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CONDUCT PROBLEMS AMONG ADOLESCENTS IN TURKEY: AN
ANALYSIS OF RESEARCH ARTICLES FROM 2000 TO 2014

A MASTER'S THESIS

BY

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THE PROGRAM OF CURRICULUM AND INSTRUCTION
İHSAN DOĞRAMACI BILKENT UNIVERSITY
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This thesis is dedicated to my mother Filiz Budak as a sign of her success and patience.

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The Graduate School of Education

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I certify that I have read this thesis and have found that it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Arts in Curriculum and Instruction.

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ABSTRACT

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The aim of the current study was to analyze studies related to conduct problems among adolescents from 2000 to 2014 and synthesize findings. The study examines rates of involvement and exposure, different types of bullying, rates of cyber-bullying and associative factors of conduct problems along with the recommended non-curricular and curricular solutions by studies. Another aim of the current study was to illustrate a descriptive model which provides connection between what is done individually by researchers and gives general broad view about these findings. Articles for a meta-analysis were identified by using key word searches. Descriptive, correlational, intervention studies related to middle and high school in Turkey were collected. Master's thesis, PhD dissertations, and minor journals that are not indexed by the Bilkent databases were not included. Studies related to risk taking behaviors and psychological problems were not included in the sample. The meta-analysis method was used to analyze the data. It can be speculated that adolescents face various conduct problems in Turkish schools and various associative factors related to conduct problems mediate the effect of these problems.

Key words: bullying, cyber-bullying, curricula, adolescents, social and emotional learning

ÖZET

TÜRKİYEDE ERGENLER ARASINDAKİ DAVRANIŞ PROBLEMLERİ: 2000-2014 YILLARI ARASINDAKİ ARAŞTIRMA MAKALELERİNİN ANALİZİ

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Bu çalışmanın amacı 200-2014 yılları arasındaki ergenler arasındaki davranış problemlerini konu alan makalelerin sentezlenmesidir. Çalışma, dahil olma, maruz kalma, zorbalık çeşitleri, sanal –zorbalık, ilişkili faktörler, müfredatla ilgili ve müfredat dışı çözümleri incelemektedir. Çalışmanın bir başka amacı, bu zaman kadar yapılan çalışmalar arasında bir bağ kurmak ve genel bir bakış sağlamaktır. Anahtar kelime metodu ile ortaokul ve lise ile ilgili makaleler açıklayıcı, korelasyonel ve müdahale programları kategorilerinde toplanmıştır. Yüksek lisans tezleri, doktora disertasyonları ve Bilkent veri tabanında yer almayan dergiler örnekleme dahil edilmemiştir. Risk alıcı davranışlar ve psikolojik sorunlarla ilgili çalışmalar, bu çalışmanın kapsamına alınmamıştır. İlgili makalelerin analizi için meta –analiz yöntemi uygulanmıştır. Bu çalışmanın ışığında söylenebilir ki, Türk okullarında ergenler çeşitli davranış problemleriyle karşı karşıya kalmakta ve bu problemlerle ilgili ilişkili faktörler bu problemleri yordamaktadır.

Anahtar Kelimeler: Orta okul, Lise, Ergen, Davranışsal faktör,

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CHAPTER 1: INTRODUCTION

Background

Social and emotional well-being of students provides a foundation for adolescents to make progress both in life and academics. School is a place which provides a social and academic environment for students, where they are socialized in order to maintain their social-emotional well-being. In schools, students interact with each other and teachers, and they affect each other in both positive and negative ways. In schools, students unfortunately experience different types of social-emotional problems that can lead to conduct problems such as bullying, cyber-bullying, peer-bullying, anger, aggression, and violence. Conduct problems consist of repetitive and persistent behaviors that are not socially acceptable. Students might take different roles in these repetitive persistent behavioral patterns as perpetrators or victims. These problems may cause negative consequences on students' learning process and personal development by creating an insecure school environment and effecting students' mental health. To illustrate, these consequences might contribute to low academic achievement, school dropout, low self-esteem, low self-efficacy, and a high level of loneliness. It can be said that students might encounter problems-such as conduct problems- that affect their social and emotional well-beings in various environment throughout their lives.

Adolescence is a developmental period in which physical and psychological changes are occurring. This period can be affected by family relationships, peer relationships, and other social interactions. These social interactions may cause a disturbance on students' social and emotional well-beings. Social-emotional problems are world-wide problems. Sometimes, they lead to school violence which also has been getting

attention as a world-wide problem and it has negative effects not only long-term but also short-term, on both perpetrators and victims (Fisch et. al 2011). According to Due et al. (2005), students experience bullying excessively across countries and exposing bullying may cause poor mental and physical health. Negative consequences of bullying may represent themselves feeling left out, feeling helpless as mental disorder, headache and stomach ache as physical disorder (Due et al., 2005).

According to the World Health Organization (n.d.), violence is the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community. Until recently, violence among adolescents has not been considered as a serious problem in Turkey and few studies investigated the prevention or intervention of school violence during the 1990s. According to Hatipoğlu-Sümer and Aydın (1999) school violence had been neglected and had not received sufficient interest in Turkey. However, school violence, bullying in particular, is a serious problem which negatively affects students' academic achievement and personal development (Pişkin, 2002).

Turkish schools have counseling services provided by guidance counselors and each school has at least one guidance counselor. In addition, in Turkish curriculum, there is a health course that might cover conduct. Yet, given the seriousness of the issue; there is a need for more studies that investigate conduct problems and policies, courses, and changes in curricula which could directly or indirectly address conduct problems at school.

Problem

Recently, social-emotional factors that negatively affect students' physical and psychological development have started to be more extensively investigated in Turkey (Ayas & Pişkin, 2011). However, one emerging problem is that researchers investigate these factors individually. They mainly focus on their own studies or cite just a handful of studies. In other words, few systematic connections across studies have been made. A descriptive model which makes connections between different studies, explains the relationships between conduct problems and their associative factors, and situates the crucial findings of studies into wider perspective, limitations, and recommended non-curricular and curricular solutions of these factors is needed.

Overall, there is a need to explore associative factors that research studies have examined in Turkey, along with curricular and non-curricular solutions for these problems. Curricular solutions may include family interventions, school interventions, targeted school interventions, and non-school interventions for teachers, students and parents. Non-curricular solutions may include improving school climate, the identification of problems, communications, counseling practices, teacher education or training, policies, raising awareness, and wider societal solutions. In addition, it is important to consider that how these solutions are supported by evidence in studies, and how findings are connected with potential solutions.

Purpose

The purpose of the current study is to analyze prior studies from 2000 to 2014. The study begins by synthesizing rates of students' involvement and students' exposure to bullying. The study investigates associative factors related to conduct problems.

To illustrate a descriptive model which shows what is done earlier by researchers, study synthesizes recommended non-curricular and curricular solutions by studies. The study used meta- analysis as a research design in order to merge findings of existing studies and recommend solutions for conduct problems.

Research questions

This study aims to answer the following research questions:

1. According to research from 2000 to 2014, what is the prevalence of types of conduct problems in Turkey?
 - a) What are the rates of student involvement in the bullying process?
 - b) What are the rates of exposure to different types of bullying?
 - c) What are the rates of cyber-bullying?
 - d) What are the other issues that have been examined about involvement in bullying and school violence?
2. According to research from 2000 to 2014, what are the associative factors related to conduct problems among adolescents in Turkish schools?
 - a) What are the societal factors?
 - b) What are the family factors?
 - c) What are the school factors?
 - d) What are the individual-gender, and age- factors?
 - e) What are the age-related factors?
 - f) What are the factors related with individual-academic achievement, and personal characteristics?
3. What are the solutions that have been recommended by researchers?

- a) What are the grounded¹ non-curricular solutions recommended by researchers to reduce conduct problems?
- b) What are the grounded curricular solutions recommended by researchers to reduce conduct problems?

Significance

The proposed study is worth investigating because it suggests ways of reducing bullying and related conduct problems. It shows rates of involvement in bullying and types victimization. The study shows associative factors related to conduct problems and their relationship –how conduct problems are mediated by associative factors-, and it suggests ways to improve social emotional learning environment of schools. No other study has been conducted that synthesizes research- based solutions for conduct problems. This study identifies research-based solutions that can be used by school principals, teachers, policy makers, other researchers to minimize conduct problems by providing curricular and non-curricular solutions while improving school culture and the learning environment. This research might be useful for the Ministry of National Education, especially the synthesis of curricular and non-curricular solutions recommended across studies. Thus, there are also implications about the existing problems that need to be better addressed, along with needed changes in curricula as well as in teacher training, counseling practices, preventions and interventions, and educational polices which could better address conduct problems at school

¹ suggestions are grounded directly in the research

Definition of key terms

Violence: To force someone to do something (Ozel, Bayındır, Inan, & Urgan, 2008)

Bullying: Harmful behavior which repeats and it is characterized by imbalance of power between victim and perpetrator (Tippett & Wolke, 2014).

Cyber-bullying: Violence on the internet, bullying on the internet (Yenilmez & Seferoğlu, 2013).

Aggression: A behavior which aims to injure or damage a person (Arslan, Hamarta, Arslan, and Saygın, 2010).

Conduct Problem: Repetitive and persistent behavioral pattern like bullying, aggression, violence

CHAPTER 2: REVIEW OF RELATED LITERATURE

Introduction

Social and emotional problems that may prevent students' learning processes and cause life-long negative consequences occur all around the world. While in some school environments students may learn without fear, in other schools children experience aggressive behaviors such as bullying, violence, and aggression.

Experiencing these problems may lead to a school climate that is full of fear and anxiety. Students might respond to this rough environment by skipping school, avoiding being at certain places in the school or they might respond with more aggressive behavior themselves such as bringing weapons to the school. These issues may affect students in both their academic achievement and social skills. In Turkey, these social and emotional problems are paid little and insufficient attention nowadays.

This chapter begins with a review of the conduct problems and underlying issues, and provides a descriptive background for the conduct problems that have been studied worldwide and particularly in Turkey. These types of conduct problems include bullying and violence, mediating factors, and studies include prevention/intervention studies related to conduct problems. This literature review addresses a gap in research: The overall findings and curricular implications **across** studies in Turkey have not been well analyzed to show the trends and how such research could help to develop and improve the intervention or prevention programs within schools

Conduct problems in Turkey

Bullying

Bullying is a serious problem that has negative effects on social, psychological, and academic development of students (Pişkin, 2002). Pişkin (2002) defines bullying as when a child is exposed, repeatedly and over time, to negative actions from one or more other students. According to Pişkin (2002), bullying may be carried out by individuals or groups of students in ways that are physical, verbal, indirect and emotional. Based on research in Turkish schools during 1990s, it was found that boys have a higher tendency to be involved in bullying than girls (Pişkin 2002) as both bullies and victims. As for the place of bullying, the most common places that bullying occurred were around school or playground, the next most common locations are school corridors and classrooms (Pişkin 2002).

Kepenekçi and Çinkır (2006) showed that bullying exists in Turkish schools, based on a study across five state high schools in Ankara in 2000-2001 academic year and 692 students, ages 14-17. This study claimed that it was the first research to investigate bullying in Turkey. According to the authors, students experienced one or more types of bullying such as pushing, name calling, humiliating, and sexual assaulting. This study also showed that students involved in bullying were mainly boys. In addition, students often choose to protect themselves instead of telling their parents or teachers (Kepenekçi & Çinkır, 2006).

Types of bullying can be categorized in several ways. One way is by direct bullying and indirect bullying (Arslan & Savaşer, 2009). Direct bullying is showing violent behavior directly by using verbal insults or physical violence; on the other hand, indirect bullying is isolating an individual socially. Another way of categorizing bullying is into groups such as verbal bullying, emotional bullying, physical

bullying, and sexual bullying (Kapcı, 2004). Cheraghi and Piskin (2011) categorized bullying as physical, verbal, and isolation. Duy (2013) categorized bullying on the other hand as physical, verbal, and relational.

Bullying is not a problem which occurs only at middle and high school levels. It is observed in elementary school as well. Kapcı (2004) showed that bullying may be seen as pushing, hitting, name calling, and rumor spreading, based on research across five state schools in Ankara with 206 students. Engaging bullying in early ages might lead children to being involved more in bullying, or might lead children to show delinquent behaviors later on.

Violence in schools

Violence can be defined as doing harm to other individuals. Similarly, bullying can be considered as a form of violent behavior both physically and mentally; however, bullying is a behavior which repeats over a period of time toward a particular victim, while violence may occur in more isolated incidents that do not target a particular victim. Violence is a serious issue and major cause of morbidity and mortality among adolescents all over the world (Celbiş, Karaoğlu, Eğri & Özdemir, 2012).

Furthermore, violent behavior may cause serious consequences even death for adolescents. Violent behaviors such as fighting, carrying weapons might cause physical and psychological consequences (Celbiş, Karaoğlu, Eğri & Özdemir, 2012).

Tendency of violent behavior might be related to various risk factors such as loneliness, family factors, or the socio-economic level of students. It can be classified under three main categories: Physical violence, emotional violence, and sexual violence. In addition, violence is one of the important conduct problems that should be given attention just as bullying in Turkey, as preventable problems, or at

the very least problems that positive school cultures and intervention programs can help to address.

Aggression in schools

Aggression as a conduct problem might be the difficult to define when comparing with bullying and violence. For many decades, psychologists have been trying to understand the relationship between human nature and aggression. According to Freud, human behavior is motivated by sexual and aggressive drives or instincts. According to Bandura, aggression is learned in two basic ways: 1) observing aggressive models, 2) by receiving payoffs following aggression (as cited in Yalçın, 2007). According to Yavuzer (2013), aggression is defined as behavior that intends to harm. Furthermore, like bullying, aggression in school might be classified as physical, verbal, anger, hostility, and indirect aggression.

Unlike bullying and violence, the intention is emphasized, so studies may be conducted about student “aggressive tendencies” (Kaya, Bilgin & Singer, 2012). Thus, these studies may especially examine students’ dispositions or attitudes toward violent behaviors. There are many theories that try to define aggression such as Freud’s frustration-aggression hypothesis, or aggression comes from human needs (Arslan, Hamarta, Arslan & Saygın, 2010). Violence and aggression might be used interchangeably; however they are slightly different from each other. A person who has high level of aggression or aggression tendency might develop violent behavior or attitudes towards violence. Same as bullying, it can be defined as doing repetitive harm to another person, though how bullying and aggression are affected by internal and external factors is different. It can be said that bullying might be a category of aggression. The outcomes of this analysis are in Chapter 4 and following is a brief view.

Factors that mediate the influence of conduct problems

Most conduct problems appear to be related to various factors such as socio-economic level, gender, family, and grades. For gender differences, male students tend to be involved in bullying more than female students (Özer, Totan & Atik, 2011). In other respects, aggression may sometimes relate with popularity and social dominance because, popularity may come with aggressive behavior (Yavuzer, 2013). Among adolescents violence sometimes is related with loneliness. According to Haskan-Avcı and Yıldırım (2014), groups that indicate high level of loneliness have a tendency to resort to violence.

Gender

Gender is an important factor which mediates and influences conduct problems. According to Özer, Totan and Atik (2011), the majority of bullies and victims were males while females were victims or not involved. Similarly, males demonstrated bully behaviors more than females (Pişkin, 2010). In addition, Due et al. (2005) showed that across 28 countries rates of being bullied were low in females. In the view of these findings, it can be said that gender is an important influencing factor of conduct problems.

Grade/Age

Age is another important factor related to conduct problems. Due et al. (2005) showed that increase in age decreased bullying across 28 countries, except Scotland. Similarly in terms of age, Ayas and Pişkin (2011) showed that eleventh grade students bullied more than ninth grade students (See Chapter 4 for detailed analysis). On the other hand, Baker and Tanrikulu (2010) showed that 14-years old females showed bullying more than 11 and 12 years old females.

Academic Achievement

Academic achievement is one of the factors related to conduct problems. According to Totan and Atik (2011), students who had low academic achievement were bully-victims (students who take role as both bully and victim) and victims, while not involved students had high academic achievement level. Across 40 countries, Harel-Fisch et al. (2011) showed that there was a strong relationship between being bully and low academic achievement. In the light of these findings it can be speculated that academic achievement mediates the influence of conduct problems, or conduct problems mediate academic achievement; either way they are associated.

Outcomes of conduct problems

Conduct problems such as bullying, aggression, cyber-bullying show themselves in different symptoms that affect physiological and psychological health both in victims and bullies. For example in victims, they appear as, low psychological well-being, low social adjustment and psychological distress (Kepenekçi & Çınkır, 2006). In emotional level, they appear as sadness, anger, and revenge (Yaman & Peker, 2012). In terms of affecting physical health, they appear as dizziness, backache, and sleeping disorder (Arslan, Hallett, Akkas, & Akkas, 2012). Sometimes they show themselves as risk taking behaviors such as drug use, being sexually active and smoking cigarette (Alikasifoglu, Erginoz, Ercan, Uysal, A.Kaymak & Ilter, 2004). In addition, victims show low self-esteem (Çetinkaya, Nur, Ayvaz, Özdemir & Kavakcı, 2009), negative behaviors (Hilooğlu & Cenkseven Önder, 2010), low social-emotional and academic self-efficacy (Özer, Totan, & Atik, 2011), and anxiety (Şahin, Aydın, Sari, 2012).

In terms of being bully, bullies show hostility (Şahin, Aydın & Sari, 2012), low self-efficacy (Özer, Totan & Atik, 2011), irritability (Arslan, Hallett, Akkas & Akkas,

2012), negative social behavior and low level of life satisfaction (Hilooğlu & Cenkseven Önder, 2010), and poor appetite (Karatas & Ozturk, 2011).

Intervention/Prevention studies

An intervention program uses targeted strategies to decrease undesired behavior such as violence, aggression or promote individuals' or groups' mental health. A prevention program is a method that helps to reduce the likelihood of undesired behaviors or mental problems occurring before they happen. Protective factors related to conduct problems are important because both prevention and intervention programs aim to reduce negative effects of conduct problems, promote mental well-being, and enhance social and emotional learning. Intervention or prevention programs that addresses conduct problems are crucial to be able to deal with conduct problems.

In addition, a number of meta-studies about social-emotional learning, prevention and intervention meta-analyses have been conducted around the world. For example, social and emotional learning programs seem to have positive effects on students' social-emotional competencies and attitudes towards self, and others. These programs promote students' behavioral readjustment and reduce conduct problems, and also improve student's academic performance (Durlak, Weissberg, Dymnicki, Taylor & Schellinger, 2011). In addition, SEL programs can be conducted by teachers and school staff and do not require additional personnel to be able to conduct these programs (Durlak et al., 2011).

In addition, interventions seem to have positive effects on social- emotional learning, as well as reducing conduct problems such as violence and bullying, or mental health problems (Weare & Nind, 2011). Such interventions are often implemented in schools, or in after-school programs, for children as well as adolescents. Starting

intervention programs at early ages may increase the effectiveness of the programs and they might need to continue with older children (Weare & Nind. 2011).

There are a limited number of intervention studies in Turkey whereas there are many studies and a handful of meta-analyses about interventions and preventions in other countries. For the present analysis of studies about conduct problems, we were able to locate only ten articles. The reason why there are limited numbers of intervention studies might be the time period—ten weeks, or two years—that intervention studies required. Implementation of these programs in the schools needs time, arrangements related to school schedule, and permissions related to ethical and procedural issues. This is very time-consuming for researchers, who may often opt for simpler studies.

In one control-group study, Duran and Eldeleklioğlu (2005) indicated that students that attended anger management programs showed less anger than students that did not attend the program. Results showed that students who attended anger management control programs, whose duration was ten weeks, demonstrated less anger in terms of traits of anger, anger-in, and anger-out. In addition, results indicated that the anger management control program contributed to students' daily life in a positive way. In the light of these findings, it can be said that intervention programs are beneficial for students to develop social skills.

According to Yavuzer and Üre (2010), a psycho-education program that lasted ninety minutes twelve sessions helped to reduce the level of aggression, physical aggression, and hostility among adolescents. According to pre-test and post-test measurements, there were significant differences between two measurements. In addition, results showed that effects of the program continued even two months after the program.

