EXAMINING THE PREDICTIVE ROLES OF CYBER VICTIMIZATION, GENDER, REVENGE, AND EMPATHY ON CYBER BULLYING PERPETRATION

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iii

ABSTRACT

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This study investigates whether gender, cyberbullying victimization, revenge, emotional empathy and cognitive empathy are possible predictors of cyberbullying perpetration. Sample was selected among university students and 852 (460 female, 392 male) participants responded to the study survey. In this study, the survey included a Demographic Information Form, Basic Empathy Scale (BES), The Vengeance Scale (VS), and The Revised Cyber Bullying Inventory for University Students. Research design of this study was quantitative correlational design and hierarchical multiple regression was utilized to examine the research question. According to results, males were cyber bullying perpetrator more than females. Also, the results showed that while cyber victimization, revenge and gender were positively correlated, emotional and cognitive empathy were negatively related to cyber bullying perpetration. Furthermore, interaction terms which are gender and cyber victimization, gender and revenge, gender and cognitive empathy were positively predicted, gender and emotional empathy interaction negatively predicted

the cyber bullying perpetration. Also, cyber victimization and emotional empathy, cyber victimization and cognitive empathy interactions were negatively predicted the cyber bullying perpetration. However, cyber victimization and revenge interaction was positively predicted the cyber bullying. Moreover, results showed that being male, having revenge feelings, low level empathy and experiences of cyber victimization predicted cyber bullying perpetration.

Keywords: Cyber Bullying Perpetration, Cyber Victimization, Revenge, Empathy, University Students

SİBER MAĞDURİYET, CİNSİYET, İNKİKAM VE EMPATİ DEĞİŞKENLERİNİN SİBER ZORBALIĞI YORDAYICI ROLLERİNİN İNCELENMESİ

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Yüksek Lisans, Eğitim Bilimleri Bölümü

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Bu araştırma siber mağduriyet, inkitam, cinsiyet, duygusal empati ve bilişsel empati değişkenlerinin siber zorbalık davranışını yordayıp yordamadığını araştırmaktadır. Örneklem üniversite öğrencileri arasından seçilmiş ve 852 (460 Kadın, 392 Erkek) kişi araştırmaya katılmıştır. Araştırmada Demografik Bilgi Formu, Temel Empati Ölçeği, İntikam Ölçeği ve Üniversite Öğrencileri için Yenilenmiş Siber Zorbalık Envanteri veri toplama aracı olarak kullanılmıştır. Bu çalışmanın araştırma deseni nicel korrelasyondur ve araştırma sorusunu incelemek için hiyerarşik çoklu regresyon kullanılmıştır. Araştırma sonuçlarına göre erkekler kadınlara oranla daha çok siber zorbalık yapmaktadırlar. Ayrıca siber mağduriyet, intikam ve cinsiyet siber zorbalık davranışı arasında negatif bir ilişki bulunmuştur. Cinsiyet ve siber mağduriyet, cinsiyet ve intikam ve cinsiyet ve bilişsel empati etkileşimleri siber zorbalık davranışını pozitif yönde yordarken, cinsiyet ve duygusal empatinin etkileşimi siber zorbalık davranışını negatif yönde etkilemiştir. Ayrıca siber mağduriyet ve duygusal empati, siber mağduriyet ve bilişsel empati etkileşimleri

siber zorbalığı negatif yönde yordarken, siber mağduriyet ve intikam etkileşimi siber zorbalığı pozitif yönde yordamıştır. Sonuç olarak erkek olmak, intikam duygusuna sahip olmak, düşük empati düzeyine sahip olmak ve siber mağdur olmak bir arada siber zorbalık davranışını yordamıştır.

Anahtar Kelimeler: Siber Zorbalık Yapma, Siber Mağduriyet, İntikam, Empati, Üniversite Öğrencileri

To my lovely family Nilgün Çokluk, Mehmet Çokluk
Ali Çokluk and Mecit Çokluk

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TABLE OF CONTENTS

PLAGIARISM	iii
ABSTRACT	iv
ÖZ	vi
DEDICATION	viii
ACKNOWLEDGMENTS	ix
TABLE OF CONTENTS	X
LIST OF TABLES	xiii
LIST OF FIGURES	xiv
LIST OF ABBREVIATIONS	xv
CHAPTER	
1. INTRODUCTION	1
1.1 Background to The Study	1
1.2 Research Question	8
1.3 Purpose of The Study	8
1.4 Significance of The Study	8
1.5 Definition of Terms	10
2. LITERATURE REVIEW	12
2.1 Nature and Prevalence of Cyber Bullying Perpetration	12
2.2 Cyber Victimization	20
2.3 Gender	24
2.4 Revenge	25
2.5 Empathy	28
2.6 Summary	31
3. METHOD	33
3.1 Overall Design of The Study	33
3.2 Participants and Sampling Procedure	33
3 3 Data Collection Instruments	34

3.3.1 Demographic Information Form	34
3.3.2 Basic Empathy Scale	34
3.3.3 Vengeance Scale	35
3.3.4 Revised Cyber Bullyin Inventory for University Students	35
3.4 Description of Variables	36
3.5 Data Analysis	37
3.6 Limitations of The Study	37
4. RESULTS	39
4.1 Preliminary Analyses	39
4.2 Descriptive Statistics of The Variables	39
4.3 Correlations among Variables	40
4.4 Gender Differences for Cyber Bullying Perpetration Variable	41
4.5 Assumption Testing for Hierarchical Multiple Regression	41
4.6 Hierarchical Multiple Regression Analysis	45
4.7 Summary of The Results	48
5. DISCUSSION	50
5.1 Discussion of The Results	50
5.2 Implications for Practice and Research	55
5.3 Conclusion	58
REFERENCES	59
APPENDICES	
APPENDIX A: APPROVAL LETTER FROM MIDDLE EAST	
TECHNICAL UNIVERSITY HUMAN SUBJECTS ETHICS	
COMMITTE.	70
APPENDIX B: PARTICIPANT CONSENT FORM	71
APPENDIX C: DEMOGRAPHIC INFORMATION FORM	72
APPENDIX D: SAMPLE ITEMS FOR REVISED CYBER BULLYING	3
INVENTORY FOR UNIVERSITY STUDENTS	73
APPENDIX E: SAMPLE ITEMS FOR THE VENGEANCE SCALE	74
APPENDIX F: SAMPLE ITEMS FOR BASIC EMPATHY SCALE	75
APPENDIX G: TURKISH SUMMARY / TÜRKÇE ÖZET	76

APPENDIX H: TEZ İZİN FORMU / THESIS PERMISSION FORM......89

LIST OF TABLES

Table 1 Forms of Cyber Bullying Perpetration	13
Table 3.1 Descriptive Statistics of the Participants.	32
Table 4.1 Correlation among Outcome and Predictor Variables and	
Descriptive Values of Variables.	38
Table 4.2 Gender Differences for the Cyber Bullying Perpetration Variable	39
Table 4.3 Normality Indices for the Study Variables	40
Table 4.4 Hierarchical Regression Analysis: Effects of Cyber	
Victimization, Revenge, Cognitive Empathy, and Emotional Empathy on	
Cyber Bullying Perpetration Behaviors	45

LIST OF FIGURES

Figure 1 Scatter Plot Matrix of Variables.	41
Figure 2 Normality of Residuals with Histogram.	41
Figure 3 Normality of Residuals with P-P Plot.	42
Figure 4 Scatterplot of Standardized Predicted Value	42

LIST OF ABBREVIATIONS

METU Middle East Technical University

TRA Theory of Reasoned Action

BES Basic Empathy Scale

VS The Vengeance Scale

RCBI The Revised Cyber Bullying Inventory for University

students

ANOVA One-Way Analysis of Variance

HSEC Human Subjects Ethics Committee

İAEK İnsan Araştırmaları Etik Kurulu

CHAPTER 1

INTRODUCTION

1.1 Background to the Study

Over the past decade, using information and communication technologies has become common for the young individuals. Although using technology can be beneficial it may also be abused by individuals. One of the misuses of online technologies is cyberbullying and it is a critical issue among the Internet users all over the world (Leung, Wong, & Farver, 2018). Cyber bullying is also called as electronic aggression, cyber aggression, online harassment cyber bullying, and online bullying (Patchin & Hinduja, 2006; Ramos & Bennett, 2016). Cyber bullying is defined as "an aggressive, intentional act carried out by a group or an individual, using electronic forms of contact, repeatedly and over time against a victim who cannot easily defend him or herself" (Smith, Mahdavi, Carvalho, & Tippett, 2006, p.376).

Cyber bullying can be done both directly and indirectly by perpetrators. Aftab (2006) claimed that sending direct messages to the young adults or children called direct cyber bullying. However, if the perpetrator uses other people to bully someone else, this is called as indirect cyber bullying which is considered as more hazardous than direct bullying (Aftab, 2006). This is because, young adults can be included in harassment without having the knowledge that they are harassed by a cyber bully. For instance, cyber bully can hack someone else's account and send some abusive messages to persons' friends or family in his/her account list.

Forms of cyber bullying were documented by Bauman (2015) as flaming, harassment, denigration, masquerading, outing and trickery, social exclusion, cyberstalking and cyber threads. Flaming occurs in the online environment like emails and defined as showing anger to hurt a person. Harassment targets one

person's gender, race, ethnicity etc. In the denigration, perpetrator insults another person and masquerading involves feigning to send messages to fool another person. Outing and trickery mean convincing a person to share his/her personal informations and spreading this information on the internet. Social exclusion means removing a person from an online group and showing him/her that s/he is not wanting by the others. Cyberstalking means threatening a person more than ones (Bauman, 2015). Lastly, "Cyber threats are messages intended to convey that the recipient or the recipient's family is in imminent danger of harm" (Bauman, 2015, p. 58).

Although the majority of studies focuses on children and young adolescents, cyber bullying is a common issue among college age students (Ramos and Bennett, 2016). The authors claimed that the prevalence of cyber bullying is not definite for college students (Ramos and Bennett, 2016). Tegeler (2010) conducted one study with 191 college students which showed that 19% of the college students accepted that they cyber bullied others, 34 % of them reported being victims of cyberbullying, and 64 % of them claimed that they witnessed some cyberbullying events (Tegeler, 2010). MacDonald and Roberts-Pittman (2010) reported that while 38% of their university-aged participants knew someone who were cyberbullied, 21.9 % of them were cyber victimized and 8.9% of them cyber bullied others. In another study, Faucher, Jackson and Cassidy (2014) found that among 1925 Canadian university students 24.1% of the students were cyberbullying victims in the last 12 months. Furthermore, Walker, Sockman and Koehn (2011) conducted an exploratory study of cyberbullying with undergraduate students. Accordingly, 11% of college students experienced and 54% of them knows someone who experienced cyber bullying perpetration, when they were in their undergraduate years in the universities.

Characteristics of college cyber bullies were examined by Schenk, Fremouw and Lillard (2013). In their study, there were 79 college students and while 60 of them were cyber bullying perpetrator, 19 of them were both cyber bully and the victim. Depression, interpersonal sensitivity, phobic anxiety, hostility, psychoticism and paranoia were found as the psychological symptoms of college cyber bullies. Cyber bullying perpetrators were also found as more aggressive, participate to more

drug issues and violent crimes and had more suicidal thoughts. Moreover, for cyber bullying perpetrators showed more distress and aggressive acts than people who were not cyber bullying perpetrators (Schenk, Fremouw, & Lillard, 2013).

Both experiencing cyber victimization and attempting to cyber bullying perpetration can be harmful for college students (Ramos & Bennett, 2016). In their research examining online cyber victimization they reported that cyber victimization can be risky for college students because students are far away from their family, and they cannot have significant support when they experience it. In addition, the researchers found that there is a negative association between receiving support or help from family and cyber victimization and perpetration. According to Suman (2016), cyber and traditional bullying have physiological and psychological impacts on college victims, such as somatic problems, social problems like isolation, developing negative self-esteem, anxiety, depression, suicidal thoughts and academic problems. Likewise, Pingault and Schoeler (2017) claimed that the cyber and traditional bullying victims are experiencing mental health problems such as social anxiety, loneliness, attempting to suicide and depression. Furthermore, Lindert (2017) mentioned the effect of cyber bullying on person as anxiety and having self-harming behaviors.

Hamby, Blount, Smith, Jones, Mitchell and Taylor (2018) claimed that there are many crimes happening online due to the advantageous aspects of online environment for cyber bullying. For example, anonymity is one of the advantages of online bullying for perpetrators. The person who is bullied cannot fight back or identify the unknown perpetrator (Hamby et al., 2018). Chakroborty, Zhang, and Ramesh (2018) also mentioned that "the possibility of anonymity and lack of effective ways to identify inappropriate messages have resulted in significant amount of online interaction data that attempt to harass, bully, or offend the recipient" (p.1001). Kowalski, Limber and Agatston (2008) mentioned the importance of anonymity and said anonymity was the most significant motive of cyber bullying perpetrators. They also, explained that traditional bullying is more insecure than cyber bullying which is another motive for cyber perpetrators. In the

traditional bullying, perpetrator has a possibility to get caught and experience face-to-face argumentation. Furthermore, Slonje and Smith (2008) mentioned that cyber bullying differs from traditional ones in terms of using mobile phones and the internet. Lack of supervision and the policing were also the variations of cyber bullying perpetration and traditional bullying (Cassidy, Faucher & Jackson, 2013).

Several motives of cyber bullying perpetration have been reported. Kowalski et al. (2008) investigated the reasons behind cyber bullying perpetration. In their research, the motives of the cyber bullying perpetrators were found as showing power, gaining satisfaction, meanness, having jealous feelings, looking cool and trying to take attention. Furthermore, Rafferty and Vander-Ven (2014) reported that entertainment was the primary reason and motive of cyber bullying perpetration. Dilmaç (2009) found the importance of succorance as a motive in cyber bullying perpetration. Moreover, Vandebosch and Van Cleemput (2008) revealed that revenge was another motive of the cyber bullies.

There are studies showing the relationship between cyber bullying perpetration and victimization. For example, Patchin and Hindjua (2006) claimed that if the person experienced to be cyber perpetrator or victim in his/her life, the probability of being perpetrator is becoming higher. According to Ak, Özdemir and Kuzucu (2015), there is a positive relationship between cyber victimization and cyber perpetration. In their research, there was a negative relationship between anger-in and anger-out with cyberbullying and cyber victimization. In addition, Şahin, Aydın and Sarı (2012) also found that there is a significant relationship between being cyber bully and cyber victim. Additionally, Balakrishnan (2015) demonstrated that there is a significant and positive relationship between being a cyber victim and a cyber bully. Moreover, cyber victims have an inclination to turn into a cyber bully, and cyber bullies have an inclination to become cyber victims. Walrave and Heirman (2011) examined the predictors of cyber bullying perpetration and cyber victimization. Results pointed out that experiences about cyberbullying and online risky behaviors are augmenting and predicting the probability of being

cyber victim. Past experiences of cyber victimization also predicted the future cyber bullying perpetration.

Previous research about cyberbullying showed inconsistent results about gender differences. For instance, Keith and Martin (2005) showed that females have tendency to cyber bully more than males because of verbal and relational aggression. Coyne, Archer, and Eslea (2006) supported this claim by revealing that girls have more relational and verbal aggression. On the contrary, girls are not only experiencing but also showing cyber bullying less than boys (Şahin, Aydın & Sarı 2012). According to Walrave and Heirman (2011), males are more likely to attempt online bullying. Nevertheless, females' probability of being victim is much higher. The eventuality of cyberbullying is going up by the age of person (Walrave & Heirman, 2011). Zsila, Urban, Griffiths and Demetrocvics (2018) examined the gender differences in the relationship between cyberbullying perpetration and victimization. They concluded that females' experiencing the traditional bullying victimization more than ones increased the probability of being exposed to cyber bullying perpetration. MacDonald and Roberts-Pittman (2010) claimed that there was no gender difference for cyberbullying behavior.

Faucher, Jackson, and Cassidy (2014) conducted a research among university students. They claimed that university students are experiencing cyberbullying because developing communication devices are commonly used by this group. On the other hand, males were reported cyber bullying others less often than females (Görzig & Olafsson, 2013). However, Erdur-Baker (2010) determined a difference between males and females. According to the author, male students were being a perpetrator and victim more than females in both online and physical settings, since males were engaging in risky online behaviors more than females on the internet. Moreover, according to Karabacak et al. (2015), girls are being cyber perpetrators and victims less than males, and if the person experiences cyber bullying, this person will have more tendency to be a cyber-bully compared to people who are not exposed to cyber bullying. Similarly, Wong, Cheung and Xiao (2018) revealed that males are cyber bullies and cyber victims more than females.

Researchers claimed that having experiences about cyber victimization making males more prone to cyber bullying perpetration as opposed to females. Furthermore, they support their research result with the social-control theory and mentioned that due to having less self-control males are cyber bullying more than females.

