

Public School Teachers' Workplace Aggression Behaviors: A New Scale with Mixed Method Approach *

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To cite this article:

Coskun, B. (2021). Public school teachers' workplace aggression behaviors: A new scale with mixed method approach. *Journal of Qualitative Research in Education*, 31, 112-139. doi: 10.14689/enad.31.1605

Abstract. Teachers who are believed to be engaged in sacred work might not be expected to commit acts of violence. However, contrary to their public image, teachers do not behave very differently from their students regarding violent behavior. This study aimed to examine how teachers in public schools perceived workplace aggression and what types of aggression behaviors were experienced in the schools and to develop a workplace aggression scale for the Turkish context. The study was conducted with a mixed-method approach, and in the qualitative stage, phenomenological approach was applied. In this phase, 20 interviews with public school teachers were conducted and the data analyzed using a descriptive technique. In the quantitative phase the steps of scale development were applied. The findings of the qualitative phase showed that workplace aggression was defined as "Unlike general aggressive behavior, mainly related to context, workplace aggression manifests itself in workers' feelings of anger toward other workers, and victims of aggressive behavior feel uncomfortable or irritated by these actions. In the quantitative stage, conducted with 213 teachers, exploratory and confirmatory analysis of "Teachers' Workplace Aggression Behaviors Scale" showed a two-factor structure with its 53 items. The scale's factor structure didn't confirm the aggression categories used in the qualitative analysis; for example, in the qualitative analysis, three types of workplace aggression were used: verbal, psychological, and physical workplace aggression; however, in the quantitative analysis, a two-factor structure appeared as overt and covert workplace aggression. In line with the findings of this study, practitioners were recommended to develop new strategies in teacher training and recruitment procedures, and researchers were recommended to conduct both qualitative and quantitative research more in the Turkish context.

Key Words: Phenomenology, exploratory design, overt aggression, covert aggression

Article Info

Received:
18 Feb. 2021
Revised:
20 Dec. 2021
Accepted:
14 Mar. 2022

Article Type

Research

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* This study was produced from the doctoral dissertation titled 'Public School Teachers' Workplace Aggression Behaviors and Their Relationship with Organizational Justice'.

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Introduction

Even though social and legal sanctions have been applied to suppress and erase it, aggression has been a part of human life from the past to the present, and found a place for itself in different walks of life. To illustrate, in the United States, homicide accounts for 9% of workplace deaths (Bureau of Labor Statistics, 2013). Every year, almost 800 workers are murdered at the workplace. More than 25% murderers declared that they committed these crimes because they were ridiculed or pissed off by their coworkers (Brown, Loh, and Marsh, 2012). While these examples of violent acts are intriguing, a much larger population is targeted by less salient ways such as verbal or physical assaults committed without lethal weapons (Burton, Mitchell and Lee, 2005). Schat, Frone and Kelloway (2006) revealed that 41,4% of workers in 15 different occupations were targeted primarily by four types of psychological workplace aggression behaviors, which manifested as yelling, insults, covert threats, and physical threats.

The literature shows that researchers defined aggression in different disciplines and periods in different ways (Anderson and Huesmann, 2003). The definition of aggression, on which a high consensus was reached during the 1960s and 70s, is that "aggression is any behavior carried out to harm another person or group of people. The aggressor is aware of the fact that his/her act is harmful to the target, and the target wants to stop this act" (Baron, 1997; Cited in Neuman and Baron, 2005). Bushman (2017) remarks that this definition has three important points: The first one is that aggression is an observable act: and the second one is aggression is not an accidental behavior but an intentional one. In other words, in order for an act to be defined as aggressive, it has to carry the conscious intent to harm. And last important point is that aggression covers the behaviors the targets try to avoid harm the act might inflict. In another definition, aggression is "any acts that are directed with intent to inflict a quick harm or create unrest in another person". "Quick harm" remarks that aggression is not planned beforehand, "intent" remarks that the accidental consequences of random acts are not aggression. Real harm is not required for an act to be classified as aggressive according to this definition (Anderson and Huesmann, 2003). From a different perspective, Loeber and Hay (1997) define aggression as "the category of behaviors that cause physical harm or threat to other people". In this definition, aggression is explained by observable harm criteria that can be measured in an objective way.

In the aggression literature, the researchers do not agree on including "intent" criteria in the aggression definition. For instance, Neuman and Baron (2005) argue that "intent" should be used as a criterion to classify aggression behaviors, if not, accidental behaviors or behaviors with good intent that resulted in harm might be defined as aggression behaviors. Besides, they remark that in aggression definition "intent" is the intent of the aggressor not the "intent" perceived by the target of aggression. However, Anderson and Pearson (1999) argue that intent is vague in most acts; that is why, "intent" criteria in aggression definitions cause arguments and conflicts in the research. Similarly, researchers such as Loeber and Hay (1997) criticize including "intent" concept in the aggression definitions; as intent cannot be observed by others, it cannot be quantified

objectively. In short, the concept of aggression has yet to be addressed because there is a lack of complete agreement on what constitutes aggression. The aggression literature shows that terms of violence and aggression can sometimes be used with different meanings and sometimes with the same meaning (McPhail, 1996; Cited in Bushman, 2017). Anderson and Bushman (2002) define violence as a type of aggressive behavior aimed at doing maximum harm (e.g., killing). In the aggression research it is seen that violence is examined as a form of aggression under the category of “physical aggression”. In this regard, it can be said that violence is a dimension of aggression.

Aggression can come up in various contexts, one of which is workplace. In general, similar to aggression, it is difficult to define workplace aggression (Jawahar, 2002). Workplace aggression is a form of counterproductive work behaviors and defined as efforts by individuals to harm others with whom they work, or have worked, or the organizations in which they are presently, or were previously, employed (Baron and Neuman, 1996; Neuman and Baron, 1997; 1998). Rai (2002) argues that any aggressive act, physical assault, threat, or compulsive behavior that might cause physical or emotional harm in a work context can be defined as workplace aggression. Whether it reaches its aim or not, the intent of harm makes the acts to be classified as aggressive (Beugré, 2005a, 2005b).

There are several studies classifying aggression, and Underwood (2004) presents an overview of the literature about the different classifications registered by different researchers; These categories include anti-social and pro-social aggression (Sears, 1961); physical and verbal aggression; targeted and untargeted aggression (Buss, 1961); instrumental and hostile aggression (Feshbach, 1964); offensive and defensive aggression (Dodge and Coie, 1987; 2006); and overt and relational aggression (Crick, 1996). Buss (1961) says that there are three different ways to look at human aggression: verbal-physical, direct-indirect, and active-passive. Verbal aggression includes the attempts to harm people with words, while physical aggression is about the acts intended to harm the targets physically. In direct aggression, the target is attempted to be harmed directly, whereas in indirect aggression the target is harmed in indirect ways, e.g. the people and objects he/she cared for might become the target of aggression. In active aggression the aggressive behaviors with the intent to harm are performed. However, in passive aggression the aggressor avoids performing the tasks that would benefit the target (Cited in Neuman and Baron, 2005). Archer and Coyne (2005) grouped adult aggression in two ways; the first of which is exhibited in a group and at the workplace, while the other is exhibited between two people in a relationship. Workplace aggression as a form of aggression exhibited in a group can take quite different forms ranging from verbal threats to name calling, from false accusations to murder (Baron and Neuman, 1998). Some of the aggression classifications were adapted to workplace aggression. One of them is Buss’ (1961) classification according to which, some forms of workplace aggression behaviors can be seen in Table 1.

As shown in Table 1, workplace aggression behaviors are exemplified in eight types of combinations. In their study, based on Buss’ (1961) classification, Baron and Neuman (1996) classified workplace aggression in three dimensions as expressions of hostility,

obstructionism and overt aggression. Embracing a more plain approach Björkqvist (1994) classified aggression as overt and covert aggression. In overt aggression, the perpetrator doesn't hide their identity or intent from the target, whereas in covert aggression the perpetrator tries to hide them from the target. Overt aggression behaviors such as murder, insult, or throwing an object can easily be identified as aggressive behavior; covert aggression behaviors such as depriving someone from resources and damning with faint praise are difficult to identify as aggression.

Table 1.

Eight Types of Workplace Aggression

Type of aggression	Example
Verbal-passive-indirect	Failing to deny false rumors about the target Failing to transmit information needed by the target
Verbal-passive-direct	Failing to return phone calls Giving someone "the silent treatment"
Verbal-active-indirect	Spreading false rumors about the target Belittling someone's opinions to others
Verbal-active-direct	Insults; yelling, shouting Flaunting status or authority; acting in a condescending, superior manner
Physical-passive-indirect	Causing others to delay action on matters of importance to the target Failing to take steps that would protect the target's welfare or safety
Physical-passive-direct	Purposely leaving a work area when the target enters Reducing others' opportunities to express themselves (e.g., scheduling them at the end of a session so that they don't get their turn)
Physical-active-indirect	Theft or destruction of property belonging to the target Needlessly consuming resources needed by the target
Physical-active-direct	Physical attack (e.g., pushing, shoving, hitting) Negative or obscene gestures toward the target

Source: Baron and Neuman, 1996

Teachers conducting sacred work may exhibit and/or be the targets of deviant behaviors at schools or in society. In fact, schools are one of the organizations dealing with a higher likelihood of aggression (Childress, 2014). However, when school, violence, and aggression terms are cited together, the previous research mainly focuses on student violence, either by or towards them. Aggression among teachers has received limited attention in literature (Sasson and Somech, 2015). In this frame, the main objective of this study was to investigate public school teachers' perception of workplace aggression as a term, and develop an original workplace aggression scale for the Turkish school context. In accordance with this general purpose, this study specifically concentrated on three research questions as;

1. How do public school teachers define workplace aggression?
2. What types of aggression behaviors do the teachers exhibit at schools?
3. What are the structural qualities of "Teachers' Workplace Aggression Scale"?