Cenkseven (2003) conducted intervention research in Adana with 26 students, 13 students were the experimental group and 13 were the control group, who showed a high level of anger. Results showed that there were significant differences between pre-test and post-test. The experimental group showed improvement on expression of anger whereas control group did not.

To take all these points into consideration, even though there were limited numbers of studies in Turkey, designing an intervention program and measuring it with pre-test/post-test method was effective to reduce problems and develop skills to cope with these problems.

Need for more intervention/prevention studies in Turkey

In view of the findings mentioned earlier, and the findings that will be presented in Chapter 4, more intervention designs are needed in Turkey. In 2005, the Turkish Ministry of Education shifted national curriculum from teacher-centered to student-centered. This constructivist approach raised the importance of students' social-emotional competencies because constructivism by its nature promotes active learning and personal engagement through learning experiences. Conduct problems such as bullying, violence, and anger have negative effects on students' social-emotional learning competencies. Such problems point further toward the need for intervention/prevention studies in Turkey.

There is a gap in literature about effective curricular and non-curricular solutions to prevent or reduce conduct problems in Turkey. Conduct problems seem to be paid less attention these days however recent studies, conducted in Turkey, when analyzed together may point toward possible ways to develop effective intervention and prevention programs.

Most of the published intervention studies have only briefly summarized the intervention programs. There should be more effectively designed programs that address conduct problems and positive youth development in Turkey (Martin, 2012). Hence, the present study examines possible curricular and non-curricular solutions and how well they are supported across studies.

CHAPTER 3: METHOD

Introduction

The main purpose of the current study was to analyze studies related to conduct problems between 2000 and 2014 in Turkey, and to synthesize the findings of the studies regarding rates of students' involvement in the bullying process, rates of exposure to different types of bullying, rates of cyber-bullying, other types of prevalence data about involvement in bullying and school violence. Another purpose was to summarize the associative factors related to conduct problems such as societal factors, family factors, school factors, individual factors and curricular and non-curricular solutions that research studies have recommended. The other purpose was to provide a model giving a broad conceptual view across the studies. Model shows connections between these studies, and gathers all these individually collected data to be able to provide understanding of the concept under consideration and what is needed to be done in this whole concept.

In this chapter, the research design, sample selection of articles for analyzing, data collection process, method of data collection, and method of data analysis are explained.

Research design

Meta-analysis is often considered a quantitative method. However, for this study, a systematic qualitative technique that compiles, analyzes and, synthesizes information from different studies was used. The method can be utilized in various branches of social and positive sciences. When using the quantitative techniques, meta-analysis allows researchers to collect and combine relevant information from studies provide

precise statistical power and make precise estimations. However, the qualitative techniques also provide a general framework of studies and their assessments on a particular issue (Trikalinos, Salanti, Zintzaras, & Ioannidis, 2008). Qualitative meta-analysis is a method of blending and gathering studies on a related theme. In contrast to quantitative meta-analysis, does not use statistical methods. It uses narratives that describes and explains gathered studies (Ren, 2008). “Qualitative syntheses of qualitative and quantitative studies is increasing rapidly in literature” (p.317) (Suri & Clarke, 2009). Çalik & Sözbilir (2014) categorized content analysis in three different sub-sections; 1) Meta-analysis, 2) Meta-synthesis, 3) Descriptive content analysis. According to Çalik & Sözbilir (2014), meta-analysis combines and summarizes findings of collected studies whereas meta-synthesis combines and criticizes the findings (p.34).

This current study included meta-analytic and meta-synthetic aspects. The method was based on analysis and synthesis of studies between 2000 and 2014. In order to synthesize studies a unique coding system was developed based on prior research studies. After the coding process ended, data were examined to look for patterns across studies which illustrated a model that connects articles according to this coding.

Sampling

In current study, meta-analysis was used to analyze studies related to conduct problems conducted in middle and high schools in Turkey. To identify sample, keyword search was used. As a result of key word search, 65 articles -25 descriptive studies and 40 correlational studies- were collected.

Instrumentation

The instrument for this study was a database developed based on seven categories (See Appendix A).

1. Possible causes
2. Situational variables
3. Possible effects or prevalence
4. Other influences (cannot be manipulated)
5. Non-curricular suggestions
6. Curricular suggestions-interventions
7. Grounded?

These seven categories were used in order to code the 65 articles. The origin of these seven categories came from a coding system used for coding the articles. The coding system was developed by a research team. This coding system was based on theoretical frameworks of prior research in other countries, and then grounded and further developed while coding the first set of articles based in Turkey. The coding system was developed by using inductive approach. First, sample was narrowed as middle and high school conduct problems –related in Turkey. Primary schools and universities were not included in the coding process. Variables were evaluated in collected articles. Codes were formed related to variables in collected articles.

Originally, categories included four situational variables -category 2- (that can be manipulated, such as perceptions of students or teachers about violence and reasons for violence in their schools), as well as other influences-category 4- that cannot be

manipulated (such as age, gender, as well as certain school and family features). However, as the study progressed, it was discovered that rearranging these seven categories into various levels of associative factors was more informative for the analysis.

Other categories included topics related directly to the research questions of this study were:

1. Possible causes of conduct problems
2. Possible effects
3. Non-curricular suggestions
4. Curricular suggestions
5. Grounded or not? this codes whether suggestions are grounded directly in the research or not.

Validity of the current research was ensured by evaluating whether variables related to current research exist in collected articles. For example, research question 1 analyzes the prevalence of conduct problems and existence of variables related to was checked in the sample of collected articles. This process was done for the relevant variables in each research question.

Reliability of the current research was ensured by coding of all articles by three researchers. Due to the complexity of the coding process, each article was at least double-coded by two researchers, until consensus was reached. Some articles were triple coded by all three researchers involved when a consensus was not reached in initial coding. When a disagreement appeared among researchers, one of the researchers adjudicated to the process. All articles were coded under complete agreement of three researchers.

Method of data collection

According to a systematic key word research, descriptive, correlational, intervention studies conducted in middle and high schools in Turkey were collected. MA theses and PhD dissertations were not included in the sample, nor minor journals that are not indexed by the Bilkent databases. Studies that related to risk taking behaviors and psychological problems were not included in the sample.

Sampled articles were assigned identification numbers. A Microsoft Excel spread sheet was constructed according to these identification numbers, and all articles were organized, summarized and coded. The categories included authors, publication year, journal, research category, possible causes, situational variables and variety of other categories related to research characteristics. See Figure 1.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	New #	Authors	Pub year	Title	Journal	article lang?	Research category	New #	Possible CAUSES (can be manipulated) - USE CODING	Evidence of causes describe briefly **STAR if attn given to culture**	Situational variables - USE CODING	Possible EFFECTS or PREVALENCES (can be changed) - USE CODING	Evidence of effects describe briefly	New #
1	465	Haskan-Avci & Yildirim	2014	Violence tendency, loneliness and social support among adolescents	Hacettepe Univ Journal of Educ	Turk	Mediating factors	465	PEERS: Social Support; FAMILY FUNCT - less social support	UCLA Loneliness Scale, Social Support Scale (ASDO-R)	STUDENT CHAR?: Loneliness.	VIOL TENDENCY	Violence Tendency Scale (VTS)	465
55	466	Çetin, Eroğlu, Peker, Akbaba,	2012	The investigation of relationship among relational-	Educational Sciences	Eng	Mediating factors	466	x	x	STUDENT CHAR: Self-construal, psychological disharmony (Relational Interdep Self-Construal)	FREQ of CYBERBULLYING; FREQ of BEING CYBERVCTMIZD; PSYCH HEALTH	Revised Cyberbullying Inventory (RCBI); Depression Anxty	466
56	467	Çiğirçi	2011	School anger and loneliness among high school students	Turk Psikolojik Danışma ve Rehberlik Dergisi	Turk	Mediating factors	467		UCLA Loneliness Scale ==>	STUDENT CHAR: Loneliness	ATTITUDES-all students in school: Anger	Multidimensional School Anger Inventory	467 see 371
57	468	Sahin & Korkut Owen	2009	Aggression level of high school students who have different psychological needs	Turk Psikolojik Danışma ve Rehberlik Dergisi	Turk	Mediating factors	468	EXPOSURE INTERPERS SKILLS (relationship, competency and autonomy) FAMILY FUNCT: perceived parental attitudes, perceived level of	Basic Psychological Needs Scale (measuring need for relationship, competency and autonomy), subject questionnaire	STUD CHAR: spare time activities	AGGRESSION	Scale of Aggression	468
58														

Figure 1 An overview of database

Chapter 4 tables and appendices use identification numbers that were assigned to each article for easy reference in locating or re-locating articles as needed. The initial sub-categories for organizing articles were: 1) descriptive studies, 2) mediating factors studies, 3) intervention studies. There were 25 descriptive studies and 40 mediating factors studies. Intervention studies were coded however they were not included in the sample because the focus of the study needed to be narrowed, and they did not describe sufficient information to draw conclusions from them.

Articles were identified based on three strategies:

1. Key word searches in English and Turkish of Bilkent databases.
2. Scanned Tables of Contents of 4 major SSCI journals of Turkey, 2000-2014.
(Currently, the four general education journals that are SSCI in Turkey are:
Eğitim ve Bilim or *Education and Science*, *Kuram ve Uygulamada Eğitim Bilimleri* or *Educational Science in Theory and Practice*, *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi* or *Hacettepe University Journal of the Faculty of Education*, and *Eğitim Araştırmaları* or *Eurasian Journal of Educational Research*.)
3. Reviewed references of articles found for other articles possibly missed by the keyword searches.

Each strategy was further cross-referenced with these two keywords: Turkey, adolescence.

Conduct problem terms:

- Bullying
- Cyber-bullying
- Violence
- Violent behavior
- Types of violent behavior
- Aggression
- Types of aggression
- Anger

K12 program terms:

- High school
- Secondary school
- Middle school
- Students
- Adolescents

Table 1
Studies on adolescent conduct problems in Turkey, 2000-2014

Type of study	Number of studies	2000-2004	2005-2009	2010-2014
Descriptive studies:	25	0	10	15
Correlational studies:	40	1	8	31
Total:	65	1	18	46

Method of data analysis

Articles found by key word search were coded by using coding system developed by research team (See Appendix A). Each article was carefully read and coded. After the coding process for all 65 articles, a second-level analysis was then used to further analyze the coded data across articles to identify the overall patterns and trends.

Articles related to patterns that current study looked for were categorized according to research questions in Microsoft Excel program tabs that were constructed for each research question. All findings summarized in relevant tabs. Tables were constructed from summarized information in the tabs related to each research question and detailed findings synthesized in each table (See Appendices). Data from the long

appendices were then reviewed and carefully interpreted according to the order of research questions. All tables and summarized findings were gathered together and formed into a structured analysis (Chapter 4). Interpretation of data provided a model that illustrates a synthesis of studies from 2000 to 2014, which especially illustrates how research question 2 was approached.

CHAPTER 4: RESULTS

Introduction

This section shows the prevalence of bullying as reported by Turkish adolescents, combines the results that come from prior bullying studies, and compares how researchers measure bullying. This section differs from prior studies in terms of bridging individual studies and showing overall findings indicated by prior studies. Thus, this meta-synthesis helps to develop a model which describes what has been done so far and what further needs to be done. Study presents existing pieces of a puzzle and also show which pieces are missing. One way to look at this study is like solving puzzle.

Research question 1: Prevalence of bullying in Turkish schools

In this section, the prevalence of conduct-related problems is shown by summarizing the “bully status” studies. As described in Chapter 3, the study focused on conduct problems that relate especially to adolescents’ social development, and excluded studies on risk-taking or psychological problems in which students only harm themselves.

This section begins with a description of main instruments of studies that show how bullying studies in Turkey are measuring various aspects of bullying. Then, tables are provided to compare the rates of bullying across studies. The two types of rates were most common: (1) bully status, and (2) exposure to different types of bullying. In addition, a handful of studies are summarized about cyber-bullying and a brief analysis is provided about other forms of school violence.

Instruments for assessing bullying

Assembling the wide array of instruments used for assessing various aspects of violence in schools reveals that nine out of eleven studies used different instruments for assessing the bully status rates in each school. This section will briefly discuss the relative strengths and weaknesses of four instruments that were used most often in the context of Turkish schools. (See Appendix B for a full summary of all the instruments being used for summarizing bully –status rates as an aspect of school violence in Turkey.)

One of the important part of instrumentation is to understand why three studies showed higher victimization rates than the others. Kartal and Bilgin (2009a) used the Colorado School Climate Survey and rated victimization at 41.3% when sampling one elementary school, grades 4-8, in the city of Bursa. This rate was based on students who reported being bullied at least once a week or more. Perhaps the most likely reason for Kartal and Bilgin’s higher victimization rate might be that this study assessed the situation of witnessing other students being bullied, as part of the victimization rate. To take witnessing into consideration as a part of victimization rate might increase the percentages. In addition, the researchers evaluated teachers’ perception and this might cause students to answer questions about their own victimization more frankly.

A few years after this study, Atik, Ozer and Kemer (2012) rated victimization at 53% when sampling grades 6-8 at middle schools in the city of Ankara. Particularly interesting about these findings is that they are quite different from a study conducted in 2012 using a similar instrument at the same grade levels (Siyahhan, Aricak & Cayirdag-Acar, 2012). The latter study rated victimization between 6.2 and 22.9% depending on what type of victimization it was. The differences between two

studies might be coming from how these studies take bullying into consideration. For example Siyahhan et al. (2012) divides bullying status into subsections such as physical, verbal, direct or indirect. In contrast, Atik, Ozer, and Kemer (2012) approach similarly to other studies like bully, victim, bully-victim or not-involved. The other difference might be about the grade levels. Age difference might cause the difference between studies. Siyahhan et al. (2012) assess grades six to eight whereas Atik, Ozer and Kemer (2012) assess grades 9 to 12.

The second (30%) and third (%22) highest victimization rate (Alikasifoğlu et al., 2004-2007) assessed victimization according to a translated international instrument known Health Behaviour in School-Aged Children (HBSC). The HBSC was also used later in a much larger study conducted in coordination with the World Health Organization (Harel-Fisch et al., 2011). The reason that lies behind the high rates might be the time period that this instrument uses. As the HSBC assesses a 12-month period, this might have raised the rate in terms of number of incidents that happen in comparison to studies that evaluate in shorter periods such as only the prior month of victimization.

Rates of student involvement in bullying (“bully status”)

In this section, ten studies related to students’ involvement were analyzed. Outcomes of this analysis presented in Table 2. The table lists studies in order of lowest grade levels to highest, then by years published. When studies gave ages rather than grade levels, these have been converted to estimated grade levels for ease of reader interpretation. The total percentages for this study were re-calculated based on data provided about females and males only.

Table 2
Bully status rates reported in Turkey

Article ID # (Authors, year)	Bully status rates (estimated percent of student population examined by study)				Grades	Sample size	Study Characteristics
	Bully	Victim	Bully- Victims	Not involved			
Article 449 (Cenkseven Önder & Sari, 2012)	5.1	6.1	8.3	80.7	4-7	569	Bully and Victim Determination Scale: Child form (Pişkin and Ayas, 2007)
Article 416 (Kartal & Bilgin, 2009a)	3.3	41.3	29.9	25.0	4-8	688 +58 teachers	Colorado School Climate Survey (Garrity et al., 2000)
Article 475 (Pekel-Uludağı & Uçanok, 2005)	7.6	9.3	6.4	-	5-6	701	Peer Victimization Scale and Peer Bullying Scale (Mynard& Joseph, 2000)
Article 419 (S. Arslan, Hallett, Akkas, & Akkas, 2012)	5.0	8.0	7.0	80.0	5, 7, 9	1,315	Determination of Peer Victims and Bullies Scale
Article 457 (Siyahhan, Aricak, & Cayirdag-Acar, 2012)	Physical:1.2 Verbal: 9.9 Indirect: 2.4	Phys: 6.2 Verbal: 22.9 Indir: 12.2	Phys: 1.7 Verbal: 16.5 Indir: 3.8	76.8	6-8	419	Olweus Bully/Victim Questionnaire(Olweus, 1996)
Article 470 (Hilooğlu & Cenkseven Önder, 2010)	8.3	9.8	4.8	76.8	6-8	935	Bullying Scale (Kutlu, 2005)
Article 459 (Özer, Totan, et al., 2011)	6.0	21.0	10.0	64.0	6-8	721	Olweus Bully/Victim Questionnaire (Olweus, 1996)
Article 418(Sevda& Sevim, 2012)	5.3	5.9	5.8	83.0	9-10	1670	Multidimensional Scale of Peer Victimization (Mynard& Joseph,2000)
Article 479 (Alikasifoglu et al., 2004)	19.0	30.0	NA	NA	9-11	4153	Health Behaviour in School-Aged Children(HBSC 1997/1998)
Article 424 (Alikasifoglu, Erginoz, Ercan, Uysal, & Albayrak- Kaymak, 2007)	9.2	22.0	9.4	60.0	9-11	3519	Health Behaviour in School-Aged Children (HBSC) 1997/1998)
Article 423 (Atik, Özmen, & Kemer, 2012)	8.0	19.8	7.7	64.5	9-12	389	Olweus Bully/Victim Questionnaire (Olweus, 1996)

Studies that were analyzed use similar ways to define bullying for example, all of them have the pattern of students being such as bully, victim, bully –victim or not involved. Some studies describe the pattern as a cycle of bullying. Others approach as bullying category or bully status. In all these ways school students take different

role. For this study bully status was chosen because school students take a role or another, it may not entirely be a cycle. Students do not have to follow one role to another like a cycle does.

Of the twelve studies with comparable data about bully status, six were conducted in upper-primary or middle schools, five in high schools, and one in both middle schools and high schools. At least four studies were conducted in public school, including two studies that were conducted in both regular and vocational public schools; however, not all studies reported whether they were conducted in private or public schools.

Six of the twelve studies were descriptive survey research, and the other six were correlational studies that included some descriptive data. Sample sizes ranged from 366 to 4,153 students, with an average sample size of 1287 (see Table 2).

Examining bully rates in Table 1a, we find that the rate of students being classified as bullies in Turkish schools ranged from 3.3 to 19.0 percent, with a median value of 7.6. Notably, one of these studies broke bullying down into its component types (Siyahhan et al., 2012), showing only one rate as high as 9.9%. Examining bully status rates more precisely in terms of verbal (9.9%), indirect (2.4%), and physical bullying (1.2%), may have been the reason for this rate of 9.9%, as students were required to reflect more specifically on particular types of bullying behavior. This contrasts with the other studies that collapsed the bully status rates into one general category. Thus, some students may have rated themselves higher when they see and have to think about how verbal and indirect bullying also are considered as part of bullying. The highest rate of 19 percent of prevalence of violent behavior among high school students were reported by Alikashifoğlu et al. (2004) about Istanbul students in grades 9 to 11. By using stratified cluster sampling method, 4,153

students were selected randomly from 26 general, vocational, public and private schools. The international version of Health Behavior in School Age Children (HBSC) instrument was used as the instrument, and the data was collected between March and April in 2000. Notably, this study was conducted in an earlier year from the other studies, so it is possible that problems of bullying in Turkey might have decreased. However, the HBSC also assesses bullying in a somewhat different way from how rates are calculated by other instruments, as previously discussed. Nonetheless, using the same instrument and studying the same age group of students in grades 11-12, another group of authors reported a rate almost 10 percent lower three years later (Alikasıfoğlu et al., 2007). However, the publication dates can be misleading, as in 2004 study, the data was collected in 2000 and published in 2004 while in the 2007 study, and data was collected in 2006 and published in 2007. So, there is actually a six year gap between the studies. This might be one possible reason for 2004 study reported a rate 10 percent lower than 2007 study, as the schools may have improved their school climates during this six-year period.

Overall, rates of victimization in schools ranged more widely from 6.1 to 41.3%, with a median value of 12.2. Only five of the eleven studies rated victimization above 20%, which may be attributable to instrumentation issues discussed earlier. Nine of the 12 studies on bully status examined characteristics of students who were both bullies and victims as a special category. This is called being a “bully-victim.” Rates of “bully-victims” among adolescents in Turkish schools were estimated between 4.8 and 9.4%, depending on the students sampled and sampling procedures, with the only outlier being the Kartal and Bilgin study (2009), which estimated the bully-status rate at 29.9%. The rates of students not involved at all in bullying ranged from 25.0 to 83.0%, with a median value of 64.5. The one outlier study was again

Kartal and Bilgin (2009) with a lower rate of only 25.0% of students not involved.