Empathy was another important factor for cyber bullying perpetration. Empathy is defined as a skill of knowing and understanding the feelings of other people (Steffgen, Pfetsch, König & Melzer, 2011). To explain the relationship between empathy level and cyber bullying, Steffgen, Pfetsch, König and Melzer (2011) conducted a research with 2.070 students. According to their results, cyber bullies are being less empathic and researchers claimed that working on empathic skills can reduce online bullying behavior. Similarly, Ashiq, Majeed and Malik (2016) found that empathy was negatively related to cyber bullying. Topcu and Erdur-Baker (2012) explained that empathy may predict cyber bullying perpetration because low level of empathy leads individuals to take risky behaviors. On the contrary, Pfetsch (2017) showed that there was no correlation between self-reported emotional and cognitive empathy and online bullying. Due to inconsistent results in the literature and the importance of empathy on cyber bullying perpetration, it was important to examine empathy and understand more about the impact of empathy on cyber bullying perpetration.

Revenge is another reason in cyber bullying. König, Gollwitzer and Steffgen (2010) noted that "the role of revenge and retaliation as a motive to engage in acts of cyberbullying has not yet been examined systematically" (p.210). They also reported that revenge was related to cyber bullying perpetration due to having past experiences about cyber victimization. Revenge is "the infliction of harm in return for perceived injury or insult or as simply getting back at another person" (Cota-McKinley, Woody & Bell, 2001, p.343). Fung (2010) conducted research about the rate of the online bullying and the relation with the proactive and reactive aggression. Accordingly, there was a relationship between revenge and the cyber bullying, emotional ventilation was the main reason of cyber bullying, and revenge

was one of the types of reactive aggression. Fluck (2014) made a research to answer the question why students bully others. Results showed that the first reason behind cyber bullying behavior was taking revenge. Raskauskas and Stoltz (2007) also demonstrated that the reason behind cyber bullying behavior is revenge. However, research regarding the relation between cyber bullying perpetration and revenge especially among university students is still limited. More specifically, the joint relation of revenge to gender and cyber victimization has not yet been examined for cyber bullying perpetration. Therefore, this current research aims to fill this gap by investigating the joint relation of revenge to gender and cyber victimization on cyber bullying perpetration.

As a summary, adolescents and young adults are experiencing cyber bullying perpetration and victimization (Ak, Özdemir & Kuzucu, 2015; Patchin & Hinduja, 2006). However, limited information exists for the university students in Turkey in the literature. The predictors of cyber bullying perpetration were proactive and reactive aggression, amount of internet usage, relational and verbal aggression, anger rumination, victimization in traditional bullying, online risky behaviors, anger-in, anger-out, past experiences of cyber bullying perpetration and victimization, having social networking profile, sadism, power, ideology and empathy in the literature (Ak, Özdemir & Kuzucu, 2015; Balakrishnan, 2015; Coyne, Archer, & Eslea, 2006; Fluck, 2014; Fung, 2010; König, Gollwitzer & Steffgen, 2010; Walrave & Heirman, 2011). In the present research, cyber victimization, revenge, gender, emotional empathy and cognitive empathy were the predictors. Gender is an important variable in the cyber bullying perpetration literature. However, there exist inconsistencies about the gender results. This is because, while some researchers found no gender difference for cyber bullying perpetration, other researchers claimed the opposite. For example, some studies claimed that females are being cyber bullying perpetrator and victim more than males but other studies have revealed the contradictory results. Because of these different results in the literature, it was important to include gender as a variable in this research. Furthermore, the joint effects of gender with cyber victimization, revenge, emotional empathy and cognitive empathy have not been explored.

Revenge has been cited as one of the motives of cyber bullying perpetration but there is not enough information about its relationship with cyber bullying behavior. Especially for the university students, there has been few studies in the literature. Therefore, adding revenge as a variable in this study may help the researchers to understand the importance of revenge feelings on cyber bullying behavior.

Moreover, cognitive and emotional empathy results are not consistent in the literature and these variables are mostly studied in adolescent samples. Therefore, this study contributed to the literature of college cyber bullies. Furthermore, cyber victimization was another significant variable of cyber bullying perpetration and it seems that it had an impact on this behavior. Therefore, this variable was added to present research. Variables of this study examined with the moderations and hierarchical multiple regression. Examining this variables will assist both counselors and researchers to integrate and use these variables within these strategies to help the cyber bullying perpetrators.

1.2 Research Question

The research question of the study was that "To what extent do gender, revenge, cyber victimization, emotional empathy and cognitive empathy predict cyber bullying perpetration?"

1.3 Purpose of the Study

The aim of the present study is to examine joint and independent relationships of the predictors of gender, cyber victimization, revenge, emotional empathy and cognitive empathy to cyber bullying perpetration. A hierarchical multiple regression model was conducted to test these relationships.

1.4 Significance of the Study

This study has important contributions to the existing literature of cyberbullying perpetration. Even though there are studies about the cyber bullying perpetration, its relationship to gender, revenge, cyber victimization, emotional empathy and cognitive empathy together has not been explored so far. Working with

these variables is important considering the inconsistent and inadequate results about cyber bullying perpetration among university students. In this study, the predictors of cyber bullying perpetration are tested to determine the best predictors of cyber bullying could be understood. This is important not only for researchers but also practitioners to perform prevention and intervention strategies to help cyber bullies.

The results of this study are of significance to counselors who work at college counseling centers. This is because, by knowing the predictors of the cyber bullying perpetration and having information about the interactions of cyber bullying, counselors can plan prevention programs, open psychoeducation groups about cyber bullying perpetration and work with the cyber bullies by taking into consideration the knowledge of the predictors which are gender, being cyber victim, revenge, emotional empathy and cognitive empathy. Knowing the importance and contribution of each variable, university students can be enlightened about the cyber bullying topic. By this way, they can understand the related factors which give rise to bully others. Therefore, gaining awareness about these predictors may help them to take professional help and work on their skills. Moreover, Suman (2016) mentioned that having somatic problems, social problems like isolation, developing negative self-esteem, anxiety, depression, suicidal thoughts and academic problems were the results of cyber bullying perpetration. For this reason, it was important to clarify the reasons behind cyber bullying perpetration to overcome these unwanted psychological and physiological problems and increase the well-being of the students.

Lastly, there were inconsistent results about gender differences in cyber bullying perpetration. Therefore, this study can fill this gap by exploring gender as a predictor variable. Additionally, interaction terms with gender and the predictors of cyber bullying perpetration were important for the cyber bullying literature to see the role of gender on cyber bullying perpetration. Furthermore, conducting hierarchical multiple regression was significant to see the joint and independent predictive power of cyber victimization, revenge, emotional and cognitive empathy

on cyber bullying perpetration. Moreover, this study showed the joint role of being male or female and experiencing cyber victimization, being male or female and having revenge feelings, being male or female and having emotional empathy and being male or female together with having cognitive empathy to cyber bullying perpetration. In addition, the interaction terms, which were being cyber victim and having revenge feelings, being cyber victim and having emotional empathy and being cyber victim and having cognitive empathy also examined to see the interactions with cyber bullying perpetration. These interaction terms contributed to the cyber bullying literature and each of the variables examined with university age people. Unraveling interaction terms were important to enlighten the researchers working on cyber bullying. This is because, researchers can see the joint predictive power of cyber victimization and gender. Also, by considering this research results, researchers can control some of the important variables in their study. By this way, there will be clear results of the cyber bullying perpetration studies.

1.5. Definition of Terms

- Bullying: Bullying can be defined as students' or a group of students' aggressive acts which are conducted one or many purposes (Elipe, de la Oliva Muñoz & Del Rey, 2018).
- **Cyberbullying:** Cyber bullying is "an aggressive, intentional act carried out by a group or an individual, using electronic forms of contact, repeatedly and over time against a victim who cannot easily defend him or herself" (Smith, Mahdavi, Carvalho, & Tippett, 2006, p.376).
- **Cyber Victim:** Cyber victim is defined as the person who receives aggressive behaviors via information and communication devices in the online environment (Law et al., 2012).
- **Cyber Perpetrator:** Cyber perpetrator is defined as person's experience of showing aggressive behaviors to another person via electronic media (Law et al., 2012).

- **Revenge:** "Revenge can be commonly defined as the infliction of harm in return for perceived injury or insult or as simply getting back at another person" (Cota-McKinley, Woody & Bell, 2001, p.343).
- **Empathy:** "Empathy, as defined in behavioral sciences, expresses the ability of human beings to recognize, understand and react to emotions, attitudes and beliefs of others." (Alam, Danieli & Riccardi, 2017, p.40).

CHAPTER 2

LITERATURE REVIEW

This study investigates whether gender, cyberbullying victimization, revenge, emotional empathy and cognitive empathy are predictors of cyberbullying perpetration. This chapter presents related literature to construct theoretical framework for the study. The selected variables were studied by the separate and independent researchers before. Therefore, their relationships to cyber bullying perpetration were somewhat known. This thesis brought these variables together to examine their relative independent and joint predictive roles on cyber bullying acts. Below, existing literature summarized in terms of the nature and prevalence of the cyber bullying perpetration. Later, the related research on independent variables were introduced.

2.1 Nature and Prevalence of Cyber Bullying Perpetration

Bullying is a behavior, which is offensive and intentional and done by an individual or a group of people over and over again (Olweus, 1993). A person who is being bullied has difficult times for defending his/herself (Olweus, 1993). There are four types of bullying which are physical, verbal, emotional and indirect (Smith, Madsen & Moody, 1999). Physical bullying is defined as harming a person by hitting him/her. Verbal bullying means mocking and name-calling of someone (Smith, Madsen & Moody, 1999). Emotional bullying is defined as threatening someone by using social exclusion, gestures or facial expressions. After communication and information technologies developed and people started to live together with technology, some people abused technology and new type of bullying emerged which is called cyber bullying (Tokunaga, 2010).

Beckerman and Nocero (2003) reported that anonymity is the most important aspect of cyber bullying perpetration. Information and communication technologies are giving chance people for opening different accounts. Therefore, communication and information technologies are becoming attractive among cyber bullies. Due to opening different accounts with different names, it is becoming hard to identify and intervene with cyber bullying perpetrators. Also, it is mentioned that because of having anonymity in the virtual platforms, cyber bullies can spread rumors and dish on someone easily.

Cyber bullying, which is a new type of aggression, differs from traditional bullying. Cyber bullying happens by using computers, mobile phones and the internet (Slonje & Smith, 2008). Shariff (2005) notes that when cyber bullying perpetration and traditional bullying were compared with each other, there was an obvious difference between them. For example, it is very easy to hide one's identity on the internet. Also, people who witness to a cyber-bullying perpetration were higher than traditional ones as information gets out much quickly on the internet (Shariff, 2005). Furthermore, cyber bullying differs from traditional bullying in terms of having lack of supervision and supervising the online bullying behaviors. Accessibility is another difference of traditional bullying and cyber bullying. For example, traditional victims can protect themselves from traditional perpetrators by going their home but escaping from cyber victimization harder than traditional ones. Yet, cyber bullying perpetrators do not have any places or times to bully and can bully victims even in their homes. Lastly, there is power imbalance. Running away from online postings may be impossible; thereby, cyber bullying perpetration is much more scary, and victims are helpless compared to the victims of traditional bullying (Cassidy, Faucher & Jackson, 2013). Even though there are some differences between cyber and traditional bullying, they are also showing some similarities. For example, as traditional bullying, some types of cyber bullying perpetration contain exclusion, rumors, stalking, discomforting and threatening someone.

Researchers claimed that young people are experiencing cyber bullying and this issue is a global problem among them. In order to be aware of the rates of cyber bullying victimization, interviews were conducted with adults who are between 16 to 64 years old in all over the world (Cook, 2018). Results between the years of 2011- 2018 demonstrated percentages of the young people who were the cyber bullying victim. Results showed that generally percentages of cyber bullying victimization are increasing year by year. Especially, the results of Turkey increased from 5 to 20 percentage in the 7 years among young people.

Cyberbullying perpetration is a significant issue among adolescents and young adults (Kırcaburun & Tosuntaş, 2017). Cyberbullying perpetration is the use of information and communication technologies to attempt to bully (Hemphill et al., 2012). There are several forms of cyber bullying perpetration. These are flaming, harassment, cyberstalking, denigration, impersonation, outing and trickery and social exclusion (Willard, 2007). In Table 1, definitions of each forms introduced.

Table 1

Forms of Cyber Bullying Perpetration.

Form of Cyber Bullying Perpetration	Definition
Flaming	It is the online act of abusing someone with using electronic messages which includes rude languages on the internet.
Harassment	It occurs when someone sends pejorative and aggressive messages to another person over and over again
Cyberstalking	Shooting messages that involving menace of damage or are excessively daunting over and over again. Making a person afraid for his/her safety by participating some online activities on the internet.

Table 1 (cont'd)

Denigration	It happens when someone is dissed online. Also, posting some cruel gossips about a person to harm his/her amity or fame.
Impersonation	Hacking someone's account, masquerade as the person and shooting messages to villainize the person in the eyes of the others.
Outing and Trickery	Sharing out glazes or confidential information on the internet. Fooling or tricking one person to get the confidential information about him/her. After that sharing these secrets on the internet.
Social Exclusion	Deliberately isolating someone from an online group.
	(Willard 2007)

(Willard, 2007)

Kırcaburun and Tosuntaş (2017) underlines that cyber bullying is an important issue because cyberbully victims are having variety of emotional and psychological problems due to experiencing cyberbullying perpetration which is also giving rise to suicide. In addition to Kırcaburun and Tosuntaş (2017), Selkie, Kota, Chan and Moreno (2015) documented that cyber bullying increases the cases of depression and problematic alcohol abuse.

In the literature, researchers mostly paid attention to cyber bullying behavior of adolescents. Thus, there is not enough information about cyberbullying perpetration among college students. Bostonia (2009) mentioned that even though cyber bullying is increasing in the high school years, it is also becoming a critical problem among college students, too. Finn (2004) claimed that cyber bullying is an inevitable problem among college students who are between 18 to 29 years old due to the students' living space and being in a closed community in the campuses.

As students are living in a closed community; their phone numbers, e-mails and class schedules are found by anyone easily. Therefore, experiencing cyber bullying perpetration has become inevitable for university students. Furthermore, Selkie and Moreno (2016) claimed that experiencing cyber bullying perpetration in the college is not interesting because young adults, who study in the college, are using communication and information technologies most frequently. Thus, the probability of experiencing cyber bullying perpetration increasing. Moreover, working with college students about cyber bullying perpetration has great importance since these age periods are critical for their personality. Also, college students' habits are shaping and becoming persistent in that ages (Selkie & Moreno, 2016). In addition, when they become adult, they continue to maintain cyberbullying behavior. Therefore, working with university students gains significance due to these reasons.

For the percentages of cyber bullying, 19% of the college students have been cyber bullying perpetrator, 34% of the college students have exposed to cyber bullying perpetration, and 64% of the college students have seen that their friends were exposed to the cyber bullying perpetration by others during the past six months (Lawler & Molluzzo, 2012). In addition, Ramos and Bennett (2016) found that as a cyber-bullying victimization, 73.5% intrusiveness, 73.2 % humiliation, 72.3% electronic hostility and 42.6% exclusion were experienced by young adults who are students in the college. Thus, working on this issue, conducting research about cyber bullying and opening prevention and intervention programs to college students are gaining importance over time.

A substantial body of literature included the related factors of cyberbullying perpetration. The first research example can be Macdonald and Roberts-Pittman's research which is conducted in 2010. There were 439 college students in this study and the aim of study was examining the prevalence and demographic differences of cyber bullying behaviors. Research results indicated that 38% of the students observed someone who cyberbullied, 8.6% of the students were cyber perpetrator and 21.9% of them were cyber victim. Furthermore, it is found that there is no significant difference for ethnic groups.

Additionally, for the predictors of cyber bullying perpetration family environment and emotional intelligence were examined among university students. The European Cyberbullying Intervention Project Questionnaire, Trait Meta-Mood Scale-24 and Social Climate in the Family scale was used in this research. There were 1282 university students in this study. Students' age range was between 18 and 46. According to results, like high school environment, cyber bullying occurs in the university environment as well. Also, 18.6% of the student reported that they experienced cyber bullying victimization. 19.4% of the students mentioned that they were cyber bullying perpetrator. Furthermore, both emotional intelligence and family atmosphere predicted cyber bullying. For example, there was a positive relationship between deteriorated family environment and cyber bullying victimization and perpetration. However, favorable family environment negatively related with the cyber bullying perpetration and victimization. The reason behind this result is that having problems in the family like conflict and lower Intellectual-Cultural Development, inexpressiveness and not having cohesion in the family giving rise to cyber bullying behavior and victimization (Martinez-Monteagudo, Delgado, Ingles & Garcia-Fernandez, 2018).

Hemphill et al.'s (2012) research was a longitudinal study, and there were 700 university students. This study examined the predictors of traditional and cyberbullying perpetration. According to results, fifteen per cent of the participant engaged in cyberbullying perpetration. Also, results showed that previous experiences with relational aggression like rumor mongering was the reason behind cyber bullying perpetration. Some people were choosing cyber bullying as opposed to traditional ones due to having motives of not being detected by anyone (Hemphill et al., 2012). Selkie, Kota, and Moreno (2016) tried to have deeper understanding about cyber bullying perpetration behavior. However, in their research, there were only female participants. Researchers used online survey which consists eleven specific cyberbullying behaviors and three roles; bully, victim, or witness. 249 female students from four different universities participated in this study. Results showed that 'hacking into another person's accounts' is the most common behavior perpetration of bullies, 'unwanted sexual advances through the Internet' is the most

common behavior victims face, and 'degrading comments or hate speech' is the most common behavior among witnesses (Selkie, Kota and Moreno, 2016). To explain this result, researchers used the idea of Kota, Benson and Moreno (2014) and claimed that hacking was the most common behavior of the cyber bullies because of being acceptable internet bullying behavior. However, other behaviors were mentioned as childish which is also related with social desirability (As cited in Selkie, Kota & Moreno, 2016).

