Determining the Factors Affecting the Phenomenon of School Bullying by Using Factor Analysis
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15 October 2024

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This study aimed to determine the most important factors leading to the phenomenon of school bullying from the perspective of middle school students in some public and private schools in Al Ain city in the United Arab Emirates. To achieve the study objectives, the researcher used the analytical descriptive approach. The study sample consisted of (330) male and female students who were selected by using random stratified way. The researcher used a paper questionnaire that consisted of (34) items which included the factors leading to school bullying; its validity and reliability were verified. The factors were ordered and classified into certain domains according to their importance by using factor analysis in (SPSS V. 26). The results revealed that the most important factors leading to school bullying are school-related factors, family factors, media factors, and psychological factors; ordered respectively, where the school-related factors accounted for (15.657%) of the total factors leading to school bullying.

keywords: school bullying, factor analysis, middle school students, Al Ain city, school bullying factors.

1 Introduction

The phenomenon of school bullying received considerable attention by those interested in the issues and problems of education throughout the world. Indeed, this bad phenomenon is considered as a main reason for academic decline among too many students, where it may force them to hate school and totally drop out of it. This phenomenon is also closely related to violence among students at schools; such a violence reached

extreme levels, to the extent that it has been labeled under a new description "school bullying", indicating a change in the human behavior to be like animal behaviors in a forest, where only the strong ones can survive, without consideration to good manners or behavior. Since addressing any phenomenon requires investigating the affecting variables which could have variant measurement units that may prevent reaching the desired results, factor analysis- that mainly depends on correlation matrix- could be the solution for the variance of measurement units, where facilitates introducing an accurate description for the relationships between variables. Factor analysis is one of the multi-variable methods which aims to investigate several related variables and change them to a smaller set of unrelated factors. The widespread of factor analysis in both scientific and human studies is attributed to its characteristics, where it reduces the number of investigated variables to a lesser number of the factors affecting the investigated phenomenon and is considered as one of the best solutions for the problem of multicollinearity (AbdulWahab and Sulieman, 2021).

Based on the above-mentioned advantages of factor analysis, it was applied to determine the most important factors leading to the phenomenon of school bullying from the perspective of middle-school students in some public and private schools in Al Ain city in the United Arab Emirates. This, indeed, contributes to determining the most important factors in this phenomenon and citing the policies that reduce this undesired global phenomenon.

1.1 The study problem

This study aimed to determine the factors leading to school bullying in Al Ain city, since it would be more possible to control this phenomenon if we identified the factors leading to it. School bullying is a global phenomenon that represents risks for a sensitive category in the community "the young people", who are viewed as the future generations that will contribute to developing the various aspects of life; therefore, spreading the delinquent behaviors among this age category will adversely affect the future of the whole community. (Schneider et al., 2012) conducted a study on a sample of (20406) students from the (9th-12th) grades in Metro West Massachusetts which aimed to evaluate their exposure to bullying and psychological distress, including the symptoms of depression, self-harm, and suicidecommitting. The results showed that (15.8%) of students were exposed to cyberbullying, and (25.9%) were exposed to school bullying during a period of (12) months. About (59.7%) of cyberbullying victims were also victims of school bullying, while (36.6%) of school bullying victims were victims of cyberbullying. Nonheterosexual youth were more exposed to the harmful effcts, where victims reported a decline in academic performance and school achievement. The results showed that distress was higher among the victims of school bullying and cyberbullying, where the adjusted odds ratios (AORs) ranged from (4.38) for depressive symptoms to (5.35) for suicidal attempts that require medical treatment. Bullying victims also reported high levels of distress. The ministry of interior in the UAE suggested that there are two types of bullying. The first type takes place in the real world when a student causes harm to his peers in school or outside it, while the second type is cyberbullying in

which a child is victimized via the internet; revealing that bullying is a global problem. The ministry confirmed that bullying has several reasons, including negligence, family disintegration, the lack of healthy socialization, and violence practiced by parents which, in turn, evokes children to practice violence against their peers, in addition to the child's desire to manifest a strong personality and dominate other peers. The deputy director of the interior ministry center for child protection, AbdulRahman Ahmad Al-Tamimi, confirmed the ministry's interest– in cooperation with the educational directorates- in providing protection and security to all students from all the academic stages in all the State's schools (Abid, 2018).