This study will be further discussed concerning its approach to how bully status rates were being assessed in the instruments section that follows.

Rates of exposure to different types of bullying

Five out of sixty five articles were analyzed in this section. Crucial findings are summarized in Table 3. In this study, damaging property and hitting can be considered physical bullying, gossiping and rejection from group can be considered emotional bullying, and name calling and teasing can be considered as verbal bullying.

Table 3
Exposure rates to types of school violence in Turkish middle and high schools, as reported by students

Study	Study Features			Types of Bullying				
	Grades	Sample Size	Experiences reported by	Physical	Verbal	Emotional or indirect	Sexual	Property violence
Article 405 (Yurtal & Cenkseven, 2007)	5-8	433	Victims	63.7	56.3 to 58.5	44.3 to 49.4	-	45.3
Article 457(Siyahhan et al., 2012)	7-8	419	All students	27.96	47	26.3	-	-
			Bullies:	1.2	9.9	2.4	-	-
			Victims:	6.2	22.9	12.2	-	-
			B-Vs:	1.7	16.5	3.8	-	-
Article 447 (Türküm, 2011)	9-12	600	All students	6.3	16.3 11.2	-	6.2	7.5
Article 406 (Kepenekci & Çinkır, 2006)	9-12	692	All students	35.5	33.5	28.3	15.6	-
Article 417 (Türkmen et al., 2013) ²	9-11	6127	All students	58.3	20.1	19.3	-	-

Exposures to bullying were operationalized similarly by five articles in terms of the similar categories, or types, of bullying involved. These common forms of bullying

² From this article, the data come from Figure 1, p. 146.

were categorized as physical, verbal, emotional, sexual, and property violence (see Table 3). However, other articles used other categories in how they described types of bullying. To address research question 1b, five articles were analyzed in terms of their similarities and differences.

Kepekci and Çınkır (2006) defined physical bullying as pushing, kicking, pulling, and assaulting with the knife. They defined verbal bullying as name calling, sarcasm, threatening, teasing, spreading rumors and they described emotional bullying as humiliating, excluding from the group, discriminating. In addition sexual bullying was described by them as sexual assault, harassing by hand, and hassling. This is similar to how other studies defined these types of bullying. In addition, some studies used the concept of “indirect” or “emotional” bullying. Siyahhan, Arıcak & Cayırdag-Acar (2012) described indirect –or relational –bullying as gossiping and rejecting peers from the group. Two studies defined bullying in a slightly different way; one categorized excluding from the group as emotional bullying, whereas the other categorized this as indirect or relational bullying.

Two of the five studies were in middle schools, and three in high schools. Exposure rates varied widely from one sample to another. Yurtal and Cenkseven (2007) conducted study with 433 students in six different primary schools in Adana, which is one of the larger cities of Turkey. Similarly, Siyahhan, Arıcak, and Cayırdag-Acar (2012) conducted their research in four middle schools with 419 students, ages 12 to 14. The other three studies were conducted in three different cities Istanbul, Eskişehir, and Bursa which are the large cities of Turkey. Wide variations in exposure rates among students may be partially a factor of who in the school community (bullies, victims, teachers, or all students) were surveyed. In addition, it

may also be a factor of school climate variables within the participating schools, which were not reported.

A particularly large cross-sectional survey about prevalence of different types of bullying was conducted by Turkmen et al. (2013). The data were collected and results were reported in a form much different from the other studies, so it warrants special elaboration. Rather than rates as reported by all students, it compared how the aggressors and victims each reported three specific types of violence. Results showed that almost all of the students were involved in bullying behavior in one way or another; only 3.3% were neither aggressors nor victims. Physical aggression was the most prevalent form of bullying, 92.3% of all students demonstrated physical aggression and about 40% of students were victims of this type of bullying. Almost half of the students (46.9%) were bullied by using emotional harassment, and 62% were victims of relational harassment. About one in four (24.4%) was involved—took action as perpetrators—in verbal assault, and 45.8% were victims of verbal abuse.

Siyahhan, Aricak, and Cayirdag-Acar (2012) showed that students mostly were bullied verbally (47%), 26.3% of students were victims of indirect bullying, 27.96% of them were victim of physical bullying. In addition, they described bullying as “pure” or not. If it is “pure bullying,” it means that pure bully is a person who acts only as the bully, and not gets bullied by others, never the victim. Similarly, they categorized “pure victims,” as those who never bullies.

Not all studies with facts about prevalence fell nicely into the most common categorization (as used for Table 3) because authors analyzed types of bullying from different perspectives. For example, in a study about violence witnessed by teachers (Yavuzer, Gundogdu & Dikici, 2008), the rate of physical violence reported was only

reported at 14.1%. The study showed that 62.0% of males were involved in physical violence whereas only 2.8% of females. Similar to other studies, the researchers showed that males have a tendency to get involved in physical acts more than females. They also described teachers' perspectives on how they perceive violence. Teachers described acts of violence as indicated by students who carried weapons (such as guns or knives), had injuries, or made sexually improper remarks. Results showed that four teachers had also witnessed a student's death.

Rates of cyber-bullying

Seven studies were conducted between 2007 and 2013 that focused especially on the relatively new phenomenon of cyber-bullying and cyber victimization. For research question 1c, several studies that examined prevalence in terms of cyber-bully status, overall rates of cyber bullying, and the different types of cyber-bullying that are beginning to be monitored will be summarized.

In a study that focused on bully status rates in the context of cyber-bullying Özdemir and Akar (2011a) found that bully status rates were as high as 10.0% at three schools in Istanbul and Ankara. The study showed that 14% of students were exposed to cyber-bullying in different cyber-spaces, such as social sharing web sites like Facebook, mobile phones, and interactive games web sites.

Bayar and Uçanok (2012) addressed the issue of how bully status rates differed from the school environment to the Internet. The study was conducted in six cities from southern and western Turkey with secondary and high school students, ages 12 to 18. The study evaluated a variety of factors such as socio-economic status, gender, parents' education along with cyber-bullying and bully status. According to Bayar

and Uçanok (2012), not –involved students both in school and cyberspaces have more positive perceptions about school, teachers, and other students in school than bullies and bully –victims. Results showed that not involved students and bullies both in school and cyberspaces have positive perceptions towards their peers rather than bully –victims.

In a survey of all students, Erdur-Baker and Kavşut (2007) reported that rates of cyber-bullying varied from 3.1 to 30 percent. The reason behind the variety of rates was likely due to dividing cyber-bullying into sub-categories like chat room, short messages, and Facebook.

Initial findings have indicated that males take the roles of cyber –bully and cyber victim more than females. According to Erdur-Baker and Kavşut (2007), the frequency of the use of internet-based communication devices is positively correlated with being both a cyber-bully and cyber victim.

Yaman and Peker (2012) examined three types of cyber-bullying and the reasons students gave for engaging in them. This qualitative study was conducted in Sakarya (in western Turkey) in the 2010-2011 academic year with a sample size of 14 high school students from various schools. The study examined cyber-bullying in three different ways: types of cyber-bullying, reasons behind cyber-bullying, and outcomes of taking actions in cyber-bullying. The researchers showed three types of cyber bullying which are cyber verbal language, cyber-forgery, and hiding identity.

Yaman and Peker (2012) indicated the reasons for cyber-bullying are revenge, relieving boredom, and popularity. Results also showed that feeling anger, sadness, and revenge are outcomes of the being a cyber-victim. Yenilmez and Seferoglu (2013) examined cyber-bullying in terms of the teachers' views about cyber-bullying. The sample was 583 teachers from kindergarten, primary school, high

school, and special education institutions. They showed that 73.6% of the teachers sampled thought that not only adults but also teenagers take roles in cyber-bullying as perpetrators. In terms of gender, 65.2% of the teachers sampled thought that males tend to get involved in cyber-bullying more than females; however, they found that a teacher's gender has no effect on the teachers' perspectives about cyber-bullying. In addition, according to the teachers' views, being from low socio-economic schools or neighborhoods also increases the tendency of involvement in cyber-bullying.

Other types of prevalence data about involvement in bullying and school violence

Seven articles related to disclosure, bullying in past month, and the most frequent types of bullying were summarized in this section. Table 4 shows outcomes of this analysis.

Table 4
Other facts about the prevalence of bullying and school violence in Turkish middle and high schools

Study:	Grades	Sample: Size	Issue	Reported by	Findings
Article 405 (Yurtal & Cenkseven, 2007)	5-8 (ages 10-14)	124 (/433 surveyed)	Disclosures	Victims	75.0% talked to friends 62.1% asked for help 61.3% talked to teachers
Article 408(Kartal & Bilgin, 2009a)	4-8	545 ss, 87 ts	Disclosures	Students and teachers	40.9% students disclosed to friends, 62.1% - teachers believed students disclose to adults
Article 451(Bayraktar, 2012)	7-12	509 ss Ankara, 544 N Cypr,	Bullying in past month	Students	80% had bullied at least once in past month
Article 476(Çetinkaya, Nur, Ayvaz, Özdemir, & Kavakci, 2009)	5-8	521	Most frequent types of bullying	Students	Most freq physical bullying: Pushing Most freq verbal bullying: Name calling Most freq sexual bullying: Disturbing touches
Article 479(Alikasifoglu et al., 2004)	9-11 (ages 15-20)	4153	Physical violence	Students	42% had been in a physical fight; 7% fights that required medical treatment; 7% had been bullied with a weapon on school grounds; 8% carried a weapon on school grounds
Article 407 (Deveci, Acik, & Ayar, 2007)	5-8 (ages 10-14)	3725	Physical fighting	Students	74% victim at least once 19.8% - serious injuries 16% - had to see a physician
Article 443(Kaya et al., 2012)	High school-grade 9 to 11	930	Aggressive behaviors	Students	Beating others: 34.5% Beating up: 40.7% Abused sexually: 21%

For research question 1d, other facts about prevalence of bullying and school violence were examined. Disclosure is one of the aspects of bullying process. We can describe disclosure as talking with someone on a particular problem or seeking for help. 75% of students talked to their friends, 62.1% of students asked for help, and 61.3% percent of students talked to their teachers (Yurtal & Cenkseven, 2007). In terms of bullying in a past month, 80% percent of students had bullied in past month (Bayraktar, 2012). Most frequent types of bullying were pushing (physical), name calling (verbal), and disturbing touches (sexual) (Çetinkaya, Nur, Ayvaz, Özdemir, & Kavakci, 2009).

Research question 2: Associative factors of school violence

This section was derived from several key studies that examined school violence. For instance, Benbenishty and Astor (2005) developed a heuristic model that shows school violence based in part on Bronfenbrenner's (1979) ecological developmental theory. This heuristic model shows relationship between victimization and associative subsystems such as school climate, school size, location, school policy, awareness, individual factors, community, culture etc. Avcı and Güçray (2013) modeled the relationship between media, peers, verbal violence, physical violence and attitudes. Similarly, relationship between violence and associative factors were modeled by other Turkish authors as well (Işıklar, Şar & Çelik, 2012; Bayraktar, 2012).

In addition, the systematic review of school interventions by the Dataprev Project was an important analysis in its international scope. By collecting and summarizing findings from over 500 studies in nine countries, Weare and Nind (2011) clarified the features of prevention programs in schools that promote positive mental health among children and adolescents. They gathered their findings in four different areas

which were; 1) positive mental health and well-being -youth development, self-esteem, self-concept-, 2) social and emotional learning -competence, coping skills etc., 3) difficult behavior -violence, bullying, 4) mental health disorders and problems -anxiety, depression-. In this section, associative factors, -societal factors, school factors, family factors, and individual factors-of conduct problems will be analyzed. As can be seen from Figure 1, associative factors are nested. Each factor is related to each other and the ways they might affect the outcome in a positive or negative way depends on how they are structured around an individual.

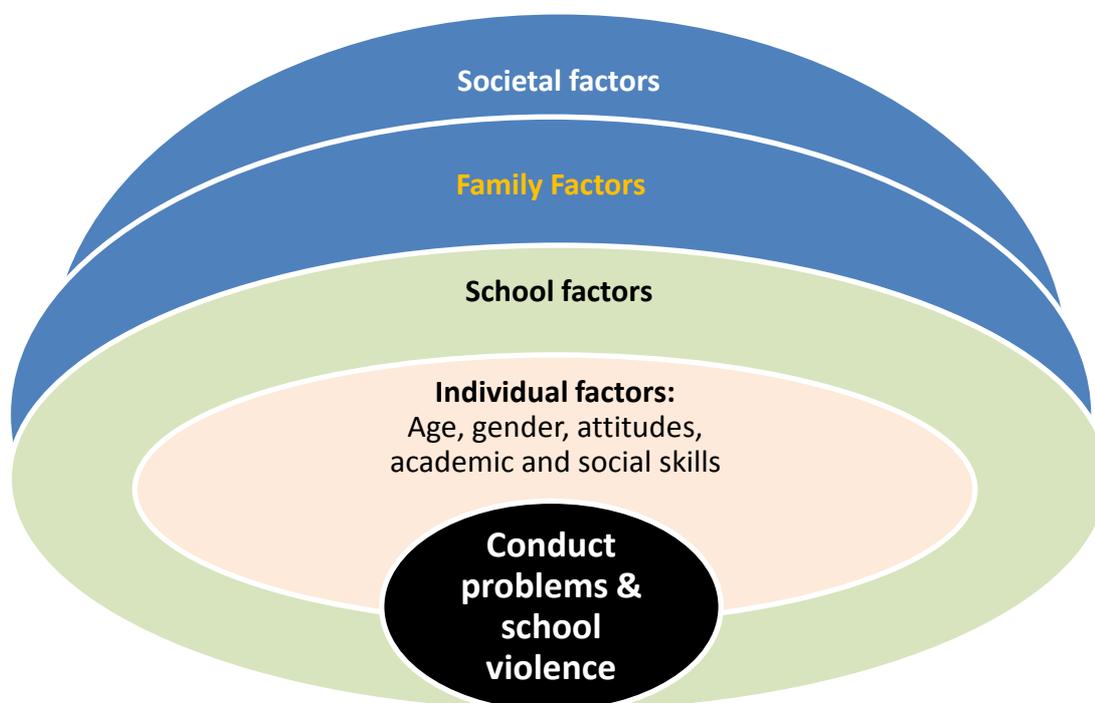


Figure 2³ Conceptual framework of associative factors underlying conduct problems and school violence

Societal factors

In this section, 13 studies related to societal factors were summarized in table 5. It shows general overview of the issue. Detailed analysis presented in Appendix C.

³ Developed by research team.

Table 5
Societal factors that are associated with conduct problems in Turkey (n=13articles)

Category of societal factors	Number of Articles	Important findings
Neighborhood factors and violence in the students' general environment	2 articles	Neighborhood risk and neighborhood safety were two of three factors found to predict adolescents' aggressive behaviors.
Exposure to violence or abuse in the past	6 articles	Bullying was more common among students who had been violently treated by family members in the past, or who had witnessed family violence than students who had not witnessed such violence. Past experiences of violence in school were also contributing factors to aggressive behavior.
Internet and media use by students	3 articles	There was a relationship between being a cyber-bully and frequency of internet usage. Frequency of internet usage associated with being cyber-bully. Media also contributed to adolescents' violent behavior.
Socio-economic level of schools	2 articles	Types of bullying varied by socio-economic level of schools. Overall, the most frequent type of bullying was emotional, and its frequency varied by socio-economic level of schools.

The coding of all 65 research articles in our sample yielded four main categories of societal factors reported across only 13 studies. These categories are: 1) Neighborhood factors, 2) Exposure of students to violence or abuse in their past history, 3) Internet and media usage by students, and 4) Socio-economic levels of schools that students attend. While the exposure of students to violence usually occurs in family settings, societal factors were identified as an additional category because, as illustrated by the conceptual framework (Figure 1), the society as a whole, and its social services, determine how family violence is accepted, rejected, or addressed by each society⁴. A fifth category of peer influences was also identified as relevant to societal factors; however, we decided that this category is more appropriate to report at the school level because peers are usually, though not always, encountered through schools. Appendix C summarizes some of the key findings from the 13 studies that describe societal factors that appear to influence the rate of

⁴ When current violence as part of a student's family setting was identified, this was coded (and often described by researchers) as an element of family functioning, which is described in the section on family factors.

conduct problems. The table gives a general overview of how these factors appear to have effects on conduct problems. More details about all the articles on societal factors and their primary findings can be found in Appendix C. For example, it appears that being exposed to violence in the past might be the reason behind student' attitudes towards bullying (Deveci, Acik, & Ayar, 2007). In addition, the frequency of media-internet usage appears to increase the rate of cyber-bullying or cyber-victimization (Erdur-Baker & Kavşut, 2007).

An important category of societal factors associated with conduct problem is related to neighborhood. Yıldız and Sumer (2010) showed that neighbourhood risk and neighborhood safety predict aggressive behaviour of adolescents.

Moreover, while media/internet usage is often considered as an important twentieth century set of skills, it is also an important factor related with conduct problems. In this study three articles were found and analyzed. To summarize essential findings, frequency of internet usage positively correlated with bullying (Erdur-Baker & Kavşut, 2007), and most common spaces for cyber-bullying were social sharing web sites like Facebook, and mobile phones (Özdemir & Akar, 2011). Media was reinforcement of students' attitudes towards violence and had contribution to demonstrate violent behavior (Avcı & Güçray, 2013). Technology has an important societal role nowadays and much more attention is needed to clarify the differing ways in which media/internet usage is associated with bullying in detail.

Furthermore, the socio-economic level of a school is another aspect of societal factors that may influence conduct problems in schools. In this study two articles related with socio-economic status were found and analyzed. Both studies indicated that types of bullying varied by socio-economic level of schools. Due to the limited

number of the studies, more research is needed to identify the nature of the problem in detail.

Family factors

This meta-analysis revealed that 28 of the 65 studies in our sample had analyzed family factors as influences on conduct problems. From these 28 studies, six categories of family factors were identified as: family functioning, the family's socio-economic level, parent occupations, parent education, marital status, and siblings. Table Appendix D summarizes key findings from these 28 studies, and Appendix D describes all 28 studies in more detail.

Table 6
Family factors that are associated with conduct problems in Turkey (n=56 articles)

Categories of family factors	Number of Articles	Major findings:
<i>Family functioning, significant results</i>	13 articles	Effects of perceived level of support from the family , family's financial status and presence of violence in the family on student aggression were significant. Students who had been treated violently in the past by their families were far more likely to be bullies, victims, or both, compared to students who had not been treated violently.
<i>Family functioning, with non-significant results</i>	2 articles	
<i>Socio-econ levels (SEL or SES) of families</i>	10 articles	There was a significant positive relationship between bullying and socio-economic level of families. Victims were more likely to have a lower socioeconomic status. Students from families with high SES had a tendency to demonstrate high rates of physical aggression. High family income was a predictor of violence related behavior. However, only about 5 of the 15 studies had significant results while the others found no significant results.
<i>Socio-economic levels of families with non-significant results</i>	5 articles	
<i>Parent occupations</i>	4 articles	Status of parents' employment was important. Majority of perpetrator fathers were unemployed same as mothers. Children of businesswomen participated in violence more than children of housewives. Fathers' occupation had significant effects on bullying.
<i>Parent education: Impact</i>	5 articles	Students from less educated family were at highest risk of exposure to physical violence. One study indicated that bully-victims had less educated mothers. Also, there were mixed results among the studies about the significance of parent education with respect to bullying overall, with three studies indicating that there was not a significant relationship between parent occupation and bullying.
<i>Parent education: Impact with non-significant results</i>	3 articles	
<i>Marital status</i>	2 articles	Bullying was more frequent in families in which parents are separated or one of biological parents absent.
<i>Siblings</i>	2 articles	There was a significant relationship between number of siblings and bullying. Students who have four or more sibling demonstrated more bully behavior.