Methods

Research Design

In order to investigate the research questions of this study, an exploratory sequential mixed method design was applied. Creswell (2017) argues that the purpose of exploratory sequential design is to explore and examine the problem through qualitative data gathering devices and analysis and develop a new scale or an intervention program. In her opinion, the exploratory step of this design is particularly advantageous since the implementation of the scales developed in Western cultures in the underdeveloped or other cultures is controversial.

In the qualitative stage of the study, phenomenology design was used. Phenomenology is based upon Husserl's idea of reality which is made up of the objects and events as the way they are perceived by those experiencing them. In phenomenology, experience is the source of all knowledge. Creswell (2016) points out that phenomenological studies display the meanings in individuals' experiences about a concept or a phenomenon. Phenomenological design is used to study individual experiences in depth; in the design, rich descriptions of human experiences are reduced to common themes. The descriptions end with a brief definition, as each word represents the experiences correctly as the phenomena are experienced. In this study, workplace aggression was explained regarding the meanings participants attributed to their experiences. In the quantitative stage data gathered at the qualitative stage and relevant literature were employed to develop "Teachers' Workplace Aggression Scale".

Study Group and Sampling

The study group was determined for the qualitative stage according to the maximum variation sampling method. In Table 2 study group participants' code names and characteristics were given.

As seen in Table 2, the study group was composed of 20 teachers – 10 of whom were male and 10 of whom were female, 12 of whom were working in urban and eight of them were working in rural schools. The age of the participants ranged from 27 to 53, and their work experience was between 2 and 31 years. Teachers were teaching different subjects, four teachers were elementary school teachers, six teachers were secondary school teachers and 10 of them were high school teachers. The interviews lasted 30 minutes on average, 602 minutes in total and created data of 28.489 words in the script. In the quantitative stage, the random sampling method was employed, and 213 teachers participated in the pilot study of the scale. In Table 3 pilot study participants' characteristics can be seen.

Table 2.

Study group

Code Name	Subject	Gender	Work Experience	Age	School Level and Type	School Location	Interview Time
Güneş	Elementary	F	20	47	Elementary	Urban	31 min.
Oğuz	Elementary	M	31	53	Elementary	Urban	51 min.
Dilek	Elementary	F	10	33	Elementary	Rural	35 min.
Mahmut	Elementary	M	12	33	Elementary	Rural	28 min.
Mehlika	Counselor	F	23	49	Secondary	Urban	19 min.
Özgür	Science	M	19	45	Secondary	Urban	32 min.
Filiz	Counselor	F	4	26	Secondary	Rural	28 min.
Metin	English	M	12	34	Secondary	Rural	31 min.
Hülya	Arabic	F	4	40	Imam & Preacher Secondary	Urban	65 min.
Halim	Sciences	M	19	45	Imam & Preacher Secondary	Urban	38 min.
Gaye	English	F	11	33	Anatolian High	Urban	33 min.
Gökhan	Geography	M	18	41	Social Sciences High	Urban	39 min.
Zehra	Chemistry	F	15	36	Anatolian High	Rural	17 min.
Tuna	Physical Education	M	5	27	Anatolian High	Rural	21 min.
Âdem	Biology	M	15	40	Vocational & Technical Anatolian High	Urban	20 min.
Zeliha	Child Development and Education	F	23	47	Vocational & Technical Anatolian High	Urban	17 min.
Funda	Mathematics	F	20	41	Anatolian Imam & Preacher High	Urban	18 min.
Abdullah	Mathematics	M	20	44	Anatolian Imam & Preacher High	Urban	32 min.
Mine	Accounting and Finance	F	6	30	Vocational & Technical Anatolian High	Rural	21 min.
Harun	Furniture and Decoration	M	2	27	Vocational & Technical Anatolian High	Rural	26 min.

In addition to the sample characteristics provided in Table 3, the mean of the numbers of teachers at schools was 45 and teachers' mean age was 41. At the secondary level, 28 teachers worked at general secondary schools while 26 worked at imam and preacher secondary schools. At the high school level, 29 teachers were working at Anatolian high (general academic education), 17 teachers were working at Anatolian imam and preacher high, 16 teachers were working at science high (high level academic education), and 18 were working at vocational and technical high schools. The mean work experience of teachers at their present school was six years.

Table 3.*Pilot Study Participants*

Variable	Category	Percent	Frequency
Gender	Female	46,9	100
	Male	53,1	113
School Level	Elementary	31,9	68
	Secondary	30,5	65
	High	37,6	80
Age	23-32	12,2	26
	33-42	48,4	103
	43-52	27,7	59
	53-62	8,9	19
	62+	,9	2
Subject	Elementary	29,1	62
	Social Subjects	38,0	81
	Arithmetics & Science	19,7	42
	Skill Subjects	7,5	16
	Vocational Subject	2,3	5
	Guidance & Counseling	2,8	6
Number of the teachers at the school	18-30	22,5	48
	31-45	33,8	72
	46-60	28,2	60
	61-80	15,5	33
Location of the school	Melikgazi	51,6	110
	Kocasinan	30,0	64
	Talas	13,6	29
	İncesu	4,7	10

Data Gathering Instruments and Implementation

In the qualitative stage of this study, semi-constructed interview technique was employed. The questions in the interview form were constructed following the literature on human and workplace aggression, and in parallel with the research questions. After the survey questions were written, six experts[†] – four faculty members from educational administration discipline, one faculty member from the assessment and evaluation discipline and a psychologist- reviewed them. The interview questions were rearranged according to the experts' comments and a pilot study with two teachers was conducted. Eventually, the interview form included three main questions and four probe questions about aggression, workplace aggression and types of workplace aggression the participants observed at schools. The pilot form of "Teachers' Workplace Aggression Behaviors Scale", aimed to measure the frequency of teachers' workplace aggression behaviors, was a 5-Likert type scale. The items in this scale were constructed by

[†] Prof. Dr. Ali Balcı, Prof. Dr. Yasemin Kepenekçi, Assoc. Prof. Ergül Demir, Dr. Tuncer Fidan ve Dr. İnci Öztürk, Psychologist İmran Emir

synthesizing the data gathered at the interviews in the qualitative stage and other scale items used in the aggression literature. In the item pool, there were 24 items for verbal workplace aggression, 23 items for psychological and 19 items for physical workplace aggression, and 66 items in total. In order to confirm the content and face validity, seven experts[‡] were consulted for their opinions. After the expert opinions, a pilot study was initiated with a form of 61 items.

Data Analysis

The data gathered in the qualitative stage was analyzed with a descriptive analysis approach; validity and reliability were confirmed in different ways. In order to ensure validity and reliability, the checklist recommended by Miles and Huberman (1994; Cited in Yildirim and Simsek, 2011) was implemented. Some of the items in this checklist registered in this study are specified like below:

1. The findings were consistent and meaningful. The concepts that emerged made up a meaningful whole.
2. The findings were consistent with the theoretical framework.
3. The characteristics of the study group and contextual and procedural specifics were described in a detailed way to make comparisons with other groups.
4. The participants in the study group were diversified so generalizations could be made.
5. The research questions were stated clearly. The stages of the study were consistent with the research questions.
6. Data collection was carried out in the manner required by the research questions and appropriate to the purpose of the study.
7. The researcher described the methods and stages of the study in a clear and detailed way.
8. The data collection steps, implementation process, analysis, determination of results, and conclusions were detailed.
9. The findings of the study were clearly associated with the data.
10. Alternative opinions were taken into consideration and reported.
11. The raw data of the study was kept in order to be examined by another researcher if needed.

The first two items in this list were applied to ensure internal validity – i.e. credibility; the third and the fourth items were for external validity – i.e. transferability; the fifth and sixth items were for internal reliability – i.e. consistency; and the last five items were applied to ensure external reliability – i.e. confirmability.

In order to explore the construct validity of the scale, the data in the pilot study was tested by exploratory factor analysis (EFA). Confirmatory factor analysis (CFA) was applied to

[‡] Prof. Dr. Ali Balcı, Prof. Dr. İnyet Aydın, Prof. Dr. Yasemin Kepenekçi, Prof. Dr. Hasan Basri Memduhoğlu, Assoc. Prof. Şakir Çinkır, Assoc. Prof. Ergül Demir

confirm the factor structure that emerged in the EFA. The SPSS was used for the EFA, and the LISREL program was used for the CFA.