1.2 The study objectives and importance

The study aimed to determine the most important factors leading to the phenomenon of school bullying by using factor analysis in Al Ain city. Based on the results, the study outcomes could be beneficial to educationalists and decision makers in providing policies and suggestions for programs that could influence controlling and reducing the risks of the phenomenon of school bullying.

1.3 The study limits

The study was limited to a sample of middle-school students in four public and private schools in Al Ain city in the United Arab Emirates during the academic year (2021-2022), with a total of (330) male and female students selected by using the simple random way. The researcher obtained the school's consent according to a letter directed from the university to the targeted school.

2 Theoretical Framework

2.1 The concept of school bullying

Herman (1973) is the first researcher that referred to the phenomenon of bullying and called it "mobbing". He described how a group of students are exposed to frequent annoyance by one of the students in the same group or by another group which, in turn, results in disturbance in the balance of that group. That evokes a reaction by the group against the bullying student, where that group retains its balance after counterattack against the bully; the displeasure and comfort are the main feelings felt by the group members (Arora et al., 2005). In a study, (Olweus, 2010) introduced a more comprehensive definition and explained several bullying behaviors, where he defined bullying as the individual's frequent exposure, over a long period of time, to negative behaviors by someone or a group of people. (Olweus, 1979) suggested that there are differences between males and females regarding bullying, where boys are more exposed to bullying. This result was also confirmed by (Al-Tkhayneh and Nser, 2020) and (Alomosh et al., 2019) which were conducted on several middle schools in the United Arab Emirates.

Joaquim (2014) defined bullying as the physical, verbal, and psychological harm to which students are exposed in the school environment (Joaquim, 2014, p. 81).

2.2 Types and manifestations of bullying

There are various types and features of school bullying. Those features usually start by the innate division performed by children at their first meeting; it could be evoked by physical, racist, or ethnic motives. Then, the strongest party attracts and makes his own group, and persuades them to practice bullying behaviors. Indeed, bullying starts by funny tricks and pranks, where these funny pranks are directed towards certain individuals outside the formed group, and are quickly developed to be in the form of intended mobbing and harassment, as well as attempts to show power and dominance over the targeted victim to force him to follow the group's instructions. In many cases, bullying acts develop to be in the form of intended physical violence or frequent psychological humiliation; they are used as a way of making fun and showing power and dominance. Many cases of individual or group sexual assault were registered in the schools of some western countries (such sexual assault cases rarely happen in Arab or Muslim countries). In its extreme cases, some students, in western countries opened fire against their peers which, in turn, resulted in severe injuries and even deaths; such extreme bullying cases were registered even among primary school students (Al-Bolini and Al-Qadah, 1433).

2.3 The previous studies

In their study, (Ahmad et al., 2020) aimed at investigating the psychometric characteristics of the scale of school bullying among middle-school students. In order to achieve the study objectives, the researcher used a descriptive approach. The study sample consisted of (200) male and female students in Aswan directorate of education. The scale's validity was verified using Exploratory Factor Analysis, while the scale's reliability was verified using Cronbach alpha coefficient. Based on the scale's psychometric values, it was valid for application to middle-school students. In a similar vein, (AbdulDayim and Abdo, 2016) aimed to identify the factorial structure for the phenomenon of bullying as an integral concept as well as its prevalence and justifications among the bullies and the differences in its level due to (primary stage, accumulative average, number of friends older than one year, number of friends younger than one year, place of friends' existence). To achieve the study objectives, the researchers developed a scale to measure bullying and tested a sample of students in the three educational stages in public schools with a total of (353) students. The results revealed that bullying is a uni-dimensional phenomenon, and that there are justifications for the phenomenon of bullying with which bullies are convinced. The results showed that the highest bullying percentage is among middle-school students, but not to the extreme levels. The results also revealed that there are no differences in the degree of bullying attributed to some variables (academic stage, accumulative average, number of friends older than one year, number of friends younger than one year, place of friends' existence). Furthermore, (Rehim et al., 2020) revealed that the main reasons leading to electronic bullying from the perspective of