One of the important categories of family factors related to conduct problem is family functioning. Deveci, Acik & Ayar (2007) showed that over 40% percent of violence experienced by children came from family members (mothers, fathers, siblings). Both bullies and victims perceived their families negatively in terms of communication, behavior control, roles, and responsiveness (Cenkseven Önder & Yurtal, 2008). Yalçın (2007) indicated that perceived levels of family support

significantly influenced aggression. Presumably, the higher perceived family support was, the lower the students' reported levels of aggression.

In addition, the general parenting attitudes were important. Eldeleklioğlu (2007) showed that democratic parental behavior decreased aggressiveness whereas authoritarian parental behavior increased it. There was also a relationship between bullying personality and attitudes of mother (Asici & Aslan, 2010). Further, family support decreased school dropout risk (Özer, Gençtanırım, & Ergene, 2011).

Family socio-economic level was another predictor of conduct problems. Across a number of studies, there was a significant positive relationship between bullying and socio-economic level of the family (Çetinkaya et al, 2009). Alikışıfoğlu et al., (2007) revealed that victims were more likely to be from lower socio-economic backgrounds. Correspondingly, Pişkin (2010) also found that students from high socio-economic level were commonly engaged in bullying compared to students from middle socio-economic level (Pişkin, 2010). Eroğlu (2009) and Gündoğdu (2010) also identified differences between students from high socio-economic level and those from lower levels in terms of their higher rate of physical, verbal, direct aggression and anger in favor of students from families with high income. However, five studies showed non-significant results. The reason might be that their data may not have had enough representation in terms of SES diversity among the families from the schools sampled. Families were classified as poor, average and high in socio –economic status, however, number of families that belonged to one of the three categories might be the reason. For example, one study focused on diversity among low SES families. Two studies focused on diversity on these three categories however majority of the sample belonged to high and average categories. There was not sufficient representation among categories in terms of number of families in the

groups. Moreover, parents' occupation was another important aspect of family factors. In a study of 563 randomly-selected students in the city of Sivas, there was a statistically significant relationship between fathers' occupation and bullying (Çetinkaya et al., 2009). In the same category of parental occupation, family's employment status was also an important factor with students' exposure to violence. For instance, Deveci et al. (2007) showed that fathers who were perpetrators were also unemployed (18%), while only 13.3% percent had regular jobs; among perpetrator mothers, 17.6% percent were unemployed. Another study indicated that students whose mothers were businesswomen participated in violence more than whose mothers were housewives (Türkmen et al., 2013).

In addition, parental education level was another associative factor of conduct problems. Students whose family finished only basic level of education were at the highest risk of exposure to physical violence (Deveci et al., 2007). Bully-victim students had less educated mothers and difficulties to talk with their parents compared to other students (Alikışifoğlu et al., 2007). In contrast, Türkmen et al. (2013) showed that students with university graduate mothers were verbally abused more frequently. More qualitative research might be helpful to explain these findings.

Marital status of parents and siblings was an important family factor. Türkmen et al. (2013) revealed that bullying was more frequent in families in which parents were separated or one of the biological parents were absent. There was also a relationship between numbers of siblings and bullying, students who had four or more siblings demonstrated bullying behavior more (Çetinkaya et al., 2009).

School factors

This meta-analysis illustrated that 40 of the 65 studies in the sample had analyzed school factors as a category of associative factors of conduct problems. From 40 studies, five categories of school factors were identified as: school types, place of violence, school environment, peers, and counseling and support skills of teachers. Appendix E summarizes key findings from these 40 studies.

Table 7

School factors that are associated with conduct problems in Turkey (n=44 studies)

Categories of school factors	Number of Articles	Important findings
<i>School types with significant results</i>	7 articles	School type was a predictor factor of violence. Frequency of being bullied with weapons was more common in public schools rather than private schools. Most victimized group was vocational high school students whereas in 3 studies that compared private and public schools, it was found that there were more bullies among private school students.
<i>School types with non-significant results</i>	1 article	One study showed non-significant results related to school types.
<i>Place of violence</i>	6 articles	Most common places were classrooms, outside of the school, school corridors, playground, sport center and canteen/cafeterias.
<i>School environment</i>	12 articles	Frequency of bullying and being victimized decreased, altruistic behaviors. Seven studies indicated that students with more negative school perceptions showed higher rates of bullying and victimization.
Perceived preventative measures taken by school	4 articles	One study stated verbal warning and formal warning were the most common type of measures. Two studies indicated that, communication, meeting with parents and students, seminars, counseling- individual and group- were common measures. . One study showed that common measures were banishing students for a short time, dismissing students, and arrest of students by police.
<i>Peers</i>	13 articles	Peer relationships were shown as an important factor which leads to victimization. Peer relation was a predictor of violent behavior. Peer relations were mediating factor of physical aggression.
<i>Counseling and support skills of teachers</i>	1 article	Some teachers were resistant to working with counselors, and counselors sometimes lacked knowledge and skills for using different of disciplinary approaches.

School types are one of the important associative factors of violence, with seven studies conducted to show this strong association (e.g., Türküm, 2011); however, the studies showed mixed findings, and one study also had non-significant results. In a study of 600 students in Ankara city, vocational high school students were found to be in the highest rate of victimized group whereas private school students were more often in the bully group (Ayas & Pişkin, 2011). In contrast, Yerlikaya (2014) revealed that vocational high school students demonstrated bullying behavior more often than students who attended other school types. Celbiş, Karaoğlu, Eğri & Özdemir (2012) used cross-sectional descriptive study type of research to show that attending vocational high school was a predictor of violent behavior. In contrast to other studies, Arslan, Savaser and Yazgan (2011), showed that rate of being both bully and victim were lower in vocational high school compared to regular high school students. To understand the relationship between conduct problems and school type, more research is needed.

In terms of the place of violence, Kepenekçi and Çınkır (2006) showed that most common place was classrooms, followed by places outside of school, school corridors, playground, sport centre and canteen. In a study of students, grades 4 to 8, Yurtal and Cenkseven (2007) indicated that playground was the most common place, followed by classrooms, outside of the school and school corridors. As younger students spend more time on the playground, this hardly seems surprising. Similarly, Kartal and Bilgin (2009b), grades 4 to 8, indicated that bullying mostly happened in school yards.

Another category of school factors is the school environment itself, which includes how welcoming or adverse it is perceived to be by students. Alikashifoğlu et al. (2004) showed that poor perception of school is associated more with students who

are involved with physical fights. Similarly, bully-victims' self-reported ratings of school climate were lowest whereas victims' and non-bullies' positive school climate ratings were highest (Kartal & Bilgin, 2009). Çalik et al. (2009), who investigated student perspectives from three schools, found that a positive school climate decreased the frequency of bullying and being victimized. Equally important, students with more negative school perceptions showed higher rates of bullying and victimization, and students who bullied others had more accumulated negative school perceptions rather than non-bully students (Harel-Fisch et al., 2011). In a study of 544 students in grades 7 to 12, Bayraktar (2012) revealed that positive attitudes of teachers and the psychological environment of the school were strongest predictor factors of less bullying.

In terms of school dropout risk, frequency of disciplinary punishment increased school dropout risk and teachers' support reduced it (Özer, Gençtanırım & Ergene, 2011). Measures taken by school to prevent conduct problems are other associative school factors. According to Kepenekçi and Çınkır (2006), 34.5% percent of measures were a verbal warning, 16.0% was formal warning. Pişkin (2010) showed that common measures were banishing students for a short time, dismissing students, and arrest of students by police. In addition, holding seminars, giving responsibilities to students who were prone to bullying and communication were most common measures taken by teachers and counselors (Sahin, 2010). Similarly, meeting with students and parents, collaborative works with classroom guidance teacher, individual counseling, reminding rules, and group guidance were measures taken by school counselors (Atici & Cekici, 2012).

Peer relation is one of fundamental components of school life. Eldeleklioğlu (2007) showed that peer pressure may increase aggressiveness. In addition, Gunduz &

Celikkale (2009) showed that there was a positive relationship between peer pressure and level of anxiety. Students who spend more time with their friends in the evenings are more likely to be involved in physical fights (Alikasıfođlu et al., 2004).

According to Pekel-Uludađı & Uçanok (2005), bully/victim students were rejected by their peers.

Individual factors: Gender and age most frequently studied

Gender was examined as an independent variable in nearly 66% of the studies (43) in our sample of 65 studies, and age (or gender) was an independent variable in over 43% of the studies (28). The most commonly studied dependent variables were the likelihood of being a bully or victim, according to gender and age. In addition, a handful of other dependent variables were examined with respect to gender and age. Appendix F shows detailed analysis of individual factors.

Table 8
Gender-related factors that are associated with conduct problems in Turkey (n=42 articles)

Category of influence	Number of Articles	Important findings
Likelihood of being a bully, or involved in violent or aggressive behaviors	14 articles	Male students more likely to be bullies or bully/victims, or to “exhibit bullying behaviors. For a male student, the likelihood of being involved in violent behaviors was 8.4 times higher when compared with a female student. Across four studies, male high school students’ physical aggression levels are significantly higher than female students.
Likelihood of being a victim or not involved	5 articles	Females are more likely to be a victim or not involved.
Who bullies who?	1 article	Males bully males more, while females bully females more.
Encounters with bullying	1 article	Males encountered bullying more than females.
Types of bullying behaviors	5 articles	Males encountered more types of bullying than females. Males experienced more physical and verbal bullying than females.
Types of victimization Experienced	3 articles	Victimization rate of relational bullying and teasing were significantly higher for females. Females were more often victim of indirect bullying compared to males.
Attitudes	2 articles	Older males most likely to have “bullying attitudes” (such as pushing, name calling.). Across countries cumulative negative school perception was stronger for females rather than males.
Relational behaviors	5 articles	Gender mediated relationship between submissive behavior and cyber bullying, cooperative behaviors and peer relations, popularity level and aggression, loneliness and level of anger.
Cyber-bullying	3 articles	One study showed that male students perform more cyber bullying behaviors compared to females. In contrast, one study showed no effects. One study also indicated that males become cyber victims more than females.
<u>No</u> -gender effects	3 articles	There were no gender effect in terms of problem solving, risk of school dropout and social skills in 3 studies about conduct problems in schools.

Table 9
Age-related factors that are associated with conduct problems in Turkey (n=25 articles)

Dependent variables	Number of Articles	Important findings
Age	7 articles	Students who demonstrated bullying more often were older ones and who demonstrated less bullying behavior were younger ones. There was statistically significant relationship between age and bullying.
Age-related factors with non-significant results	3 articles	These three studies showed non-significant results related to age-related factors.
Grade level	11 articles	There was statistically significant relationship between grade level and bullying. Grade 9 students were victims were as grade 10 and 11 students were bullies.
Grade level with non-significant results	4 articles	These four studies showed non-significant results related to grade level.

Gender-related factors are one of the important associative factors related to conduct problems. In this meta-analysis, eight categories were identified related to gender: 1) likelihood of being bully or involved in violent aggressive behaviors, 2) likelihood of being a victim or not involved, 2) who bullies who?, 3) encounters with bullying, 4) types of bullying behaviors, 5) types of victimization experienced, 6) attitudes, 7) relational behaviors, 8) cyber-bullying

In terms of the likelihood of being a bully or being involved in violent/aggressive behavior, males were more likely to be bullies or bully-victims (Pişkin, 2010; Erdur-Baker & Kavşut, 2007; Kartal & Bilgin, 2009b; Ayas & Piskin, 2011). Compared to females, male students were involved in violent behavior 8.4 times more (Eroglu, 2009). In terms of likelihood of being a victim, females were more often victims (Erdur-Baker & Kavşut, 2007; Piskin, 2010; Özer, Totan & Atik, 2011). Female

students were also more often not involved (Cenkseven Önder & Sarı, 2012; Hilooğlu & Cenkseven Önder, 2010).

Moreover, for who bullies who category, males bullied males more, whereas females bullied females (Arslan, Savaser&Yazgan, 2011). In terms of encountering bullying, male students encountered bullying more than female students (Piskin, 2010).

Other important gender-related factors are types of bullying behaviors and types of victimization. Males experienced more physical and verbal bullying compared to females (Kepenekci & Çınkır, 2006; Deveci, Acik & Ayar, 2007; Siyahhan et al. 2012). Similarly, Piskin (2010) showed that males encountered more types of bullying than females. Males reported higher level of bullying compared to females, even though differences reached significance only for overt bullying (Arslan, Hallett, Akkas & Akas, 2012). In terms of victimization, females were more often victims of indirect bullying than males (Siyahhan et al., 2012). Females reported higher levels of victimization for all scales compared to males, with significant results for teasing and relational victimization ($p<0.01$) (Arslan, Hallett, Akkas & Akas, 2012).

In terms of attitudes, across countries—not only in Turkey, effects of cumulative negative school perception on bullying were stronger for females than males (Harel-Fisch et al., 2011). According to Yurtal and Cenkseven (2007), who surveyed students aged 10 to 14, older males had more bully attitudes, such as pushing, calling names, spreading rumors. Gender also seems to be a mediating factor between relational behaviors such as submissive behavior and cyber-bullying (Peker, Eroğlu & Çitemel, 2012). Females displayed cooperative behaviors more often in peer relations whereas males displayed bullying (Aypay & Durmuş, 2008). Popularity and aggression were other relational behaviors. For instance, males with low popularity were more likely to show high aggression (Yavuzer, 2013). Compared to students

with a high level of loneliness, females showed a high level of anger experiences whereas males did not (Çivitçi, 2011).

For cyber-bullying issues, males were again more likely to become virtual bullies (Özdemir & Akara, 2011). Male students performed more cyber-bullying and became cyber victims more than females (Şahin, Aydın & Sari, 2012). Though, in contrast, Özdemir and Akara (2011) showed that gender had no effects on cyber-bullying.

Lastly, studies to date in Turkey have shown that gender had no effects on interpersonal problem solving (Arslan, Hamarta, Arslan & Saygın, 2010), school dropout risk (Özer, Gençtanırım & Ergene, 2011), or social skills (Peker & Gültekin, 2014).

Aside from gender, age (or its correlate of grade level) was the other associative factor studied most frequently as individual factors related to conduct problems.

Yıldız and Sumer (2010) showed that the frequency of aggressive behavior increased as students grew older. Similarly, Yurtal and Cenkseven (2007) found that students who demonstrated bullying more often were the older ones, while younger students demonstrated less bullying behavior.

Similarly, 11 studies showed a significant relationship between grade level and bullying. To illustrate, being exposed to physical violence was higher in eighth graders compared to fifth graders, and tenth and eleventh grade students were bullies whereas ninth grade students were more likely to be victims (Deveci, Acik, & Ayar, 2007; Alikışıfoğlu et al., 2007). Similarly, Ayas and Piskin (2011) showed that eleventh grade students expressed their anger in destructive ways compared to ninth and tenth grade students. Contrary to most of the studies on gender differences, four

articles showed non-significant results related to grade level. There might be two reasons for these non-significant results; 1) homogeneity of the sample, 2) age differences between the Turkish education system and other countries' education system. Starting ages to school and systems that divides students into grades were different between Turkey and other countries. That might be the reason for age-related issue.

Individual factors: Academic achievement and personal characteristics

Individual factors are closest among nested factors to core in Figure 1. The core-fundamental part- of the figure is conduct problems and individual factors are closest set of factors related to the core. In this section there are five categories which are: 1) Academic achievement, 2) Perceived reasons for bullying or cyber-bullying, 3) Bully characteristics, 4) Victim characteristics, and 5) Measures taken by victims.

There was strong relationship between being bully, bully-victim and lower academic grades (Harel-Fisch et al., 2011; Özer, Totan & Atik, 2011). Gunduz and Celikkaleli (2009) indicated that academic efficacy and aggressiveness were negatively correlated. In addition, Ada (2010) showed that students who were academically successful were found to engage in and be exposed to verbal bullying more often than other students.

Perceived reasons for bullying is another individual factor associated with conduct problems. Two studies showed that common perceived reasons were family functioning, family income, media, internet and peers (Deveci, Acik & Ayar, 2007; Sahin, 2010). According to Yaman and Peker (2012), reasons for bullying were having fun for feeling better and joy, and reinforcing friendship like backing up for

friends. In addition, provocation, jealousy, and swearing were other perceived reasons (Deveci, Acik & Ayar, 2007).

Bully characteristics are another aspect of individual factors. Bullies perceived their families negatively in terms of communication, functioning, roles (Cenkseven Önder & Yurtal, 2008). According to Ada (2010), bullies had poor self-esteem and negative behaviors at school. Similarly, Eksi (2012) showed that bullies displayed selfish behaviors. Equally, Aypay and Durmuş (2008) showed that bullies demonstrated less cooperativeness attitudes.

In terms of the personal characteristics of children who are likely to be victimized, eight studies in the sample summarized these characteristics. Rejected children were more likely to experience terror, over victimization, relational victimization, and attacks on property rather than popular children (Pekel-Uludağı & Uçanok, 2005). Victims perceived their families negatively in terms of communication, functioning, and roles (Cenkseven Önder & Yurtal, 2008). According to Eksi (2012), non-bullying victims show more resoluteness as a personal trait compared to victims and bully-victims. In terms of behavioral pattern, victims showed more submissive behaviors compared to bullies (Peker, Eroğlu & Çitemel, 2012; Atik, Özmen & Kemer, 2012). Victims demonstrated more avoidant behaviors (Aypay & Durmuş, 2008).

In terms of bullying towards teachers, inexperienced, soft-tempered, and extremely serious teachers encountered bullying more often (Özkılıç, 2012).

Another individual factor is measures taken by victims. Six studies in our sample summarized these measures. Students talked with a friend about being bullied more often (40%), whereas 33% percent of students talked to their parents. And only

13.9% percent of students talked with an adult in the school (Kartal & Bilgin, 2009a). Showing some variance from this study, Yurtal and Cenkseven (2007) showed that 75% percent of students talked to their friends after they had been bullied, while 62% percent of students asked help from somebody, and 61% percent of students talked with their teachers. Two studies targeted same age group-10 to 14- however in 2009 study; teachers were also participants different from 2007 study. This might be the reason for big differences between two studies. Protecting themselves was the most common measure (32.4%). Other measures taken to prevent further bullying were asking help from school administration (29.69%), from a friend (18.4%), from teachers (6.3%) and from parents (3.5%) (Kepenekci & Çinkir, 2006). According to Kartal and Bilgin (2009a), students mostly talked with their friends and parents, few students talked with their teachers. This study also targeted same age group mentioned earlier and this might be the reason why they talk to parents more. In addition, social skills, submissive behaviors, seeking for help, social support, avoiding, resisting, and optimism were strategies against bullying (Peker & Gültekin, 2014).

Research question 3: Solutions recommended by research

In this section, curricular and non-curricular solutions recommended by research will be discussed, with attention to the 54 out of 65 studies that provided well-grounded evidence for their recommendation. A synthesis of this research literature highlights curricular gaps and what is needed for prevention and intervention programs in Turkish secondary curricula.

In this section studies are divided into two categories as described earlier; 1) Non-curricular solutions and 2) Curricular solutions. In data analysis, these categories were coded into two sub-categories; 1) Grounded and 2) Ungrounded. For reporting

purposes, only the grounded studies will be discussed. The grounded studies' solutions were those that matched with their findings; in contrast, the ungrounded recommendations seemed to only reiterated popular beliefs about how to reduce bullying or school violence in schools without showing how such techniques linked to their particular findings. In other words, for the grounded studies, the results and recommendations were clearly linked whereas for the ungrounded studies the same recommendation might be given by simply using common sense. Thus, the ungrounded solutions are really not informative and so will not be reported in this analysis.

Non-curricular solutions recommended

The category of non-curricular solutions is divided into eight sub-categories; 1) Improve school climate, 2) Identification of Problem, 3) Improve communication, 4) Counseling practices, 5) Teacher education or training, 6) Raise awareness, 7) Societal solutions, 8) Policies.

In line with research on the associative factor of school environment, creating a positive school climate is important to reduce violence. Kartal and Bilgin (2009) stated that positive school climate was important to reduce bullying. Positive school climate and democratic school system reduced bullying and gave an opportunity to students to express themselves (Çalık, Özbay, Özer, Kurt & Kandemir, 2009; Eldeleklioğlu, 2007).

