation and misevaluation of leader-member exchanges: Some initial evidence. The Leadership Quarterly, 19, 266-282.
- Hubert, A. B., & Van Veldhoven, M. (2001). Risk sectors for undesirable behaviour and mobbing. European journal of work and organizational psychology, 10(4), 415-424.
- Hughes J (1994) The Philosophy of Social Research. Essex, Longman.
- Hunter, J. E., & Hunter, R. F. (1984). Validity and utility of alternative predictors of job performance. Psychological bulletin, 96(1), 72.
- Ilies, R., Peng, A.C., Savani, K. and Dimotakis, N. (2013), "Guilty and helpful: an emotion-based reparatory model of voluntary work behaviour", Journal of Applied Psychology, Vol. 98 No. 6, pp. 1051-1059, doi: 10.1037/a0034162.
- Isaacson, W. 2012. The real leadership lessons of Steve Jobs. Harvard Business Review, 90(4): 92–102.

- Johnson, R. E., Rosen, C. C., & Djurdjevic, E. (2011). Assessing the impact of common method variance on higher order multidimensional constructs. Journal of Applied Psychology, 96(4), 744.
- Johnson, R. E., Venus, M., Lanaj, K., Mao, C., & Chang, C. H. (2012). Leader identity as an antecedent of the frequency and consistency of transformational, consideration, and abusive leadership behaviors. Journal of Applied Psychology, 97(6), 1262.
- Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. Journal of applied Psychology, 86(1), 80.
- Kiazad, K., Restubog, S. L. D., Zagenczyk, T. J., Kiewitz, C., & Tang, R. L. (2010). In pursuit of power: The role of authoritarian leadership in the relationship between supervisors' Machiavellianism and subordinates' perceptions of abusive supervisory behavior. Journal of Research in Personality, 44(4), 512-519.
- Kothari, C. R. (2004). Research methodology: Methods and techniques. New Age International.
- Kramer, R. M. 2006. The great intimidators. Harvard Business Review, 84(2): 88–96.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educational and psychological measurement, 30(3), 607-610.
- Kotrlik, J. W. K. J. W., & Higgins, C. C. H. C. C. (2001). Organizational research: Determining appropriate sample size in survey research appropriate sample size in survey research. Information technology, learning, and performance journal, 19(1), 43.
- Leith, K. P., & Baumeister, R. F. (1998). Empathy, shame, guilt, and narratives of interpersonal conflicts: Guilt-prone people are better at perspective taking. Journal of personality, 66(1), 1-37.
- Lian, H. W., Ferris, D. L., & Brown, D. J. (2012a). Does power distance exacerbate or mitigate the effects of abusive supervision? It depends on the outcome. Journal of Applied Psychology, 97(1), 107–123.

- Liao, Z., Lee, H. W., Johnson, R. E., Song, Z., & Liu, Y. (2020). Seeing from a short-term perspective: When and why daily abusive supervisor behavior yields functional and dysfunctional consequences. Journal of Applied Psychology.
- Liden, R. C., Wayne, S. J., & Stilwell, D. (1993). A longitudinal study on the early development of leader-member exchange. Journal of Applied Psychology, 78, 662-674.
- Lin, W. P., Wang, L., & Chen, S. T. (2013). Abusive supervision and employee well-being: The moderating effect of power distance orientation. Applied Psychology—an International Review (Psychologie Appliquee—Revue Internationale), 62(2), 308–329.
- 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(5), 1187–1212.
- Liu, W., & Xiang, S. (2018). The positive impact of guilt: How and when feedback affect employee learning in the workplace. Leadership & Organization Development Journal, 39(7), 883-898.
- Martinko, M. J., Harvey, P., Brees, J. R., & Mackey, J. 2013. A review of abusive supervision research. Journal of Organizational Behaviour, 34(S1): 120–137.
- Marschall, D., Sanftner, J., & Tangney, J. P. (1994). The state shame and guilt scale. Fairfax, VA: George Mason University.
- Mitchell, M. S., & Ambrose, M. L. 2007. Abusive supervision and workplace deviance and the moderating effects of negative reciprocity beliefs. Journal of Applied Psychology, 92(4): 1159–1168.
- Moin, M. F., Wei, F., & Weng, Q. (2020). Abusive supervision, emotion regulation, and performance. International Journal of Selection and Assessment, 28(4), 498-509.
- Morris, M.W. and Keltner, D. (2000), "How emotions work: the social functions of emotional expression in negotiations", Research in Organizational Behaviour, Vol. 22, pp. 1-50, doi: 10.1016/S0191-3085 (00)22002-9.