Furthermore, Doane, Pearson and Kelley (2014), asserts that understanding cyberbullying perpetration requires various research theory. In this research, researchers aimed to test the Theory of Reasoned Action (TRA) in order to understand cyber bullying perpetration among college students. This study consisted of 375 college students (128 male, 246 female). In this research, types of cyberbullying which are deception, malice, public humiliation and unwanted contact were assessed with the cyberbullying perpetration scale of the Cyberbullying Experiences Survey. Doane, Pearson and Kelley (2014) included empathy toward cyber bullying victims in the model. Result of the study demonstrated that lower empathy toward cyberbullying victims is inversely correlated with favorable attitudes toward cyberbullying behaviors. Also, TRA is a helpful test in order to explain cyberbullying perpetration. Moreover, if college students are having positive attitudes toward cyberbullying, they are also having high intentions to be perpetrator. Lastly, having high cyberbullying intentions were explaining the more often cyberbullying perpetration behavior.

Another study about cyber bullying perpetration examined the effect of experiences about cyber harassment victimization and perpetration in the high school years to college years. There were 1,368 students from 3 universities. According to results, if the person experienced cyber harassment in his/her high school years, he/she also experienced same type of harassment in the college too. Therefore, prevalence of cyber harassment predicted the same behavior in the college years. Researchers explained this result with the idea that students are adopting behaviors of victims or perpetrators. Thus, they are also perpetrating others

in the college years. Also, easy access to the internet was another motive of cyber bullies (Beran, Rinaldi, Bickham & Rich, 2012). Additionally, Kırcaburun and Tosuntaş (2017) examined the relationships of cyberbullying perpetration with gender. Participants of this research included 353 sophomore and freshman university students from Turkey. According to the results, being male predicted and giving rise to cyberbullying perpetration. They explained this result with the qualifications of people who are easily getting angry and do not have tolerance to others which making them to perpetrate others. Leung, Wong, and Farver (2018) studied with 312 Chinese college students to examine cyberbullying behavior. According to results, cyber bullying perpetration and victimization were positively correlated with males and females. Also, friendship quality, cyber victimization and perpetration just moderated association for female students in the college. They explained this research result with the qualifications of cyber bullies and said that victims were physically weak, and their social standing was low. Victims were choosing cyber bullying rather than traditional one to perpetrate others because there was a low risk to have confrontation with others and can have feedback which is delayed. In addition, the best reason behind this behavior is achieving power imbalance via cyber bullying perpetration. Friendship quality was explained cyber bullying because having secure friendship helping perpetrator not to scare his/her aggressive behaviors while taking revenge. This is because perpetrators know that after this experience, they can have emotional support from their friends and this idea is motivating them (Leung, Wong & Farver, 2018).

Researchers have been trying to find reasons behind cyber bullying behavior for many years. Li, Holt, Bossler and May (2016) conducted a research in Kentucky to find an answer to the question "Why students are attempting to cyber bullying perpetration?". The result of the study demonstrated that there was a significant relationship between low self-control and social learning for cyber bullying behavior. Thus, low self-control and social learning predicted cyber bullying perpetration. The reason behind this result is that person who has low self-control more easily influenced from his/her peers who are cyber bullying others (Li, Holt, Bossler & May, 2016). Another research examined the reasons behind cyber

bullying perpetration among adolescents. There were 84 participants in this research. According to results, there were four reasons behind this behavior. 38 % of the people mentioned that they are cyber bullying for fun, 25 % of them cyber bullying for taking revenge, 6% of them claimed that they are cyber bullying due to feeling bad and 31% of them said that they do not have any idea about this issue (Raskauskas & Stoltz, 2007). Moreover, Rafferty and Vander Ven (2014) studied with 221 university students at Midwestern University. In their research, as other studies, it is aimed to find the reasons behind cyber bullying and on-line aggression behaviors. This study was a qualitative research study and researchers asked open ended questions to the students. According to the results, there were three motivations for cyber perpetration and on-line aggression behaviors. These motivations were power struggles, entertainment and cyber sanctioning.

2.2 Cyber Victimization

Cyber bullying victimization is an increasing issue in the world. Due to accessing information and communication instruments are easier in today's world, the probability of being cyber victim is wide spreading (Brown, Demaray & Secord, 2014). For example, Wright (2016) conducted a research to find the longitudinal and bidirectional relations between cyber bullying victimization, suicidal ideation, anxiety and depression. For this reason, 1,483 university students participated to this study. The results of the study demonstrated that cyber bullying victimization were increasing the probability of experiencing suicidal ideation, depression and anxiety. In addition to this, suicidal ideation, anxiety and depression are making contribution to cyber victimization too. Thus, researchers mentioned the significance of the cyber victimization rate among college students on universities.

Another research examined the psychological correlates of cyber victimization and perpetration (Ildırım, Çalıcı, & Erdoğan, 2017). The psychological correlates of this study were chosen as depression, anxiety, hostility, impulsivity, negative self-concept, internet addiction and empathy. In study, there were 198 college students who are between 18 to 25 years old. Results showed that cyber perpetration and victimization had a positive association with depression,

somatization, anxiety, hostility, impulsivity and internet addiction. However, cyber bullying perpetration was negatively associated with empathy. Therefore, cyber bullying perpetration and victimization had the same psychological correlates with each other (Ildırım, Çalıcı, & Erdoğan, 2017). Researchers explained empathy with the having less moral judgment which is giving rise to cyber bullying perpetration. Additionally, Selkie, Kota, Chan and Moreno (2015) studied with 265 female students in a college to find the effects of being cyber victim. According to results, both perpetrators' and victims' probability of experience depression increasing. Because of these negative effects of cyber victimization to university students, working on this issue and taking precaution were important. Therefore, it was important to add this variable in to this study.

Cyber victimization seems to be one of the important variables in cyber bullying perpetration literature. There are some studies which examined the relation between cyber bullying victimization and perpetration. In the literature, majority of the studies found a relationship between cyber bullying perpetration and victimization (Ak, Özdemir & Kuzucu, 2015; Kraft & Wang, 2010; Zalaquett & Chatters, 2014; Dilmaç, 2009; Eroğlu & Güler, 2015; Xiao & Wong, 2013). For example, Zalaquett and Chatters (2014) studied on college student's cyberbullying experiences while focusing on their both high school and college experiences. There were 613 college students (459 female, 149 male, 5 did not report gender) from different background participating to this study. It was found that nineteen percent of the population has experienced cyberbullying in college and thirty-five percent of this subsample also experience cyberbullying in high school. Furthermore, there was a relation between being victim and cyber perpetrator. However, the reason behind this result did not explained and in this research college students (77%) mentioned that they wanted more information or education about cyber bullying in their campuses.

Ak, Özdemir and Kuzucu (2015) examined the role of anger expression styles on cyber bullying perpetration and victimization. There were 687 university students and the mean age was 22.45. Research findings revealed a relationship

between cyber bullying victimization and perpetration. Researchers explained this relationship with being victims and non-victims. Experiencing cyber victimization can make a person to show more aggressive behaviors more than other people who are not victimized and this is making them to perpetrate more easily others. Also, anger-in explained the relation between victimization and perpetration. This is because, anger-in is augmenting the feeling of taking revenge which is giving rise to become cyber bullying perpetrator. Moreover, Eroğlu and Güler (2015) examined the association between contingencies of self-worth, risky internet behaviors and cyber bullying perpetration and victimization. In this research, there were 505 Turkish university students. Contingencies of self-worth, the risky internet behaviors questionnaire, revised cyber bullying inventory and socio-demographic form were used in this research. Research results demonstrated that both cyber bullying perpetration and cyber bullying victimization related with external contingencies of self-worth and risky internet behavior positively. However, internal contingencies of self-worth were negatively related to cyber bullying perpetration and victimization. Lastly, cyber bullying perpetration and victimization were associated with each other. Researchers explained these results claiming that external contingencies of self-worth include competition which is giving rise to both cyber victimization and perpetration. Some people may construct their self-worth with competition and carrying out this to the internet by perpetrating others which is also leading to cyber victimization (Eroğlu & Güler, 2015). Kraft and Wang (2010) conducted a research at a college with the 471 sample of students. In this study, researchers tried to find the experiences about cyber bullying and cyberstalking. According to the results, students who are higher than 25 years old were cyber perpetrators and cyber victims at lower rates compare to younger university students. Lastly, researchers mentioned that past experiences about cyber victimization especially experiences in the high school years, increase the probability to be cyber perpetrator and cyber stalker in the college years. Thus, there were relationship between cyber victimization and perpetration. The reason behind this result is that having revenge feelings towards previous perpetrators (Kraft & Wang, 2010). Similar research results were found by Dilmaç (2009) but the

researcher examined this topic from a different perspective. The author mentioned that knowing which psychological needs lead to cyberbullying perpetration may shed light to understand the subject better. Dilmaç (2009) conducted a study in order to find out relationship between psychological needs and cyberbullying behavior. Population of this study consist of 666 (231 male and 435 female) university students. As a research instrument, the Adjective Check List (ACL) and a survey which contains inquiries about demographic information was used. Result of the study showed that aggression and succorance were positively while intraception was negatively related with cyberbullying. Also, having cyberbullying experiences in the past was a strong predictor for being a cyberbully in the future. This result explained with having low degree of affiliation which making victim to engage in cyber bullying perpetration behavior (Dilmaç, 2009). Xiao and Wong (2013) explained this relationship with the idea that cyber victims are becoming cyber perpetrator by learning this behavior from their past experiences with the cyber perpetrator. Also, it may be because of being exposed to violence and having perception that there will not be negative outcomes of online bullying behavior. Different from other studies, 288 University students (100 male, 188 female) who are from Hong Kong participated in the study. In this research, personal factors including cyber-victimization experience, motivations, Internet self-efficacy, demographics and environmental factor; social norm were tested with multi-item measurements. According to the results, students were prone to show cyberbullying behavior when they hold positive normative belief. Also, another reason behind cyberbullying behavior having high Internet self-efficacy, desire of power or attention, and facing with cyberbullying behavior before. Thus, there was a relation between cyber victimization and perpetration (Xiao & Wong, 2013).

Barlett and Wright (2018) considered cyber bullying victimization topic from a different angle. Researchers tried to find the effect of belonging to ethnic minority to cyber bullying victimization. Therefore, there were totally 828 students which included majority and minority of groups. According to the results of this study, the majority ethnicity showed the highest cyber victimization and perpetration when compared to the minority group (Barlett & Wright, 2018). Also,

there were strong relation between cyber bullying perpetration and victimization for majority of groups. This is because, majorities have more accessibility to the internet. There are some of the studies about cyber bullying victimization. In the literature, several studies showed the relationship between cyber victimization and cyber bullying perpetration (Ak, Özdemir & Kuzucu, 2015; Kraft & Wang, 2010; Zalaquett & Chatters, 2014; Dilmaç, 2009; Eroğlu & Güler, 2015; Xiao & Wong, 2013). While some of the researchers could not explained the reason behind relationship between cyber bullying perpetration and victimization, others mentioned that experiencing victimization making person to become insensitive about aggressive behaviors which is giving rise to perpetrate others. Also, having desires to take revenge, competition, low degree of affiliation, learning behaviors from previous perpetrators and having thoughts that nothing will happen motivating cyber victims to perpetrate others. Because this variable was an important in the cyber bullying literature and giving rise to negative psychological consequences, it was important to check its' both relative independent and joint predictive role on cyber bullying acts.

2.3 Gender

Gender is another factor that is thought to be related to cyberbullying and frequently discussed in studies. In the literature, some of the researchers found no gender difference in terms of cyber bullying perpetration (Macdonalds & Roberts-Pittman, 2010). However, researchers found this result surprising this is because other studies found a difference in gender. For example, Leung, Wong and Farver (2018) found that males are involving in cyber bullying perpetration and cyber bullying victimization more than females. The reason behind this result is that having intrapersonal motive which is also called bullying others directly and this motive is common among males. Icellioglu and Ozden (2013) found the same result but explained this result with socio-cultural factors and mentioned that aggressive acts are admissible among males as opposed to females. Also, Kokkinos, Antoniadou, and Markos (2014) claimed that males are cyber bullying more than females due to having impulsive, unemotional and manipulative qualifications.

Different from these results, Zalaquett and Chatters (2014) found that females' cyber bullying rates were higher than males. However, they did not mention about the reason behind this result. In this research, researchers claimed that "although there were 3 times more females in the sample as males, the frequency of cyber bullying in the female populations remained disproportionately high with cyber bullying in college being reported 5 times more by females in the sample." (Zalaquett & Chatters, 2014, p. 4). As Zalaquett and Chatters (2014), Faucher, Jackson and Cassidy (2014) worked on cyber bullying to find the gendered experiences, perspectives and impacts of university students. In this study, there were 1925 Canadian university students, and there were differences between males and females results. Also, results showed that females were cyber bullying more than males and the reason behind this result was females' characteristics which is relational aggression such as gossip. This type of aggression explains the behavior of females which is covert.

2.4 Revenge

"Revenge is a form of retaliation which seeks the satisfaction of returning a perceived humiliation, insult, or injury." (Uniacke, 2000, p.62). In the literature, revenge is seen as another motive in cyber bullying perpetration. For example, Vandebosch and Van Cleemput (2008) mentioned that the reason behind the students' bullying behavior is that having desires to take revenge from their perpetrators. However, there are few studies which show the relation between cyber bullying perpetration and revenge. The literature suggests that there is a relation between cyber bullying perpetration and having desires to take revenge. However, there were mostly studies with adolescents in the literature. In order to show the relation between these variables, some examples are given below.

Tranell (2018) mentioned about the secret cyber perpetrators and he claimed that the reason behind cyber bullying others can be the revenge seeker. In addition to Tranell, Iozzio (2014) mentioned that cyber bullying perpetration is a growing threat on the internet, and there was news about this issue. In one blog, which is used by teens to show their revenge feelings to another, the blogger posted some private

messages and pictures about the drug uses, genitals and sexual things about some teens. Even though it was closed by the authorities immediately, it was devastating for the teenage victims and definitely left an indelible impression on them. For this reason, it can be seen that revenge was a hazardous for cyber victims and working on this issue is gaining importance day to day. Another research about revenge and cyber bullying conducted by Yaman and Peker in 2012. The aim of the study was finding the perceptions of adolescents about cyber bullying perpetration and victimization. There were four students in the study and it was a qualitative study. For this reason, individual meeting conducted by researchers for each participant. According to the result of this study, students were showing their bullying behaviors by cyber forgery, hiding their identity, and cyber verbal language. The reason behind these behaviors were found as taking revenge, wanting to be socially popular and getting bored. In addition to cyber perpetrators, victims were feeling revenge, sadness and anger after experiencing cyber bullying victimization. The last example about the revenge and cyber bullying perpetration can be the research which was examining the motives behind violence in the schools. This research conducted in Germany with middle-school adolescents and students filled a questionnaire about the five dimensions which are sadism, ideology, revenge and power. Five dimensions which is also called taxonomy of reasons to explain and categorize violent or antisocial behaviors of people. The results of the study demonstrated that ideology was not related to cyber bullying but sadism, power and revenge were the highest reasons of cyber bullying behavior. They explained the revenge relationship with the idea that people can behave aggressive behaviors due to experiencing unjustified bullying from others. Especially, if the victim was weaker or smaller than their cyber bullies, the probability of showing anger on the internet increasing. Furthermore, perpetrators can justify their aggressive acts by showing that they did not have any choices and they are using revenge as a reason in their behaviors.

For the university students there were a few studies which shows the relation between cyber bullying perpetration and revenge. Akbulut and Eristi (2011) conducted a research with 254 Turkish university students about cyber bullying perpetration and victimization. Results demonstrated that there were an association

between cyber bullying perpetration and victimization. For the gender results, males are being cyber bullying perpetrator and cyber victim more than females. For the age, there were no difference for both cyber bullying perpetration and victimization. In this study, 179 students mentioned the reasons behind the behavior of cyber bullying perpetration. Students mentioned that past experiences about victimization and having feelings to take revenge were the reasons of cyber bullying perpetration (Akbulut & Eristi, 2011). In addition, Hoff and Mitchell (2009) mentioned that the reason behind cyber bullying perpetration is that being jealous and having problems on the romantic relationships like breaking up with the romantic partner. Also, it is claimed that after breaking up with someone, people are trying to take revenge by cyber bullying perpetration. Thus, there is a relation between cyber bullying perpetration and revenge.