Findings

In this part, the qualitative results, i.e., the findings obtained from the interview data, and the quantitative results, i.e., the findings from the scale development, were presented.

Qualitative Findings

In the qualitative findings, the definition of aggression, the definition of workplace aggression, and the types of workplace aggression were reported.

The definition of aggression. As most of the hypotheses generated in workplace aggression literature were developed in compliance with human aggression literature, the first research question was about the perceptions about aggression as a term and the findings about general human aggression were presented before workplace aggression was discussed. The responses and comments by the teachers in the study group for the interview question “How do you define aggression?” were summarized under seven themes. These themes were “behavior”, “victim perception”, “subjectivity”, “anger”, “spontaneity”, “purposeful behavior”, and “perpetrator intent”. There were 32 codes under these themes. Although there were no codes under the perpetrator intent and purposeful behavior, they were presented as individual themes because of their theoretical importance. In Figure 1, the themes that the participating teachers referred to in their definitions of aggression were provided.

Figure 1.

The Definition of Aggression

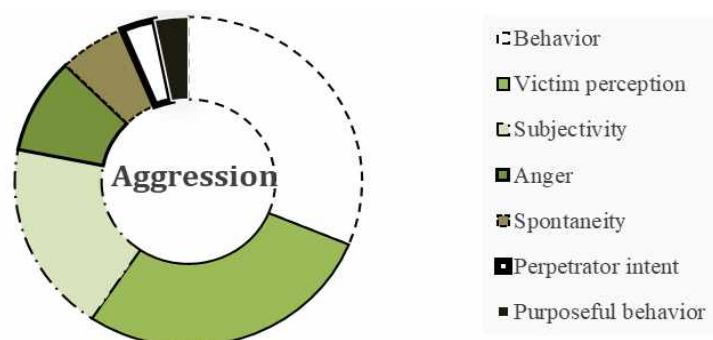


Figure 1 shows that teachers have defined aggression in terms of aggression “behaviors”. Teacher Adem defined aggression as “violence, interference, a high voice tone, yelling ... etc. in general sense. It can be in other means such as pressure”. In his definition, he used observable behaviors to define aggression. The second issue participants frequently raised was conceptualized as “victim perception”. For example, Teacher Oğuz defined

aggression as “disturbing behaviors for the victim. For instance it is to act disturbingly by body language”. In this definition “disturbing behaviors” expression was repeated by the other participants as well. Teacher Özgür argued that aggression was “the physical or verbal acts that might disturb the target”, Teacher Zeliha expressed in a similar way as such “disturbing behaviors towards the target”. The important point with this approach was that the participant did not remark on the observable behaviors, but rather on the disturbing behaviors according to the target's perception. The third theme emerging in the aggression definitions by the participants was “subjectivity”. In this theme, it was argued that aggression could be perceived in different ways, changing according to the target, perpetrator, or act in different contexts. That is, depending on the people's world views and contextual factors, some acts might be perceived as aggressive and might not be perceived so in some other times. In this theme Teacher Gaye pointed that there might be different criteria of aggression for every individual saying that,

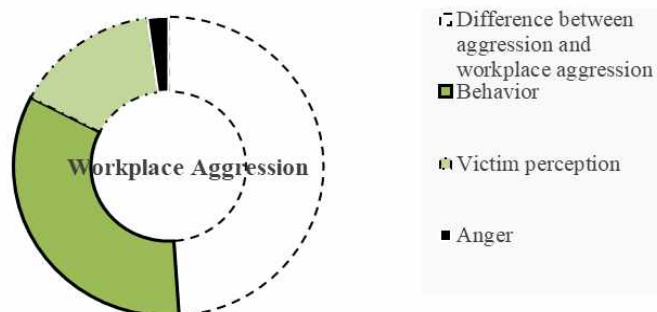
If I don't know the parties, I don't have an obvious idea whether there is aggression behavior or not. However, when I know the parties I can understand that they are not on good terms. How well I know the parties, their communication history, how much I know them and my own interaction with them determine my perception.

Another characteristic of aggression that the participants remarked was the way aggression behaviors were exhibited. That is, behaviors exhibited with anger could be perceived as aggressive (Teacher Dilek, Teacher Hülya and Teacher Zeliha).

Based on the teachers' comments on the definition of aggression, human aggression can be defined as “actions that are perceived as hurtful by their target, about which perception can change contextually, are displayed with anger, and are mostly observable” After the aggression definition by the teacher participants, it was examined how they define workplace aggression.

Figure 2.

The Definition of Workplace Aggression



Definition of workplace aggression. When asked how they would define aggression in the workplace, responses and comments from participating teachers were grouped under four themes. The themes were “the difference between general human aggression and workplace aggression”, “behavior”, “victim perception” and “anger”. There were

29 codes under these themes. The themes of workplace aggression definition were shown in Figure 2.

As shown in Figure 2, the teachers mostly remarked the difference between general human aggression and workplace aggression. The differences that were remarked were coded as "context" (Oğuz, Derya, Özgür and Gökhan Teachers), "causes" (Dilek, Metin, Hülya and Gökhan Teachers), aims (Mahmut, Hülya and Abdullah Teachers), "cumulativeness" (Teacher Gaye), "types" (Adem and Mine Teachers) and "consequences" (Teacher Filiz). As an example of contextual difference Teacher Oğuz argued that "...in everyday life aggression arises spontaneously as a reaction to an action. However, in school life, the observed space is larger, the class is larger, the staff room is larger, and you may become the target of the bully stare or simple behavior". In simple terms, teacher Oğuz noted the characteristics of community life where large audiences witnessed actions. Teacher Gaye remarked the different causes of aggression and workplace aggression and expressed that,

In 'normal' aggression the aggressive behaviors exhibited are more spontaneous. For example you can witness two people arguing in the traffic, which might result from a spontaneous event emerging at that time. However, there must be a deep root when something like that happens at the workplace. They must be something that accumulates over time.

As it is clear, Teacher Gaye thought that general aggression could emerge spontaneously while workplace aggression might result from cumulative reasons. Another code for the difference between general aggression and workplace aggression was the types of aggression; psychological aggression instruments might be used in workplace aggression more than they are used in general aggression. According to Teacher Adem "Workplace aggression includes psychological aspects ... I mean, it might be exhibited as psychological aggression behaviors, it does not generally come up as physical aggression".

Similar to the themes of aggression, the second theme for workplace aggression definition was behavior; the participants explained workplace aggression by giving examples of workplace aggression behaviors. Teacher Melike gave examples of workplace aggression like:

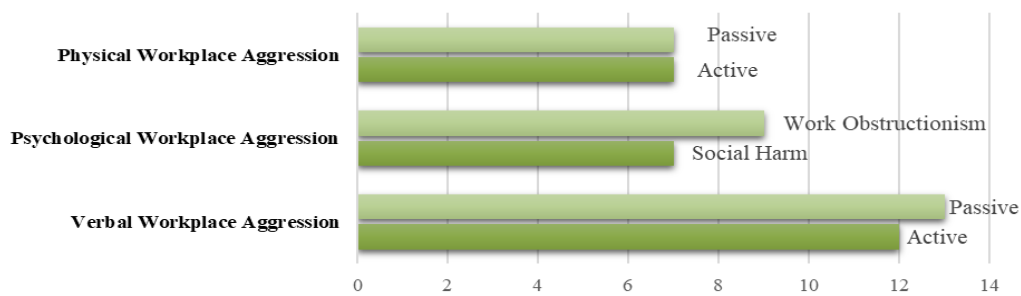
The conflicts between teachers, disputes, fights, suppression, cliques, and ostracism can be given as examples of workplace aggression behaviors among teachers. In addition, workplace aggression might come up as various extra tasks given to a teacher by school management without taking the teacher's ideas and feelings into account. There might be a conflict between teachers and school management because of these tasks.

Once again, similar to the general aggression definition, teachers defined workplace aggression by pointing out the victim's perceptions. In conclusion, it might be concluded that participant teachers defined workplace aggression as "Workplace aggression, which is mainly contextually different from general human aggression, manifests itself in workers' feelings of anger toward other workers, and victims of aggressive behavior feel uncomfortable or irritated by these actions".

Types of teachers' workplace aggression behaviors. The participants were asked about what kinds of aggression behaviors they observed among the teachers at their schools and the responses from them were classified under verbal, psychological. Their responses were classified under verbal, psychological, and physical aggression categories. In Figure 3, the frequencies of these categories were shown.

Figure 3.