- Nunnally, J. C. (1967). Psychometric Theory. New York: McGraw-Hill.
- Parker, S. K., & Axtell, C. M. 2001. Seeing another viewpoint: Antecedents and outcomes of employee perspective-taking. Academy of Management Journal, 44: 1085–1100.
- Preacher, K. J. Rucker, DD, & Hayes, A. F.(2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. Multivariate Behavioral Research, 42, 185-227.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y.s, & Podsakoff, N. P. (2003). Common method biases in behavioural research: A critical review of the literature and recommended remedies. Journal of applied psychology, 88(5), 879.
- Rafferty, A. E., Restubog, S. L. D., & Jimmieson, N. L. 2010. Losing sleep: Examining the cascading effects of supervisors' experience of injustice on subordinates' psychological health. Work and Stress, 24(1): 36–55.
- Ree, M. J., & Earles, J. A. (1992). Intelligence is the best predictor of job performance. Current directions in psychological science, 1(3), 86-89.
- Restubog, S. L. D., Scott, K. L., & Zagenczyk, T. J. (2011). When distress hits home: The role of contextual factors and psychological distress in predicting employees' responses to abusive supervision. Journal of Applied Psychology, 96(4), 713–729.
- Rupp, D. E., Silke McCance, A., Spencer, S., & Sonntag, K. (2008). Customer (in) justice and emotional labor: The role of perspective-taking, anger, and emotional regulation. Journal of Management, 34(5), 903-924.
- Rynes, S. L., Gerhart, B., & Parks, L. (2005). Personnel psychology: Performance evaluation and pay for performance. Annu. Rev. Psychol., 56, 571-600.
- Saunders, M. N. (2011). Research methods for business students, 5/e. Pearson Education India.
- Sekaran, U. (2006). Research methods for business: A skill building approach. John Wiley & Sons.
- Schroth, H. A., & Pradhan Shah, P. (2000). Procedures: Do we really want to know them? An examination of the effects of procedural justice on self-esteem. Journal of Applied Psychology, 85(3), 462.

- Schyns, B., & Schilling, J. (2013). How bad are the effects of bad leaders? A meta-analysis of destructive leadership and its outcomes. The Leadership Quarterly, 24(1), 138–158.
- Shoss, M. K., Eisenberger, R., Restubog, S. L. D., & Zagenczyk, T. J. 2013. Blaming the organization for abusive supervision: The roles of perceived organizational support and supervisor's organizational embodiment. Journal of Applied Psychology, 98(1): 158–168.
- Slevitch, L. (2011). Qualitative and quantitative methodologies compared: Ontological and epistemological perspectives. Journal of Quality Assurance in Hospitality & Tourism, 12(1), 73 81.
- Takaku, S. 2001. The effects of apology and perspective-taking on interpersonal forgiveness: Introducing a dissonance- attribution model of interpersonal forgiveness. Journal of Social Psychology, 141: 494-508.
- Tangney, J.P., Miller, R.S., Flicker, L. and Dh., B. (1996), "Are shame, guilt, and embarrassment distinct emotions?", Journal of Personality & Social Psychology, Vol. 70 No. 6, pp. 1256-1269, doi: 10.1037/0022-3514.70.6.1256.
- Tangney, J.P., Stuewig, J. and Mashek, D.J. (2007), "Moral emotions and moral behaviour", Annual Review of Psychology, Vol. 58 No. 1, pp. 345-372.
- Tepper, B. J. (2000). Consequences of abusive supervision. Academy of Management Journal, 43, 178–190.
- Tepper, B. J., Duffy, M. K., & Shaw, J. D. (2001). Personality moderators of the relationship between abusive supervision and subordinates' resistance. Journal of Applied Psychology, 86(5), 974.
- Tepper, B. J. (2007). Abusive supervision in work organizations: Review, synthesis, and research agenda. Journal of Management, 33, 261–289.
- Tepper, B. J., Henle, C. A., Lambert, L. S., Giacalone, R. A., & Duffy, M. K. (2008). Abusive supervision and subordinates' organization deviance. Journal of applied psychology, 93(4), 721.