Identification of problem is the use of strategies to recognize that conduct problems exist in a school or community. Students, teachers, parents need to be educated or informed about hazards of technology students might face, how they might wisely use communicative technology by considering others' rights and ethical issues, and

the school counselor might provide instructional information about these issues (Özdemir & Akar, 2011; Peker, Eroğlu & Çitemel, 2012; Şahin, Aydın & Sari, 2012). Identification of types of violent behavior and factors that lead to these types of behaviors might be useful to prevent students from aggressive behaviors, and the differences in expressing anger between males and females need to be considered in this identification process (Eroglu, 2009; Kaya, Bilgin, & Singer, 2012; Şahin & Korkut Owen, 2009).

Improving communication is about taking direct action for communicating specific problems between parents, teachers, students, administration, and counselors.

Bullying, violence, and aggression might be reduced or prevented by education and collaboration of parents, teachers counselors, students, health practitioners, and community (Pişkin, 2010; Atici & Cekici, 2012; Özkılıç, 2012; Sahin, 2010; Kaya, Bilgin & Singer, 2012; Siyahhan et al., 2012).

Counseling practices might be thought of as a more specific type of improving communication. Education programs that are related to cyber-crimes are helpful to prevent cyber-bullying (Özdemir & Akar, 2011). Equally important, psychological counseling and guidance are helpful to prevent bullying (Yerlikaya, 2014). Similarly, psychological counseling and guidance help students to develop interpersonal skills (Arslan, Hamarta, Arslan& Saygın, 2010). In addition, counseling and guidance programs considering gender differences are needed (Asici & Aslan, 2010).

Teacher education or training involves either professional development program for teachers or training for pre-service and in-service teachers. In-service training and seminars are helpful to enlighten every aspects of violence (Eroglu, 2009). In-service training helps teachers to increase their awareness about violence (Piskin, 2010).

Similarly Yenilmez and Seferoğlu (2013) stated that training related to cyber-

bullying helps to increase awareness. Bullying awareness needs to be included in both pre-service and in-service programs (Özkılıç, 2012). In addition, in-service training related to behavior management and disciplines are useful for counselors (Atici & Cekici, 2012). While this might be considered as a type of curricula, I distinguish it from curricular solutions because they are related to teacher training curriculum.

Raising awareness alerts the community about the existence of bullying issues at a more societal level. To prevent bullying, increasing teachers' awareness is needed (Kartal & Bilgin, 2009a). Information related to effects of bullying on gender and role in bully cycle is important for schools to raise awareness (Arslan, Hallett, Akkas & Akkas, 2012). Health practitioners need to be aware of characteristics of students who might be involved in bullying (Alikasifoglu et al., 2007). Parents, non-governmental organizations, and media need to support studies to prevent bullying (Yerlikaya, 2014). Media needs to broadcast educational programs to raise awareness (Sahin, 2010).

Societal solutions are ideas to change behaviors in the local community or society, as identified by two studies in my sample. Identifying factors that lead to aggressive behavior and describing every aspect of aggressive behaviors and their effects on children to social community might prevent high school students from demonstrating similar behaviors at university and business life (Eroglu, 2009).

Policies describe school committees or other policy making practices. School policies and strategies need to be developed to reduce bullying (Alikasifoglu et al., 2007). A child surveillance system which is related to child abuse and neglect is important in terms of violence and victimization (Deveci, Acik & Ayar, 2007).

Prevention strategies also need to consider cultural and regional differences (Kaya,

Bilgin, & Singer, 2012). It is also important to note that policies that include parents, teachers, and students are useful to improve school climate (Cenkseven Önder & Sarı, 2012).

Curricular solutions recommended

This section includes curricular recommendations. There are 25 studies that recommend grounded curricular solutions, compared to 50 studies that recommend non-curricular solutions in this section. This section is divided into four categories which are 1) Non-school interventions, 2) Family interventions, 3) Universal school interventions, and 4) Targeted school interventions.

Universal school interventions have the strongest research support with 9 studies out of 25 studies. Family interventions and targeted school interventions are suggested by six studies each. Non- school interventions have the least research support, with only 4 studies recommending them in our sample of research articles.

Non-school interventions (four studies) are specific or general workshops or activities for students, that do not have to be implemented in schools, but that could be conducted with community service organizations. For example, interventions that address social skills and programs that address self-concept clarity have been recommended to reduce conduct problems (Asici & Aslan, 2010; Çivitçi, 2001).

Family interventions (six studies) are working not only with students but also with parents. Programs that address anger management against family members (Avcı & Güçray, 2010), problem solving in the family and communication among family (Cenkseven Önder & Yurtal, 2008) might be arranged by school counselors to prevent violent behaviors. Education need to be directed to families through bullying prevention programs to increase effects of family relations on bullying behaviors.

(Sevda & Sevim, 2012). Similarly, two studies showed that intervention programs need to include parents as well (Hilooğlu & Cenkseven Önder, 2010; Pekel-Uludağı & Uçanok, 2005).

From 2000 to 2014, universal school interventions (nine studies) are the most widely recommended intervention by studies in Turkish schools, as curricula in the form of counseling or prevention programs for all students. Based on quantitative type of evidence, it has been recommended that school-based interventions that aim to reduce violence need to be developed (Harel-Fisch et al., 2011; Alikasifoglu et al., 2004). More specifically, school interventions that address gender differences, and guidance programs that address social skills, communication skills, place and types of violence, self-protection abilities have especially been recommended (Özer, Totan & Atik, 2011; Türküm, 2011). Another researcher recommended that anti-bullying interventions need to include attention to developing a democratic school system and students' sense of belonging in Turkey (Bayraktar, 2012). Programs also need to consider the cultural and social structures of the country to prevent violent behaviors, such as physical aggression, verbal aggression, and relational aggression (Yıldız & Sümer, 2010). It was further recommended that such universal school intervention programs need to include both bullies and non-bullies because of the similarities between bully behaviors, avoiding bully behaviors, and collaborative behaviors (Aypay & Durmuş, 2008).

Targeted school interventions (six studies) are about curricula for special populations of students, such as those with bullying problems. For example, one study recommended that assertiveness training and psycho-education need to be run by a school psychological counselor (Peker, Eroğlu & Çitemel, 2012). Siyahhan et al. (2012) stated that targeted prevention and intervention programs also need to address

gender-related issues. Similarly, prevention programs need to address differences between males' and females' problem solving skills (Gündođdu, 2010) and anger management skills (Şahin & Korkut Owen, 2009). In addition, social skills and students' levels of loneliness need to be addressed in prevention programs (Çivitçi, 2001). Finally, prevention programs need to address communication, anger management, and problem solving skills in the family and programs that address problem solving, communication and coping skills are needed to be arranged by school counselors for students (Avcı & Güçray, 2010).

CHAPTER 5: DISCUSSION

Introduction

The aim of this chapter is to summarize and discuss the findings of the three research questions of this study, and make suggestions related to practical implications and further studies needed to address conduct problems among Turkish adolescents.

There are two sections in this chapter. The first section will discuss the main findings of the analyzed articles. The second part will discuss implications of this study for further research, followed by a brief summary of limitations.

Major findings

Research question 1: Prevalence of bullying in Turkish schools

The aim of this question was to analyze the prevalence of bullying reported across studies from 2000 to 2014. The question has two components which are; 1) Bully status and 2) Exposure to different types of bullying along with several issues that were also uncovered.

There were differences between studies in terms of how they assessed bullying. For instance, Siyahhan et al. (2012) categorized bullying behaviors as physical, verbal, direct or indirect. (Atik, Özmen & Kemer, 2012) categorized student roles as bully, victim, bully-victim, not involved. Another difference was including witnessing into the rates of bullying and violence (Kartal & Bilgin, 2009a).

The rate of involvement in the bullying process ranged from 3.3 to 19.0 percent for bullies. Possible reasons for this relatively wide range could be related to how it was assessed, or differences between the data collection year and publication year. Over

time, factors that are related to conduct problems might change. Categorizing bullying into its components and showing only one component's rate as high might have increased the rates of bullying (Siyahhan et al., 2012). Time differences between data collection (2000) and publication (2004) might have caused 10% percent difference between two studies with same authors and the same assessment tools and same sample of 9th to 11th grades students (Alikasıfoğlu et al. 2004, 2007). It is also possible that the sample schools in some region of Turkey such as Istanbul, Ankara, Izmir –large cities of Turkey–have more bullying than sample schools in other regions. City size might be the case related to regional issue. Such societal factors as well as school-level factors about why bullying rates vary across studies will be examined further in the discussion on research question 2.

In terms of victimization, rates varied widely from 6.1 to 41.3% percent. Five out of eleven studies' rates were above 20% percent and this rate of outliers can be linked with instrumentation problems mentioned earlier. Kartal and Bilgin (2009) showed that rates of bully-victim were estimated between 4.8 and 9.4% percent, with an outlier result of 29.9%. Equally important, rates of not-involved students ranged from 25.0 to 83.0% percent. The outlier result was again Kartal and Bilgin (2009) with lowest rate 25%, and likely related to how this bully status was assessed by different instruments.

Research question 1: b) Rates of exposure to different types of bullying

Exposure to bullying was analyzed by five articles. Common types of bullying categorized as physical, verbal, emotional, sexual, and property violence. Rates of physical bullying ranged from 6.3 to 63.7 percent. Verbal bullying varied from 11.2 to 58.5 percent, emotional or indirect bullying ranged from 19.3 to 49.4, and sexual bullying ranged from 6.2 to 15.6, property violence ranged from 7.5 to 45.3 percent.

Research question 1: c) Rates of cyber-bullying

Of the 65 articles, seven studies articles focused on rates of cyber-bullying. Erdur-Baker & Kavşut (2007) indicated that frequency of internet-based communication devices usage was positively correlated with being both a cyber-bully and cyber-victim. The rate of cyber-bullying ranged from 3.1 to 30% percent. The reason was similar to studies about different types of bullying, dividing cyber-bullying into its components such as chat room, short messages, Facebook and showing rates as high. For example, while chat room cyber-bullying rate is high, facebook rate can be low. In that case showing one component's rate as high might increase overall rate. In terms of location, Özdemir and Akar (2011a) showed Istanbul and Ankara showed high rates as 10% percent. Due to number of the studies related to cyber-bullying, more quantitative research might be helpful to compare urban area rates and rural area rates. Common cyber-bullying types were cyber-language, cyber-forgery and hiding identity and reasons for cyber-bullying were revenge, relieving boredom and popularity (Yaman & Peker, 2012).

Research question 1: d) Other types of prevalence data about involvement in bullying and school violence

Other types of prevalence data is about involvement such as disclosure, aggressive behaviors, rates of involvement in the past month, and physical violence. Disclosure is one of the aspects of bullying process. We can describe disclosure as talking with someone on a particular problem or seeking for help. After bullying occurs, 75% percent of students talked to their friends, 62.1% percent of students asked for help, and 61.3% percent of students talked to their teachers (Yurtal & Cenkseven, 2007). In terms of bullying in a past month, Bayraktar (2012) showed 80% percent of

students had bullied in past month. Çetinkaya et al. (2009) showed the most frequent types of bullying were pushing (physical), name calling (verbal), and disturbing touches (sexual) .The reason why this study was analyzed in this section was this study categorized bullying slightly different from other studies mentioned in research question 1b.

Research question 2: a) Societal factors that are associated with conduct problems in Turkey

Categories of societal factors were neighborhood factors, the exposure of students to violence or abuse in their past, internet and media usage by students, and socio-economic levels of school that students attend. Neighborhood risk and neighborhood safety were factors to predict students' aggressive behaviors. Bullying was common among students who had been treated violently by family, or who witnessed violence in the family. Students' experience of violence in the school was also a contributing factor to aggressive behavior. Frequency of internet usage was associated with being a cyber –bully. Media was a contributing factor to aggressive behavior. Frequency of bullying was varied by socio –economic level of schools. Students in lower socio-economic schools reported more bullying. In middle and low socio –economic level schools, most frequent type of bullying varied by socio –economic level of schools was emotional bullying.

When examined the locations of schools as being another possible societal factor that might be notable across studies in terms of their variations of bullying rates, there was not enough evidence to make any conclusions on this point as most studies were conducted primarily in large cities. No discussions were found about whether location (such as urban/rural or eastern/western cities) may be contributing factors to bullying rates.

Research question 2: b) Family factors that are associated with conduct problems in Turkey

Categories of family factors that were researched in the studies are family functioning, the family's socio-economic level, parent occupations, parent education, marital status, and number of siblings. Yalçın (2007) and Işıklar et al. (2012) showed perceived levels of support from family, presence of violence in the family had significant effects on students' aggression. Students who were treated violently by their family were more likely to be bullies, victims or both (Sevda & Sevim, 2012). According to Çetinkaya et al. (2009), there was a positive relationship between bullying and socio-economic level of families. Alikasifoglu et al. (2007) and Eroğlu (2009) showed similar results as victims were more likely to come from lower socio-economic backgrounds and student from high socio –economic status reported involvement in high rates of physical aggression. In terms of parents' employment status, the majority of perpetrators' fathers and mothers were unemployed (Deveci et al., 2007). Children of businesswomen demonstrated more violent behavior compared to children of housewives (Türkmen et al., 2013). Regarding parents' education, students from less educated families were at higher risk of exposure to physical violence (Deveci et al., 2007). Bullying was also more frequent in families in which parents are separated or biological parents are absent (Türkmen et al., 2013). Students who had four or more siblings demonstrated more bullying behavior.

Research question 2: c) School factors that are associated with conduct problems in Turkey

In the studies analyzed in this thesis, school factors are considered under different categories such as school types, place of violence, school environment, peers, and counseling and support skills of teachers. According to Türküm (2011), types of schools were a predicting factor of violent behavior across seven studies. Ayas and Pişkin (2011) showed that in private schools, there were more bullies compared to public or government schools. Frequency of being bullied with weapons was, however more common in public schools (Alikasifoglu et al., 2004). Vocational high schools' students were more likely to be victimized (Ayas & Pişkin, 2011).

The most common places for violent behavior were classrooms, outside of the school, school corridors, playground, sports center and canteen/cafeterias in this order (Kepeneci & Çınkır, 2006).

Students who had negative school perceptions demonstrated higher rates of bullying and victimization (Harel-Fisch et al., 2011). As school climate improved, frequency of bullying decreased and selfless-pro-social- behaviors increased (Çalık et al., 2009).

In terms of perceived preventative measures taken by school, two studies indicated that communication, meeting with parents and students, seminars, counseling- individual and group- were common actions that schools take in response to bullying (Şahin, 2010; Atici & Cekici, 2012). One study showed that banishing students for a short time, dismissing students, and arresting of students by police were preventative measures taken by the school (M Pişkin, 2010), though it did not indicate whether these had yet been assessed in terms of their effectiveness. Another study indicated

that verbal warning and formal warning were common types of actions taken by teachers at five schools (Kepenekci & Çinkır, 2006).

Peers was a school-related factor, and peer relations were shown as predictor of violent behaviors in two studies (Avcı & Güçray, 2013; Yavuzer, Karatas, Civilidag, & Gundogdu, 2014). Another study showed that peer relations were a mediating factor of physical violence (Avcı & Güçray, 2013). In terms of counseling and support skills of teachers, one study indicated that counselors lacked the necessary background knowledge and skills to support teachers in terms of disciplinary approaches and some teachers were resistant to work with counselors (Atıcı & Çekici, 2012).

School size is a possible school factor that could also influence variations in rates of conduct problems; however, none of the studies reviewed in Turkey had yet considered this issue, and researchers rarely reported the school size to make an estimate of its influence across studies.

Research question 2: d) Gender-related factors that are associated with conduct problems in Turkey

Gender-related factors were the most commonly studied associative factor of all conduct problems in Turkey. They have been analyzed under eight different categories; 1) likelihood of being a bully or involved in violent aggressive behaviors, 2) likelihood of being a victim or not involved, 2) who bullies who?, 3) encounters with bullying, 4) types of bullying behaviors, 5) types of victimization experienced, 6) attitudes, 7) relational behaviors, 8) cyber-bullying.

In terms of the likelihood of being a victim or not involved, males demonstrated more violent behaviors and were more likely to be bullies or bully-victims. One

study in Konya indicated that males were involved in violent behaviors 8.4 times more than females (Eroğlu, 2009). According to five studies, females were more likely to be victims or were not-involved at all (Cenkseven Önder & Sarı, 2012; Erdur-Baker & Kavşut, 2007). Males bullied males whereas females bullied females (Arslan et al., 2011). Males encountered bullying more than females. Regarding types of bullying behaviors and types of victimization, males experienced more physical and verbal bullying compared to females (Kepenekci & Çınkır, 2006).

In terms of attitudes, older males had more bullying behaviors such as name calling, pushing, spreading rumors (Yurtal & Cenkseven, 2007). Equally important, gender was also a mediating factors of relational behaviors such as submissive behavior and cyber-bullying (Yaman & Peker, 2012). Males were more likely to be virtual bullies, and they performed more cyber-bullying and became victims more than females (Şahin, Aydın & Sarı, 2012; Yenilmez & Seferoglu, 2013).

Research question 2: e) Age-related factors that are associated with conduct problems in Turkey

Age and its correlate of grade was another one of the most commonly studied associative factors related to conduct problems. There was a statistically significant relationship between age and bullying. Aggressive behavior increased as age increased. Older males showed bullying more often compared to younger males (Yurtal & Cenkseven, 2007).

In terms of grade, 11 studies showed significant relationships between grade level and bullying. For example, there were more tenth and eleventh grade bully students whereas there were more ninth grade victim students (Alikasifoglu et al., 2004). Another study showed that eleventh grade students expressed their anger in

destructive ways compared to students in lower grades. Related to societal factors, one study also showed that eighth grade students were exposed to violence more than fifth grade students (Deveci et al., 2007).

Research question 2: f) Individual factors that are associated with conduct problems in Turkey

Individual factors such as academic achievement, perceived reasons for bullying or cyber-bullying, bully characteristics, victim characteristics, measures taken by victims are associative factors related to conduct problems.

In terms of academic achievement, there was a significant positive relationship between bullying and low grades. In one study, academically successful students bullied verbally more often. In one other study, there was also negative correlation between academic self-efficacy and aggressiveness.

Regarding perceived reasons for bullying, common reasons related to family were family functioning, and family income. Media and internet were other reasons for bullying related to mass communication devices. In addition, peers, jealousy, entertainment, feeling better, reinforcing friendship were also reasons for bullying. Furthermore, bullies perceived their families negatively in terms of communication, functioning and roles. In terms of bully characteristics, bullies showed negative behaviors, poor self-esteem, selfish behaviors, and less cooperative attitudes (Ada, 2010; Aypay & Durmuş, 2008).

Moreover, for victim characteristics, victims also perceived their families negatively in terms of communication, functioning, and roles (Cenkseven Önder & Sarı, 2012). Victims showed more submissive behaviors, and avoidant behaviors (Atik et al., 2012; Aypay & Durmuş, 2008). In terms of bullying towards teachers as a victim

characteristic, inexperienced, and extremely serious teachers more often encountered bullying (Özkılıç, 2014).

A handful of studies also examined the measures taken by victims, which included asking help from friends, from teachers, or from school administration. Protecting themselves was also one of the common strategies against bullying in some studies (Kepenekci & Çınkır, 2006). More specifically, social skills, submissive behaviors, seeking for help, social support, avoiding, resisting were reported of how students protected themselves against bullying.

Research question 3: a) Recommendations for non-curricular solutions to bullying/conduct problems in schools

Across 48 studies that focused on non-curricular solutions, there were eight types of recommended non-curricular solutions reported in the studies which were to improve school climate, identification of problem, improve communication, counseling practices, teacher education or training, raise awareness, policies, societal solutions.

Positive school climate or positive school atmosphere reduced bullying. In terms of identification of problem, as pointed out by five studies, students, teachers, parents need to be educated about the hazards of communicative technology. According to two other studies, identification of the types of violent behaviors and factors that lead to violent behaviors were important to reduce aggressive behaviors. Regarding recommendations to improve communication, three studies pointed to the importance especially of improving education and collaboration of parents, teachers, counselors, students, health practitioners, and community to reduce or prevent bullying, violence and aggression.