Types of Workplace Aggression Behaviors

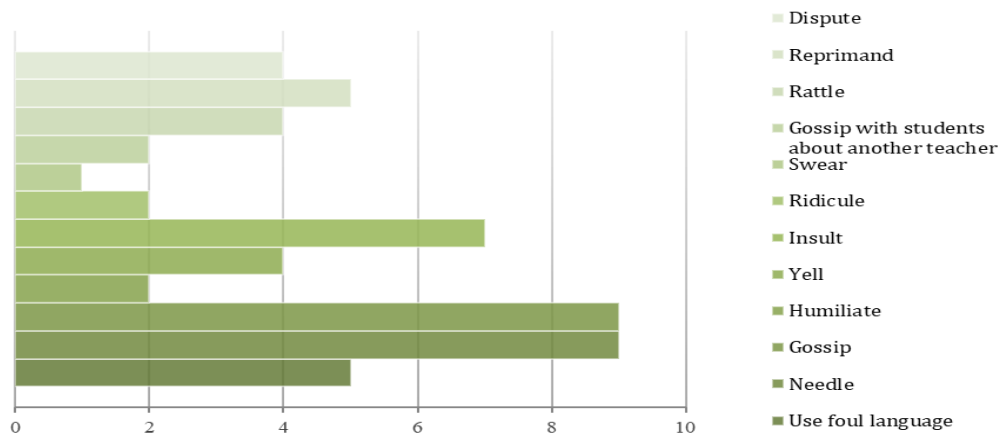


As shown in Figure 3, teachers' examples of workplace aggression were mostly categorized under verbal aggression. Besides, as it is seen each category was divided under two sub-categories.

Teachers' verbal workplace aggression behaviors. Verbal aggression is attempts to harm targets through words rather than physical acts. In this study, the verbal aggression category was divided into two sub-categories as active and passive verbal aggression. While active aggression behavior is about harming people actively with words, in passive aggression the target is harmed by not making the expected and appreciated contact with him/her (Buss, 1961; Cited in Baron and Neuman, 1996). In Figure 4 the codes of active verbal workplace aggression behaviors were shown.

Figure 4.

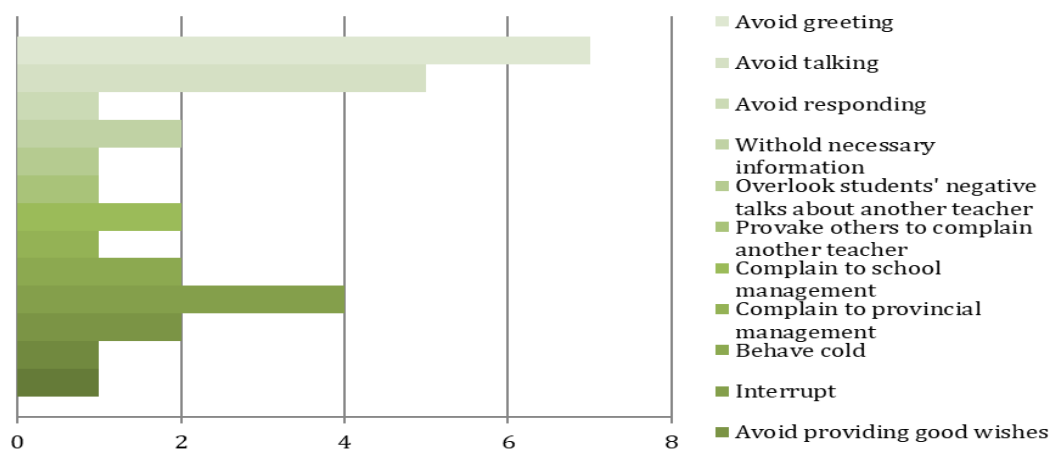
Active Verbal Workplace Aggression



As can be seen in Figure 4, there were 12 codes under active verbal workplace aggression. "Gossiping" and "Needling" were the most cited active verbal workplace aggression codes. The reason why gossiping and "gossiping with students about another teacher" were coded in two was that gossiping about another teacher with students was cited as a more harmful aggression behavior than simply gossiping with another adult. Swearing was the least expressed active verbal workplace aggression act.

Figure 5.

Passive Verbal Workplace Aggression



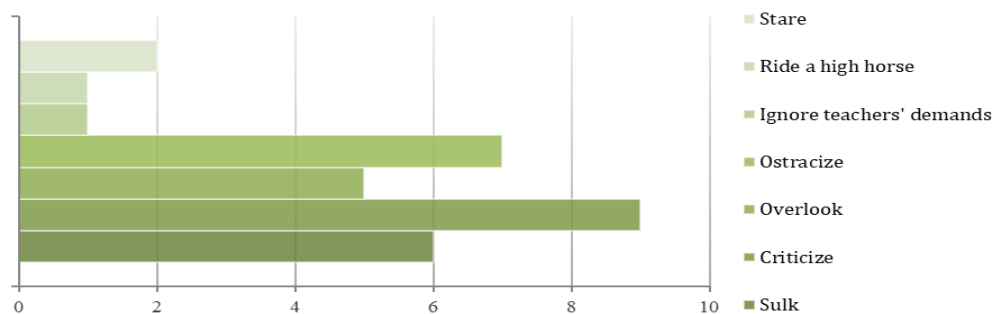
As shown in Figure 5, there were 13 codes under the passive verbal aggression sub category. "Avoid greeting" was the mostly cited passive verbal aggression code. Some of the codes in the figure were written in short terms; for example "provoking students" was used to express provoking students against another teacher; "avoid giving warm wishes" was used to express not giving warm wishes on important occasions such as birth or funeral in a teacher's family (Giving warm wishes births or funeral, or wedding is a very important manner in Turkish traditions), "getting a teacher reported" was used to express getting parents report another teacher to the authorities. As seen in Figure 4 and Figure 5 there were fewer passive verbal workplace aggression codes than active ones. There can be two main reasons for this: First, some passive verbal aggressive behaviors can be more difficult to label/notice as aggressive. That said, while not greeting someone is an aggressive act for some people, it may not be perceived as aggressive by some others. The second reason is that passive aggression behaviors are less observable than active ones. For example, provoking students/parents toward other teachers is a covert aggressive act that cannot easily be observed or noticed by third parties.

Teachers' psychological workplace aggression. Psychological aggression behaviors are the ones that do not seem to have harmful intentions at first sight, but eventual aims or consequences of which are to harm the target. Psychological aggression behaviors were divided into two categories as social harm behaviors and obstructionist behaviors. Social harm is the aggressive behavior that harms the target by preventing them from

having a good social life. Obstructionist behaviors are aggressive behaviors that avoid the target to conduct an effective work life by deliberately delaying or preventing progress. In Figure 6, the codes of social harm behaviors were shown.

Figure 6.

Social Harm- Psychological Workplace Aggression



As shown in Figure 6, the social harm category had seven codes among which "criticizing" had the highest frequency. Although criticizing did not seem like aggressive behavior, the participants referred to this code as criticizing other teachers' world view, appearance, lifestyles etc. The least cited codes were "riding a high horse" and "ignoring teachers' demands". In Figure 7 the codes of work obstructionism were shown.

Figure 7.

Work Obstructionism - Psychological Workplace Aggression

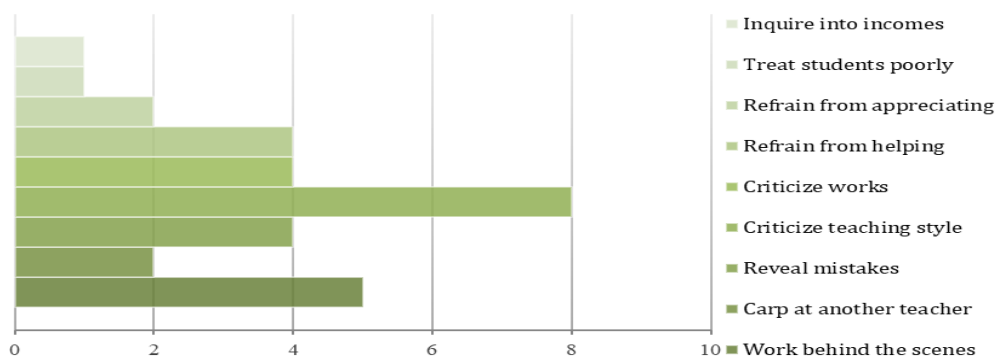


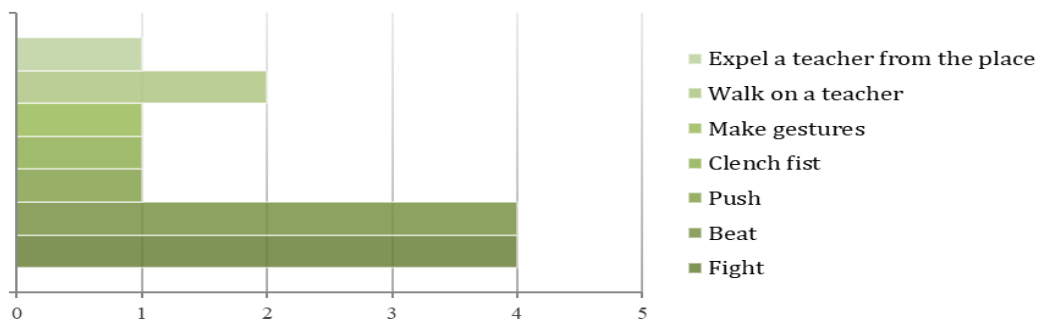
Figure 7 illustrates that obstructionist behaviors were summarized in nine codes. Criticism of teaching style was the most often stated obstructionist behavior, whereas publicly "inquiring into other teachers' salaries" and "treating some individual children poorly" were the least cited codes. The code of treating some specific kids badly was used to signify treating pupils who were another teacher's "favorite" students badly. Social harm behaviors and obstructionist behaviors had the same frequency of codes. It might be questioned why there had been such a categorization as social harm and obstructionism as social harm itself might harm teacher's professional work. Yet,

according to the opinion that social harm is aimed at teacher’s social environment and work obstructionism is aimed at professional teaching work, such a distinction was made between the two.