- Tepper, B. J., Carr, J. C., Breaux, D. M., Geider, S., Hu, C., & Hua, W. (2009). Abusive supervision, intentions to quit, and employees' workplace deviance: A power/dependence analysis. Organizational Behavior and Human Decision Processes, 109, 156–167.
- Tepper, B. J., Duffy, M. K., Henle, C. A., & Lambert, L. S. (2006). Procedural injustice, victim precipitation, and abusive supervision. Personnel Psychology, 59, 101–123.
- Tepper, B. J., Duffy, M. K., Hoobler, J., & Ensley, M. D. (2004). Moderators of the relationships between coworkers' organizational citizenship behavior and fellow employees' attitudes. Journal of Applied Psychology, 89, 455–465
- 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(2), 279-294.
- Tepper, B. J., Simon, L., & Park, H. M. (2017). Abusive supervision. Annual Review of Organizational Psychology and Organizational Behavior, 4, 123-152.
- Tierney, P., & Tepper, B. J. (2007). Introduction to The Leadership Quarterly special issue: Destructive leadership.
- Thau, S., Bennett, R. J., Mitchell, M. S., & Marrs, M. B. (2009). How management style moderates the relationship between abusive supervision and workplace deviance: An uncertainty management theory perspective. Organizational Behavior and Human Decision Processes, 108(1), 79-92.
- Thau, S., & Mitchell, M. S. 2010. Self-gain or self-regulation impairment? Tests of competing explanations of the supervisor abuse and employee deviance relationship through perceptions of distributive justice. Journal of Applied Psychology, 95(6): 1009–1031.
- Tracy, J.L. and Robins, R.W. (2006), "Appraisal antecedents of shame and guilt: support for a theoretical model", Personality and Social Psychology Bulletin, Vol. 32 No. 10, pp. 1339-1351.

- Treeby, M. S., Prado, C., Rice, S. M., & Crowe, S. F. (2016). Shame, guilt, and facial emotion processing: initial evidence for a positive relationship between guilt-proneness and facial emotion recognition ability. Cognition and emotion, 30(8), 1504-1511.
- Troester, C., & Van Quaquebeke, N. (2020). When victims help their abusive supervisors: The role of LMX, self-blame, and guilt. Academy of Management Journal, (ja).
- Wang, H., Law, K. S., Hackett, R. D., Wang, D., & Chen, Z. X. (2005). Leader-member exchange as a mediator of the relationship between transformational leadership and followers' performance and organizational citizenship behaviour. Academy of Management Journal, 48, 420-432.
- Wang, W., Mao, J., Wu, W., & Liu, J. (2012). Abusive supervision and workplace deviance: The mediating role of interactional justice and the moderating role of power distance. Asia Pacific Journal of Human Resources, 50(1), 43-60.
- Wang, G., Harms, P. D., & Mackey, J. D. (2015). Does it take two to tangle? Subordinates' perceptions of and reactions to abusive supervision. Journal of Business Ethics, 131(2), 487-503.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. Journal of personality and social psychology, 54(6), 1063.
- Wright, P. M., Kacmar, K. M., McMahan, G. C., & Deleeuw, K. (1995). P= f (MXA): Cognitive ability as a moderator of the relationship between personality and job performance. Journal of Management, 21(6), 1129-1139.
- Wu, T. Y., & Hu, C. Y. (2009). Abusive supervision and employee emotional exhaustion dispositional antecedents and boundaries. Group and Organization Management, 34(2), 143–169.
- Xu, E., Huang, X., Lam, C. K., & Miao, Q. (2012). Abusive supervision and work behaviours: The mediating role of LMX. Journal of Organizational Behaviour, 33(4), 531-543.

- Yagil, D., Ben-Zur, H., & Tamir, I. 2011. Do employees cope effectively with abusive supervision at work? An exploratory study. International Journal of Stress Management, 18(1): 5–23.
- Zellars, K. L., Tepper, B. J., & Duffy, M. K. 2002. Abusive supervision and subordinates' organizational citizenship behaviour. Journal of Applied Psychology, 87(6): 1068–1076.
- Zhang, Y., & Bednall, T. C. (2016). Antecedents of abusive supervision: A meta-analytic review. Journal of Business Ethics, 139(3), 455-471.
- Zhang, Y., & Liao, Z. (2015). Consequences of abusive supervision: A meta-analytic review. Asia Pacific Journal of Management, 32(4), 959-987.
- Zhou, L. (2016). Abusive supervision and work performance: The moderating role of abusive supervision variability. Social Behavior and Personality: an international journal, 44(7), 1089-1098.