König, Gollwitzer and Steffgen (2010) conducted a research to examine the role of revenge on cyber bullying behavior. In addition to this, researchers, tried to find the answer whether traditional victims were choosing their traditional perpetrators as a target to cyber bully them. Moreover, vengefulness and justice sensitivity were also examined in this study. For this reason, 473 students participated the study and filled an online survey. The research results showed that students who experienced traditional bullying, cyber perpetrating to their traditional perpetrators. Thus, victims are cyber perpetrating due to having vengeance feelings. Furthermore, the reason behind vengeance feelings was having past experiences of cyber victimization. In this research, perpetrators were choosing their former perpetrators which shows that cyber bullies motivated by revenge (König, Gollwitzer & Steffgen, 2010).

Lastly, Tanrıkulu (2015) examined the relation between personality traits, which are online disinhibition, narcissism, aggression and moral disengagement, and cyber bullying perpetration motives which are entertainment, harm, dominance and revenge. In this study, there were 598 university students and ages of the students were between 17 and 27. Revised Cyber Bullying Inventory for University Students, Online Disinhibition Scale, Propensity to Morally Disengage Scale, Cyber

Bullying Perpetration Motivation Scale, 12-item Aggression Questionnarie, demographic information form and 16-item Narcissistic Personality Inventory were used in this study. According to research results, aggression and moral disengagement were related with revenge which is the motive of cyber bullying perpetration (Tanrıkulu, 2015). This was an important result because this result may explain the reason behind revenge feelings which is an aggression. All in all, studies showed the role of revenge on cyber bullying perpetration behavior. However, the relationship between revenge and cyber bullying among university students did not examined by the researchers. Therefore, it was important to examine revenge variable in this research.

2.5 Empathy

Empathy is another factor to be related to cyberbullying and frequently discussed in studies. The concept of empathy defined as "the intellectual or imaginative apprehension of another's condition or state of mind." (Hogan, 1969, p.307). Empathy has two components which are affective empathy and cognitive empathy. Affective empathy defined as showing coherent emotional reactions which is happening due to another person's emotional condition (Feshbach, 1975). However, cognitive empathy means thinking and imagining about another persons' situation and putting his/herself into this persons' shoes (Preston et al., 2007). Empathy seems to be one of the important variables in cyber bullying research. In the literature, several studies found a relationship between cyber bullying perpetration and empathy (Doane, Pearson & Kelley, 2014; Brewer & Kerslake, 2015; Ashiq, Majeed & Malik, 2016; Rey, Lazuras, Casas, Barkoukis, Ortega-Ruiz, & Tsorbatzoudis, 2016). For example, one of the research used the Theory of Reasoned Action to cyber bullying behavior and examined the predictors of cyber bullying perpetration among university students. Furthermore, empathic feelings toward victims of cyber bullying added to the model of the research. In this study, there were 128 male and 246 female college students. Results of the study demonstrated that both having low level of empathy and high intentions to cyber bullying perpetration predicted higher desires toward cyber bullying behavior. In addition, having high intentions toward cyber bullying behavior associated with more often cyber bullying behavior (Doane, Pearson & Kelley, 2014). However, researchers did not mention the reason behind this relation. Another research which supported the result of Doane et al., (2014); Brewer and Kerslake (2015) mentioned that there is not much research about the factors which are predicting the cyber bullying perpetration.

Brewer and Kerslake (2015) conducted a study with 90 students from Further Education College. Researchers examine the association between empathy, selfesteem and loneliness on cyber bullying perpetration and victimization. This study demonstrated that loneliness, self-esteem, and empathy significantly predicted both cyber bullying perpetration and victimization. Also, low self-esteem predicted the cyber victimization. However, lower empathy enhanced the cyber bullying perpetration (Brewer & Kerslake, 2015). Furthermore, researchers mentioned that the role of cognitive and affective empathy in cyber bullying can be investigated by future studies. However, as Doane, Pearson and Kelley (2014), in this research, the reason behind the relationship between empathy and cyber bullying perpetration did not explained. Ashiq, Majeed and Malik (2016) mentioned about the empathy cyber bullying perpetration relationship and said that lack of empathy predicted cyber bullying perpetration. To explain this result, they claimed that people who have low level empathy showing aggressive attacks which is giving rise to cyber bullying perpetration (Ashiq, Majeed & Malik, 2016). Furthermore, "those with less empathy level has more egoistic strategy- the defense against the dilemma between id and ego which emerges when id is stronger and super ego is more fragile, so it will lead to interpret that males have stronger id and they are more prone towards cyber bullying behaviors, which could be their egoistic strategy to solace their id." (Ashiq, Majeed & Malik, 2016, p.8). Different from other studies, in this research there were 150 young adults, and the aim of the research was to examine the psychological associations of cyber bullying perpetration. According to the results of this study, empathy and cyber bullying were negatively associated with each other (Ashiq, Majeed & Malik, 2016). Furthermore, lack of empathy and problems which are

emotional predicted the cyber bullying behavior significantly (Ashiq, Majeed & Malik, 2016).

In addition, other studies generally worked with empathy and did not mentioned about the cognitive and emotional empathy. Pfetsch (2017) mentioned that there are very few studies about the association of cognitive and emotional empathy to cyber bullying perpetration among young adults. There were two ideas about this relation. For example, Pfetsch (2017) conducted a research with young adults to examine the empathic skills of person and cyber bullying behavior. In this study, there were 72 young adults and researcher claimed that empathic accuracy and cognitive empathy are negatively associated with cyber bullying behavior. Also, findings revealed that there were no association between empathy (affective and cognitive) and cyber bullying behavior. This result was also the same for traditional bullying behavior. However, emotional congruence predicted the cyber bullying perpetration in this research. Lastly, having higher level of empathic accuracy can decrease traditional bullying but higher level of emotional congruence may decrease cyber bullying behavior (Pfetsch, 2017). In this research, researcher noted that interpreting the results of this study was not easy. Also, low level of empathy related to higher level of cyber bullying behavior. The reason behind this result is that perpetrators' inability to understand affective state of the victims which is giving rise to inability to inhibit aggressive acts.

Another research about cognitive and affective empathy tried to examine the relationship between empathy and cyber bullying perpetration (Rey, Lazuras, Casas, Barkoukis, Ortega-Ruiz, & Tsorbatzoudis, 2016). Also, the effects of age, gender and nationality were examined. In this study, there were adolescents who are from Greece and Spain. Results demonstrated that not only affective but also cognitive empathy were negatively associated with cyber and traditional bullying. Also, females and older students got high results from empathy. The level of cyber bullying behavior was higher among older students. However, although cognitive and affective empathy related with cyber and traditional bullying, there were not the effects of age, gender and nationality (Rey, Lazuras, Casas, Barkoukis, Ortega-Ruiz,

& Tsorbatzoudis, 2016). The reason behind this result was not mentioned. However, Davis (1983) claimed that some people who have lower level of empathy do not have ability to understand others' feelings and thoughts and do not having guilty feelings after acting aggressive toward other people. Furthermore, Kokkinos, Antoniadou, and Markos (2014) supported the idea and mentioned that having troubles to sense emotions of other people leading to cyber bullying perpetration.

Empathy is another important variable in cyber bullying perpetration. However, none of the research examined the joint effect of cyber bullying victimization and gender with the revenge and empathy. Thus, it was not clear whether revenge and empathy predicting cyber bullying perpetration by itself or by the effect of gender or cyber bullying victimization. Also, there were no clear results about the relationship between empathy (cognitive empathy and emotional empathy) and cyber bullying perpetration.

2.6 Summary

Cyberbullying behavior is an important problem among adolescents and young adults in today's world (Kırcaburun & Tosuntaş, 2017). Cyber bully victims are experiencing variety of emotional and psychological problems. These problems mentioned in the literature and as a depression, problematic alcohol abuse, somatization, and anxiety (Selkie, Kota, Chan & Moreno, 2015; Ildırım, Çalıcı & Erdoğan, 2017). There are many cases about cyber victims who are killed him/herself because of experiencing cyber bullying victimization. Furthermore, interviews with parents showed that number of victim children have increased significantly from 2011 to 2018. Therefore, this growing issue is becoming more important as time progresses (Cook, 2018). For cyber victimization, there were some of the predictors of cyber bullying victimization and most of the studies conducted among adolescent samples. In the literature, there were significant relationship between cyber bullying behavior and cyber victimization. Also, studies mentioned the role of past experiences of cyber victimization on cyber bullying perpetration (Selkie, Kota, Chan & Moreno, 2015),

For revenge, there were very few studies which demonstrates the relation between cyber bullying perpetration and revenge. In the existed studies, there were significant relationship between cyber bullying perpetration and revenge. However, none of the study claimed the opposite of this idea. Another variable of this study was empathy, and low level of empathy predicting the cyber bullying behavior. However, few studies check the association of emotional and cognitive empathy on cyber bullying perpetration.

In the literature, there were inconsistencies about the gender differences for cyber bullying perpetration and victimization. While some of the studies mentioned that females are cyber perpetrating more than males, other studies assert the contrary. In addition, some of the studies claimed that there were no gender differences for cyber bullying behavior. As for associations of cyber victimization, revenge, and empathy with cyber bullying perpetration, a substantial body of literature revealed similar results. Primarily, cyber victimization was found significantly associated with cyber bullying perpetration. In this research, it was expected to obtain significant relationship between cyber bullying perpetration and cyber bullying victimization. Also, the role of gender was inconsistent in the literature. Furthermore, empathy was negatively correlated with cyber bullying perpetration. Moreover, cognitive and affective empathy were found related with cyber bullying perpetration. Therefore, it was expected that cognitive and affective empathy would be correlated with cyber bullying perpetration. Lastly, in the literature, revenge was negatively correlated with cyber bullying perpetration. Thus, revenge was expected to be negatively correlated with cyber bullying perpetration. For all these reasons, cyber bullying victimization, gender, revenge, emotional empathy and cognitive empathy might predict cyber bullying perpetration.

CHAPTER 3

METHOD

3.1 Overall Design of the Study

This study aims to examine the predictors of cyberbullying perpetration. These predictors are gender, cyber victimization, revenge, emotional empathy and cognitive empathy. This was a quantitative correlational research design study, and hierarchical multiple regression was utilized to evaluate the predictors (gender, cyber victimization, revenge, and empathy) of cyber bullying. This chapter introduces the overall design and the participants of the study as well as the sampling procedure. Instruments utilized to obtain variables' scores were also presented. In the fifth section, descriptions of variables were introduced. As a last two section, data analysis and limitations of the study were explained.

3.2 Participants and Sampling Procedure

Participants were 852 (460 females, 392 males) university students (ages ranging from 17 to 48) from two different universities in two large cities of Turkey. The data of the study were gathered in both online and paper-pencil. In this research, participants were reached via convenience sampling.

Human Subjects Ethics Committee from Middle East Technical University gave ethical approval for this research. Data collection took place during the spring semester of 2017-2018 academic year. This process started at the 21th of the May and lasted until the first week of the June. Participants were informed that their participation was completely voluntary, and they may quit the study at any time they want. They were also asked to sign the consent forms prior to administering the survey forms which took about 15 minutes. Table 3.1 displays the demographic information about the participants.

Table 3.1.

Descriptive statistics of the participants

		f	%
Gender			
	Female	460	54.0
	Male	392	46.0
Year in Study			
	Prep. School	61	7.2
	1st year	194	22.8
	2 nd year	173	20.3
	3 rd year	153	18.0
	4 th year	222	26.1
	Msc.	34	4.0
	PhD	15	1.8

3.3 Data Collection Instruments

In this research, the survey included a demographic information form, Basic Empathy Scale (BES; Jolliffe & Farrington, 2006), The Vengeance Scale (VS; Stuckless & Goranson, 1992), and The Revised Cyber Bullying Inventory for university students (RCBI; Tanrıkulu, 2015).

3.3.1 Demographic Information Form

This form is developed by the researcher and inquires participants' gender, age and class (see Appendix C).

3.3.2 Basic Empathy Scale (BES)

Basic Empathy Scale (BES) was developed by Jolliffe and Farrington (2006) to measure the level of empathy. It has two sub factors of emotional and cognitive empathy with the total of 20 items in 5 point Likert-type scale. In this scale, nine items are to measure cognitive empathy and eleven items are to measure emotional

dimension of empathy. There are eight reversed items. As an assessment of scale, each high point from each sub-dimensions are showing the empathy level and the area of the empathy. This scale was adapted to Turkish by Topçu, Erdur-Baker and Çapa (2010). An example item of the scale is "It is hard for me to understand when my friends are scared." Factor analysis of this scale was supported the original factor structure suggested. The Cronbach alpha coefficients were reported as .76 for the emotional empathy and .80 for cognitive empathy. The Cronbach's Alpha coefficients were found .83 for the global scale. The lowest score can be obtained from cognitive empathy subscale is nine and the highest score is 45. For the emotional empathy the lowest score 11 and the highest score is 55. In this study, the lowest score of emotional empathy was 12 and highest was 55. For cognitive empathy, the lowest score was 18 and the highest score was 48.

3.3.3 Vengeance Scale (VS)

Vengeance Scale was developed by Stuckkless and Goranson (1992) to measure people's tendency to take revenge or having desires about it because of experiencing some humiliating situations. There are 20 items in 7 point Likert-type scale. In this scale, there are 11 reversed items which are 1, 4, 5, 8, 9, 11, 15, 17, 18 and 20. The score range of the scale is 20 to 140. Higher scores indicating high level of revenge tendency. An example item of the scale is "I am not a vindictive person". Internal reliability coefficient for the scale was reported as .92 and test-retest reliability of the scale is .90. This scale is adapted to Turkish by Satici, Can and Akın in 2015. After adaptation internal reliability changed to .92 and test-retest reliability .90. Besides, reliability analysis showed that Cronbach's Alpha for this study's data was .93

3.3.4 Revised Cyber Bullying Inventory for University Students (RCBI for University Students)

This inventory firstly developed and used by Erdur-Baker and Kavşut in 2007. After conducting factor analysis, the two forms revealed single factor structure. Internal consistency coefficients of cyber bullying form was .92 and cyber

victimization was .80 (Erdur-Baker & Kavsut, 2007). Tanrıkulu (2015) conduct a pilot study to use revised cyber bullying inventory with the university students. In this pilot study, the cyberbullying perpetration sections' Cronbach alpha was .81 and cyberbullying victimization section of the inventory's' Cronbach alpha was .78.

Revised Cyber Bullying Inventory for University Students (RCBI for University Students) includes two sections and these two sections' each of them includes 11 items. The section which is "I did" for measuring the people who are showing the cyber bullying behavior and "It happened to me" section was measuring the cyber bullying victimization. Therefore, this scale is measuring two things at the same time. This inventory's rating system is 4 point Likert scale. For each section the lowest and the highest scores are 12 and 48. The person who took the highest scores from each section took the highest score for being cyber bully victim and cyber bully (Tanrıkulu, 2015). An example item of the scale is "Swearing someone in the virtual platfrom." In addition, after reliability analysis was conducted and Cronbach's Alpha for this study's data was .77 for "I did" and .83 for "It happened to me" part.

3.4 Description of Variables

- **Cyber Bullying Perpetration:** The total scores calculated by "I did" section of Revised Cyber Bullying Inventory for University Students (RCBI for University Students).
- **Cyber Victimization:** The total scores calculated by "It happened to me" section of Revised Cyber Bullying Inventory for University Students (RCBI for University Students).
- **Cognitive Empathy:** The total scores calculated by Basic Empathy Scale's Cognitive Empathy questions (BES).
- **Emotional Empathy:** The total scores calculated by Basic Empathy Scale's Emotional Empathy questions (BES).
- **Revenge:** The total scores calculated by Vengeance Scale (VS).
- **Gender:** The total score of Demographic Information Form's gender section.

3.5 Data Analysis

The aim of this research was answering the question of "Why cyber bullies are bullying others?". It was hypotized that gender, cyber victimization, revenge, emotional empathy and cognitive empathy are significant predictors of the cyber bullying perpetration. This study brought these variables together to examine their relative independent and joint predictive roles on cyber bullying acts. For joint predictive role of Gender × Cyber Victim, Gender × Cognitive Empathy, Cyber Victim × Revenge, Cyber Victim × Emotional Empathy and Cyber Victim × Cognitive Empathy variables were also tested. For this purpose, hierarchical multiple regression analysis was used.

Before analysis, data were cleaned from missing cases and outliers. The next step was describing data by the results of descriptive statistics. After describing data, one-way ANOVA was conducted to check whether there was gender difference between variables or not. Furthermore, bivariate correlations were computed to understand relationships between the variables of the study. After that, assumptions (i.e. normality, sample size, independence of observations, linearity, multicollinearity and homoscedasticity) of the hierarchical multiple regression were checked. As a last step, hierarchical multiple regression was conducted with the predictors and the interaction terms. All these analyses were conducted by the SPSS Version 24 (IBM, 2016).

3.6 Limitations of the Study

Although findings of the study revealed that there is a relationship among the variables of the study and cyber bullying perpetration, some limitations are necessary to be reported. Data were collected from state universities and sample selection strategy of this research was convenience sampling. Therefore, the research results cannot be generalized. In the online surveys, participants could not have a chance to ask some questions about the items which they do not understand. Furthermore, because all of the questionnaires were self-reported, there were a risk of social desirability in the results. In the data collection time, some of the

participants were working on their final exams. Therefore, their level of anxiety may high which made them to answer the questions much more negatively. For this reason, future studies should consider to collect data in the different term.