Teachers’ physical workplace aggression. Physical aggression includes behavior committed with intent to cause physical harm or threat of physical harm to the target. Physical workplace aggression was categorized into two as active physical workplace aggression and passive physical workplace aggression. In the active physical workplace aggression, the aggressor causes actual physical harm to the target. In the passive physical aggression, an actual harm is not realized, but there is an intent to inflict harm on the target or an observable threat of physical harm towards the target. In Figure 8 the codes of active physical workplace aggression were shown.

Figure 8.

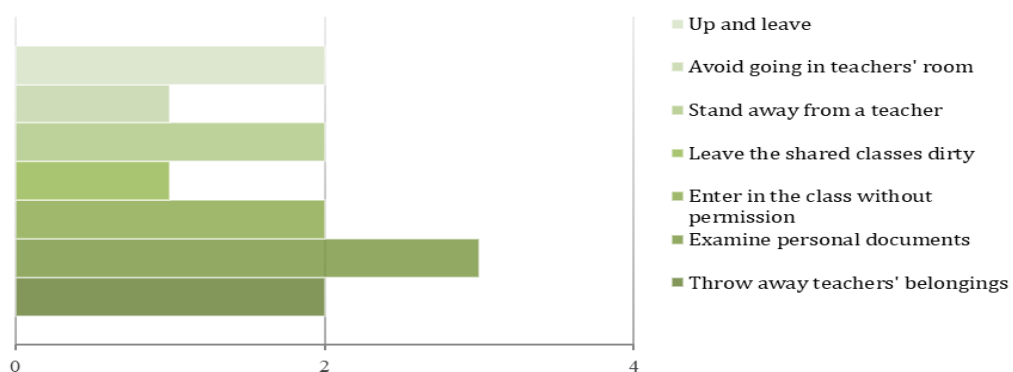
Active Physical Workplace Aggression



As seen in Figure 8 active physical workplace aggression had seven codes. The most cited active physical aggression behaviors were “fighting” and “beating”. There was more than one least cited behavior. In Figure 9 the codes of the passive physical workplace aggression were shown.

Figure 9.

Passive Physical Workplace Aggression



As shown in Figure 9, passive physical workplace aggression consisted of seven codes the most cited of which was “avoid getting in the teachers’ room” and the least cited of which were “leaving the shared classes dirty” and “examining personal documents without consent”. Although leaving the shared classes dirty seemed to be too specific and unique to be accepted as an aggressive act, the researcher purposefully included this code to draw attention to the variety of acts that could be perceived as aggressive.

Quantitative Findings

This part of the study explained the steps in the Teachers Workplace Aggression Scale development process and the EFA and CFA results.

Exploratory factor analysis. As a first step missing data analysis was run on the data set gathered from 213 teachers with the pilot scale of 61 items. It was determined that there was no significant missing data since there was no missing data of more than 5% of any variable (Tabachnick and Fidell, 2013). In the statistics literature there are different approaches to how many observations are needed to run a sound factor analysis. Tabachnick and Fidell (2013) argue that when there are a few variables with high loadings (0.80) a small population (e.g. 150) is adequate for a sound factor analysis. That Teachers’ Workplace Aggression Behaviors Scale had seven variables (31, 34, 36, 43, 44, 59 and 61. Items) with loadings higher than 0.80 showed the number of observations was adequate.

Kaiser Meyer Olkin and Bartlett’s Sphericity tests were run to determine the suitability of the data for factor analysis. KMO coefficient which changes between 0 and 1 and is supposed to be 0.6 minimum (Tabachnick and Fidell, 2013) was calculated as .935. Bartlett’s Sphericity chi-square value was 10084.188, with an 1830 degree of freedom, and was significant ($p < 0.05$). KMO and Bartlett test results showed that there was no correlation among the items, and data had a normal distribution. In order to examine the outliers, item values were transformed in standard “z score” and seen that all the item scores were between -3 and +3 interval (Cokluk, Sekercioglu and Büyükozturk, 2014).

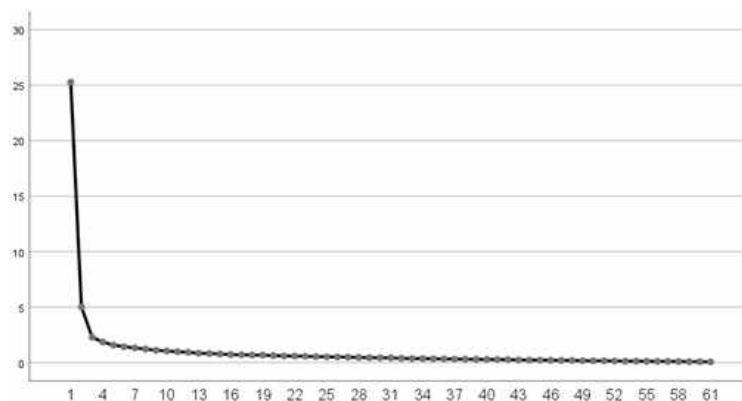
The item correlation matrix for multicollinearity was investigated. It was observed that the highest correlation value among the items was 0.728 ($r > 0.90$; Cokluk et al., 2014) so it was evaluated that there wasn’t a multicollinearity issue. Similarly, when the anti-image matrix was examined, it was observed that intersection points for each variable were higher than 0.5 and as a result there weren’t any variables to be omitted (Can, 2014).

According to these results, it was decided that the EFA could be performed. As a factor extraction method, maximum likelihood with oblique rotation was employed as the researcher wanted to have a theoretical approach (Tabachnick and Fidell, 2013; Can, 2014; Erkuş, 2016; Pallant, 2017). In this analysis, factor loadings of the variables were examined in the common variance table, and it was observed that there weren’t any variables with a factor loading lower than 0.30 so all the variables were acceptable

(Cokluk et al., 2014). In the total variance table, there were 10 factors with eigenvalues higher than 1. However, as it is not a recommended approach to determine factors by eigenvalue for long scales (more than 30 variables) (Field, 2005; Cited in Can, 2014), factors were determined within the frame of the criteria that each additional factor had 5% contribution to the total variance and scree plot. According to these two criteria, the scale was decided to be composed of two factors. In Figure 10, scree plot of the Teachers' Workplace Aggression Behaviors was presented.

Figure 10.

Teachers' Workplace Aggression Behaviors Scale Scree Plot



As shown in Figure 10 there were two “drop” points. In the total variance table it was seen that, the variance explained by each factor decreased by less than 5% after the second factor (The third factor explained 3,72% of the total variance). In accordance with these two findings, it was assumed that the scale had a two-factor structure, and as a next step the factor analysis was repeated, fixing the factor number to two. With the assumption that there was a theoretical relation between the factors, the direct oblimin technique, which is one of the oblique rotation techniques, was employed to rotate two factors (Cokluk et al., 2014). The overlapping variables that cross loaded on both factors were excluded from the scale one by one, on condition that the difference between the factor loadings were less than 0.100 and their theoretical importance could be ignored. In this way eight variables were excluded from the scale (21, 19, 33, 9, 7, 16, 11 and 36. Items, respectively). Pattern matrix and factor loadings for 53 variables can be seen in Table 4.

Table 4.

Teachers' Workplace Aggression Scale EFA Pattern Matrix

	Pattern Matrix		Total Item Correlation
	Factor 1	Factor 2	
Teacher/Teachers in my school ...			
S 53 .. ride a high horse towards another teacher.	.923		.754
S 43 .. gossip about another teacher.	.890		.723
S 27 .. look for another teachers' mistake constantly.	.843		.816