Annexure 1: Questionnaire

Dear Sir/Madam,

You are requested to participate in a study which is a part of a MS research thesis. Your participation is necessary to complete this research and will be highly appreciated. The information provided by you will be kept secret and for academic purpose only. Please spare your precious time and try to answer the questions logically and on ground footing. This entire survey will take only 15 minutes. If you have any questions related to this research, please feel free to contact me at amna.amjad826@gmail.com

Thanks & Regards, Amna Amjad MS Human Resource Management Candidate, Nust Business School, Islamabad.

Instructions to complete the Questionnaire:

i) Please fill all the questions and do not leave anything blank.

Appendix A

The following information is concerned about your personal information. Please encircle the appropriate one.

1.Gender	Male	Female			
2. Age (in years)	Less than 18	18-20	21-23	24-26	More than 26
3. Academic Tenure with University (in months)	1-12 months	13-24 months	25-36 months	37-48 months	More than 48 months
4. Academic Tenure with Teacher (in months)	1-12 months	13-24 months	25-36 months	37-48 months	More than 48 months

Appendix B- Time 1 Study

The following statements are about your perceptions of your teachers' behavior. Please indicate the extent of your agreement or disagreement with each statement by circling a number from 1 to 5:

		I cannot remember him/her ever using this behavior with me	He/she very seldom uses this behavior with me	He/she occasion ally uses this behavior with me	He/she uses this behavior moderately often with me	He/she uses this behavior very often with me
1.	My teacher ridicules me	1	2	3	4	5
2.	My teacher tells me my thoughts or feelings are stupid	1	2	3	4	5
3	My teacher gives me the silent treatment	1	2	3	4	5
4	My teacher puts me down in front of others	1	2	3	4	5
5	My teacher invades my privacy	1	2	3	4	5
6	My teacher reminds me of my past mistakes and failures	1	2	3	4	5
7	My teacher does not give me credit for tasks requiring a lot of effort	1	2	3	4	5
8	My teacher blames me to save himself/herself embarrassment	1	2	3	4	5
9	My teacher breaks promise he/she make	1	2	3	4	5
10	My teacher expresses anger at me when he/she is mad for another reason	1	2	3	4	5
11	My teacher makes negative comments about me to others	1	2	3	4	5
12	My teacher is rude to me	1	2	3	4	5
13	My teacher does not allow me to interact with other students during the class	1	2	3	4	5
14	My teacher tells me I am incompetent	1	2	3	4	5
15	My teacher lies to me	1	2	3	4	5

Appendix B- Time 1 Study

Rate each statement based on how you are feeling right at this moment.

		Not feeling this way at all	Very rarely feel this way	Occasionally feel this way	Frequently feel this way	Always feeling this way
1	I want to sink into the floor and disappear	1	2	3	4	5
2	I feel remorse, regret.	2	3	4	5	6
3	I feel small	1	2	3	4	5
4	I feel tension about something I have done	1	2	3	4	5
5	I feel like I am a bad person	1	2	3	4	5
6	I cannot stop thinking about something bad I have done	1	2	3	4	5
7	I feel humiliated, disgraced	1	2	3	4	5
8	I feel like apologizing, confessing.	1	2	3	4	5
9	I feel worthless, powerless	1	2	3	4	5
10	I feel bad about something I have done	1	2	3	4	5

Appendix B- Time 1 Study

Rate each statement based on how you mostly feel.

		Not feeling this way at all	Very rarely feel this way	Occasionally feel this way	Frequently feel this way	Always feeling this way
1	Upset	1	2	3	4	5
2	Hostile	1	2	3	4	5
3	Irritable	1	2	3	4	5

You are requested to describe the extent to which you adopt your teachers' perspective. Please indicate the extent of your agreement or disagreement with each statement by circling a number from 1 to 5:

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I made an effort to see the world through my teachers' eyes	1	2	3	4	5
2	I imagined how my teacher was feeling	1	2	3	4	5
3	I sought to understand my teachers' viewpoints	1	2	3	4	5
4	I tried to take the teachers' perspectives	1	2	3	4	5