Lastly, this research was not longitudinal or experimental but a quantitative correlational research design study. Therefore, this study only showed the predictors of cyber bullying perpetration. However, what the causal associations between variables were cannot be explained by evidence in this study.

CHAPTER 4

RESULTS

This chapter introduces the preliminary analyses, descriptive statistics of the variables, correlations among variables, gender differences for cyber bullying behavior, assumption testing, hierarchical multiple regression analysis and summary of the results. This is a quantitative correlational research design study, and a hierarchical multiple regression was utilized to evaluate the predictors of cyber bullying perpetration. These predictors were gender, cyber victimization, revenge, emotional empathy and cognitive empathy. The analyses of the study were done in two steps. In the first step, preliminary analyses were conducted via descriptive analyses including gender comparisons. In the second step, the research question was tested via hierarchical multiple regression analysis.

4.1 Preliminary Analyses

Before conducting the main statistical analyses, the data were screened to examine whether data set was free of error and suitable to conduct the main analysis. Frequency tables were examined, and missing or unusual numbers were corrected. Five cases with missing values and six outliers were deleted from the data set.

4.2 Descriptive Statistics of the Variables

Table 4.1 shows the results of means and the standard deviations of each variable including correlation coefficients among outcome and predictor variables in the present study. There were 852 university students in this study. Cyber bullying perpetration score can be maximum 48 and minimum 12, and the current mean of this score was 13.93 with the standard deviation of 4.24. Furthermore, cyber victimization score can be maximum 48 and minimum 12 and the current mean of this score was 15.14, standard deviation 5.36. According to these results, cyber bully

and cyber victim means were close to each other. For revenge scale, the maximum score can be 140 and the minimum 20. The last two scores were cognitive and emotional empathy. While cognitive empathy score can be maximum 45 and minimum 9, emotional empathy's score can be maximum 55 and minimum 11. Results show that cognitive empathy's and revenge's scores were close to maximum score.

4.3. Correlations among Variables

In the second part of the analysis, relations among cyber bully, cyber victim, revenge, emotional empathy and cognitive empathy were investigated (see Table 4.1). Bivariate correlations were computed to understand relationships between the variables of the study.

Table 4.1

Correlation among Outcome and Predictor Variables and Descriptive Values of Variables

	1.	2.	3.	4.	5.	М	SD	Range
1. Cyber Bully	-	.71**	.28**	16**	18**	13.93	4.24	11.00 -39.00
2. Cyber Victim		-	.17**	11**	10**	15.14	5.36	11.00 -40.00
3. Revenge			-	19**	17**	69.68	24.47	20.00 -140.00
4. Emotional Empathy				-	.38**	38.97	6.98	12.00- 55.00
5. Cognitive Empathy					-	36.05	4.88	18.00- 48.00

Note. **p < .01, two tailed.

Based on the results shown in the Table 1.1, all of the predictor variables were significantly correlated with outcome variable which is cyber bullying perpetration. Cyber bullying perpetration variable was positively correlated with being cyber victim (r = .71, p < .01), and taking revenge (r = .28, p < .01). This result was indicating that the students who were cyber victims bullied other people. Moreover, person who is a cyber bully reported to have revenge tendencies. However, cyber bullying perpetration was negatively correlated with emotional empathy and cognitive empathy. Therefore, people who are cyber bullying others

reported having poor emotional and cognitive empathy. For the revenge variable, there was a negative association between emotional empathy and cognitive empathy, indicating that people who have a desire to take revenge have poor emotional and cognitive empathy.

4.4 Gender Differences for Cyber Bullying Perpetration Variable

To examine the gender differences among variables one-way analysis of variance (ANOVA) was used. Table 4.2 provides the descriptive statistics, which are number of participants, means and the standard deviations, for males and females of the each variable. The result of one-way ANOVA revealed that there was a significant gender difference in terms of being a cyber bullying perpetrator, F(1, 850) = 48.11, p = .000. According to results, males were cyber bullying more than females. (See Table 4.2).

Table 4.2

Gender Differences for the Cyber Bullying Perpetration Variable

	N	М	SD	F	η^2	
				48.11	.05*	
Female	460	13.02	3.33			
Male	392	14.99	4.89			
Total	852	13.93	4.24			

^{*}p<05

4.5 Assumption Testing for Hierarchical Multiple Regression

Before conducting the main analysis, hierarchical multiple regression analysis assumptions were checked. Normality assumption was controlled by Skewness and Kurtosis levels. Finney and Distefano (2006) assumed that the distribution as moderately non-normal if the kurtosis value is smaller than seven and skewness value is smaller than two. According to results, no extreme skewness and kurtosis were observed (see table 4.3). Since most of the assumptions were confirmed, it can be stated that normality was assumed.

Table 4.3

Normality Indices for the Study Variables

Study Variables	Skewness	Kurtosis	
Cyber Victim	1.80	3.42	
Cyber Bully	2.38	6.79	
Revenge	.38	36	
Emotional Empathy	37	.36	
Cognitive Empathy	47	.44	

According to Tabachnick and Fidell (2013), a minimum sample size should be 50+8m. "m" is demonstrating the number of independent variables in the research. For this reason, when it is calculated, there should be at least 50+8*5=90 individuals to constitute a satisfactory sample size. This study was included 852 participants which was a good number of participants. Therefore, the criteria of sample size were met for this study. Furthermore, independence of errors explored by calculating Durbin-Watson and it was 2.16. Durbin and Watson (1951) claims that the result of a Durbin-Watson coefficient should be between 1 and 3, so this study's result was in the acceptable range because there was no gross violation of assumption which was independence of errors in the data.

In order to detect the outliers in the data, Cook's Distance was examined. Cook and Weisberg (1982) reported that if you have a value higher than 1, this can show you the problem of outliers. According to results, there were no outliers in this study because Cook's Distance was minimum .00 and maximum .10 in the study which did not show the problem of outliers. To check the linearity, scatterplot matrix was used which shows the linear relationship between the variables (See Figure 1). In addition to this, normality of residuals assumption was met (See Figure 2 and 3).

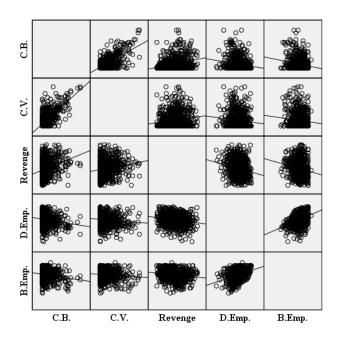


Figure 1: Scatter plot matrix of variables.

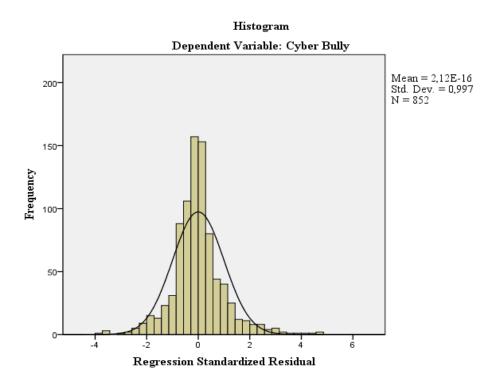


Figure 2: Normality of residuals with histogram.

Normal P-P Plot of Regression Standardized Residual

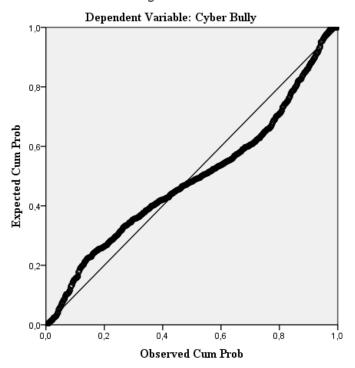


Figure 3: Normality of residuals with P-P Plot

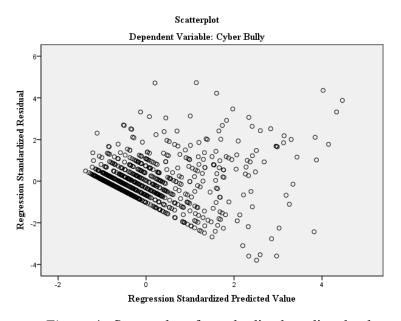


Figure 4: Scatterplot of standardized predicted value.

Homoscedasticity was another assumption and it was checked. Figure 4 showed that since there is a little pattern in the result, generally homoscedasticity assumption was met (See Figure 4).

Assumption of multicollinearity was examined by checking bivariate correlations among the variables, tolerance values and VIF (variance inflation factor). According to results of the bivariate correlations were not higher than .90 and VIF values were ranged 1.043 to 1.191 among the cyber victimization, cyber bullying perpetration, revenge, emotional empathy and cognitive empathy variables. Furthermore, according to results tolerance values were ranged .96 to .75. Therefore, it can be said that multicollinearity assumption was met.

4.6 Hierarchical Multiple Regression Analysis

To examine the joint and independent predictive power of cyber victimization, revenge, emotional and cognitive empathy on cyber bullying perpetration, a hierarchical multiple regression analysis was conducted. In order to prevent collinearity, variables were centralized. After that two sets of interaction terms were created. The first sets of interactions terms were Gender × Cyber Victimization, Gender × Revenge, Gender × Emotional Empathy and Gender × Cognitive Empathy. The second sets of interaction terms were Cyber Victimization × Revenge, Cyber Victimization × Emotional Empathy and Cyber Victimization × Cognitive Empathy. Multiple regression analysis included gender, cyber victim, revenge, emotional empathy and cognitive empathy in Step 1, the first set of interaction terms in Step 2 and the interaction terms which are the second set with the cyber victim in Step 3 (See Table 4.4)

The regression equations with gender, cyber victim, revenge, emotional empathy and cognitive empathy were significant, F(5, 846) = 206.609, p = .000; R2 = .550. Therefore, the linear combination of cyber victim, gender, revenge, emotional empathy and cognitive empathy scores was significantly associated to cyber bullying perpetration scores and accounted for 55% of cyber bullying perpetration behaviors. According to partial correlation coefficients, cyber

victimization explains most of the variance by itself. Moreover, revenge and gender contributed significantly to the explanation of the variance on cyber bullying perpetration. The results showed that while cyber victimization, revenge and gender were positively related, emotional and cognitive empathy were negatively related to cyber bullying perpetration. Nevertheless, emotional empathy's contribution was not significant.

Later, in step 1, variables which are gender, cyber victimization, revenge, cognitive empathy and emotional empathy were controlled for. After the interaction terms were created with multiplying each independent variable with the Gender variable, these interaction terms were added to the regression equation in the second step. In this part each of the variable multiplied with gender and computed new variable. According to results, in Step 2, the associations of interaction terms which were Gender × Cyber Victimization, Gender × Revenge, Gender × Emotional Empathy and Gender × Cognitive Empathy to the cyber bullying perpetration were significant, $\Delta R2 = .03$, F (4, 842) = 16.61, p = .000. Also, the second model was significantly explained the 58.3% of the variance in cyber bullying perpetration behaviors. However, after interactions were added to analysis revenge and emotional empathy were non-significant. Moreover, Gender × Revenge and Gender × Emotional Empathy's interactions' contribution were not significant. Additionally, while Gender × Cyber Victimization, Gender × Revenge and Gender × Cognitive Empathy were positively correlated, Gender × Emotional Empathy interaction was negatively related to Cyber bullying perpetration.

Finally, the second sets of interaction terms were created by multiplying independent variables which are revenge, emotional empathy and cognitive empathy with the cyber victimization variable. After controlling for the power of the variables and the interaction terms, the associations of the interaction terms, which were Cyber Victimization \times Revenge, Cyber Victimization \times Emotional Empathy and Cyber Victimization \times Cognitive Empathy, to the cyber bullying perpetration were significant, $\Delta R2 = .03$, F (3, 839) = 21.75, p = .000.

Table 4.4

Hierarchical Regression Analysis: Effects of Cyber Victimization, Revenge,
Cognitive Empathy, and Emotional Empathy on Cyber Bullying Perpetration
Behaviors.

	Cyber Bullying			
Predictors	R^2	β	p	- Partial
				Correlation
Step 1	.550*			
Gender		.105	.000	.142
Cyber Victimization		.666	.000	.697
Revenge		.142	.000	.199
Cognitive Empathy		066	.009	090
Emotional Empathy		003	.910	004
Step 2	.583*			
Gender		.106	.000	.149
Cyber Victimization		.146	.048	.068
Revenge		.027	.702	.013
Cognitive Empathy		253	.001	110
Emotional Empathy		.020	.806	.008
Gender × Cyber Victimization		.547	.000	.247
Gender × Revenge		.121	.091	.058
Gender × Cognitive Empathy		.201	.009	.089
Gender × Emotional Empathy		024	.770	010
Step 3	.613*			
Gender		.110	.000	.160
Cyber Victimization		.304	.000	.137
Revenge		.051	.462	.025
Cognitive Empathy		262	.001	118
Emotional Empathy		.020	.802	.009
Gender × Cyber Victimization		.325	.000	.141
Gender × Revenge		.109	.117	.054
Gender × Cognitive Empathy		.229	.002	.105
Gender × Emotional Empathy		016	.836	007
Cyber Victimization × Revenge		.091	.000	.136
Cyber Victimization × Emotional		051	.046	069
Empathy				
Cyber Victimization × Cognitive		130	.000	180
Empathy				
*n= 000				

^{*}p=.000

Furthermore, all of the variables in the third step were significantly explained the 61.3% of the variance in cyber bullying behaviors. Besides, the contributions of Cyber Victimization × Revenge, Cyber Victimization × Emotional Empathy and Cyber Victimization × Cognitive Empathy were significant. In this part, Cyber Victimization x Emotional Empathy, Cyber Victimization x Cognitive Empathy, Cyber Victimization x Revenge predicted cyber bullying perpetration variable. While Cyber Victimization × Emotional Empathy and Cyber Victimization × Cognitive Empathy interactions were negatively associated with Cyber Bullying Perpetration, Cyber Victimization × Revenge interaction was positively related. According to partial correlation coefficients, Cyber Victimization × Revenge interaction explains most of the variance by itself in the three interaction terms with the cyber victimization. These results indicated that all four predictors which are gender, cyber victim, revenge and cognitive empathy were significantly correlated with the cyber bullying perpetration behaviors of the university students. Furthermore, the joint effect of Gender × Cyber Victimization, Gender × Cognitive Empathy, Cyber Victimization × Revenge, Cyber Victimization × Emotional Empathy and Cyber Victimization × Cognitive Empathy were also significantly predicting the cyber bullying perpetration behavior. It was interesting that while emotional empathy by itself and interaction with gender was not significant; their joint effects with cyber victimization predicted the cyber bullying perpetration behavior. In the results, Gender × Revenge interaction were not significantly associated to cyber bullying perpetration behavior in university students.

4.7 Summary of the Results

In this current research, cyber victimization, gender, revenge and empathy were examined in terms of their relative independent and joint predictive roles on cyber bullying perpetration behaviors of university students. According to ANOVA results, there was a significant gender difference in cyber bullying perpetration behaviors and males are cyber bullying more than females. Furthermore, Hierarchical multiple regression results showed that variables of this study significantly predicted the cyber bullying perpetration of university students. While

emotional empathy by itself and interaction with gender was not significant in this study, its joint effect with cyber victimization significantly predicted cyber bullying perpetration.

CHAPTER 5

DISCUSSION

The main purpose of the current study was to examine the relationship between cyber bullying perpetration and cyber victimization, gender, revenge, emotional empathy and cognitive empathy of the university students. For this aim, quantitative correlational research design study and hierarchical multiple regression were utilized in this research. In this chapter, findings of the research were discussed in the light of the related literature. Furthermore, implications and recommendations for the further research were presented.

5.1 Discussion of the Results

In this current investigation gender difference in cyber bullying perpetration was examined. Results demonstrated that there were significant gender differences in cyber bullying perpetration. That is, males were cyber bullying more than females. The reason behind this result could be that males' experiences of cyber victimization. This is because, in the present study, there were a relationship between being cyber victim and bully. Different from the present study, some of the researchers found that females are cyber bullying perpetrators more than males (Faucher, Jackson & Cassidy, 2014; Zalaquett & Chatters, 2014). They explained this result with the characteristics of females which is having relational aggression, and this is giving rise to gossip among females (Faucher, Jackson & Cassidy, 2014). Scheithauer, Smith and Samara (2016) mentioned the importance of cultural differences on behaviors about violence. Drawing from the report of Scheithauer et al., (2016), this result may differ from the present study in terms of being in a different culture because the study which claimed that female's cyber perpetrator more than males was conducted among Canadian young adults.