students' parents are family factors, including the lack of parental control, followed by the negative effect of media on students, then the low level of commitment to ethics and values in our community, the spread of violence phenomenon, and finally the electronic bullying itself, where the bully could be a victim of another bully. However, the study didn't use factor analysis in determining the leading factors based on the distributed questionnaire, and only used the instrument's validity and reliability. Similarly, (Halheit, 2023) revealed that psychological, family, school and environmental factors are amongst the most important factors leading to bullying, where the researcher used the qualitative approach to prove the study results. Finally, (Lahqi and Lahiqi, 2022) revealed that bullying behaviors are attributed to family reasons, in addition to the effect of friends in practicing the behavior and the victims' physical and social characteristics as well as the impact of such characteristics on practicing the bullying behaviors against them. Therefore, we can say that bullying is a social problem that needs more investigation to identify the factors leading to it and find solutions to reduce its occurrence. Finally, our study is an attempt to, accurately, identify the factors leading to bullying using factor analysis.

3 Methodology

3.1 The study sample and instrument

Before starting the field study, we should illustrate the study Sample, which consisted of (330) male and female students in the middle stage from (4) public and private schools (2 private, 2 public). The schools were selected purposively, while the students were selected by using the random stratified way. The selection of stratified random sampling is a method used to select samples when it is possible to naturally divide the statistical population into small, non-overlapping groups or strata. Samples are taken randomly from each individual stratum and combined to form a total sample. The size of the random sample taken from each stratum reflects the size of that stratum within the statistical population. The questionnaire consisted of (34) items; its validity and reliability were verified.

3.2 The statistical methods used in the study

In order to analyze the study instrument and conclude the results, the researcher used (SPSS), where the questionnaire's requirements were coded and inserted to the software, and the following statistical methods were performed:

- Calculating frequencies and percentages to identify the personal characteristics of the sample individuals.

- Applying factor analysis to investigate the sample's appropriateness and determine the most important factors leading to school bullying.

3.3 The study instrument's validity and reliability

3.3.1 Face validity

It refers to arbitration validity; after developing the questionnaire, it was introduced to (6) experienced faculty members who are experienced in developing research questionnaires in order to determine the extent to which the items are clear and can achieve the study objectives. Accordingly, some items were modified to cite the final version of the questionnaire.

3.3.2 Measuring the study reliability using Cronbach alpha

The value of Cronbach alpha was high, with (0.860) for the whole questionnaire, knowing that the questionnaire doesn't include axes. Factor analysis will be used to distribute the items to the axes that are viewed as the factors leading to school bullying.

3.3.3 The validity of internal consistency

The values of Pearson correlation coefficient for the items with the total questionnaire ranged between (0.54-0.82), which is statistically significant and acceptable for most items. This indicates that they have high validity and confirms the strong internal correlation between all the questionnaire's items with the total score.

3.4 The Characteristics of the Sample Individuals

The following table shows the distribution of the sample individuals according to their demographic variables.

Table 1: The distribution of the sample individuals according to their demographic variables.

Variable	Percentage	Variable	Percentage
Gender		School type	
Male	47%	Private	60%
Female	53%	Public	40%
Nationality		Academic level	
Resident	45%	Excellent (A, B, B+)	92%
Citizen	55%	Medium (C, C+)	160%
		Low (D, D+)	78%

Source: the outcomes of SPSS V. 26

4 Using factor analysis to determine and analyze the study results

In order to determine the most important factors and causes leading to school bullying in Al Ain city, factor analysis will be used, where it includes some conditions that we will verify, and then perform the tests of factor analysis. The conditions are as follows (Shiraz, 2015):

- The sample size: if the sample size was (50) individuals or less, we won't be able to perform factor analysis of its data.

- The hypotheses' independence: this requires the individual response to the questionnaire's items, but not group responses.