Appendix C- Time 2 Study

The following statements are about your own performance in the class. Please indicate the extent of your agreement or disagreement with each statement by circling a number from 1 to 5:

		Strongly Disagree	Disagre e	Neutral	Agree	Strongly Agree
1	In this class, I exhibit an underlying concern for doing	1	2	3	4	5
	things or tasks better, for improving situations					
2	In this class, I exhibit zeal about the tasks given and a	1	2	3	4	5
	consequent willingness to work hard and energetically					
3	In this class, I exhibit willingness to go beyond what the	1	2	3	4	5
	situation requires and to act before being asked					
4	I exhibit an ability to see the whole, its parts and relations,	1	2	3	4	5
	and use this to set my priorities, plan, anticipate and					
	evaluate					
5	I always get things done on time	1	2	3	4	5
6	I never disappoint on the quality of work that I submit to	1	2	3	4	5
	my teachers					
7	My work habits (tardiness, lengths of breaks etc.) are	1	2	3	4	5
	exemplary					
8	If my teacher has to be out of the class for an extended	1	2	3	4	5
	period of time, I can rest assured that I will continue to be					
	productive					
9	My teacher never has to check up on me	1	2	3	4	5
10	I get along well with other students	1	2	3	4	5

Annexure 2: Output File

Demographics Frequencies

Statistics

	Ctatistics						
				Job Tenure with	Job Tenure with		
				Organization (in	Supervisor (in		
		AGE (in years)	Gender	months)	months)		
N	Valid	1150	1150	1150	1150		
	Missing	0	0	0	0		
Mear	1	1.39	1.17	1.32	1.02		
Std. Deviation		.555	.379	.654	.131		

AGE (in years)

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	less than 18	740	64.3	64.3	64.3
	18-20	370	32.2	32.2	96.5
	21-23	40	3.5	3.5	100.0
	Total	1150	100.0	100.0	

Gender

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Male	950	82.6	82.6	82.6
	Female	200	17.4	17.4	100.0
	Total	1150	100.0	100.0	

Job Tenure with Organization (in months)

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1-12 months	860	74.8	74.8	74.8
	13-24 months	240	20.9	20.9	95.7
	25-36 months	30	2.6	2.6	98.3
	37-48 months	10	.9	.9	99.1
	More than 48 months	10	.9	.9	100.0
	Total	1150	100.0	100.0	

Job Tenure with Supervisor (in months)

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1-12 months	1130	98.3	98.3	98.3
	13-24 months	20	1.7	1.7	100.0
	Total	1150	100.0	100.0	

Correlations

-		_		Correlation		-		-	-
		AGE	GENDER	JTO	JTS	AS_MEAN	G_MEAN	SP_MEAN	PT_MEAN
AGE	Pearson Correlation	1	117**	.516 ^{**}	.146**	087**	.117**	.080**	060 [*]
	Sig. (2-tailed)		.000	.000	.000	.003	.000	.007	.043
	N	1150	1150	1150	1150	1150	1150	1150	1150
GENDER	Pearson Correlation	117**	1	121**	061 [*]	048	.038	.035	.000
	Sig. (2-tailed)	.000		.000	.038	.101	.200	.242	.992
	N	1150	1150	1150	1150	1150	1150	1150	1150
JTO	Pearson Correlation	.516**	121**	1	.138**	220 ^{**}	.201**	.200**	076**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.010
	N	1150	1150	1150	1150	1150	1150	1150	1150
JTS	Pearson Correlation	.146**	061 [*]	.138**	1	.037	.005	.049	.037
	Sig. (2-tailed)	.000	.038	.000		.211	.854	.096	.215
	N	1150	1150	1150	1150	1150	1150	1150	1150
AS_MEAN	Pearson Correlation	087**	048	220**	.037	1	506**	513 ^{**}	080**
	Sig. (2-tailed)	.003	.101	.000	.211		.000	.000	.006
	N	1150	1150	1150	1150	1150	1150	1150	1150
G_MEAN	Pearson Correlation	.117**	.038	.201**	.005	506 ^{**}	1	.671**	164**
	Sig. (2-tailed)	.000	.200	.000	.854	.000		.000	.000
	N	1150	1150	1150	1150	1150	1150	1150	1150
SP_MEAN	Pearson Correlation	.080**	.035	.200**	.049	513 ^{**}	.671**	1	182**
	Sig. (2-tailed)	.007	.242	.000	.096	.000	.000		.000
	N	1150	1150	1150	1150	1150	1150	1150	1150
PT_MEAN	Pearson Correlation	060 [*]	.000	076**	.037	080**	164 ^{**}	182 ^{**}	1
	Sig. (2-tailed)	.043	.992	.010	.215	.006	.000	.000	
	N	1150	1150	1150	1150	1150	1150	1150	1150

^{**.} Correlation is significant at the 0.01 level (2-tailed).