The present research result was in line with a study which claimed that cyber bullying perpetration and victimization were positively correlated with gender. Also, Leung Wong, and Farver (2018) mentioned that males are cyber bullying due to having an intrapersonal motive. Furthermore, Kırcaburun and Tosuntaş (2017) reported that there were significant gender differences in terms of being cyber perpetrator, and their results showed that males are cyber bullying more than female university students. Kırcaburun and Tosuntaş also (2017) asserted the reason behind this result may be the higher rates of internet usage and gaming. The result of Kırcaburun and Tosuntas (2017) was parallel with findings of Arıcak (2009), who found that males are perpetrating more frequently than female university students. However, Aricak (2009) mentioned that there were no gender differences for victimization. Their explanation for cyber bullying result was females' negative cognitions about cyber bullying behavior, although males do not see cyber bullying perpetration as a problematic behavior. Thus, males seem to have more inclinations to cyber bullying perpetration. Kokkinos, Antoniadou, and Markos (2014) explained that the reason behind male cyber bullying is that having impulsive, unemotional and manipulative qualifications. These research results supported the present research and showed that males are cyber bullying more than females.

In this research, the relationship between cyber bullying victimization and cyber bullying perpetration was examined. The results showed that there was a significant relationship between cyber bullying victimization and cyber bullying perpetration. This means that college students who bully others are more likely to be victims of the cyber bullying acts as well. This can be explained with having feelings of taking revenge which may make person to expose sending and receiving aggressive messages. Therefore, they may become both cyber bullying perpetrators and cyber victims (Ak, Özdemir & Kuzucu, 2015; Beran, Rinaldi, Bickham & Rich, 2012). This results is parallel to the findings of the previous studies reporting a substantial overlap between cyber bullying victimization and cyber bullying perpetration experiences (e.g., Ak, Özdemir, & Kuzucu, 2015, Eroğlu & Güler, 2015; Xiao & Wong, 2013). Researchers explained this relation with having past experiences of cyber bullying perpetration because experiences of violence can

make a person to show more aggressive behaviors and normalizing aggressive acts which is giving rise to be perpetrator. Furthermore, Beran, Rinaldi, Bickham and Rich (2012) explained this result that people are learning the behaviors of victims or perpetrators and showing these behaviors to another people. Thus, it can be concluded that there was a relationship between cyber bullying perpetration and victimization. In this study, this relationship can be explained with being male, having revenge feelings and low level of empathy.

The results of the study also revealed a significant relationship between variables of cyber bullying perpetration and revenge. That is, college students who reported to be engaged in cyber bullying also reported to be engaged in revenge as well. In the literature, there are not many studies which show the relationships between cyber bullying perpetration and revenge among college students. However, some of the studies explained revenge as a motive of cyber bullying perpetrators. König, Gollwitzer and Steffgen (2010) examined the role of revenge on cyber bullying behavior and found that victims are cyber perpetrating due to having vengeance feelings. Vengeance is also reported to be a common character of the cyber bullying perpetrators. Cyber victims are perpetrating their previous traditional perpetrators to take their revenge (König, Gollwitzer & Steffgen, 2010). Similarly, Kraft and Wang (2010) mentioned that past experiences about cyber victimization increase the probability of acting as a cyber perpetrator in the future. The reason behind this behavior may be having vengeance feelings toward previous cyber perpetrator. Furthermore, Tanrıkulu (2015) mentioned that revenge was a motive of cyber bullying perpetration. The author (2015) found that both aggression and moral disengagement were related to revenge motive of cyber bullying. By considering this research result, the reason behind revenge and cyber bullying perpetration association can be explained with aggression and moral disengagement. However, in the present study there were no data to explain this result. Thus, it can be tested in the future studies. All in all, literature supported the results of this study and the reason behind the relationship between taking revenge and cyber bullying perpetration can be explained as having past experiences of cyber victimization.

Moreover, in the present study association between cyber bullying perpetration and empathy were examined. According to results of hierarchical multiple regression, emotional and cognitive empathy were negatively related to cyber bullying perpetration. Other researchers explained this negative relation with having troubles to sense both emotions and thoughts of other people which is related with low level of empathy and giving rise to cyber bullying behaviors (Kokkinos, Antoniadou, & Markos, 2014; Davis, 1983). Furthermore, as Topcu and Erdur-Baker (2012) asserted that low level of empathy making person more prone to risky behaviors which is giving rise to cyber bullying perpetration. Thus, another reason behind this negative relation can be putting oneself in a risky situation. There were two ideas about the relationship between cyber bullying perpetration and empathy in the literature. Different from the present study, Pfetsch (2017) mentioned that there were no association between empathy and cyber bullying perpetration. The reason behind this result is explained with the characteristics of the sample. However, other researches mentioned that both cognitive empathy and emotional empathy were negatively associated with cyber bullying perpetration (Rey, Lazuras, Casas, Barkoukis, Ortega-Ruiz, & Tsorbatzoudis, 2016). Kokkinos, Antoniadou, and Markos (2014) found negative relation between affective empathy and cyber bullying perpetration. Pfetsch (2017) explained the relationship between cyber bullying perpetration and empathy with perpetrators' inability in terms of understanding affective state of the victims, and this was leading to inability to inhibit aggressive acts of perpetrators. The reason behind low level of empathy and cyber bullying relation can be having revengeful characteristics and experiencing cyber bullying victimization.

All of these variables examined independently and they all were predictors of cyber bullying perpetration. However, their joint predictive roles were also examined and found that results were much stronger than their relative independent roles. Present research result showed that both being male and experiencing cyber victimization predicted cyber bullying perpetration. Being male and having revengeful feelings together also predicted cyber bullying behavior. Being male and high level of cognitive empathy also predicted cyber bullying perpetration. This

result showed that gender did not change the results of cyber victimization and revenge in terms of its relationship between cyber bullying perpetration. However, joint effect of cognitive empathy and gender predicted positively cyber bullying perpetration. By itself cognitive empathy was negatively correlated with cyber bullying perpetration. Thus, gender has a significant impact on cyber bullying perpetration. Also, people who are both male and experiencing cyber victimization much more likely to be cyber perpetrator than only being cyber victims. Similarly, people who are both male and have cognitive empathy much more likely to cyber bully others. Therefore, while working on cyber bullying topic including gender in the research can be important to see the effect of it to other variables.. However, gender did not change the relationship between cyber bullying perpetration and emotional empathy. This is because, emotional empathy was not effecting cyber bullying behavior by itself. Also, if person both male and have low level of emotional empathy, their probability to be cyber perpetrator remaining same. In the literature, their roles in the cyber bullying behavior were supported and somewhat known especially among adolescents. Walrave and Heirman, (2011) claimed that cyber bullying perpetration can change with the age of person but it is not expected to change characteristics of person as age progresses. Therefore, being empathic and revengeful may remain same from high school to university. For this reason, it may expected to have same results with adolescents. Different from the other studies, this study contributed to cyber bullying literature with examining the joint predictive roles of the variables.

Cyber victimization was another important variable in the existing literature and its relation to cyber victimization was mentioned among adolescents. Concerning the joint predictive role of cyber victimization with the revenge, emotional empathy and cognitive empathy interactions were created in the hierarchical multiple regression analysis. Result of the study demonstrated that the relations of the interaction terms to the cyber bullying perpetration were significant. That means both past experiences of cyber victimization and having revengeful feelings together making person much more likely to be cyber perpetrator. Also, past experiences of cyber victimization and having emotional empathy together

were increasing the probability of being cyber perpetrator more than their independent roles. Moreover, person who is both cyber victim and having cognitive empathy being much more likely to be cyber perpetrator. These variables' relation to cyber bullying independently explained as being a revengeful in the literature (Kraft & Wang, 2010). For this reason, their joint predictive roles may be due to having revenge feelings.

It was surprising that while emotional empathy by itself and interaction with gender was not predicted cyber bullying, its interaction with cyber victimization was related to cyber bullying perpetration behavior. Therefore, if the person experienced cyber victimization and had emotional empathy, s/he much more likely to become cyber perpetrator. Because this strong prediction, it may important for future studies to include cyber victimization in the cyber bullying studies. Regarding these results, when variables of this study came together, their probability to predict cyber bullying perpetration becoming stronger. Consequently, this study aimed to find who these cyber perpetrators are and these cyber perpetrators found as a male who had revenge feelings, low level of empathy and had experiences of cyber victimization.

5.2 Implications for Practice and Research

Before discussing the implications related to findings of this present research, my personal experiences in the data collection process are worth to mention. During the data collection process, participants told me that they did not know these behaviors were cyber bullying, and they were thankful about this research which raised their awareness. Actually, these feedbacks were interesting. Research and media mention that cyber bullying is a critical issue all over the world. However, some of these students did not have any idea what behavior can be cyber bullying or what is the meaning of cyber bullying. Therefore, awareness about cyber bullying should be raised in the universities. For this reason, giving seminars and designing informative posters in the universities are very significant. Future studies should work whether Turkish university students can be defining what cyber

bullying is or not. This may give clear ideas about their awareness to the cyber bullying perpetration.

The findings of the present research have implications for prevention and intervention activities of counseling centers. For example, counseling centers should develop strategies to raise awareness about cyber bullying perpetration on the campuses about the cyber victimization, revenge, cognitive empathy and emotional empathy relationship with cyber bullying perpetration. If cyber bullying behavior is not solved in the college years, this behavior may continue in their adulthood years and can affect their workplace (Kota, Benson, Schoohs & Moreno, 2014). Therefore, university counseling centers should give importance on this topic. Counseling centers should explain the nature of the cyber bullying perpetration and give detailed information about the related factors with cyber bullying by considering the results of this research. For example, revenge, cyber victimization, emotional empathy and cognitive empathy were related to cyber bullying perpetration. Thus, counseling centers should design psychoeducational groups for developing or increasing empathic skills of students. Moreover, knowing the reasons behind cyber bullying behavior can help counselors to have deeper understanding about the cyber perpetrator. By this way, they can help and work with cyber bullies more effectively. For example, if counselors give information about the cyber victimization, revenge and empathy, cyber bullies can understand their behaviors and can act with this understanding.

The result of this study showed that males are cyber perpetrating and being cyber victims more than females. Having this awareness is important for counseling centers in universities. By considering this information, counselors can design groups mostly for male students in the universities. Present research results showed that males are cyber bullying and being victim more than females. Also, if they notice that males are not willing to take professional help from centers, they can raise awareness in the universities by writing bulletins and giving seminars about cyber bullying behavior. Furthermore, faculty members can talk about this issue in their classes to inform their students about this issue. This may help counselors to

reach people who cyber bullied. By working with victims to raise their empathy level or decrease their revenge feelings may decrease the rate of cyber bullying perpetrators. Another important result of this research was that emotional empathy by itself and interaction with gender was not significant. However, its interaction with cyber victimization predicted the cyber bullying behavior. This result showed that cyber victimization had a large impact on cyber bullying perpetration. Therefore, solving the problem of cyber victimization and working with clients to decrease revenge feelings and increase empathy can decrease the probability of being cyber perpetrator. Furthermore, Lauritsen and Laub (2007) claimed that giving education cyber victims about how to cope with cyber bullying can help mental health professionals prevent cyber victim and perpetrator cycle.

Moreover, cyber victimization can be risky for college students because students may be far away from their families, and they cannot have enough support when they experience cyber victimization (Ramos & Bennett, 2016). Therefore, informing parents in the high schools that cyber bullying is a significant issue in the college years and supporting them during this process gaining more importance. In addition, counseling centers can give information about the cyber bullying behavior via social media or media channels. By this way, university students can enlighten about the cyber bullying and this behavior may decrease by raising awareness in the universities.

Furthermore, by considering this research, researchers who work on cyber bullying perpetration can conduct their research by moderating cyber victimization and gender in their studies because these variables had significant roles in this study for cyber bullying behavior. In this study, moderating roles of cyber victimization and gender were examined. Future studies can check mediating effects of them in cyber bullying behavior. The present study was a correlational study. Thus, relationships between variables cannot be explained. To explain the nature of these relations longitudinal studies can be done in the future studies. Additionally, in this research, two way interactions examined. However, due to being complicated three

way interactions did not examined. Future studies can conduct three way interactions in their studies.

5.3 Conclusion

Cyber bullying perpetration and victimization were happening among college students. In order to have a deeper understanding about cyber bullying perpetration behavior, examining its related factors is important. Counseling centers can develop prevention and intervention strategies to work on the cyber bullying perpetration issue. In the present study, university students' gender, cyber victimization, revenge, cognitive empathy and emotional empathy significantly relate to their reported cyber bullying perpetration behaviors. Therefore, creating empathy based strategies and working on empathic skills were important to decrease cyber bullying behavior. To decrease cyber victims' revenge feelings, raising awareness and empathy groups can help the students who is cyber bullying others.

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APPENDICES

APPENDIX A: APPROVAL LETTER FROM MIDDLE EAST TECHNICAL UNIVERSITY HUMAN SUBJECTS ETHICS COMMITTE

	BYSGLAMALI E APPLIES ETHIC	CTIK ARAŞTIRMA MERKEZI IS REHEARCH CENTER	0	ORTA DOĞU TEKNİK ÜNİVERSİTESİ MIDDLE EAST TECHNICAL UNIVERSITY		
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	Vancu			11 MAYIS 2018		
	Konu:	Değerlendirme Sonucu				
	Gönderer	n: OOTÜ İnsan Araştırmaları				
	ligi:	İnsan Araştırmaları Etik	Kurulu Başvurusu			
	Sayın Prof. Dr. Özgür Erdur BAKER					
	Danışmanlığını yaptığınız yüksek lisans öğrencisi Gizem ÇOKLUK'un "Neden siber kurbanlar aynı zamanda siber zorbalık yapar: Öfkeye ilişkin derin düşünme, intikam ve empati aracı değişkenlerinin rolleri" başlıklı araştırması insan Araştırmaları Etik Kurulu tarafından uygun görülerek gerekli onay 2018-EGT-061 protokol numarası ile 11.05.2018 - 30.09.2019 tarihleri arasında geçerli olmak üzere					
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		Üye		Dr. Oğt. Dyesi Pınar KAYGAN Üye		

APPENDIX B: PARTICIPANT CONSENT FORM

ARAŞTIRMAYA GÖNÜLÜ KATILIM FORMU

Bu araştırma Orta Doğu Teknik Üniversitesi, Eğitim Bilimleri Bölümü, Psikolojik Danışmanlık ve Rehberlik Programı Yüksek Lisans Tez çalışması kapsamında Yüksek Lisans öğrencisi Gizem Çokluk tarafından Prof. Dr. Özgür Erdur-Baker danışmanlığında yürütülmektedir. Bu form sizi araştırma koşulları hakkında bilgilendirmek için hazırlanmıştır.

Araştırmanın amacı siber kurban ve siber zorbalar arasındaki ilişkide bazı aracı değişkenlerin rolleri incelemektir. Araştırmaya katılmayı kabul ederseniz, sizden 4 farklı ölçek doldurmanız beklenmektedir. Bu çalışmaya katılım ortalama olarak 15 dakika sürmektedir.

Sizden istenen tüm soruları eksiksiz ve içtenlikle yanıtlamanız beklenmektedir. Her bir anketin başında o anket ile ilgili açıklama yer almaktadır. Lütfen bu açıklamaları dikkatlice okuduktan sonra anketleri doldurmaya başlayınız.

Araştırmaya katılımınız tamamen gönüllülük temelinde olmalıdır. Ankette, sizden kimlik veya kurum belirleyici hiçbir bilgi istenmemektedir. Cevaplarınız tamamıyla gizli tutulacak, sadece araştırmacılar tarafından değerlendirilecektir. Sağladığınız veriler gönüllü katılım formlarında toplanan kimlik bilgileri ile eşleştirilmeyecektir.

Ölçekler genel olarak kişisel rahatsızlık verecek sorular veya uygulamalar içermemektedir. Ancak, katılım sırasında sorulardan ya da herhangi başka bir nedenden ötürü kendinizi rahatsız hissederseniz ölçekleri doldurma işini yarıda bırakıp çıkmakta serbestsiniz. Böyle bir durumda çalışmayı uygulayan kişiye, çalışmadan çıkmak istediğinizi söylemek yeterli olacaktır. Çalışma sonunda, bu araştırmayla ilgili sorularınız cevaplanacaktır.

Araştırmayla ilgili daha fazla bilgi almak isterseniz:

Gizem Çokluk (E-posta: gizem.cokluk@metu.edu.tr) ile iletişim kurabilirsiniz.

Özgür Erdur Baker (E-posta: erdur@metu.edu.tr) ile iletişim kurabilirsiniz.

Yukarıdaki bilgileri okudum ve bu çalışmaya tamamen gönüllü olarak katılıyorum.

İsim Soyad	Tarih	İmza
	//	

APPENDIX C: DEMOGRAPHIC INFORMATION FORM

DEMOGRAFİK BİLGİLER

CİNSİYETİNİZ: (İşaretleyiniz)							
Kadır	n						
Erkek							
Diğer							
YAŞINIZ: (Belirtiniz)							
KAÇINCI SINIFTASINIZ?							
	Hazırlık						
	1nci sınıf						
	2nci sınıf						
	3ncü sınıf						
	4ncü sınıf						
	Diğer () Belirtiniz.						