- The required measurement level: the dependent variables in the factor analysis should be measured at the group's level at least.

- Sample suitability scale (KMO): this refers to the extent to which the sample is suitable for factor analysis: it is better when the value of (KMO) is higher, where the value of more than (0.50) indicates that the sample is suitable.

- Correlation matrix: factor analysis depends on the existence of strong correlations among variables. If the variables are not sufficiently correlated, performing factor analysis will be meaningless, and the values of correlation should not be less than (0.30). When correlations are stronger, factor analysis will be better and more representative for the variables.

4.1 Factor analysis for the study data

Before starting with the procedures of factor analysis, we should verify that all the hypotheses are satisfied:

- The sample is more (300) individuals (there is contradiction concerning the acceptable sample size. Some specialists think that it should be more than (50), others think it shouldn't exceed (300), while others suggested that if the sample is more than (10), then it is acceptable. In this study, we selected a large sample size to avoid variations.

- Based on correlation matrix (correlation matrix can't be displayed, since it has a large size, where we will only summarize its results), we found sufficient correlation among the variables to perform factor analysis, and correlation level between the variables didn't reach a level that requires removing any one of them. We also found that the value of determinant was (0.008), which is higher than the criterion (0.00001); indicating that there are no problems in the correlation level between the variables, especially the high correlation level between variables, known as (Multicollinearity).

- As for (KMO) test, the results are illustrated in Table(2).

Table 2: (KMO) test for sample size suitability

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.798
Bartlett's Test of Sphericity	
Approx. Chi-Square	4349.672
df	561
Sig.	.000

Source: (SPSS V. 26)

(KMO) test is used as a criterion for the suitability of the sample size to perform factor analysis. The results revealed that (KMO) value was (0.798), which is higher than the lowest value (0.50), and this is acceptable. After verifying the conditions of factor analysis test, the questionnaire's results will be analyzed and the number of factors will be determined, and then ordered.

4.2 The common variations

The following table shows the extent of common variations for each item after calculating the latent factors.

Table 3: The value of common variations (commonality)

Component	Item	Initials	Extraction
A1	I frequently watch violent content on social media sites	1.000	.629
A2	I play violent electronic games for long hours	1.000	.537
A3	My family members don't listen to me	1.000	.669
A4	My family taught me to take my right by force	1.000	.636
A5	My brothers practice violence against me	1.000	.668
A6	My parents scold me hardly if I make a mistake	1.000	.665
A7	My parents constantly blame me even for the smallest things	1.000	.612
A8	My parents don't allow me to participate in social events	1.000	.674
A9	I play electronic games at home	1.000	.641
A10	I frequently watch violent and suspenseful movies	1.000	.729

Table 3: (continued)

Component	Item	Initials	Extraction
A11	My parents don't monitor my practices on social media sites or any other sites	1.000	.602
A12	My parents stay away from home for long hours	1.000	.723
A13	My colleagues frequently make fun of me; therefore, I use power to defend myself	1.000	.675
A14	There are no deterrent laws and regulations for bullying in school	1.000	.735
A15	The educational counselor has ineffective role in reducing the phenomenon of bullying	1.000	.594
A16	The teacher refuses to listen to my complaint against those bullying me	1.000	.606
A17	Bullying peers have the strongest position in school	1.000	.628
A18	The school administration avoids interfering with students' problems	1.000	.743
A19	The school doesn't take the appropriate action to solve students' problems related to bullying	1.000	.705
A20	Sometimes, we get bullied by the teacher himself	1.000	.524
A21	My family members are intolerant	1.000	.681
A22	I get bullied in the school bus	1.000	.538
A23	I get bullied at school due to ethnic reasons	1.000	.700
A24	I get bullied at school due to racist reasons	1.000	.725
A25	I get bullied at school due to my color	1.000	.617
A26	I feel that teachers discriminate for other students	1.000	.675
A27	There are no educational programs in the school about the risks of bullying	1.000	.578
A28	There are no suitable activities and projects to develop students' skills and distract them from bullying	1.000	.532
A29	Enhancing positive social values, such as respect, tolerance and cooperation is not effective at school	1.000	.662
A30	Enhancing positive social values such as respect, tolerance and cooperation is not effective at home	1.000	.652
A31	School bullying takes place due to scholastic factors, such as inability to tolerate competition or poor understanding of school subjects	1.000	.539