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Reliability Analysis

Case Processing Summary

		N	%
Cases	Valid	1150	100.0
	Excludeda	0	.0
	Total	1150	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics: Abusive

supervision

Cronbach's	
Alpha	N of Items
.816	5

Reliability Statistics:

Subordinate Guilt

Cronbach's	
Alpha	N of Items
.751	5

Reliability Statistics:

Subordinate Performance

Cronbach's	
Alpha	N of Items
.873	4

Reliability Statistics:

Supervisor Perspective

taking

Cronbach's	
Alpha	N of Items
.577	4

Model 1

```
Run MATRIX procedure:
 ****** PROCESS Procedure for SPSS Release 2.16.1 ************
                 Written by Andrew F. Hayes, Ph.D. www.afhayes.com
       Documentation available in Hayes (2013). www.guilford.com/p/hayes3
 ******************
 Model = 1
      Y = SP MEAN
       X = AS MEAN
      M = PT MEAN
 Statistical Controls:
 CONTROL= AGE GENDER JTO JTS
 Sample size
           1150
 ********************
 Outcome: SP MEAN
 Model Summary
          R R-sq MSE F df1 df2
.57 .33 .84 79.36 7.00 1142.00
 Model

        Model
        coeff
        se
        t
        p
        LLCI
        ULCI

        constant
        2.73
        .24
        11.44
        .00
        2.26
        3.19

        PT_MEAN
        -.54
        .07
        -8.29
        .00
        -.67
        -.41

        AS_MEAN
        -.62
        .03
        -20.34
        .00
        -.68
        -.56

        int_1
        .17
        .07
        2.39
        .02
        .03
        .32

        AGE
        -.04
        .06
        -.70
        .48
        -.15
        .07

        GENDER
        .06
        .07
        .77
        .44
        -.09
        .20

        JTO
        .11
        .05
        2.29
        .02
        .02
        .21

        JTS
        .60
        .21
        2.85
        .00
        .19
        1.01

 Product terms key:
 int 1 AS MEAN X PT MEAN
 R-square increase due to interaction(s):
      R2-chng F df1 df2
 int 1 .00
                             5.69 1.00 1142.00
                                                                         .02
 **************
 Conditional effect of X on Y at values of the moderator(s):
    PT_MEAN Effect se t p LLCI -.43 -.69 .04 -16.57 .00 -.77
                                                                  .00
                                                                                               -.61

      -.62
      .03
      -20.34
      .00
      -.68
      -.56

      -.54
      .05
      -11.87
      .00
      -.63
      -.45

          .00
          .43
```

Values for quantitative moderators are the mean and plus/minus one SD from mean.

Values for dichotomous moderators are the two values of the moderator.

*********** ANALYSIS NOTES AND WARNINGS *********************

Level of confidence for all confidence intervals in output: 95.00

NOTE: The following variables were mean centered prior to analysis: AS_MEAN $\mbox{PT}_{\mbox{\footnotesize{MEAN}}}$