APPENDIX D: SAMPLE ITEMS FOR REVISED CYBER BULLYING INVENTORY FOR UNIVERSITY STUDENTS

- 1. İnternet ortamında başkasının kimliğiyle izinsiz paylaşımda bulunmak
- 2. İnternet ortamında yapılan paylaşımlara (yorum, fotoğraf, video, bilgi) utandırıcı, kırıcı yorumlar yapmak
- 3. İnternette tehdit içeren, utandırıcı, kırıcı mesajlar göndermek

APPENDIX E: SAMPLE ITEMS FOR THE VENGEANCE SCALE

- 1. Biri seni incitirse bunun karşılığını ona ödetmek yanlış değildir.
- 2. Biri beni çok sinirlendirdiğinde sadece kızmakla yetinmem bunun acısını ondan çıkarırım.
- 3. Beni incitenleri affetmeyi daha kolay buluyorum.

APPENDIX F: SAMPLE ITEMS FOR BASIC EMPATHY SCALE

- 1. Başka insanların ne hissettikleri beni çok fazla ilgilendirmez.
- 2. Birisi kendini kötü hissettiğinde onun neler hissettiğini genellikle anlayabilirim.
- 3. Arkadaşlarımın korktuğunu genellikle anlarım.

APPENDIX G: TURKISH SUMMARY / TÜRKÇE ÖZET

SİBER MAĞDURİYET, CİNSİYET, İNKİKAM VE EMPATİ DEĞİŞKENLERİNİN SİBER ZORBALIĞI YORDAYICI ROLLERİNİN İNCELENMESİ

1. GİRİŞ

Günümüz dünyasında siber zorbalık davranışı ergenler ve genç yetişkinler arasında önemli bir problem haline gelmiştir (Kırcaburun & Tosuntaş, 2017). Siber mağdur olan kişiler biden çok duygusal ve psikolojik problemler deneyimlemektedirler. Bunlar literatürde depresyon, somatizasyon, kaygı ve problemli alkol kullanımı olarak geçmektedir (Selkie, Kota, Chan & Moreno, 2015; Ildırım, Çalıcı & Erdoğan, 2017). Ayrıca siber mağdur olan bir çok vaka siber mağduriyet yaşadığı için kendini öldürmüştür. Bu yüzden bu büyüyen problem zaman geçtikçe daha da önemli bir hale gelmektedir (Cook, 2018).

Literatürde siber mağduriyet değişkenini yordayan birden çok değişken bulunmaktadır fakat bu çalışmalar çoğunluklu olarak ergen katılımcılar ile gerçekleştirilmiştir. Ayrıca literaturde ergenler arasında siber mağduriyet ve zorbalık ilişkisi anlamlı bulunmuştur. Bazı çalışmalar da geçmişte deneyimlenmiş siber mağduriyetin siber zorbalık üzerindeki rolüne değinmişlerdir (Selkie, Kota, Chan & Moreno, 2015). Fakat bu çalışmalar ergenler arasında gerçekleştirilmiş ve bu değişkenin moderatör rolü incelenmemiştir. Diğer değişkenler ile birlikteki yordayıcılığını incelemek siber mağduriyetin rolünü en iyi şekilde anlamak için önemlidir.

İntikam değişkenine baktığımızda siber zorbalık literatüründe bir diğer önemli değişkendir. Fakat siber zorbalık ve intikam arasındaki ilişkiyi direkt olarak inceleyen pek çalışma bulunmamaktadır. Örneğin, Vandebosh ve Van Cleemput (2008)'a göre siber zorbalık davranışının arkasında yatan neden kişilerin siber

zorbalarından intikam alma duygularına sahip olamalarıdır. Ayırca, literatürde intikam siber zorbalık için bir motivasyon olarak görülmüştür (Tanrıkulu, 2015). Üniversite öğrencileri arasında yapılan bazı çalışmalar geçmişte deneyimlenen siber mağduriyetin ve intikam alma duygusuna sahip olmanın siber zorbalığın nedenleri olabileceğini belirtmiştir (Akbulut & Eristi, 2011). Bu çalışmadaki bir diğer değişken empatidir ve empati siber zorbalık literatüründe önemli bir yere sahiptir.Literatürde bir çok çalışma siber zorbalık ve empatiyi ilişkili bulmuştur (Doane, Pearson & Kelley, 2014; Brewer & Kerslake, 2015; Ashiq, Majeed & Malik, 2016; Rey, Lazuras, Casas, Barkoukis, Ortega-Ruiz, & Tsorbatzoudis, 2016). Fakat duygusal ve bilişsel empatinin siber zorbalık ile ilgili ilişkisi üniversite öğrencileri arasında kontrol edilmemiştir. Ayrıca empati ve intikamın, cinsiyet ve siber mağduriyet ile iki yönlü etkileşimi incelenmemiştir. Bu yüzden empati ve intikamın siber zorbalığı tek başına mı yoksa cinsiyet ve siber mağduriyet ile birlikte mi yordadığı bilinmemektedir. Ayrıca duygusal empati ve bilişsel empati ile siber zorbalık ilişkisi konusunda net sonuçlar bulunmamaktadır. Bu yüzden empatiyi bu çalışamada incelemek önemlidir.

Literatürde siber zorbalık ve mağduriyet konusunda cinsiyet değişkeni ile ilgili tutarsız sonuçlar bulunmaktadır. Bazı çalışmalar kadınların erkeklerden daha zorba olduğunu belirtirken (Zalaquett & Chatters, 2014), diğer çalışmalar erkeklerin kadınlardan daha zorba olduğunu belirtmiştir (Leung, Wong & Farver, 2018). Ayrıca bazı çalışmalarda cinsiyet farkı bulunmamıştır (Macdonalds & Roberts-Pittman, 2010). Yani literatürde cinsiyet konusunda net bir bilgi bulunmamakla beraber, yapılan çalışmalar genel olarak ergenler arasındadır ve üniversite öğrencileri arasında cinsiyetin siber zorbalığı yordamadaki rolü incelenmemiştir.

Genel olarak siber mağduriyet, intikam ve empatinin siber zorbalık ile ilişkisinde literatürde benzer sonuçlar bulunmuştur. Fakat üniversite öğrencileri için yeteri kadar bilgi bulunmamakla beraber literatürde bu konuda bazı tutarsız ve eksik sonuçlar bulunmaktadır. Bu yüzden bu çalışmada siber mağduriyet, cinsiyet, intikam ve empatinin siber zorbalığı yordayıp yordamadığı hem tek başlarına hem de iki yönlü etkileşimler ile incelenmiştir.

1.1 Çalışmanın amacı

Bu çalışmanın amacı siber zorbalık davranışını yordayan değişkenleri bağımsız ve birlikte olarak incelemektir. Çalışmadaki değişkenler cinsiyet, siber mağduriyet, intikam, bilişsel empati ve duygusal empati olarak seçilmiştir. Bu değişkenler arasındaki ilişkiler hiyerarşik çoklu regresyon modeli ile test edilmiştir.

1.2 Araştırma Sorusu

Bu araştırmada "Cinsiyet, intikam, siber mağduriyet, duygusal empati ve bilişsel empati siber zorbalık davranışını ne ölçüde yordar?" sorusu araştırılmıştır.

1.3 Çalışmanın önemi

Bu çalışma siber zorbalık davranışı konusunda olan alan yazınına önemli katkılar sağlamıştır. Siber zorbalık davranışı konusunda çalışmalar olmasına rağmen, şu zamana kadar siber zorbalığın cinsiyet, intikam, siber mağduriyet, duygusal empati ve bilişsel empati ile ilişkisi birlikte incelenmemiştir. Üniversite öğrencileri arasında siber zorbalık çalışmalarında tutarsız sonuçlar olduğu için bu değişkenler ile çalışmak önem taşımaktadır. Siber zorbalığı en çok yordayan değişkene karar vermek için bu çalışma önem taşımaktadır. Böylece hem araştırmacılar hem de uygulayıcılar önleyici ve müdahale edici stratejiler geliştirip siber zorbalara yardımcı olabileceklerdir.

Bu çalışma ayrıca üniversite danışma merkezlerinde çalışan danışmanlar için de önem taşımaktadır. Çünkü siber zorbalığı yordayan değişkenlerin bilincinde olarak danışmanlar önleyici programlar planlayabilir, psikoeğitim grupları açabilir. Ayrıca siber zorbalarla çalışırken siber zorbalığı yordayan cinsiyet, intikam, duygusal empati ve bilişsel empati değişkenlerini göz önünde bulundurmaları siber zorbalara daha iyi yardımcı olmalarını sağlayacaktır. Ayrıca üniversite öğrencileri siber zorbalığı yordayan konularda aydınlatılabilecek ve nelerin siber zorbalık davranışına neden olduğunu anlayabileceklerdir. Suman (2016) a göre siber zorbalık sonucunda mağdurlar; somatik problemler, sosyal problemler, kaygı, depresyon, intihar düşünceleri ve akademik problemler gibi birçok problem yaşamaktadırlar. Bu yüzden siber zorbalık davranışının altındaki nedenleri araştırmak bu istenmeyen

psikolojik ve fizyolojik problemlerin azalmasına, iyilik hallerinin artmasına yardımcı olacaktır.

2. YÖNTEM

Bu araştırmanın yöntemi hiyerarşik çoklu regresyon analizidir ve bağımlı ve bağımsız değişkenler arasındaki birleşik ve bağımsız ilişkiler incelenmiştir. Bu çalışmanın araştırma deseni nicel korelasyondur. Araştırmada bağımsız değişkenler siber mağduriyet, intikam, duygusal empati, bilişsel empati ve cinsiyet olarak belirlenmiştir. Araştırmanın bağımsız değişkeni ise siber zorbalık davranışıdır.

2.1 Örneklem

Bu araştırmadaki katılımcılar üniversite öğrencilerinden oluşmaktadır ve hazırlık, birinci sınıf, ikinci sınıf, üçüncü sınıf, dördüncü sınıf, yüksek lisans ve doktora öğrencilerini kapsamaktadır. Veriler Türkiye'deki iki büyük şehirdeki iki üniversiteden toplanmıştır. Geleneksel yöntem yani kağıt-kalem yöntemi ve internet ortamında veri toplama yöntemi ulaşılabilen örneklem yöntemiyle katılımcılardan toplanmıştır. Çalışmaya toplamda 852 kişi katılmıştır.

2.1.1. Katılımcıların Demografik Özellikleri

Siber zorbalığı yordayan değişkenleri incelemek için 852 üniversite öğrencisi çalışmaya katılmıştır. Katılımcıların 460 ı kadın, 392si erkektir. Katılım gösteren öğrencilerin yaş aralıkları 17 ile 48 yaşları arasındadır.

2.2 Veri Toplama Araçları

Bu araştırmada Demografik Bilgi Formu, Temel Empati Ölçeği (Jolliffe & Farrington, 2006), İntikam Ölçeği (Stuckless & Goranson, 1992) ve Üniversite Öğrencileri için Yenilenmiş Siber Zorbalık Envanteri (Tanrıkulu, 2015) veri toplama aracı olarak kullanılmıştır.

2.2.1 Demografik Bilgi Formu

Demografik bilgi formu araştırmacı tarafından geliştirilmiş olup formda katılımcıların cinsiyetleri, yaşları ve sınıfları sorulmuştur.

2.2.2 Temel Empati Ölçeği

Temel Empati Ölçeği Jolliffe ve Farrington (2006) tarafından empati düzeyini ölçmek için geliştirilmiştir. Bu ölçek iki alt boyuttan oluşmaktadır. Bunlar duygusal ve bilişsel empatidir. Toplamda 20 maddeden oluşan envanter 5'li Likert tipte bir ölçektir. Ölçeğin 9 maddesi bilişsel empatiyi ölçerken, 11 maddesi duygusal empatiyi ölçmektedir. Her maddeden alınan yüksek puanlar empati düzeyini göstermektedir.

Ölçek Topçu, Erdur-Baker ve Çapa (2010) tarafından Türkçe 'ye uyarlanmıştır. Ölçeğin Cronbach alfa değeri duygusal empati için .76, bilişsel empati için .80 bulunmuştur. Global ölçekte Cronbach alfa katsayısı .83 olarak bulunmuştur. Ölçeğin bilişsel empati bölümünden alınabilecek en düşük puan dokuz, en yüksek puan 45tir. Duygusal empatide alınabilecek en düşük puan 11, en yüksek puan ise 55tir. Bu çalışmada duygusal empatiden en düşük 12, en yüksek 55 alınmıştır. Bilişsel empatide ise en düşük 18, en yüksek 48 alınmıştır.

2.2.3. İntikam Ölçeği

Bu ölçek ilk olarak Stuckless ve Goranson (1992) tarafından insanların intikam alma eğilimlerini ölçmek amacıyla geliştirilmiştir. Bu ölçekte toplamda 20 madde bulunmakta ve 7'li Likert tipte bir ölçektir. Ölçekten alınabilecek puanlar 20 ile 140 arasında değişmektedir. Ölçekten alınan yüksek puanlar yüksek intikam eğilimini göstermektedir. Ölçeğin iç güvenilirlik katsayısı .92, test-tekrar test güvenilirlik katsayısı .90'dır.

Internal reliability coefficient for the scale was reported as .92 and test-retest reliability of the scale is .90. This scale is adapted to Turkish by Satici, Can and Akın in 2015. After adaptation internal reliability changed to .92 and test-retest reliability .90. Besides, reliability analysis showed that Cronbach's Alpha for this study's data was .93

2.2.4 Üniversite Öğrencileri için Yenilenmiş Siber Zorbalık Envanteri

Bu ölçek ilk olarak Erdur-Baker ve Kavşut (2007) tarafından kişilerin siber zorbalık yapma ve maruz kalma davranışlarını ölçmek amacıyla geliştirilmiştir. Bu ölçeğin iç tutarlılık katsayısı siber zorbalık için .92, siber mağduriyet için .80 olarak bulunmuştur.

Tanrıkulu (2015) pilot bir çalışma ile siber zorbalık envanterini üniversite öğrencileri ile kullanmak için revize etmiştir. Bu pilot çalışmada siber zorbalık bölümünün Cronbach alfa katsayısı .81 ve siber mağduriyet bölümünün Cronbach alfası .78 olarak bulunmuştur. Ölçek iki bölümden oluşmaktadır ve her bölümde toplamda 11 madde bulunmaktadır. "Ben Yaptım" bölümü siber zorbalık davranışını, "Bana Yapıldı" bölümü ise siber mağduriyeti ölçmektedir. Bu ölçek 4'lü Likert tipte bir ölçektir. Her bir bölüm için en yüksek ve en düşük puanlar 12 ile 48'dir. Her iki bölümden de yüksek puan alan kişiler hem siber zorbalık hem de siber mağduriyeti en çok deneyimlemiş kişilerdir (Tanrıkulu, 2015). Güvenilirlik analizi sonrasında bu data için Cronbach alfa katsayısı "Ben yaptım" bölümü için .77, "Bana yapıldı" bölümü için .83 olarak bulunmuştur.

2.3 Veri Toplama Süreci

Veri toplamandan önce Orta Doğu Teknik Üniversitesi İnsan Araştırmaları Etik Kurulundan bu araştırma için etik izin alınmıştır. 2017-2018 bahar döneminde veriler toplanmıştır. Bu süreç 21 Mayıs'ta başlamış, Haziran ayının ilk haftasına kadar sürmüştür. Türkiye'deki iki büyük şehirdeki iki üniversiteden veriler toplanmıştır. Katılımcılar ankete başlamadan önce bilgilendirme amacıyla çalışmanın içeriği ve bu çalışmanın gönüllülük esasına dayandığı bilgisi katılımcılar ile paylaşılmış, bilgilendirilmiş onay formunda detaylı bilgiler verilmiştir. Anketin tamamlanma süresi yaklaşık olarak 15 dakikadır.

2.4 Veri Analizi

Bu çalışmadaki analizler IBM Statistical Packages of Social Sciences 24 (SPSS) kullanılarak gerçekleştirilmiştir (IBM, 2016). Araştırmanın temel analizine geçmeden önce cinsiyet değişkeni Tek Yönlü Varyans Analizi ile incelenmiştir.

Ayrıca ikinci aşamada siber zorbalık, siber mağduriyet, intikam, duygusal empati ve bilişsel empati arasındaki ilişkileri test etmek için iki değişkenli korelasyon analizi yapılmıştır. Hiyerarşik çoklu regresyon öncesinde varsayımlar test edilmiş ve test edilen varsayımlar geçerli bulunmuştur. Daha sonrasında hiyerarşik çoklu regresyon analizi yapılmıştır.

2.5 Çalışmanın Kısıtlılıkları

Bu çalışmada uygun örnekleme yöntemi kullanıldığı için çalışmanın genellenebilirliği açısından bu bir kısıtlılıktır. Ayrıca internet ortamında yapılan anketlerde katılımcıların anlamadığı sorularını araştırmacı kişiye yöneltememesi de bir diğer kısıtlılıktır. Bireysel doldurulan anket çalışmaları olduğu için sosyal arzuedilebilirlik yanlılığı olabilir. Bu çalışma yöntemi uzun süreli veya deneysel olmadığı için değişkenler arasındaki nedensel ilişkiler açıklanamaz.