Although intervention studies were not examined by this analysis, the findings of the descriptive and explanatory studies recommended that education programs related to cyber-crimes would be helpful to prevent cyber-bullying. Psychological counseling and guidance were recommended also as needed to prevent bullying and to develop interpersonal skills. In addition, gender-based guidance and counseling need to be prepared.

Grounded studies recommended that in-service and pre-service training related to violent behaviors could help teachers to be aware of every aspect of violent behaviors such as bullying and cyber-bullying. Three grounded studies also recommended that bullying be included in both pre-service and in- service trainings, however, it was not always clear if it is useful to only introduce the topic for raising awareness or if it is more useful to do skills training with teachers at certain stages in the early or later stages of their careers.

To prevent bullying, increasing teachers' and health practitioners' awareness, sharing information related to effects of bullying on gender groups and their role in the bully cycle and symptoms of bullying is needed, according to two out of the five studies related to raising awareness in this analysis. A handful of studies also indicated that parents, media, non-governmental organizations needed to support more research to prevent bullying. Though, only one study recommended that media needs to broadcast educational programs related to bullying to raise awareness.

In terms of societal solutions, one study claimed that identifying factors that lead to aggressive behavior by counselors prevented high school students from demonstrating the same behaviors at university.

Finally, two studies out of seven also showed clearly that school policies and strategies that reduce bullying were needed. A child surveillance system related to

child abuse and neglect was recommended by one study (Deveci et al., 2007) for reducing violence and victimization. Also, a number of studies point out that cultural differences needed to be considered in prevention strategies, though rarely gave specific examples about how to do this. Furthermore, policies needed to include teachers, parents, and students to reduce bullying and improve school climate, though good examples of how to be more inclusive in this way was rarely examined.

Research question 3: b) Recommendations for curricular solutions to bullying/conduct problems in schools

Four types of recommended curricular solutions in the studies were: non-school interventions, family interventions, universal school interventions, and targeted school interventions.

Interventions and programs that address social skills, self-concept clarity were especially recommended as useful to reduce conduct problems (Çivitçi, 2011).

In terms of family interventions, one study recommended programs that address anger management against family members, problem solving and communication among family to prevent violent behavior. A number of grounded studies also explained the need for intervention programs to include parents.

School-based interventions that aim to reduce violence were strongly recommended by nine studies. These might include gender-based programs, guidance programs that address social skills, communication skills, place and types of behavior. Again, as with non-curricular solutions, cultural and social structures must be considered; however, again, there was little in terms of particular recommendations of how to do this within prevention programs. Though, one study explained that due to similarity between bully behaviors, avoidance behaviors, and cooperative behaviors, bullies

and non-bullies alike needed to be included in the intervention programs (Aypay & Durmuş, 2008).

For targeted school interventions, it has been recommended that gender-related issues must be considered in prevention and intervention programs. Assertiveness training and psycho-education program run by counselors were recommended by one study. Several other well-grounded studies also recommended topics including anger management, coping skills, communication skills, problem solving skills, level of loneliness, social skills to be addressed in prevention and intervention programs.

Implications for research

Firstly, the main factor that affects the rate of bullying was how studies take bullying into consideration. They had similarities and differences while they were describing the issues however there was a variety in the language to describe bullying and its components. For example, one study broke down bullying into its components such as name calling, kicking, slapping, and so forth, and showed rates for each whereas another study categorized it as verbal, physical, emotional, and sexual bullying. Inconsistency in language and the definition affect the reported results and the compilation of a more systematic, quantitative meta-analysis. Efforts to bridge different terminology and a common conceptual framework for describing and assessing bullying or related conduct problems would be helpful to describe and measure issues more effectively.

Furthermore, more descriptive studies are needed to describe the role of students in bully status and to describe types of bullying in detail. For cyber-bullying, as usage of technology rapidly increases nowadays, adolescents and adults spend much more time on the internet. Due to development of technology, more descriptive studies are needed to describe what cyber-bullying is and what types of cyber-bullying exist. In

addition, more correlational research is needed to increase awareness about what factors mediate or reduce the rates of being cyber-bully and cyber-victim.

Another important factor that affects the findings was instrumentation. Some studies showed different results even though they used the same instrument and collected data from the same age group. Well-prepared and well-adapted instruments that are devised according to Turkish culture and society are needed. In addition, one last issue which affects the variance in reported rates was gap between data collection year and publication year. One study showed four years gap between data collection and publication year. This might mislead researchers for further research. While such wide gaps need to be minimized, it might also be important for journals to be more careful in careful reporting of the years in which data is collected as some national trends may change in time.

In the view of results of this study, as Benbenishty and Astor (2005) presented, a model which is developed according to structure of Turkish culture and shows associative factors of school violence is needed to illustrate the relationship between those associative factors and school violence.

A systemic review of school interventions similar to those studies in Europe, Australia, Nederland, North America, UK, New Zealand, Canada, Norway, Belgium, and Germany, as reported by Data Prev project (Weare & Nind, 2011) is needed in Turkey to promote positive mental health, social-emotional learning competence.

In terms of research-based implications, while some initial studies have been conducted, further correlational studies are needed that show how family and school-related factors mediate school violence. While individual factors have been studied extensively, more attention needs to be given to neighborhood factors, parent

occupations, marital status of parents, number of siblings, counseling and support skills of teachers.

Implications for practice

In this section, two types of implications were described: 1) non-curricular implications; 2) curricular implications

Non-curricular implications

According to results of the current study, school climate needs to be improved to prevent or reduce school violence. This in turn might improve the perception of a positive school climate, and reduce to rate of school violence. Positive school climates need to be combined with a democratic school system which provides an opportunity to students to express themselves in order to increase students' commitments to the school.

Administrative supports also need to be given for helping schools to recognize and identify the conduct problems that are most common in their schools. Thus, identification of the problem is another important aspect of non-curricular solutions. Teachers, parents, students need to be educated about aspects of school violence, and they need to work collaboratively to reduce school violence. While identifying the problem, gender differences need to be considered and actions taken accordingly. Identification of types of violent behaviors and factors that lead to violent behaviors are needed, perhaps even at a school level, not simply for research, but for systematic school improvements.

Another important approach to solution is to improve communication between teachers, students, and parents. Teachers, parents, students, health practitioners need

to work collaboratively, and they need to communicate with each other on issues of school safety.

Counseling practices that improve communication about bullying and cyber-bullying should consider gender and especially help students to develop interpersonal skills, if they are going to reduce school violence.

Furthermore, teacher training or education is important. In-service training and seminars that describe school violence are needed. In-service training needs to help raise teachers' awareness about violence. Topics and discussions about bullying prevention need to be included in both in-service and pre-service training.

Raising awareness is important to reduce school violence. Health practitioners need to be aware of both physical and psychological symptoms of bullying. Information related to gender differences in bullying and roles of students in the bully (status) cycle need to be recorded and it is important for schools to deal with bullying directly after it occurs, as well as indirectly through preventions. Parents and non-governmental organizations need to request, encourage, and support studies related to school violence. More educational programs about bullying and school violence also need to take place in the media to raise awareness.

Moreover, school policies should be developed according to strategies that reduce bullying. A child surveillance system related to child abuse and neglect in terms of victimization is needed to supervise the development of adolescents. Policies should include teachers, parents, and students to promote positive school climate.

Curricular implications

Interventions and programs that address social skills and self-concept clarity are needed to prevent school violence. Intervention programs need to integrate families as well. Intervention programs that address communication among family, problem solving in the family, anger management skills are needed. Families can be educated about school violence through prevention programs.

School interventions should consider gender differences. Guidance programs that promote social skills, communication skills are especially recommended. Anti-bullying programs should include a democratic school system, and a sense of belonging. Anti-bullying programs should include both the students involved in conduct problems and those not-involved. Intervention programs should also consider cultural and social structure of Turkey as well, though more research is needed to determine how this can be done.

Regarding targeted school interventions, well-structured and well-prepared guidance programs are needed. These programs should address problem-solving skills, communication skills, anger management skills, coping skills, and levels of loneliness. In addition, these programs should consider self-expression differences between males and females, and be run accordingly.

In addition, the importance of school violence can be integrated into classrooms as a part of particular course's subject, for instance the health course. Definition and types of bullying, aggression, and anger need to be integrated and discussed within the health course program. Physical and psychological symptoms of violent behaviors should be emphasized in this course, along with interpersonal skill-building activities for prevention.

In the light of information given above, the most important associative factor related to conduct problems is school factors because it is challenging to change individual factors person to person or to change family factors and societal factors. School factors are suited for change. School safety, positive school climate can be better established for the purpose of reducing conduct problems.

Finally, it can be said that students have various serious problems such as bullying, aggression, anger, and cyber-bullying. These problems are mediated by other factors such as family factors, school factors, neighborhood factors, and individual factors. Students get affected by these problems in negative ways such as low achievement, high levels of loneliness, low self-esteem, and having roles in the bully status to do harm or get harmed. They also affect each other in terms of factors mentioned earlier. In order to eliminate these problems and their associative factors that lead to these problems, I believe that schools, families, and other stakeholders need to take preventative precautions against these problems. These precautions can be a well-prepared teacher training which raises understanding and caring teachers and raises teachers who are able to identify students' problems and help students to solve their problems. A well-designed school guidance program which helps students to develop skills to cope with problems can be another precaution. Well-equipped school administrations, and programs that helps families to understand their children and to understand what kinds of problems students face with and how they can help to children as a parent can be helpful. In addition, policies that include these problems, provide solutions, guide students and teachers are needed. These problems need to be integrated into curriculum as a part of relevant courses to minimize the problems and to educate students against these problems.

Limitations

The current study used meta-analysis which is a descriptive method. It was limited to key-word search. There might be bias at some level while deciding on relevant articles or there may be unintentional faults in searching process. The decision making process for selecting articles might be also affected by researchers' bias; even though much effort is put forth to minimize this possibility by reviewing the articles to be included by three people. This study summarized prevalence of types of conduct problems, associative factors related to conduct problems, non-curricular and curricular solutions recommended by researchers from 2000 to 2014. Underlying behavioral patterns were not investigated directly, only through the synthesis of others' research, which often focused on more direct behavioral issues. Risk taking behaviors that might mediate conduct problems were not included. Also, master theses and doctoral dissertations were not included in this study either which poses a limitation as well.

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APPENDICES

APPENDIX A: Codes Used for Analysis of Articles

Grounded	Y = evidence from study used specifically to make the given suggestion		N = unclear, based on common sense but not grounded in the research evidence	
Curricular suggestions - interventions	SPEC INTERV CURR - workshop or other type of short-term intervention for students	SPEC FAMILY INTERV	GEN INTERV CURR - intervention or prevention, unspecified activities involving students	SCHOOL INTERVENTION: Specify if possible
Non-curricular suggestions	IMPROVE SCH CLIMATE - create more pos atmos to reduce violence	ID OF PROB - recog that prob exists by school, system, or	CMU OF PROB - communicating about specific problems, btw students, teachers,	COUNSELLING practices
Other influences	xVariable = a variable that was studied but significant relationship was NOT found		AGE: Bully or Victim	GENDER differences: B or V
Possible effects or prevalence	FREQ OF BULLYING, FREQ OF BEING VICTIMIZED; FREQ OF VIOLENCE -	TYPES OF BULLYING-- BULLY/VICTIM persp - examines types of bullying	FREQ OF CYBER BULLYING, FREQ OF BEING CYBER-VICTIMIZED	TYPES OF CYBER BULLYING-- BULLY, TYPES OF CYBER
Situational Variables	PRCVD MEAS TAKEN - Views about preventiv measures taken by school,	PRCVD MEAS NEEDED: prevent. measures needed at school	PRCVD REASONS FOR VIOLENCE/Bullying -- by ss, ts, or other	PREV MEASURES BY VICTIM - preventative
Possible Causes	BULLYING-A -- yes/no, if it exists; ss exposed to bullying as cause of attitudes, etc. (otherwise code as an	BULLYING-B -- what is it, how concept is perceived	BULLY STATUS -- role classification (4 roles - nothing, B, V, or B/V)	EXPOSURE to viol/bullying -- general

COUNSELLING COURSES: YOUTH, courses	COUNSELLING COURSES: FAMILIES	LT PREV PROGRAM - long-term prevention	PYD/SERVICE - positive youth development extracurric or service	
TEACHER EDU/TRG - edu progr or training of teachers or preservice	RAISE AWARENESS: media, posters, etc, so school	POLICIES - describes school committees or other policy making practices	MORE RESEARCH: Needed and specified particularly	
School features: Specify: Location	SCH LEVEL - ELEM, Upper elem, Middle, or High	SCH TYPE-- Anatolian, vocational, etc.	GRADE LVL - Grades 6, 7, 8, 9, 10, 11, or 12	Family features: Specify...
AGGRESSION/violent behavior -- more general than bullying, may include	VIOL TENDENCY - measures of attitudes	ATTITUDES/BHVR- Bully -- misc attitudes, beliefs, or behaviors of those exhibiting	ATTITUDES-Victim -- attitudes, beliefs, or behaviors of victims or peers exposed to	ACAD ACHVMT - measured influence on achievements or successes in school
OF AGGRS. TYPE	especially toward	conduct problems	problems	
<u>Intervention study (only): FEATURES OF RESOLUTION:</u> <u>Types of conflict</u>	<u>Descriptive studies only</u>	BULLY CHARACTERISTICS	VICTIM CHARACTERISTICS	STUDENT CHARACTERISTICS -general in school
ABUSED - prior phys, social, emotional violence to the student	FAMILY FUNCTIONING	PEERS - relations (if causal, otherwise: BULLY CHAR)	SCHOOL ENV - features of school that promote, or not inhibit, conduct problems	VIOL IN ENVIR -- identifies who the perpetrators are (fathers, siblings, teachers, etc.)

SES levels - income or other measures	PARENT EDUCation, OCCUP of FATHER OCCUP of	# OF SIBLINGS	MARITAL STATUS - divorce or not		
PHYS HEALTH- Bully: Specify	PSYCH HEALTH- Bully: Specify	LEARNING ENVIR - evidence of how classrooms or school climate may be effected	PHYS HEALTH- Victim: Specify	PSYCH HEALTH-Victim: Specify	
PARENTAL CHARacteristics	TEACHER CHAR	PLACE of bullying in school	MEDIUM FOR CYB BULL		
NEIGH ENV: Neighborhood environment	MEDIA/INTernet usage	INTERPERS SKILLS - skills or perceived skills of students	SOCIAL SKILLS TRAINING		
		For Intervention studies only:			

**SCHOOL DROPOUT
RATE**

INTERPERS SKILLS
improved

**PREVENT SCHOOL
PROBS--**prevention of
violence, misbehaviors, other
problems, school-wide

**IMPROVE SCHOOL
CLIMATE--**strategies
to support positive
conduct school-wide

DISCLOSURES of
victim (who do they
tell?)

**TEACHER
TRAINING FOR
SOCIAL SKILLS**

PEER MEDIATION TRG

**APPENDIX B: Instruments Used for Assessing Conduct problems and School
Violence**

Instruments used	Number of studies using⁵	How self-report data is collected: Type of questions posed
Peer Bullying Detection Scale (Pişkin&Ayas, 2007).	3	Both adolescent or child forms have been developed and used in Turkey. The underlying theoretical framework was developed by two Turkish authors...
School Bullying Scale	1	Adapted to Turkish by Calik (2006); Used by (Çalık et al., 2009)
Bullying Scale (Kutlu, 2005)	1	Adapted to Turkish or originally written in Turkish??
Colorado School Climate Survey	2	Adapted into Turkish, translated and back translated by ____ .Used by (Kartal&Bilgin, 2009).
(Garrity et al. (2000),		
Revised Olweus Bully/Victim Questionnaire(Olweus, 1996)	4	Adapted and translated by Dölek (2002), the Olweus questionnaire asks students 40 questions about how often they were exposed to and engaged in various forms of bullying.
Peer Bullying Questionnaire, and Determining Bully/Victim Scale (Mynard& Joseph, 2000,	2	Adapted to Turkish by Gultekin&Sayil (2005) is a 16-item self-report questionnaire

⁵ Note: This number includes bully-status studies in our sample, along with correlational studies discussed in RQ2,

**APPENDIX C: Summary of Articles that Describe Societal Factors Associated
with Conduct Problems in Turkey**

Category of societal factors	Article ID: Authors (year)	Sample	Important findings
Neighborhood factors and violence in the students' general environment (n=2 articles)	Article 453(Yıldız& Sümer, 2010)	400, grades 6-8	Neighborhood risk and neighborhood safety were two of three factors that predicted adolescents' aggressive behaviors.
	Article 452 (Celbis, Karaoglu, Egri, & Ozdemir, 2012)	1,175 grades 9-11,	Gang membership was one of six predictors of violent behavior. General exposure to neighborhood violence was NOT a predictor
Exposure to violence or abuse in the past (n=6 articles)	Article 407 (Deveci et al., 2007)	3725 grades 5-8,	In previous year, 43.4% of students had experienced violence. Perpetrators were reported as teachers (19.8%) , mothers (17.3%) , biological fathers (13.9%) , siblings (10.0%) , peers (4.9%), and school administrators (4.7%).
	Article 468 (E. S. Şahin & Korkut Owen, 2009)	1011	Gender, perceived father/mother attitudes, family domestic violence observed at home , needs for relationship and need for competence were predictors of aggression.
	Article 447 (Türküm, 2011)	600 grades 9-12	In contrast to other studies, frequency of exposure to violence was reported at 77.5%-98.8% <u>never</u> having been exposed to some type of violence.
	Article 474 (Karatas & Ozturk, 2011)	92 grade 6	With respect to exposure to violence from being bullied, it was found that "the children with high victim scores experienced headache, feeling bad, crying dizziness, restlessness, nervousness, sleeping problems significantly more frequently" (p. 85).
	Article 418 (Sevda & Sevim, 2012)	1670 grades 9-10	Bullying was more common among students who had been violently treated by family members in the past, or who had witnessed family violence than students who had not witnessed such violence.
	Article 443 (Kaya et al., 2012)	930 grades 9-12	"Past experiences of violence of high school students (direct exposure to violence/witnessing violence/exposure to/witnessing attack with knife/gun) were determined as the most contributing factor to aggressive behavior." -p. 56

Internet and media use by students (n=3 articles)	Article 404 (Erdur-Baker & Kavşut, 2007)	228 grades 9-12	Being a cyber-bully is associated with frequent use of Internet, msn, sms, cell phones, chat rooms, and the like.
	Article 421(Özdemir& Akar, 2011b)	366 grades 9-12	In past month, 14% of participants had become a cyber-victim, 10% cyber-bullies. Cyber-bullying was common on social sharing web sites like Facebook and by mobile phones. Students using internet more than five hours a day are more likely to be involved in cyber-bullying. <i>No gender, age, or grade level effects observed.</i>
	Article 464 (Avcı & Güçray, 2013)	2120 grades 7-8	Structural equation modeling indicated that media and peers reinforced“ adolescents' attitudes towards violence and contribute to the demonstration of violent behavior" (p. 2013, and model on p. 2011)
Socio-economic level of schools (n=2 articles)	Article 475 (Pekel-Uludağı & Uçanok, 2005)	521 grades 5-8	Most frequent type of emotional bullying varied by economic level of school.
	Article 476 (Çetinkaya et al., 2009)	5 counselors, 20 Ts, 35 ss grades 5-8	Most frequent type of emotional bullying was damaging properties in high socio-economic level school, humiliating in mid-socio economic level school, and isolation in low economic level school.