S 8 .. overlook others' gossips about another teacher.	.804	.724
S 46 .. do not talk to a teacher/ getting crossed with another teacher. .	.803	.763
S 18 .. ignore another teachers' demands or ideas.	.788	.716
S 40 .. complain to school, province management about another teacher even for simple conflicts.	.784	.749
S 15 .. reveal another teachers' mistake/ tell on another teacher'.	.764	.717
S 60 .. avoid getting in the same place with another teacher/other teachers.	.761	.674
S 17 .. sulk another teacher.	.749	.656
S 49 .. don't help another teacher even if he/she/they can.	.736	.688
S 29 .. don't speak up for the false rumours made up about another teacher.	.726	.689
S 20 .. don't appreciate another teacher for the works deserving appreciation.	.726	.644
S 52 .. don't deliberately attend the events organized by another teacher.	.724	.716
S 22 .. provoke a teacher against another teacher.	.710	.770
S 37 .. criticize another teacher's appearance.	.710	.717
S 57 ..criticize another teacher's teaching style in a bitter way.	.692	.726
S 1 .. needle another teacher/make implications towards another teacher.	.650	.534
S 56 .. provoke students, parents or other teachers against another teacher.	.642	.709
S 38 .. ridicule/ say unpleasant words to another teacher.	.638	.696
S 28 .. yell another teacher.	.630	.740
S 48 .. intervene directly in another teachers' work.	.628	.702
S 47 .. make groundless accusations about another teacher.	.615	.657
S 4 .. avoid sitting next to another teacher.	.607	.587
S 51 .. prevent others from appreciating another teacher.	.602	.711
S 13 .. prevent another teacher from expressing his/her opinions/interrupt him/her.	.601	.679
S 6 .. quarrel with another teacher out loud.	.600	.594
S 5 .. criticize another teachers' opinions in a harsh way.	.590	.611
S 45 .. don't provide warm greetings to another teacher for his/her important times.	.561	.515
S 41 .. correct another teacher in a harsh way in front of others.	.547	.71
8		
S 42 .. remind another teacher his/her past mistakes.	.542	.762
S 23 .. behave in an unsympathetic way towards another teacher in her/his hard periods.	.533	.684
S 12 .. avoid informing another teacher about an issue she/he is supposed to be.	.504	.586
S 3 .. abandon a place when a teacher enters in there.	.473	.559
S 2 .. reprimand/scold another teacher.	.461	.574
S 39 .. speak slang/vulgar language with another teacher.	.456	.581
S 25 .. take another teachers' belongings, documents or lesson materials without permission.	.417	.549
S 34 .. push or pull another teacher with force.	.895	.484
S 44 .. throw an object to another teacher.	.855	.369

S 24 .. assault physically to another teacher (slap, kick, punch, strangle etc.).	.811	.545
S 35 .. bang into/shoulder another teacher on purpose.	.782	.410
S 54 .. damage another teachers' belongings, documents or lesson materials on purpose.	.759	.540
S 26 .. make rude or obscene gestures to another teacher.	.741	.583
S 55 .. threaten another teacher with physical violence.	.731	.541
S 31 .. insult, swear or damn another teacher.	.695	.646
S 59 .. abuse another teacher physically.	.632	.541
S 14 .. threaten another teacher with revealing her/his secret information.	.597	.459
S 32 .. make sexist remarks about another teacher.	.584	.599
S 50 .. attack objects or things around (slam a door, kick a chair, hit on a table etc.).	.580	.513
S 61 .. make threatening gestures to another teacher (clench fist, lift a hand etc.).	.563	.440
S 30 .. make racist remarks towards another teacher.	.539	.551
S 10 .. make verbally abusive remarks towards another teacher (obscene expressions, unreasonable compliments etc.).	.385	.371
S 58 .. examine another teachers' belongings, documents or lesson materials without permission.	.345	.528
Total Explained Variance:	% 51.76	
Scale Total Cronbach Alfa:		.972

As illustrated in Table 4, the total variance explained by the two-factor scale was 51.765%. The first factor was composed of 37 variables, and the second factor included 16 variables. The first factor accounted for 42,489% of the variance, while the second factor accounted for the remaining 9.276%. After the factor structure seen in Table 4 was settled, the correlation matrix between the factors was reviewed. In Table 5, the correlational matrix for the Teachers' Workplace Aggression Behaviors Scale factors was presented.

Table 5.

Teachers Workplace Aggression Scale Correlation Matrix between the Factors

Factor Correlation Matrix		
Factor	1	2
1	1.000	.521
2	.521	1.000

In Table 5 it could be seen that, the correlation between the two factors was 0.521, which indicated that each factor could be evaluated separately (Cokluk et al., 2014). After the scale structure was determined by the EFA, Cronbach alpha coefficient was examined for the scale and each factor in order to evaluate measurement reliability. As Buyukozturk (2009) argues, a reliability coefficient above 0.70 is adequate. In table 4 it is seen that Teachers' Workplace Aggression Behaviors Scale had a perfect Cronbach alpha coefficient value ($\alpha \geq .90$). When each factor was examined separately, it was seen that the 1st Factor had a 0.971 alpha coefficient value and for the 2nd Factor it was 0.970. Both factors had Cronbach alpha coefficient values of perfect levels. Total item

correlation was used to estimate the distinctiveness of scale items, and it was discovered that all of the items had total item correlation values greater than 0.30, indicating that all of the items could distinguish individuals and that no item should be removed from the scale (Buyukozturk, 2009).

Confirmatory factor analysis. The results of CFA conducted on 53 variables and 213 observations can be seen in Table 6.

Table 6 shows that the Teachers' Workplace Aggression Behaviors Scale fit indices of χ^2 / sd (2.4), RMSEA (0.8), NFI (0.94), PNFI (0.90) and RFI (0.93) had acceptable fit levels, NNFI (0.96), CFI (0.96) and IFI (0.96) had good fit values. These indices showed two-factor structure of the scale was confirmed.

Table 6.

CFA Results for the Teachers' Workplace Aggression Behaviors Scale

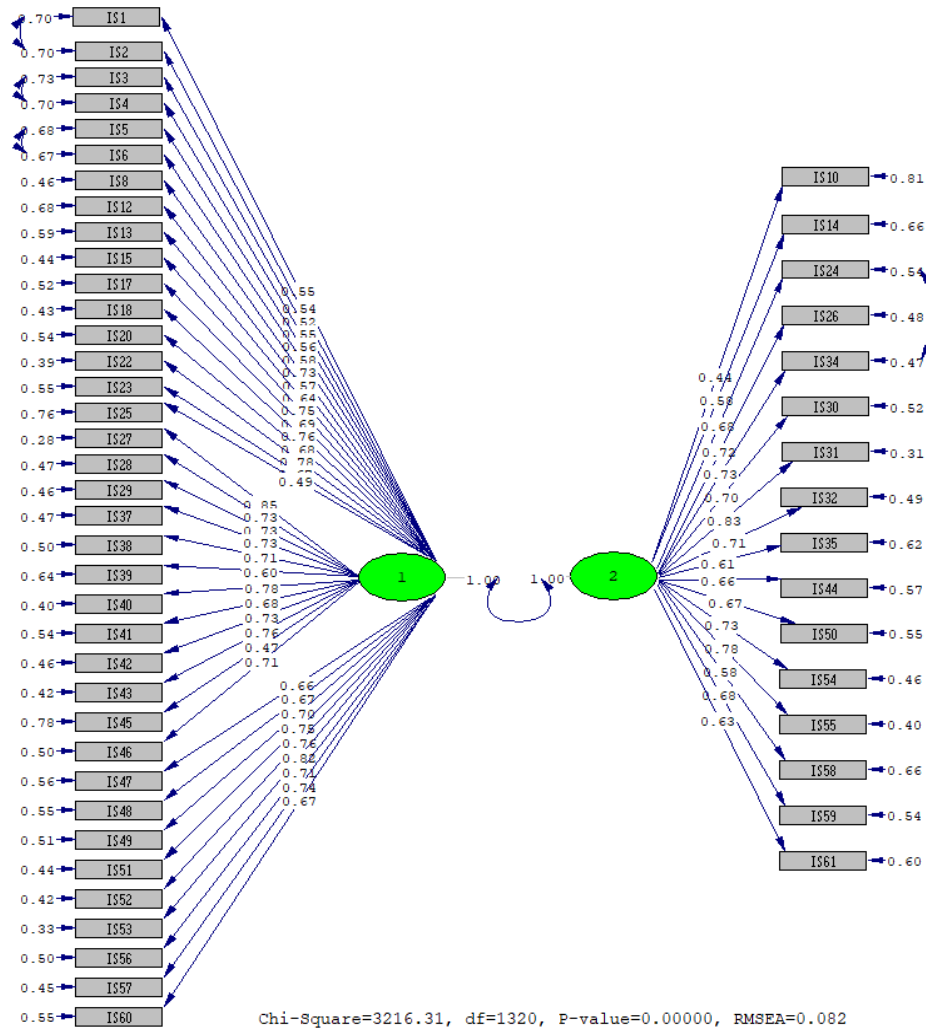
Fit Indices	Scale Value	Acceptable Fit	Perfect Fit
χ^2 / sd	3216.31/1320 = 2.4	$2 \leq \chi^2 / sd \leq 3$	$0 \leq \chi^2 / sd \leq 2$
RMSEA	.08	$.05 \leq RMSEA \leq .08$	$.00 \leq RMSEA \leq .05$
NFI	.94	$.90 \leq NFI \leq .95$	$.95 \leq NFI \leq 1.00$
NNFI	.96	$.90 \leq NNFI \leq .95$	$.95 \leq NNFI \leq 1.00$
PNFI	.90	$.50 \leq PNFI \leq .95$	$.95 \leq PNFI \leq 1.00$
CFI	.96	$.90 \leq CFI \leq .95$	$.95 \leq CFI \leq 1.00$
IFI	.96	$.90 \leq IFI \leq .95$	$.95 \leq IFI \leq 1.00$
RFI	.93	$.90 \leq RFI \leq .95$	$.95 \leq RFI \leq 1.00$

Model produced on LISREL for the Teachers' Workplace Aggression Behaviors Scale with the standardized results can be seen in Figure 11.