---- END MATRIX ----

Model 1

```
Run MATRIX procedure:
 ****** PROCESS Procedure for SPSS Release 2.16.1 ************
              Written by Andrew F. Hayes, Ph.D.
                                                                  www.afhayes.com
      Documentation available in Hayes (2013). www.guilford.com/p/hayes3
 ********************
Model = 1
     Y = G MEAN
     X = \overline{AS} MEAN
     M = PT\_MEAN
Statistical Controls:
CONTROL= AGE GENDER JTO JTS
Sample size
        1150
 ******************
Outcome: G MEAN
Model Summary
         R R-sq MSE F df1 df2
.56 .31 .52 73.53 7.00 1142.00
         .56
Model

        Model
        coeff
        se
        t
        p
        LLCI

        constant
        3.11
        .19
        16.62
        .00
        2.74

        PT_MEAN
        -.36
        .05
        -7.09
        .00
        -.46

        AS_MEAN
        -.46
        .02
        -19.52
        .00
        -.51

        int_1
        .17
        .06
        3.06
        .00
        .06

        AGE
        .06
        .04
        1.24
        .22
        -.03

        GENDER
        .06
        .06
        .98
        .33
        -.06

        JTO
        .07
        .04
        1.72
        .09
        -.01

        JTS
        .13
        .16
        .78
        .44
        -.20

                                                                           ULCI
                                                                           3.47
                                                                           -.26
                                                                           -.42
                                                                                .29
                                                                                .14
                                                                               .17
                                                                               .14
                                                                  -.20
                                                                               .45
Product terms key:
 int 1
              AS MEAN X PT MEAN
R-square increase due to interaction(s):
          R2-chng F df1 df2
 int 1 .01
                        9.33
                                     1.00 1142.00
                                                              .00
 *******************
Conditional effect of X on Y at values of the moderator(s):
   PT MEAN Effect se t p LLCI ULCI
               -.54 .03 -16.48
-.46 .02 -19.52
       -.43
                                                         .00
                                                                   -.60
                                                                                -.47
        .00
                                                       .00
                                                                   -.51
                                                                                -.42
                 -.39
                               .04 -10.87
                                                         .00
                                                                   -.46
                                                                                -.32
```

Values for quantitative moderators are the mean and plus/minus one SD from mean.

Values for dichotomous moderators are the two values of the moderator.

********** ANALYSIS NOTES AND WARNINGS **********************

Level of confidence for all confidence intervals in output: 95.00

NOTE: The following variables were mean centered prior to analysis: AS_MEAN $\mbox{PT}_{\mbox{\footnotesize{MEAN}}}$

---- END MATRIX ----

Model 8

******** PROCESS Procedure for SPSS Release 2.16.1 ********** Written by Andrew F. Hayes, Ph.D. www.afhayes.com Documentation available in Hayes (2013). www.guilford.com/p/hayes3									
Written by Andrew F. Hayes, Ph.D. www.afhayes.com Documentation available in Hayes (2013). www.guilford.com/p/hayes3									

Statistical Controls: CONTROL= AGE GENDER JTO JTS									
Sample size 1150									

Model Summary R R-sq MSE F df1 df2 p .56 .31 .52 73.53 7.00 1142.00 .00									
Model									
coeff se t p LLCI ULCI constant 3.11 .19 16.62 .00 2.74 3.47 AS_MEAN 46 .02 -19.52 .00 51 42 PT_MEAN 36 .05 -7.09 .00 46 26 int_1 .17 .06 3.06 .00 .06 .29 AGE .06 .04 1.24 .22 03 .14 GENDER .06 .06 .98 .33 06 .17 JTO .07 .04 1.72 .09 01 .14 JTS .13 .16 .78 .44 20 .45									
Product terms key:									
int_1 AS_MEAN X PT_MEAN									

Model Summary R R-sq MSE F df1 df2 p .71 .51 .61 148.22 8.00 1141.00 .00									
Model coeff se t p LLCI ULCI constant .66 .23 2.93 .00 .22 1.11									

AS_MEAN PT_MEAN int_2 AGE GENDER JTO JTS	.06 08 .02 .07	.03	-10.32	.00	37 41	.73 25 19 .18 .02 .14 .15	
	erms key:	ע ס	m Mirani				
_	AS_MEAN		_	· EFFECTS	*****	*****	
Condition PT_MEAN43	al direct eff Effect 33 31 28	fect(s) 6 SE .04 .03	of X on Y a t -8.41	nt values p .00	of the mo LLCI 41 37	oderator(s): ULCI2625	
Conditional indirect effect(s) of X on Y at values of the moderator(s):							
Mediator PT_MEAN							
Indirect	effect of hic	ghest or	der product	::			
Mediator Effect SE(Boot) BootLLCI BootULCI G_MEAN .12 .04 .03 .20							

Mediator G_MEAN	Index SE(Boo	ot) Boot?		JCI 20			
************ ANALYSIS NOTES AND WARNINGS ***************							
Number of bootstrap samples for bias corrected bootstrap confidence intervals: 5000							
Level of confidence for all confidence intervals in output: 95.00							
NOTE: The following variables were mean centered prior to analysis: AS_MEAN PT_MEAN							

----- END MATRIX -----