APPENDIX D: Summary of Articles that Describe Family-related Factors

Associated with Conduct Problems in Turkey

Categories of family factors	Articles	Sample	Major findings:
<i>Family functioning, significant results</i> (n=13 articles)	Article 407 (Deveci et al., 2007)	3725 grades 5-8	Over 40% of violence experienced in previous year by students comes from families that majority of fathers and mothers were perpetrators.
	Article 444 (Yalçın, 2007)	639	Effects of perceived level of support from the family , family's financial status and presence of violence in the family on student aggression were significant
	Article 473 (Eldeleklioglu, 2007)	202 grade 9 to 10	Democratic parental attitudes (in which parents respect and listen to the views of their children) decreased adolescents' aggressiveness whereas protective and authoritarian parental attitudes increased aggressiveness. In addition, peer pressure increased aggressiveness.
	Article 403 (Cenkseven Önder & Yurtal, 2008)	273 grades 6-8	In contrast to other students, both bullies and victims perceived their families as negative with respect to communication, roles, affective responsiveness, affective involvement, behavior control, and general functioning.
	Article 468 (E. S. Şahin & Korkut Owen, 2009)	1011 grades 9-12	Gender, mother and father attitudes, domestic violence at home, need for relationship, and need for competence were predictor factors of aggression.
	Article 478 (Avci & Güçray, 2010)	108 grades 9 to 12	Adolescents who report doing violent behaviors also experienced higher family problems in terms of unclear family roles, constant anger, alcohol use, problematic behaviors of family members, anger expression style, and criminal behaviors.
	Article 454 (Asici & Aslan, 2010)	313 grades 9-12	There was relationship between bullying personality and attitudes of mother. There was relationship between self-concept clarity and attitudes of mother and father.
	Article 460 (Özer, Gençtanırım, & Ergene, 2011)	478 grades 9-12	Family and friend support decreased school dropout risk . Teacher support was mediator factor between anti-social behavior and school dropout risk . Gender and achievement level of students were not predicting factors of risk for school dropout .

	Article 418 (Sevda & Sevim, 2012)	1670 grades 9-10	Students who had been treated violently in the past by their families were far more likely to be bullies, victims, or both, compared to students who had not been treated violently.
	Article 450 (Önder & Yılmaz, 2012)	881 grades 9-12,	Variables of " strictness/supervision " as perceived from family along with students' satisfaction with school, family, and self together make "meaningful contributions in explaining the highness of delinquency" (p.1747). Noted more strictness/ supervision had impact of decreasing delinquency.
	Article 451 (Bayraktar, 2012)	509 students - Ankara, 544 - N Cypress, grades 9-12	Based on multi-factor models, "strongest predictor of bullying was psychological environment of school followed by individual social competence factors, positive teacher attitudes, parental acceptance factors , positive peer relationships, and parental rejection factors... " (p.1055)
	Article 456 (Işıklar, Şar, & Celik, 2012)	283	Study used structural equation modeling to show complex path diagram of relations between family supports and bullying. This includes an unexpected positive correlation between family support and two types of bullying: mocking and property aggression . However, family support and aggression were negatively correlated .
	Article 465 (Haskan-Avcı & Yıldırım, 2014)	899 grades 9-12	Students who report less support from their families, friends, and teachers and have high level of loneliness have a tendency towards violence.
<i>Family functioning, with non-significant results</i> (n= 2 articles)	464 (Avcı & Güçray, 2013) 479 (Alikasifoglu et al., 2004)		In contrast to the above studies, two studies had non-significant correlations between family functioning and bullying.
<i>Socio-econ levels (SEL or SES) of families</i> (n=10 articles)	Article 407 (Deveci et al., 2007)	3725 grades 5-8	"Of the lower-income group (income below or about minimum wage), 45.5% (95% CI, 42.3% to 48.6%) were confronted with physical violence while this rate was 37.3%(95% CI, 26.7% to 49.3%) for those from upper middleclass" (p. 28)
	Article 424 (Alikasifoglu et al., 2007)	3519 grades 9 -11	"Victims were more likely to have a lower socioeconomic status" (p. 1253)
	Article 444 (Yalçın, 2007)	639	Families' financial status had effects on students' aggression. "perceived level of support from the family, the perception of family's financial status and the violence in the family on aggression scores were found significant" (p. 209)
	Article 476	521	There was a significant positive

	(Çetinkaya et al., 2009)	grades 5-8	relationship between bullying and socio-econ level of family.
	Article 426 (Eroğlu, 2009)	2242 (1294 hs, 948 univ),	SES was predictor factor for high school students. Students from families with high SES had tendency to demonstrate high rate of physical aggression.
	Article 440 (M. Şahin, 2010)	10 teachers, (ages 34-53)	SES was "perceived reason" for bullying from the teacher's perspective. Evidence for their opinions was scanty.
	Article 401 (M Pişkin, 2010)	1154 grades 4-8	Found that children from higher SEL families were more commonly engaged in bullying behavior than children from middle and low SEL.
	Article 471 (Gündoğdu, 2010)	266 grade 9	There were significant differences between students from families with different income in terms of levels of total, physical, verbal, indirect aggression and anger. Students from high SES demonstrated higher rate of aggression and anger. There were also significant differences between students from families with different income in terms of level of anger expression out and aggression.
	Article 446 (Ünal & Çukur, 2011)	4150 grades 9-12	Income had significant association with delinquency. Students whose fathers had middle school education committed more delinquent acts than students whose fathers had more education.
	Article 452 (Celbis et al., 2012)	1,175 grades 9-11	High family income was predictor of violence related behavior.
<i>Socio-economic levels of families with non-significant results(n=5articles)</i>	404 (Erdur-Baker & Kavşut, 2007) 413 (S. Arslan et al., 2011) 419 (S. Arslan et al., 2012) 456 (Işıklar et al., 2012) 479 (Alikasifoglu et al., 2004)		In contrast to the above studies, five studies should be noted that had non-significant correlation between socio-economic levels of families and bullying.
<i>Parent occupations (n=4 articles)</i>	Article 407(Deveci et al., 2007)	3725 grades 5-8	Among fathers who took role as perpetrator, 18.3% percent was unemployed, 13.3% percent had regular job and among the perpetrator mothers, 17.6% percent was unemployed, 16.0% percent was employed.
	Article 417(Türkmen et al., 2013)	6127, grades 9-11	"Children of businesswomen participated in violence 1.6 times more than students whose mother were housewives" (p,146).
	Article 446(Ünal & Çukur, 2011)	4150 grades 9 - 12	There were significant positive effects of mother occupation on mothers' employment status.
	Article 476 (Çetinkaya et al., 2009)	521 grades 5-8	There was statistically significant relationship between fathers' occupation and bullying however, there was not significant relationship between

			bullying and mothers' occupation.
<i>Parent education: Impact</i> (n=5 articles)	Article 407(Deveci et al., 2007)	3725 grades 5-8	Students whose family finished only basic level of education were at highest risk to exposure physical violence. Students whose family graduated from university and collages were at second highest risk to exposure to violence.
	Article 424(Alikasifoglu et al., 2007)	3519 grades 9 - 11	Bully-Victims had less educated mothers and had difficulties to talk with their parents than other students.
	Article 417(Türkmen et al., 2013)	6127 grades 9-11	Students with university graduate mothers were verbally abused more frequently.
	Article 446(Ünal & Çukur, 2011)	4150 grades 9 -12	Students whose fathers had middle school or above level education committed more delinquent behaviors.
	Article 476 (Çetinkaya et al., 2009)	521 grades 5-8	There was significant relationship between fathers' education level and bullying.
<i>Parent education: Impact with non-significant results</i> (n=3 studies)	413 (S. Arslan et al., 2011) 452 (Celbis et al., 2012) 479 (Alikasifoglu et al., 2004)		On the contrary to other studies above, these three studies had non-significant relationships with bullying.
<i>Marital status</i> (n=2 studies)	Article 413 (S. Arslan et al., 2011)	1670 grades 9-10	There was significant relationship between roles in bully cycle and students living with their parents or not.
	Article 417 (Türkmen et al., 2013)	6127 grades 9-11	Bullying was more frequent in families that parents are separated or biological parents absent.
<i>Siblings</i> (n=2 studies)	Article 476 (Çetinkaya et al., 2009)	521 grades 5-8	There was significant relationship between number of siblings and bullying. Students who have four or more sibling demonstrated more bully behavior.
	Article 442 (Ada, 2010)	488 grades 6-8	Number of siblings was significant predictor factor of peer bullying.

**APPENDIX E: Summary of articles that Describe School-related Factors
Associated with Conduct Problems in Turkey**

Categories of school factors	Articles	Sample size & grade level	Important findings
<i>School types</i> (n=7 articles)	Article 479(Alikasifoglu et al., 2004)	4153 grades 9-11	Frequency of being bullied with weapons was more common in public schools rather than private schools.
	Article 420 (Ayas & Pişkin, 2011)	600 grades 9-11	Most victimized group was vocational high school students whereas most bully group was private school students. In addition, Anatolian high school students were least victimized group.
	Article 413(S. Arslan et al., 2011)	1670 grades 9-10	Rate of being both bully and victim were lower in vocational high school students compared to regular high school students. On the other hand, rate of being victim were higher in vocational high school than private high school.
	Article 447(Türküm, 2011)	600 grades 8-12	School type was predictor factor of violence.
	Article 452(Celbis et al., 2012)	1175 grades 9-11	Attending vocational school was predictor of violent related behavior. Other predictors were being threatened or injured at school.
	Article 458 (M. Şahin et al., 2012)	300 grades 9-12	General high school students performed more cyber bullying behaviors compared to individuals who attend to Science High Schools.
	Article 425(Yerlikaya, 2014)	213 grades 9-12	Vocational high school students exhibited bullying acts more than students in other school types.
<i>School types with non-significant results</i> (n=1 article)	404 (Erdur-Baker & Kavşut, 2007)		In contrast to other studies above, this study showed non-significant results related to school types.
<i>Place of violence</i> (n=6 articles)	Article 406(Kepenekci & Çınkır, 2006)	692 grades 9-12	Most common place was classrooms(28.5%), 24.1% was outside of the school, 16.6% was school corridors, 14.4% was playground, and 16.4% sport center and canteen.
	Article 405 (Yurtal & Cenkseven,	433 grades 5-8	Playground was the most frequent place (79%),69% in classrooms, and

	2007)		outside of the school, 63% was school corridors.
	Article 408 (Kartal & Bilgin, 2009b)	545 students, grades 4-8 87 teachers,	Bullying happened in most school yards. The teachers thought that bullying happens in corridors and school yard.
	Article 416 (Kartal & Bilgin, 2009a)	688 students grades 4 to 8, 58 teachers	Bullying took place mostly in classrooms and playground, and very seldom in bathrooms.
	Article 421 (Özdemir& Akar, 2011b)	366	Most common cyber-spaces were social sharing web sites and cell phones.
	Article 447(Türküm, 2011)	600 grades 9-12	There was no relationship between problem solving skills and place of violence. Even students exposed to violence in different places their problem solving skills continued constant.
<i>School environment</i> (n=12 articles)	Article 479 (Alikasifoglu et al., 2004)	4153 grades 9 -11,	Poor perception of school was associated with physical fight.
	416(Kartal & Bilgin, 2009a)	688 grades 4-8 58 teachers	Both victim and not-bullies reported the highest score of positive school climate. Bully-victims rated school climate the lowest.
	Article 469 (Çalık et al., 2009)	456 grades 6- 8	Frequency of bullying and being victimized decreased, selfless behaviors increased as school climate improved.
	Article 453 (Yıldız& Sümer, 2010)	400 grades 6-8	Students who have high perception of safe environment demonstrated less aggressive behavior.
	Article 414 (Harel-Fisch et al., 2011)	4000-6000 grades 6, 8, and 10	Students with more negative school perceptions showed higher rates of bullying and victimization. Students who bullied others had more accumulated negative school perception than non-bullies.
	Article 451(Bayraktar, 2012)	509 students from Ankara, 544 students from N. Cyprus, grades 7-11	Psychological environment of the school and positive attitudes of teachers were the strongest predictors of bullying.
	Article 460 (Özer, Gençtanırım, et al., 2011)	478 grades 9-12	Frequency of disciplinary punishment increased school dropout risk. Perception of teachers' support reduced dropout risk.

	Article 446 (Ünal & Çukur, 2011)	4150 grades 9- 12	Commitment to school had effect in reduction of all kinds of delinquent acts. Coercive discipline and victimization positively related with delinquent acts.
	Article 410 (Atıcı & Çekici, 2012)	5 counselors, 20 Teachers, 35 students	Counselors can and do help to support students through different types of counseling. Teachers were sometimes resistant to working with counselors in ways that could be helpful in shifting student behaviors, with attitudes that indicated student behaviors could not be changed.
	Article 449 (Cenkseven Önder & Sarı, 2012)	569 grades 4 - 7	Teachers and administration had highest contribution to estimate students' participation in bullying and victimization.
	Article 461 (Bayar & Uçanok, 2012)	1263 grades 6 - 12	Non-victim students perceived school and teachers more positively than bullies and bully victims. In terms of cyber bullying, non-victim students perceive school more positively than bullies and bully-victims. In addition, victims perceived teachers more positively than bullies.
<i>Perceived preventative measures taken by school</i> (n=4 articles)	Article 406 (Kepenekci & Çınkır, 2006)	692 grades 9-12	34.5% percent of measures were a verbal warning, 16.0% was formal warning
	Article 402 (M Pişkin, 2010)	142	Common measurements were banishing students for a short time, dismissing students, and arresting students by police.
	Article 440 (Şahin, 2010)	10 teachers (ages 34-53)	Holding seminar, giving responsibilities to students who were prone to bullying, and communication were most common measurements taken by teachers and counselors.
	Article 410 (Atıcı & Çekici, 2012)	5 counselors, 20 Teachers, 35 students	Meeting with students and parents, collaborative works with classroom guidance teacher, individual counseling, reminding rules, and group guidance were measures taken by school counselor.
<i>Peers</i> (n=13 articles)	Article 479 (Alikasifoglu et al., 2004)	4153 grades 9 -11	Students who spend more time with their friends in the evening were involved in more often physical fights.
	Article 475 (Pekel-Uludağı &Uçanok, 2005)	701 grade 5-6	Bully/Victim students were rejected by their peers. Victim students were in rejected status rather than

			neglected status.
	Article 473 (Eldeleklioglu, 2007)	202 grades 9-10	Peer pressure increased aggressiveness.
	Article 444 (Yalçın, 2007)	639	There was a significant relationship between perception of support from friends and level of aggressiveness.
	Article 477 (Gündüz & Celikkaleli, 2009)	231 grades 9-12	There was positive relationship between peer pressure and level of anxiety. There was moderate positive relationship between peer pressure and aggressiveness.
	Article 414 (Harel-Fisch et al., 2011)	4000-6000 grades 6-8-10	Peer relationship was shown as an important factor which leads to victimization. Students who were bullied perceived their friends as negative.
	Article 451 (Bayraktar, 2012)	509 students - Ankara, 544 – N Cypress, grades 9-11	Negative peer relation was one of the strongest predictor of bullying.
	Article 460 (Özer, Gençtanırım, et al., 2011)	478 grades 9-12	Friend support reduced school dropout risk.
	Article 456 (Işıklar et al., 2012)	283	Peer support predicts mocking negatively (i.e., when receiving peer support, students are less likely to mock other peers.)
	Article 462 (Yavuzer, 2013)	524 grade 8	Anger increased in students whose popularity level was low. Verbal aggression, hostility, indirect aggression, physical aggression increased in high level of popularity
	Article 464(Avcı & Güçray, 2013)	2120 grades 7-8	Peer relation was predictor factor of violent behavior. Peer relations were mediator factor of physical factors.
	Article 463 (Yavuzer et al., 2014)	411 grade 9	Peer pressure was mediating factor for identifying students' aggression. There was positive relationship between peer pressure and aggression.
	Article 465 (Haskan-Avcı & Yıldırım, 2014)	899 grades 9-12	Students who have less support from their teachers and friends had a tendency towards violence.
<i>Counseling and support skills of Teachers</i> (n=1 article)	Article 410 (Atıcı & Çekici, 2012)	5 counselors, 20 Teachers, 35 students	In five high schools located in low SES areas, some teachers were resistant to working with counselors, and counselors sometimes lacked background for supporting a variety of disciplinary approaches.

APPENDIX F: Summary of Articles that Describe Gender-related Factors

Associated with Conduct Problems in Turkey

Category of influence	Articles	Important findings	
Likelihood of being a bully, or involved in violent or aggressive behaviors	Article 401 (M Pişkin, 2010)	Male students more likely to be bullies or bully/victims, or to “exhibit bullying behaviors.”	
	Article 404 (Erdur-Baker & Kavşut, 2007)		
	Article 408 (Kartal & Bilgin, 2009b)		
	Article 420 (Ayas & Pişkin, 2011)		
	Article 449 (Cenkseven Önder & Sarı, 2012)		
	Article 459 (Özer, Totan, et al., 2011)		
	Article 470 (Hilooğlu & Cenkseven Önder, 2010)		
	Article 417 (Türkmen et al., 2013)		65.5% of students claimed that bullies were males.
	Article 426 (Eroğlu, 2009)		For a male student, the likelihood of being involved in violent behaviors was 8.4 times higher when compared with a female student.
	Article 427 (Yenilmez & Seferoglu, 2013)		Male high school students’ physical aggression levels are significantly higher than female students.
Article 463 (Yavuzer et al., 2014)	Male adolescents’ aggression scores were higher than female adolescents’ aggression scores.		
Article 473 (Eldeleklioglu, 2007)			
Article 468 (Şahin & Korkut Owen, 2009)	Gender was found to be one of many predictors of aggression.		
Article 479 (Alikasifoglu et al., 2004)	Being male was associated with fighting.		

Likelihood of being a victim or not involved	Article 401 (M Pişkin, 2010) Article 404 (Erdur-Baker & Kavşut, 2007) Article 459 (Özer, Totan, et al., 2011)	Females more likely to be a victim.
	Article 449 (Cenkseven Önder & Sarı, 2012) Article 470 (Hilooğlu & Cenkseven Önder, 2010)	Females more often not involved.
Who bullies who?	Article 413 (S. Arslan et al., 2011)	Males bully males more, while females bully females.
Encounters with bullying	Article 402 (M Pişkin, 2010)	Males encountered bullying more than females.
Types of bullying behaviors	Article 402 (M Pişkin, 2010)	Males encountered more types of bullying than females.
	Article 406 (Kepenekci & Çınkır, 2006) Article 407 (Deveci et al., 2007) Article 457 (Siyahhan et al., 2012)	Males experienced (or reported being victims of— 457) more physical and verbal bullying than females.
	Article 419 (S. Arslan et al., 2012)	Although males reported higher levels of bullying behaviors than females for all DPVBS scales, the difference reached significance only for overt bullying ($p < 0.01$).
Types of victimization experienced	Article 419 (S. Arslan et al., 2012)	Females reported higher levels of victimization than males for all scales, with significance reached for teasing ($p < 0.01$) and relational victimization ($p < 0.01$).
	Article 457 (Siyahhan et al., 2012)	Females were victims of indirect bullying more than males.
	Article 475 (Pekel-Uludağı & Uçanok, 2005)	For females – teasing and relational victimization. For males – terror, teasing and overt and relational victimization.
Attitudes	Article 405 (Yurtal & Cenkseven, 2007)	Older males most likely to have “bullying attitudes”.
	Article 414 (Harel-Fisch et al., 2011)	The effect of Cumulative Negative School Perceptions on bullying is stronger for females than it is for males (across countries, not only Turkey).
Mediating variables	Article 422 (Yaman & Peker, 2012)	Gender mediated relationship between submissive behavior and cyber bullying. Gender did not mediate cyber-victimization.
	Article 462 (Yavuzer, 2013)	For males, low popularity seems to lead to high aggression. Not the case for females.

	Article 467 (Çivitçi, 2011)	When comparing students with high levels of loneliness, females also show high levels of anger experience whereas male students do not. However, males and females did not vary according to other dimensions of school anger (hostility, destructive expression and positive coping).
	Article 477 (Gündüz & Celikkaleli, 2009)	Predictors of male aggressiveness were peer pressure and academic self-efficacy belief; the predictors of the females' aggressiveness were academic self-efficacy belief, trait anxiety and peer pressure.
Cyber-bullying: Contrasting results	Article 421 (Özdemir& Akar, 2011b)	Gender has <u>no</u> significant effect on cyber-bullying
	Article 427 (Yenilmez & Seferoglu, 2013)	Males more likely to become a virtual bully.
	Article 458 (M. Şahin et al., 2012)	Male students perform more cyber bullying behaviors compared to females. Males become cyber victims more than females.
No-gender effects	Article 441 (C.Arslan, Hamarta, Arslan, & Saygin, 2010)	No diffs in gender or age on problem solving inventory.
	Article 460 (Özer, Gençtanırım, et al., 2011)	Gender did not predict school dropout risk.
	Article 480 (Peker & Gültekin, 2014)	Social skills were not predicted by gender.