When the standardized results were examined in Figure 11, it was seen that error variances were lower than 0.90, and t values of all the items were insignificant ($p > 0.05$). That is, there was not any item to be omitted in the scale. After this stage the factors were named as the dimensions of the scale. The 1st factor was named as covert workplace aggression and the 2nd factor was named overt workplace aggression. Neuman and Baron (2005) noted that the classification of aggression, which is closely related to the concept of intention, is overt and covert aggression. While the behaviors such as committing murder, insulting, or throwing an object could easily be recognized and classified as aggressive; some behaviors such as depriving someone of the resources, or damning with faint praise were difficult to recognize and classify as aggressive. The easily observed behaviors are overt aggression, and the behaviors that are difficult to observe are covert aggression (Neuman and Baron, 2005). In overt aggression, anger is openly exhibited in various ways, while in covert aggression it is difficult to say whether the aggressor is angry or not (Björkqvist, 1994). In covert aggression the aggressor tries to hide the intent of harm, and the victim cannot clearly be sure if they are really harmed or not.

Figure 11.

Teachers' Workplace Aggression Behaviors Scale CFA Model



Discussion

In this study aiming to investigate how public school teachers' define aggression and workplace aggression, and what types of behaviors they label as aggressive, it was observed that teachers defined aggression as actions that are perceived as hurtful by their target, about which perception can change contextually, are displayed with anger, and are mostly observable. In the human aggression literature aggression is defined within three frames as aggressor's intention, behavior and targets' perception. However, the participants of this study didn't refer to "aggressor intention" as a criterion when they defined aggression. That the participants of this study remarked "behavior" and examples of aggressive behavior in their definition of aggression were in the same vein with Loeber and Hay's (1997) argument that not intention but observable behaviors

should be a criterion to define aggression. Similar to the findings of this study, Loeber and Hay (1997) assert that most of the aggressors reject they have a harming intention, which is why when aggression is defined intention could not be referred as a sound standard. So, the findings of this study about the definition of aggression are not in line with Anderson and Bushman's (2002) and Baron and Neuman's (1998) aggression definitions which strongly highlight "aggressors' harming intention" to define an act as aggressive. As stated earlier there are three important points in Anderson and Bushman's (2002) definition of aggression. The first one is that aggression is an observable behavior, the second one is that aggression behaviors are enacted with the intent of harm, and the third one is that aggression behaviors are the acts the victims of which try to protect themselves from potential harm. In other words, the participants did not relate much to the first two points in their definition of aggression; they emphasized the third point, i.e. the behaviors that victims try to avoid. Although the participants remarked anger as a definitive of aggression, anger doesn't always result in aggression behavior. It might result in aggression when it combines with other factors, though.

As participants defined workplace aggression, it became clear that they focused heavily on the differences between general human aggression and workplace aggression. They largely pointed out the contextual differences between general aggression and workplace aggression. According to Baron et al. (1999), there are three main reasons why workplace aggression is different from general aggression. First, workers from the same work unit are in regular and frequent contact with one another, and this reality increases the likelihood of retaliation. Also, workers in a workplace know each other very well, reducing the likely anonymity of an aggressive act. Finally, workplace aggression has potential witnesses who could lead to the conviction of the aggressor. Similar to what the participants expressed, aggression literature points out that workplace aggression behaviors are enacted in different contextual factors from general human aggression.

Although there was a huge alignment between the participants' definition of workplace aggression and the extant literature, it was noticed that they didn't point out a certain point. Neuman and Baron (1997, 1998) argue that workplace aggression includes the attempts that could harm the organization. Yet, the participants of this study didn't refer to the acts that might harm the organization as workplace aggression, they solely focused on the harm that might cause personal harm, in other words they commented on workplace aggression at an interpersonal level, not organizational level.

The participants in the study gave examples of verbal aggression most frequently, followed by psychological aggression and examples of physical aggression least. When this is compared to research, it was found that there was almost a complete resemblance as the least aggressive behavior demonstrated was physical aggressive behavior (Chang and Cho, 2016; Spector, Zhou and Che, 2014, Zhang et al., 2017). Verbal aggression behaviors, which were named as "expressions of hostility" by Baron et al. (1999) were used most in the workplace compared to the other aggression types. In a study by Geddes and Baron (1997) it was found that 68.9 of the managers were the victims of verbal aggression after they gave a negative performance evaluation. That physical

aggression behaviors were exemplified least might be because there are administrative and legal sanctions for these kinds of behaviors. Psychological aggression behaviors were exemplified less than verbal aggression because it is difficult to notice or define psychological assaults or abuse as aggression behavior. Although it is comparatively easier to directly notice and define various forms of verbal and physical aggression behaviors, both for the audience and the victims, it is more difficult and complicated to notice or define psychological aggression behaviors as aggressive, and moreover, it is generally more challenging to understand the intention behind psychological aggression behaviors.

As detailed in the method section of this exploratory sequential mixed-method study, the examples of aggression behaviors provided by the participants formed the basis of the scale developed. The behaviors that were defined and exemplified as aggressive were classified into three categories as verbal, psychological, and physical workplace aggression behaviors. Within the frame of these categories and examples, the researcher created an item pool and expected to develop a three-factor scale. However, the EFA didn't confirm the three-factor structure. The variables composed a meaningful whole in the two-factor structure, which was named overt and covert aggression, and this structure was confirmed in the CFA. That is, the theoretical framework used to analyze the qualitative data wasn't confirmed in the quantitative analysis. This might be the result of various reasons; first of all in the qualitative analysis the researcher focused on the means of aggression whether the harm was given by words, psychological means or physical means. The EFA, on the other hand, showed that the participants of the quantitative stage inclined to classify workplace aggression according to the observability of the behavior by the audience. This revealed the fact that some behaviors which were classified as verbal workplace aggression in the qualitative stage were perceived in the same dimension as physical aggression behaviors. To illustrate better, verbal workplace aggression behaviors such as "insulting, swearing or damning a teacher" were classified in the same factor with physical workplace aggression behaviors such as "physical assault". This dual classification of workplace aggression might be the result of cultural context. It might be concluded that overt verbal aggression is perceived as brutal and grave as physical assault in Turkish culture.

When examining the items on covert workplace aggression, it was seen that the actions that were classified as physical workplace aggression in the qualitative phase, such as "leaving a seat when another teacher enters," and the psychological workplace aggression, such as "not acknowledging another teacher's success," and the verbal workplace aggression, such as "not greeting another teacher," were combined under the same factor. In cultures of honor (Uskul and Cross, 2019), like Turkish society observability of an aggressive act by a third party might be an important distinguishing point in the classification of aggressive behaviors. The aggressive behaviors that the audience can observe might be perceived more seriously or damaging and it might be a motivation for the victims' decision about retaliation.

Conclusion and Implications

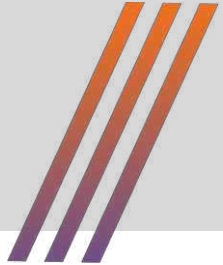
In this study, it can be concluded that there are disagreements between how general aggression and workplace aggression are defined in the literature and how individuals perceive it. This study shows that aggression definition differs from the literature such that aggression behaviors are the acts that are perceived as harming by their target, and the perceptions about it might change contextually. Workplace aggression has contextual differences from general human aggression and is all the behaviors exhibited among workers with anger, and from which the target tries to avoid getting harmed. It is better to classify teachers' workplace aggression behaviors in a dichotomous way as overt and covert workplace aggression rather than verbal, psychological and physical workplace aggression behaviors.

Even though this study is one of the primary researches on workplace aggression in Turkey, it has certain limitations. One of the limitations is that qualitative data was gathered only by semi-structured interviews. Another one is that the study group included teachers from one city. In addition to these, because of ethical concerns scale items were constructed according to the observer perspective not to the aggressor or victim perspective. In this respect, for the researchers it is recommended to conduct quantitative studies in contextually different educational organizations around Turkey and qualitative studies based on various data sources like police investigations about teacher crimes and aggression events reflected in the media. Case studies conducted with the aggressors or the victims will provide important contributions to the literature. Validity and reliability analyses conducted on diverse study groups are recommended, too.

Concerning the qualitative findings of this study, the practitioners are recommended to improve the pre-service teacher education programs in a way that they include effective communication or psychology courses. In addition, measuring candidate teachers' psychological fitness to the teaching profession is advised in the appointment and supervision procedures. Revising teachers' wages and work loads in accordance with the conditions of the school they work in, and avoiding fast and unprepared changes in the education system are recommended to prevent teachers' workplace aggression.

Ethics Committee Approval: This study was approved by Social Sciences Ethics Board of Ankara University. (Date: 4/02/19, Number: 02/54)

Informed Consent: An informed consent was obtained from all participants prior to their inclusion in the study.



Peer-review: Peer-reviewed.

Authors' Contributions: This study has one author.

Conflict of Interests: The authors have no conflict of interest to disclose

Financial Disclosure: The author declared that this study has received no financial support.