3. BULGULAR

Hiyerarşik çoklu regresyon sonuçlarına göre siber mağduriyet, cinsiyet, intikam, duygusal empati ve bilişsel empati siber zorbalığı tek başlarına yordamıştır. Ayrıca çalışmanın sonuçlara göre erkekler kadınlara oranla daha çok siber zorbalık yapmıştır. Değişkenlerde siber mağduriyet, intikam ve cinsiyet siber zorbalığı pozitif yönde yordamaktadır. Fakat bilişsel ve duygusal empati ile siber zorbalık davranışı arasında negatif bir ilişki bulunmuştur. Cinsiyet ve siber mağduriyet, cinsiyet ve intikam ve cinsiyet ve bilişsel empati etkileşimleri birlikte siber zorbalık davranışını pozitif yönde yordamıştır. Fakat cinsiyet ve duygusal empatinin etkileşimi siber zorbalık davranışını negatif yönde etkilemiştir. Ayrıca siber mağduriyet ve duygusal empati, siber mağduriyet ve bilişsel empati etkileşimleri birlikte siber zorbalığı negatif yönde yordamıştır. Sonuç olarak erkek olmak, intikam duygusuna sahip olmak, düşük empati düzeyine sahip olmak ve siber mağdur olmak bir arada siber zorbalık davranışını hep birlikte yordamıştır.

4. TARTIŞMA

Bu çalışmada ilk olarak siber zorbalık davranışındaki cinsiyet farklılıkları incelenmiştir. Sonuçlara göre siber zorbalık davranışında anlamlı bir cinsiyet farklılığı bulunmuştur. Yani erkeklerin kadınlara oranla daha çok siber zorba oldukları görülmüştür. Bu sonuç erkeklerin siber mağduriyet deneyimlerine sahip olmaları ile açıklanabilir. Çünkü bu çalışmada siber mağduriyet ve siber zorbalık arasında bir ilişki bulunmuştur. Bu çalışmadan farklı olarak bazı araştırmacılar kadınların erkeklerden daha çok siber zorba olduklarını bulmuşlardır (Faucher, Jackson & Cassidy, 2014; Zalaquett & Chatters, 2014). Bu sonucu araştırmacılar kadınların bir özelliği olan ilişkisel agresyona sahip olmak ile açıklamışlardır (Faucher, Jackson & Cassidy, 2014). Ayrıca bir diğer araştırmacı (Scheithauer, Smith & Samara, 2016) da kadınların erkeklerden daha zorba olduğunu kültürel farklılıklara sahip olmak ile açıklamıştır ve bu çalışma Kanada'daki genç yetişkinler ile yapılmıştır.

Ayrıca bu çalışmaya göre siber zorbalık ve mağduriyet cinsiyet ile pozitif yönde ilişkili bulunmuştur. Bu çalışma ile aynı sonuçlara sahip olan bir diğer çalışma erkeklerin siber zorbalık davranışını içsel güdü ile açıklamışlardır (Leung Wong, & Farver, 2018). Ayrıca, Kırcaburun ve Tosuntaş (2017) erkeklerin kadınlardan daha çok siber zorba olduklarını internet kullanımı ve oyun oynamak ile açıklamışlardır. Kokkinos, Antoniadou ve Markos (2014) ise bu sonucu dürtüsellik ve duygusuzluk ile açıklamışlardır. Bütün bu çalışmalardan farklı olarak Arıcak (2009) siber mağduriyette cinsiyet farklılığı bulmamıştır.

Bu araştırmada siber mağduriyetin siber zorbalığı yordayıp yordamadığı da araştırılmıştır. Çalışmanın sonuçlarına göre siber zorbalık ve mağduriyet arasında anlamlı bir ilişki bulunmuş ve siber mağduriyet siber zorbalığı yordamıştır. Sonuçlara göre siber zorbalık yapan üniversite öğrencileri aynı zamanda siber mağdur olan kişiler olarak bulunmuştur. Bu sonuç intikam alma duygusuna sahip olmak ile açıklanabilir. İntikam duygusu olan kişiler de hem siber zorba hem de siber mağdur olan kişiler olabilirler (Ak, Özdemir & Kuzucu, 2015; Beran, Rinaldi, Bickham & Rich, 2012). Bu çalışmanın sonucu daha önce çalışılmış bazı çalışmalar

ile paralel çıkmıştır yani siber zorbalık ve mağduriyet birbiri ile ilişkili bulunmuştur (Ak, Özdemir, & Kuzucu, 2015, Eroğlu & Güler, 2015; Xiao & Wong, 2013). Araştırmacılar bu sonucu geçmişte siber mağdur olma deneyimi ile açıklamışlardır. Çünkü zorbalığa maruz kalan kişi daha agresif davranışlar sergileyebilir ve agresif davranışları normalleştirebilir. Bu da siber zorbalık davranışına neden olur. Ayrıca, bu çalışmadan farklı bir bulgu olarak Beran, Rinaldi, Bickham ve Rich (2012) siber zorbalık ve mağduriyet ilişkisini şu şekilde açıklamışlardır. Araştırmacılara göre siber mağdurlar siber zorbalık davranışını siber zorbalardan öğrenmekte ve bu davranışı başkalarına göstermektedirler. Bu yüzden siber mağduriyetin siber zorbalığı yordadığı tahmin edilmektedir. Bu araştırmada ise bu ilişki erkek olmak, intikam duygusuna sahip olmak ve düşük empati düzeyine sahip olmak ile açıklanabilir.

Bu çalışmanın sonuçlarına göre intikam duygusu siber zorbalık davranışını yordamaktadır. Yani siber zorbalık yaptığını belirten üniversite öğrencileri aynı zamanda intikam alma duygusuna da sahip olmuştur. Literatürde üniversite öğrencileri arasında bu ilişkiyi açıklayan pek bir çalışma olmamıştır. Fakat bazı çalışmalar intikam almayı siber zorbalık davranışında bir motivasyon olarak görmüşlerdir. Ayrıca, König, Gollwitzer ve Steffgen (2010) intikam almanın rolünü siber zorbalık davranışı için incelemiş ve siber zorbalık davranışını intikam duygusuna sahip olmak ile açıklamışlardır. Ayrıca siber zorbalar arasında intikam alma yaygın bir özellik olarak görülmüştür. Buna ek olarak, siber zorbaların kendilerine siber zorbalık yapan kişilerden intikam almak amacıyla zorbalık yaptıkları araştırmacılar tarafından açıklanmıştır (König, Gollwitzer & Steffgen, 2010). Bazı araştırmacılar bu çalışmayla paralel olarak siber mağduriyet deneyimleyen kişilerin siber zorba eğilimlerinin diğer siber mağdur olmayanlara oranla daha yüksek olduğunu belirtmişlerdir. Bu sonucu da siber zorbalarından intikam alma duygusuna sahip olmaları ile açıklamışlardır (Kraft & Wang, 2010). Sonuç olarak literatürde bu çalışmayı destekleyecek çalışmalar bulunmuştur ve bu çalışmanın sonucuna göre siber zorbalık ve mağduriyet arasındaki ilişki siber mağdur olma ile açıklanmıştır.

Bütün bunlara ek olarak bilişsel ve duygusal empati siber zorbalığı yordamıştır ve negative yönde bir ilişki bulunmuştur. Bazı araştırmacılar bu sonucu başkalarının duygu ve düşüncelerini tahmin etmede zorluk yaşamak ile açıklamışlardır (Kokkinos, Antoniadou, & Markos, 2014; Davis, 1983). Literatürde empati ve siber zorbalık ile ilgili iki farklı sonuç bulunmaktadır. Örneğin, bu çalışmadan farklı olarak Pfetsch (2017) siber zorbalık ve mağduriyet arasında bir ilişki bulmamıştır. Bu sonucu da araştırmaya katılım gösteren kişilerin kişisel özellikleri ile açıklamışlardır. Bu çalışmayı destekleyecek diğer çalışmalar da duygusal ve bilişsel empatiyi siber zorbalık ile negative yönde ilişkili bulmuşlardır (Rey, Lazuras, Casas, Barkoukis, Ortega-Ruiz, & Tsorbatzoudis, 2016). Bu çalışmada siber zorbalık ve düşük seviye empati arasındaki ilişki intikam duygusuna sahip olmak ve siber mağduriyet ile açıklanabilir.

Bütün bu değişkenler tek başlarına incelendiği gibi birlikteki yordayıcı etkileri de incelenmiştir. Araştırma sonuçlarına göre bu değişkenlerin birlikte yordayıcı özellikleri daha güçlü bulunmuştur. İki yönlü etkileşimler cinsiyet ve siber mağduriyet ile yapılmıştır. Siber mağduriyetin literatürde önemli bir değişken olarak geçmesi ve cinsiyet konusundaki tutarsız sonuçlar bu iki değişkenin moderator olarak seçilme nedenleri olmuşlardır. Araştırma sonuçlarına göre hem erkek olmak hem de siber mağdur olmak birlikte siber zorbalığı yordamıştır. Ayrıca erkek olmak ve intikam duygularına sahip olmak birlikte siber zorbalığı yordamıştır. Bilişsel empati ve erkek olma birlikte siber zorbalığı yordayan bir diğer sonuçtur. Bilişsel empati tek başına siber zorbalığı negative yönde yordarken, cinsiyet ile bir araya geldiğinde pozitif yönde yordamıştır. Bu yüzden cinsiyetin siber zorbalık üzerinde önemi bir etkisi olduğu söylenebilir. Ayrıca siber mağduriyet ve cinsiyetin birlikte siber zorbalığı yordaması siber mağduriyetin siber zorbalığı tek başına yordamasından çok daha güçlüdür. Bu yüzden cinsiyeti moderator yapmak değişkenlerin bir aradaki etkilerini görmek açısından iyi bir fikir olabilir. Literatürde bu değişkenler özellikle ergenlik çağında olan kişiler arasında tek başlarına az da olsa incelenmiştir. Örneğin, Walrave ve Heirman (2011)'e göre siber zorbalık davranışı kişilerin yaşı ile değişkenlik gösterebilir fakat kişisel özelliklerin yaş ile beraber değişmesi beklenmez. Bu yüzden empatik olan ve intikam duygularına sahip olan bir ergen, üniversite yıllarında da bu özelliklerini sürdürmeye devam eder. Bu yüzden ergenler ile genç yetişkinler arasında bu özellikler açısından aynı sonuçların bulunması beklenebilir. Diğer çalışmalardan farklı olarak bu çalışma siber zorbalık literatürüne değişkenlerin birlikte yordayıcı rollerini inceleyerek katkıda bulunmuştur.

Bu çalışmanın bir diğer önemli sonucu siber mağduriyet ve intikam duygularına birlikte sahip olan kişilerin siber zorba olma olasılıklarının çok daha yüksek olmasıdır. Ayrıca hem siber mağduriyet yaşamış hem de düşük duygusal empati seviyesine sahip olan kişilerin siber zorba olma olasılıkları daha yüksektir. Ayrıca hem siber mağdur hem de bilişsel empatiye birlikte sahip olan kişiler daha çok siber zorba olma olasılığına sahip kişilerdir. Bu değişkenlerin siber zorbalık ile ilişkileri bağımsız olarak intikam duygusuna sahip olmak olarak açıklanmıştır (Kraft & Wang, 2010). Bu yüzden bu değişkenlerin birlikte yordayıcı rollerinin olması da kişilerin intikam duygusuna sahip olması ile açıklanabilir. Duygusal empati tek başına ve cinsiyet ile birlikte siber zorbalığı yordamamıştır fakat siber mağduriyet ile bir araya geldiğinde siber zorbalığı yordamıştır. Yani eğer üniversite öğrencisi hem siber mağduriyet deneyimlemiş hem de duygusal empatisi düşükse bu öğrencinin siber zorba olma olasılığı artmaktadır. Siber mağduriyetin bu etkisi göz önünde bulundurulduğunda gelecek çalışmalarda bu değişkeni moderator olarak kullanmak iyi bir fikir olabilir. Sonuç olarak, hem erkek olan, hem intikam duygusuna sahip olan, hem düşük empati seviyesi olan üniversite öğrencileri siber zorba olmaktadırlar.

4.1. Öneriler

Bu çalışmanın bulguları üniversitelerin danışmanlık merkezlerinde önleme ve müdahale çalışmalarında kullanılabilir. Örneğin, danışmanlık merkezleri siber zorbalığa neden olan faktörler ile ilgili farkındalık arttırmak amacıyla stratejiler geliştirebilirler. Bu çalışmaları yapmak önemlidir çünkü siber zorbalık davranışı üniversite yıllarında çözülmezse, yetişkinlik döneminde de devam eder ve iş hayatını da etkiler (Kota, Benson, Schoohs & Moreno, 2014). Ayrıca üniversite psikolojik danışmanlık merkezleri bu çalışma sonuçlarını dikkate alarak siber

zorbalığın doğası ve ilgili faktörleri hakkında öğrencilere ayrıntılı bilgi vermelidir. Örneğin, bu çalışmanın sonuçlarına göre intikam, siber mağduriyet, duygusal empati ve bilişsel empati siber zorbalık davranışı ile ilişkili çıkmıştır. Bu yüzden bu konularda psikoeğitim gruplar açmak ve öğrencilerin empatik becerilerini geliştirmek veya arttırmak üzerine çalışmalar yapılabilir.

Bu çalışmanın bir diğer katkısı erkeklerin kadınlardan daha siber zorba olmalarıdır. Bu farkındalığa sahip olmak önemlidir çünkü bu bilgi ışığında üniversite danışmanlık merkezleri erkek öğrenciler odaklı çalışmalar düzenleyebilirler. Ayrıca psikolojik danışmanlar, erkeklerin yardım alma davranışının düşük olduğunu fark ettiklerinde onlara ulaşabilmek için bültenler hazırlayabilir veya bu konularda seminerler verilebilir.

Buna ek olarak, siber mağdurlara siber zorbalıkla nasıl mücadele edecekleri konusunda eğitim vermek siber zorba ve mağdur döngüsünden korunmak konusunda kişilere yardımcı olabilir (Lauritsen & Laub, 2007). Ayrıca siber mağduriyet üniversite öğrencileri için riskli olabilir çünkü öğrenciler ailelerinden uzakta yaşıyor olabilir ve destek alma konusunda kendilerini yetersiz hissedebilirler (Ramos & Bennett, 2016). Bu yüzden aileleri siber zorbalık konusunda öğrenciler lisedeyken bilgilendirmek büyük bir önem taşımaktadır. Böylelikle siber mağduriyet yaşamış öğrencilere ebeveynleri daha bilinçli bir şekilde destek sağlayabilirler.

Siber zorbalık konusunda çalışan araştırmacılar bu araştrımanın sonuçlarını dikkate alarak siber mağduriyet ve cinsiyet değişkenlerini kendi çalışmalarında da moderatör olarak kullanabilirler. Bu iki değişken önemli etkilere sahip oldukları için moderatör olarak kullanmak önemli olabilir. Ayırca ileriki çalışmalar siber mağduriyet ve cinsiyeti aracı değişkenler olarak kendi çalışmalarında test edebilirler. Bu çalışma korrelasyonel bir çalışmadır. Bu yüzden değişkenler arasındaki ilişkiler açıklanamaz. Bu değişkenler arasındaki ilişkileri açıklamak adına uzun vadeli çalışmalar veya deneysel çalışmalar yapılabilir.Bütün bunlara ek olarak, bu çalışmada iki yönlü etkileşimler incelenmiştir fakat çalışmayı komplike

hale getirdiği için üç yönlü etkileşimler incelenmemiştir. Bu yüzden ileriki çalışmalar bu değişkenlerin üç yönlü etkileşimlerini inceleyebilirler.

APPENDIX H: TEZ İZİN FORMU / THESIS PERMISSION FORM

ENSTİTÜ / INSTITUTE	
Fen Bilimleri Enstitüsü / Graduate School of Natural and Applied Sciences	
Sosyal Bilimler Enstitüsü / Graduate School of Social Sciences	
Uygulamalı Matematik Enstitüsü / Graduate School of Applied Mathematics	
Enformatik Enstitüsü / Graduate School of Informatics	
Deniz Bilimleri Enstitüsü / Graduate School of Marine Sciences	
YAZARIN / AUTHOR	
Soyadı / Surname : ÇOKLUK Adı / Name : GİZEM Bölümü / Department : PSİKOLOJİK DANIŞMANLIK VE REHBERLİK/GUIDANCE AND PSYCHOLOGICAL COUNSELING	
TEZİN ADI / TITLE OF THE THESIS (İngilizce / English) : EXAMINING THE PREDICTIVE ROLES OF CYBER VICTIMIZATION, GENDER, REVENGE, AND EMPATHY ON CYBER BULLYING PERPETRATION	
TEZİN TÜRÜ / DEGREE: Yüksek Lisans / Master Doktora / PhD	
1. Tezin tamamı dünya çapında erişime açılacaktır. / Release the entire work immediately for access worldwide.	
2. Tez <u>iki yıl</u> süreyle erişime kapalı olacaktır. / Secure the entire work for patent and/or proprietary purposes for a period of <u>two year</u> . *	
3. Tez altı ay süreyle erişime kapalı olacaktır. / Secure the entire work for period of six months. *	
* Enstitü Yönetim Kurulu Kararının basılı kopyası tezle birlikte kütüphaneye teslim edilecektir. A copy of the Decision of the Institute Administrative Committee will be delivered to the library together with the printed thesis.	
Yazarın imzası / Signature Tarih / Date	