**APPENDIX G: Summary of Articles that Describe Age-related Factors
Associated with Conduct Problems in Turkey**

Dependent variables	Article	Sample	Important findings
Age (<i>n=7 articles</i>)	Article 405 (Yurtal & Cenkseven, 2007)	433 grades 5-8	Students who demonstrated bullying more often were older ones and who demonstrated less bullying behavior were younger ones.
	Article 426 (Eroğlu, 2009)	2242(1294 high school students,948 university students)	Younger high schools students had difficulties to control their anger compared to university student.
	Article 476 (Çetinkaya et al., 2009)	521 grades 5-8	There was statistically significant relationship between age and bullying.
	Article 442 (Ada, 2010)	488 students, grade6-8	Age found to be strongest predictor of bullying (but unclear in what direction)
	Article 453 (Yıldız& Sümer, 2010)	400 grades 6-8	When age increased, frequency of aggressive behavior increased.
	Article 446 (Ünal & Çukur, 2011)	4150 grades 9-12	Age had positive effects on delinquent behavior.
	Article 417 (Türkmen et al., 2013)	6127 grades 9-11	Physical, verbal, emotional violence level increased with age.
Age-related factors with non-significant results (<i>n=3 articles</i>)	404 (Erdur-Baker & Kavşut, 2007) 421 (Özdemir& Akar, 2011b) 447 (Türküm, 2011)		In contrast to studies mentioned above, these three studies showed non-significant results related to age-related factors.
Grade level (<i>n=11 articles</i>)	Article 407 (Deveci et al., 2007)	3725 grades 5-8	Being exposed to physical violence was high in eight graders, and being victim was high in eight graders compared to fifth graders.
	Article 424 (Alikasifoglu et al., 2007)	3519 grades 9-11	Grade 9 students were victims were as grade 10 and 11 students were bullies.
	Article 473 (Eldeleklioglu, 2007)	202 grades 9-10	Ninth and tenth grades students were tend to be more aggressive.
	Article 476 (Çetinkaya et al., 2009)	521 grades 5-8	There was statistically significant relationship between grade level and bullying however direction of the relationship was unclear.
	Article 420 (Ayas & Pişkin, 2011)	600 grades 9-11	11 th grade students bullied more often than 9 th grade students.
	Article 447 (Türküm, 2011)	600 grades 9-12	4 th grade students were exposed to violence more often than other students.
	Article 467	398	11 th grade students tend to express their anger

	(Çivitçi, 2011)	grades 9-11	in destructively compared to 9 th and 10 th grade students.
	Article 411 (Özkiliç, 2012)	540 teachers, grades 6-8	8 th grade students demonstrated bullying behavior bullying behavior towards their teacher more frequently.
	Article 419 (Arslan et al., 2012)	1315 grades 5-7-9	High numbers of 5th grade students were bully-victim compared to grade 7 and 9. Low numbers of 7 th grade students were bully compared to grade 5.
	Article 452 (Celbis et al., 2012)	1175 grades 9-11	Carrying weapon, and being injured were higher among 11 th grade students.
	Article 425 (Yerlikaya, 2014)	213 grades 9-12	12 th grade students bullied more than 9 th grade students, 10 th grade students bullied more often than 11 th grade students. 12 th grade students were exposed bullying more than 9 th , 10 th , and 11 th grade students.
Grade level with non-significant results (<i>n=4 articles</i>)	404 (Erdur-Baker & Kavşut, 2007) 445 (Aypay & Durmuş, 2008) 421 (Özdemir & Akar, 2011b) 423 (Atik et al., 2012)		In contrast to studies above, these four studies showed non-significant results related to grade level.

APPENDIX H: Summary of Articles that Describe Individual Factors

Associated with Conduct Problems in Turkey

Independent variables	Article	Important findings
Academic achievement (<i>n=4 articles</i>)	Article 414 (Harel-Fisch et al., 2011)	There was a strong relationship between being bully, being bully-victim and lower grades.
	Article 442 (Ada, 2010)	Academically successful students are more often the victims of verbal bullying. Academically less successful students are more likely to engage in vandalism.
	Article 459 (Özer, Totan, et al., 2011)	Low academic achievement was related to being bully and victim.
	Article 477 (Gündüz & Celikkaleli, 2009)	There was a negative relationship between belief of academic efficacy and aggressiveness.
Academic achievement: No significant results (<i>n=2 articles</i>)	Article 419 (Arslan et al., 2012)	Contrary to 4 studies above, these two studies showed non-significant results related to academic achievement.
	Article 460 (Özer, Gençtanırım, et al., 2011)	
Perceived reasons for bullying or cyber-bullying (<i>n=4 articles</i>)	Article 402 (M Pişkin, 2010)	Main reason was lack of care of family and lack of control. Following reasons were peer, media, internet, and discipline of school.
	Article 407 (Deveci et al., 2007)	Provocation, incitement, swearing, jealousy, peers were the reasons.
	Article 412 (Yaman & Peker, 2012)	Feeling better, reinforce friendship, and enjoyments were common reasons.
	440 (Şahin, 2010)	Media, family socio-economic level, attitudes of family towards children, peers, and internet were the reasons perceived for bullying.
Bully characteristics (<i>n=5 articles</i>)	Article 403 (Cenkseven Önder & Yurtal, 2008)	Bullies perceived their families negative in terms of communication, functioning, roles.
	Article 442 (Ada, 2010)	Bullies had low academic achievement, poor self-esteem, negative attitude
	Article 445 (Aypay & Durmuş, 2008)	Bullies displayed less cooperativeness attitudes.
	Article 448 (Ekşi, 2012)	Bullies had selfish behaviors.
	Article 478 (Avcı & Güçray, 2010)	Bullies had highest self-esteem level.
Victim characteristics (<i>n=8 articles</i>)	Article 403 (Cenkseven Önder & Yurtal, 2008)	Victims perceived their families negative in terms of communication, functioning, roles.
	Article 411 (Özkiliç, 2012)	Inexperienced, soft-tempered, and extremely serious teachers encountered bullying more often.
	Article 422 (Peker, Eroğlu, & Çitemel, 2012)	Victims demonstrated more submissive behaviors.

	Article 423 (Atik et al., 2012)	Victims showed more submissive behaviors compared to bullies.
	Article 442 (Ada, 2010)	Students who were academically successful were found to engage and be exposed to verbal bullying more often than other students.
	Article 445 (Aypay & Durmuş, 2008)	Victims demonstrated more avoidant behaviors.
	Article 448 (Ekşi, 2012)	Non-bullying victims show more resoluteness trait compared to victims and bully-victims.
	Article 475 (Pekel-Uludağı & Uçanok, 2005)	Rejected children more likely experienced terror, over victimization, relational victimization, and attacks on property rather than popular children
Measures taken by victims: Who do they tell? What preventative measures do they take? (<i>n=6 articles</i>)	Article 405 (Yurtal & Cenkseven, 2007)	75% percent of students were talked to their friends, 62.10% percent of students asked help from somebody, and 61,29% percent of students talked with their teachers.
	Article 406 (Kepenekci & Çınkır, 2006)	Protecting themselves was the most common measure (32.4%). Following measurements were asking help from school administration (29.69%), asking help from a friend (18.4%), asking help from teachers (6.3%) and parents (3.5%).
	Article 408 (Kartal & Bilgin, 2009b)	Students talked with a friend about being bullied more often (%40). 33% percent of students talked to their parents. 13.9% percent of students talked with an adult in the school.
	Article 410 (Atıcı & Çekici, 2012)	Asking help from counselor and teachers was common measures taken by students.
	Article 416 (Kartal & Bilgin, 2009a)	Students mostly talked with their friends and parents. Few students talked with their teachers.
	Article 480 (Peker & Gültekin, 2014)	Social skills, submissive behaviors, seeking for help, social support, avoid, resist, and optimism were strategies against bullying.

APPENDIX I: Summary of Articles that Describe Recommended Non-curricular and Curricular solutions related to conduct problems in Turkey

Type of Non-curricular Solution	Studies recommending these solutions (Authors, year)	Extent and nature of the given recommendation
Improve School Climate – create more positive atmosphere to reduce violence (<i>n=3 articles</i>)	Article 416 (Kartal & Bilgin, 2009a)	A positive school climate in which all students feel comfortable, safe, valued was essential to reduce bullying.
	Article 469 (Çalık et al., 2009)	Positive school climate reduced bullying.
	Article 473 (Eldeleklioglu, 2007)	Democratic classroom environment was important in terms of providing an opportunity to students to express themselves.
Identification of Problem – strategies to help recognize that conduct problems exist in the school or community (<i>n=7 articles</i>)	Article 421 (Özdemir & Akar, 2011)	Students, parents, teachers and school administrator need to be educated in terms of cyber communication and its hazards towards students.
	Article 422 (Peker et al., 2012)	Students need to be informed about how they can wisely use cell phones and internet according with having responsible towards others rights and ethical issues. School psychological counselor can provide instructional information to parents and teachers related to how communication technologies can be safely used.
	Article 426 (Eroğlu, 2009)	The factors that lead aggressive behaviors can be revealed to prevent students from demonstrating same acts at university or in business life.
	Article 443 (Kaya et al., 2012)	The identification of violence behavior types and the factors could be beneficial in order to protect students from aggressive behaviors. School nurse informs school health team and school staff to ensure student' safety.
	Article 452 (Celbis et al., 2012)	Information related to violence, types of violence, environment, prevention of violence, risky situations, and problem solving strategies need to be provided.
	Article 458 (Şahin et al., 2012)	Parents and teachers need to be well-informed about cyber-bullying.
	Article 468 (Şahin & Korkut Owen, 2009)	Parents and teachers need to be informed about males aggression level is higher than females. Parents might be educated about their attitudes towards their children. Consequences of being neglect and authoritarian might be told to parents.

Improve communications – communicating about specific problems, between students, teachers, parents, counselors, administrators, and even doctors or those in other helping professions (<i>n=7 articles</i>)	Article 401 (M Pişkin, 2010)	Bullying can be reduced by communication related to bullying between students, teachers, school counselors, guidance, and parents.
	Article 410 (Atıcı & Çekici, 2012)	Collaboration between counselor, teachers and principals are important to deal with misbehavior.
	Article 411 (Özkiliç, 2012)	School administration and parents need to be informed about bullying towards teachers.
	Article 440 (Şahin, 2010)	Bullying can be reduced by educating students, meeting with parents to inform them about bullying.
	Article 443 (Kaya et al., 2012)	Collaboration of parents, teachers, school administrators, and communities are needed to prevent violence among students.
	Article 457 (Siyahhan et al., 2012)	It is helpful to educate both students and adults in order to reduce bullying.
	Article 474 (Karatas & Ozturk, 2011)	Health professionals need to consider students who show some physical and mental symptoms might be involved in bullying.
Counseling practices – may be a more specific form of improving communications with students. (<i>n=12 articles</i>)	Article 410 (Atıcı & Çekici, 2012)	Counselors need in-service training related to discipline and behavior management.
	Article 421 (Özdemir & Akar, 2011)	Education programs related to cyber crimes is helpful to prevent cyber-bullying.
	Article 425 (Yerlikaya, 2014)	Psychological counseling and guidance are helpful to prevent bullying.
	Article 441 (Arslan et al., 2010)	Psychological counseling and guidance help students to develop interpersonal problem solving skills.
	Article 447 (Türküm, 2011)	Counseling service which considers needs of victims is important in order to reduce being exposed to violence and it helps students with their problem solving skills.
	Article 452 (Celbis et al., 2012)	Behavior management needs to be taught to all students. Information of students who demonstrate behavioral symptoms related to conduct problems might be collected in private.
	Article 454 (Asici & Aslan, 2010)	Counseling and guidance programs need to be prepared based on gender.
	Article 455 (Ongen, 2010)	Counselors need to consider how students express adaptive and maladaptive perfectionist behaviors.
	Article 460 (Özer, Gençtanırım, et al., 2011)	It is helpful that social support from counseling service, and consultation from counseling service to teacher to reduce school dropout risk.
	Article 466 (Çetin, Eroğlu, Peker, Akbaba, & Pepsoy, 2012)	To support development of relational-interdependent self-construal is effective to prevent cyber-bullying

	Article 473 (Eldeleklioglu, 2007)	Counseling- group or individual- is useful for developing conflict resolving skills.
	Article 477 (Gündüz & Celikkaleli, 2009)	It can be helpful to consider differences between males' and females' predictors of aggressiveness into counseling and guidance practices.
Teacher education or training —professional development program for teachers or training for pre-service teachers (<i>n=7 articles</i>)	Article 402 (M Pişkin, 2010)	To provide in-service training to teachers is helpful to make teachers aware about violence.
	Article 410 (Atıcı & Çekici, 2012)	In service training related to behavior management and discipline are helpful for counselors.
	Article 411 (Özkiliç, 2012)	Bullying needs to be included pre-service and in-service training programs.
	Article 426 (Eroğlu, 2009)	Providing in-service programs and seminars are useful to enlighten every aspect of violence and aggression.
	Article 427 (Yenilmez & Seferoglu, 2013)	Training related to cyber-bullying is useful in terms of increasing teachers' awareness and knowledge about cyber-bullying.
	Article 440 (Şahin, 2010)	In-service training and train trainee teachers are effective to prevent peer bullying.
	Article 460 (Özer, Gençtanırım, et al., 2011)	Pre-service and in-service training related to how to support students could be useful.
Policies —describes school committees or other policy making practices (<i>n=7 articles</i>)	Article 407 (Deveci et al., 2007)	Developing child surveillance system regarding to child abuse and neglect is important in terms of violence and victimization.
	Article 424 (Alikasifoglu et al., 2007)	School policies and strategies need to be developed to reduce bullying and victimization
	Article 442 (Ada, 2010)	“Discipline punishments can reduce self-esteem (p.98)”.Discipline punishments might be more prudent.
	Article 443 (Kaya et al., 2012)	Prevention strategies that consider cultural and national differences need to be formed.
	Article 446 (Ünal & Çukur, 2011)	Policy makers need to address school commitment, victimization and discipline methods to reduce rates of delinquent behavior.
	Article 449 (Cenkseven Önder & Sarı, 2012)	Developing policies that include parents, teachers, and students might be useful to improve school climate.
	Article 469 (Çalık et al., 2009)	Prevention programs that cover all needs of students need to be formed.
Raise Awareness —media, posters, etc, so school members or the wider community are more alert to the general problem	Article 416 (Kartal & Bilgin, 2009a)	Increasing teachers' awareness needed to prevent bullying.
	Article 419 (Arslan et al., 2012)	Effects of bullying are depend on gender and role in the bully cycle and this information is important for

<i>(n=5 articles)</i>	Article 424 (Alikasifoglu et al., 2007)	schools in terms of raising their awareness.
	Article 425 (Yerlikaya, 2014)	Health professionals need to be aware of characteristics of students who might involve in bullying.
	Article 440 (Şahin, 2010)	Parents, non-governmental organizations and media need to support studies to prevent bullying.
	Article 426 (Eroğlu, 2009)	Media needs to broadcast more educative programs to raise awareness and reduce rate of bullying.
Societal solutions —ideas to change behaviors in local community or society (n=1)		Identifying factors that lead to aggressive behavior might prevent high school students from demonstrating same behaviors at university.

Type of Curricular Solution	Studies recommending these solutions	Extent and nature of the given recommendation
Non-school interventions: Specific or general workshops or activities for students, that do not have to be implemented in schools, but that could be conducted with community service organizations (<i>n=4 articles</i>)	Article 421 (Özdemir & Akar, 2011)	Students, teachers, parents need to be educated against cyber crimes and administrative and judicial punishments.
	Article 427 (Yenilmez & Seferoglu, 2013)	To protect children from risks and treats of internet, social support platforms that they can use in case of need might be formed. In addition, usage of various internet filters might prevent children from harmful contents.
	Article 454 (Asici & Aslan, 2010)	Programs that address self-concept clarity issues in bully student might be developed at class levels.
	Article 467 (Çivitçi, 2011)	Interventions that help to develop social skills might be useful for those who have difficulties to develop social relationships.
Family interventions: Working not only with students but also with parents (usually recommended in context of whole school interventions) (<i>n=6 articles</i>)	Article 403 (Cenkseven Önder & Yurtal, 2008)	To improve communication within the family, parenting role, and gain problem solving skills within the family, some works need to be done with families of bully and victim students by practitioners.
	Article 412 (Yaman & Peker, 2012)	School psychological counselor might arrange seminars for families to deal with cyber-bullying and proper use of communication technologies.
	Article 418 (Sevda & Sevim, 2012)	Education might be directed at families through bullying prevention programs that consider effects of family relations on students' behaviors.
	Article 470 (Hilooğlu & Cenkseven Önder, 2010)	Bullying prevention programs need to include not only students but also parents as well.
	Article 475 (Pekel-Uludağı & Uçanok, 2005)	School administrations might provide an environment in which students feel happy, safe, and comfortable and they might prevent peer bullying through intervention program which includes parents as well.
	Article 478 (Avcı & Güçray, 2013)	Programs that include anger management against family members, problem solution in family, and communication might be arranged by school counselors to prevent violent

		behavior.
Universal school interventions: Curriculum in the form of counseling or prevention programs for all students (<i>n=9 articles</i>)	Article 408 (Kartal & Bilgin, 2009b)	Teachers need to understand their roles in preventing bullying and protecting victims. Pre-service training need to be arranged according to this understanding.
	Article 414 (Harel-Fisch et al., 2011)	School based interventions that aim to reduce bullying need to focus on circumstances and experiences that lead negative school perceptions.
	Article 445 (Aypay & Durmuş, 2008)	School intervention programs need to include students who are bullies and non-bullies.
	Article 447 (Türküm, 2011)	Programs that address places of violence and the physical self-protection abilities, emergency support sources and ways of communication s social skill might be developed to be used in counseling work at schools
	Article 451 (Bayraktar, 2012)	Democratic school system, usage of authoritarian discipline techniques, students' sense of belonging might be essential factors for anti-bullying preventions and interventions.
	Article 453 (Yıldız& Sümer, 2010)	It might be useful to develop programs according to cultural and social structure of country to prevent violent behavior for early age groups.
	Article 458 (M. Şahin et al., 2012)	For developing prevention and intervention programs, teachers and parents need to be knowledgeable about cyber-bullying.
	Article 459 (Özer, Totan, et al., 2011)	School-wide intervention which includes gender sensitive strategies, guidance programs which aim to improve academic, social, and emotional self-efficacy and social skills might be developed.
	Article 479 (Alikasifoglu et al., 2004)	Preventions that aim to reduce violence need to be developed and implemented in schools.
Targeted school interventions: Curriculum for special populations of students, such as those with bullying problems.	Article 422 (Peker et al., 2012)	School psychological counselor need to run assertiveness training and psycho-education programs.

<i>(n=6 articles)</i>	Article 457 (Siyahhan et al., 2012)	Prevention and intervention programs need to address gender issues, to target perception of bullies and victims, and to raise awareness of teachers and parents.
	Article 467 (Çivitçi, 2011)	Prevention programs need to address students who have difficulties to develop social skills and their level of loneliness.
	Article 468 (Şahin & Korkut Owen, 2009)	Prevention programs might address males' anger management issues and communication skills.
	Article 471 (Gündoğdu, 2010)	Programs that address males' problem solving issues and females' anger management issues might be run.
	Article 478 (Avcı & Güçray, 2013)	Programs that include anger management, problem solving in family, communication, controlling the behavior might be arranged. School counselor might arrange programs that address problem solving skills, anger management, communication skills, coping skills for students.

APPENDIX J: Summary of Articles that Describe Outcomes of Bullying

Dependent variables	Number of Articles	Important findings
Age	7 articles	Students who demonstrated bullying more often were older ones and who demonstrated less bullying behavior were younger ones. There was statistically significant relationship between age and bullying.
Age-related factors with non-significant results	3 articles	These three studies showed non-significant results related to age-related factors.
Grade level	11 articles	There was statistically significant relationship between grade level and bullying. Grade 9 students were victims were as grade 10 and 11 students were bullies.
	4 articles	These four studies showed non-significant results related to grade level.
Grade level with non-significant results		