References

- Anderson, C. A., & Bushman, B. J. (2002). Human aggression. *Psychology*, 53(1), 27-51. <https://doi.org/10.1146/annurev.psych.53.100901.135231>
- Anderson, C. A., & Huesmann, L. R. (2003). Human aggression: A social cognitive view. M. A. Hogg & J. Cooper (Ed.) *The Sage handbook of social psychology* (pp. 296-323). Thousand Oaks, CA: Sage.
- Anderson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *Academy of Management Review*, 24(3), 452-471. <https://doi.org/10.2307/259136>
- Archer, J., & Coyne, S. M. (2005). An integrated review of indirect, relational, and social aggression. *Personality and Social Psychology Review*, 9(3), 212-230. https://doi.org/10.1207/s15327957pspr0903_2
- Baron, R. A., & Neuman, J. H. (1996). Workplace violence and workplace aggression: Evidence on their relative frequency and potential causes. *Aggressive Behavior*, 22(3), 161-173. [https://doi.org/10.1002/\(SICI\)1098-2337\(1996\)22:3<161::AID-AB1>3.0.CO;2-Q](https://doi.org/10.1002/(SICI)1098-2337(1996)22:3<161::AID-AB1>3.0.CO;2-Q)
- Baron, R. A., Neuman, J. H., & Geddes, D. (1999). Social and personal determinants of workplace aggression: Evidence for the impact of perceived injustice and the Type A behavior pattern. *Aggressive Behavior*, 25(4), 281-296. [http://dx.doi.org/10.1002/\(SICI\)1098-2337\(1999\)25:4<281::AID-AB4>3.0.CO;2-J](http://dx.doi.org/10.1002/(SICI)1098-2337(1999)25:4<281::AID-AB4>3.0.CO;2-J)
- Beugré, C. D. (2005a). Reacting aggressively to injustice at work: a cognitive stage model. *Journal of Business and Psychology*, 20(2), 291-301. <https://doi.org/10.1007/s10869-005-8265-1>
- Beugré, C. D. (2005b). Understanding injustice-related aggression in organizations: A cognitive model. *The International Journal of Human Resource Management*, 16(7), 1120-1136. <https://doi.org/10.1080/09585190500143964>
- Björkqvist, K. (1994). Sex differences in physical, verbal, and indirect aggression: A review of recent research. *Sex Roles*, 30(3), 177-188. <https://doi.org/10.1007/BF01420988>
- Brown, V. M., Loh, J. M., & Marsh, N. V. (2012). Moderators of workplace aggression: The influences of social support and training. *The Australasian Journal of Organisational Psychology*, 5, 32-42. <https://doi.org/10.1017/orp.2012.4>
- Burton, J. P., Mitchell, T. R., & Lee, T. W. (2005). The role of self-esteem and social influences in aggressive reactions to interactional injustice. *Journal of Business and Psychology*, 20(1), 131-170. <https://doi.org/10.1007/s10869-005-6995-8>
- Bushman, B. J. (2017). Aggression and violence. R. Biswas-Diener & E. Diener (Ed.) *Noba textbook series: Psychology*. Champaign, IL: DEF publishers. Retrieved from <http://nobaproject.com/modules/aggression-and-violence> web.
- Buyukozturk, S. (2009). *Sosyal Bilimler Icin Veri Analizi El Kitabı: İstatistik, Arastırma Deseni, Spss Uygulamaları ve Yorum* (9. baskı). Ankara: Pegem Yayınları.
- Can, A. (2014). *SPSS ile Bilimsel Araştırma Surecinde Nicel Veri Analizi*. Ankara: Pegem Akademi.
- Chang, H. E., & Cho, S. H. (2016). Workplace violence and job outcomes of newly licensed nurses. *Asian Nursing Research*, 10(4), 271-276. <https://doi.org/10.1016/j.anr.2016.09.001>
- Childress, N. M. (2014). *The effect of organizational violence prevention climate and workplace aggression within schools: An investigation of burnout syndrome in teachers and the moderating effect of locus of control, communal orientation, and violence prevention climate* (Unpublished master's thesis). Graduate School of Wayne State University, Detroit, Michigan.
- Creswell, J. W. (2017). *Karma Yontem Arastirmalarina Giris*. (Translation by M. Sozbilir, S. Celik, I. H. Acar & Y. Goktas). Ankara: Pegem Akademi Yayıncılık.
- Crick, N. R. (1996). The role of overt aggression, relational aggression, and prosocial behavior in the prediction of children's future social adjustment. *Child Development*, 67(5), 2317-2327. <https://doi.org/10.2307/1131625>
- Cokluk, O., Sekercioglu, G., & Buyuozturk, S. (2014). *Sosyal Bilimler Icin Cok Degiskenli İstatistik: SPSS ve LISREL Uygulamaları*. Ankara: Pegem Akademi.

- Dodge, K. A. (2006). Translational science in action: Hostile attributional style and the development of aggressive behavior problems. *Development and Psychopathology*, 18(3), 791-814. <https://doi.org/10.1017/s0954579406060391>
- Dodge, K. A., & Coie, J. D. (1987). Social-information-processing factors in reactive and proactive aggression in children's peer groups. *Journal of Personality and Social Psychology*, 53(6), 1146-1158. <https://doi.org/10.2307/1131875>
- Feshbach, S. (1964). The function of aggression and the regulation of aggressive drive. *Psychological Review*, 71(4), 257-272.
- Geddes, D., & Baron, R. A. (1997). Workplace aggression as a consequence of negative performance feedback. *Management Communication Quarterly*, 10(4), 433-454. <https://doi.org/10.1177/0893318997104002>
- Husserl, E. (2012). *Ideas: General introduction to pure phenomenology*. Routledge.
- Jawahar, I. M. (2002). A model of organizational justice and workplace aggression. *Journal of Management*, 28(6), 811-834. <https://doi.org/10.1177/014920630202800606>
- Loeber, R., & Hay, D. (1997). Key issues in the development of aggression and violence from childhood to early adulthood. *Annual Review of Psychology*, 48(1), 371-410. <https://doi.org/10.1146/annurev.psych.48.1.371>
- Neuman, J. H., & Baron, R. A. (2005). Aggression in the workplace: A social- psychological perspective. S. Fox & P. E. Spector (Ed.), *Counterproductive Work Behavior: Investigations of Actors and Targets* (pp. 13-40). Washington, DC, US: American Psychological Association.
- Neuman, J. H., & Baron, R. A. (1998). Workplace violence and workplace aggression: Evidence concerning specific forms, potential causes, and preferred targets. *Journal of Management*, 24(3), 391-419. [https://doi.org/10.1016/S0149-2063\(99\)80066-X](https://doi.org/10.1016/S0149-2063(99)80066-X)
- Neuman, J. H., & Baron, R. A. (1997). Aggression in the workplace. R.A. Giacalone & J. Greenberg (Ed.) *Antisocial Behavior in Organizations* (pp. 37-67). Thousand Oaks, CA, US: Sage Publications, Inc.
- Rai, S. (2002). Preventing workplace aggression and violence--A role for occupational therapy. *Work*, 18(1), 15-22.
- Sasson, D., & Somech, A. (2015). Observing aggression of teachers in school teams. *Teachers and Teaching*, 21(8), 941-957. <https://doi.org/10.1080/13540602.2015.1005865>
- Schat, A. C. H., Frone, M. R., & Kelloway, E. K. (2006). Prevalence of workplace aggression in the U.S. workforce: Findings from a national study. In E. K. Kelloway, J. Barling, & J. J. Hurrell (Ed.) *Handbook of workplace violence* (pp. 47-89). Thousand Oaks, CA: Sage Publications.
- Sears, R. R. (1961). Relation of early socialization experiences to aggression in middle childhood. *The Journal of Abnormal and Social Psychology*, 63(3), 466-492. <https://doi.org/10.1037/h0041249>
- Spector, P. E., Zhou, Z. E., & Che, X. X. (2014). Nurse exposure to physical and nonphysical violence, bullying, and sexual harassment: a quantitative review. *International Journal of Nursing Studies*, 51(1), 72-84. <https://doi.org/10.1016/j.ijnurstu.2013.01.010>
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics*. New York: Allyn & Bacon/Pearson Education.
- Underwood, M. K. (2004). III. Glares of contempt, eye rolls of disgust and turning away to exclude: Non-verbal forms of social aggression among girls. *Feminism & Psychology*, 14(3), 371-375. <https://doi.org/10.1177/0959353504044637>
- U.S. Bureau of Labor Statistics, U.S. Department of Labor (2015). Number of fatal work injuries, 1992-2013. Retrieved from <https://www.bls.gov/iif/oshwc/foi/cfch0012.pdf> on 17.12.2021.
- Whitfield, C. L., Anda, R. F., Dube, S. R., & Felitti, V. J. (2003). Violent childhood experiences and the risk of intimate partner violence in adults: Assessment in a large health maintenance organization. *Journal of Interpersonal Violence*, 18(2), 166-185. <https://doi.org/10.1177/0886260502238733>
- Yildirim, A., & Simsek, H. (2011). *Sosyal Bilimlerde Nitel Arastirma Yontemleri*. Ankara: Seckin Yayincilik.

Zhang, L., Wang, A., Xie, X., Zhou, Y., Li, J., Yang, L., & Zhang, J. (2017). Workplace violence against nurses: A cross-sectional study. *International journal of nursing studies*, 72, 8-14. <https://doi.org/10.1016/j.ijnurstu.2017.04.002>

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