Table 3: (continued)

Component	Item	Initials	Extraction
A32	Sometimes, my colleagues bully me because of my economic situation	1.000	.731
A33	School bullying occurs due to school factors, such as discrimination, negligence, or aggression by teachers or peers	1.000	.669
A34	Providing social skills training programs in schools can help reduce bullying	1.000	.639
Extraction Method: Principal Component Analysis.			

Source: (SPSS V. 26)

Table(3) shows the values of commonality, which is the variation ratio that can be explained by the calculated factors. The (Initials) column shows the primary hypothesized commonality for each variable, with the value of (1), while (Extraction) column shows the commonality of each variable after calculating the factors. For example, the commonality of "there are no deterrent laws and regulations for bullying in school" was (0.735); indicating that the calculated factors account for (73%) of variance in this item. The method of basic component analysis was used to calculate commonalities.

4.3 Determining the number of factors and ordering them by using eigenvalues related to linear components before and after extraction and rotation, as illustrated in the following table

Table 4: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.179	24.055	24.055	8.179	24.055	24.055	5.323	15.657	15.657
2	2.163	6.362	30.417	2.163	6.362	30.417	3.179	9.351	25.008
3	2.032	5.976	36.393	2.032	5.976	36.393	2.272	6.681	31.690
4	1.868	5.495	41.888	1.868	5.495	41.888	2.005	5.896	37.586
5	1.653	4.862	46.750	1.653	4.862	46.750	1.825	5.368	42.954
6	1.422	4.184	50.934	1.422	4.184	50.934	1.567	4.608	47.563

Table 4 – continued from previous page

Comp onent	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumul ative %	Total	% of Variance	Cumul ative %	Total	% of Variance	Cumul ative %
7	1.315	3.867	54.802	1.315	3.867	54.802	1.485	4.369	51.932
8	1.170	3.443	58.244	1.170	3.443	58.244	1.481	4.355	56.287
9	1.130	3.323	61.567	1.130	3.323	61.567	1.458	4.289	60.576
10	1.044	3.070	64.636	1.044	3.070	64.636	1.381	4.061	64.636
11	.957	2.814	67.450						
12	.893	2.626	70.077						
13	.865	2.545	72.622						
14	.774	2.277	74.899						
15	.756	2.224	77.123						
16	.682	2.006	79.129						
17	.644	1.894	81.023						
18	.608	1.787	82.810						
19	.604	1.775	84.585						
20	.537	1.578	86.163						
21	.514	1.510	87.673						
22	.485	1.427	89.100						
23	.446	1.311	90.411						
24	.422	1.240	91.651						
25	.400	1.177	92.828						
26	.392	1.153	93.981						
27	.364	1.070	95.051						
28	.333	.979	96.030						
29	.276	.811	96.841						
30	.271	.797	97.638						
31	.247	.726	98.364						
32	.221	.649	99.013						
33	.173	.509	99.522						
34	.162	.478	100.000						

Extraction Method: Principal Component Analysis.

Source: (SPSS V. 26)

The previous table showed the explained variance, where the process of calculating the factors resulted in three factors higher than (2), whereas the other factors were less than (2), and thus were neglected. Based on the results of the explained variance, we can see that the first factor accounted for (15.567%) of the total variance in the eigenvalue

of (5.323). The second factor accounted for (9.351%) of variance in the eigenvalue of (3.197). The third factor accounted for (6.681%) of the total variance in the eigenvalue of (2.272), while the fourth factor accounted for (5.896%) of the total variance with the eigenvalue of (2.005). The rest of the factors have relatively low interpretation ratio. Based on the sum of the previous variations, we can see that the factors accounted for (41.888%) of the total variance of the study data, which is acceptable. The following diagram shows the order of factors according to the total eigenvalues.
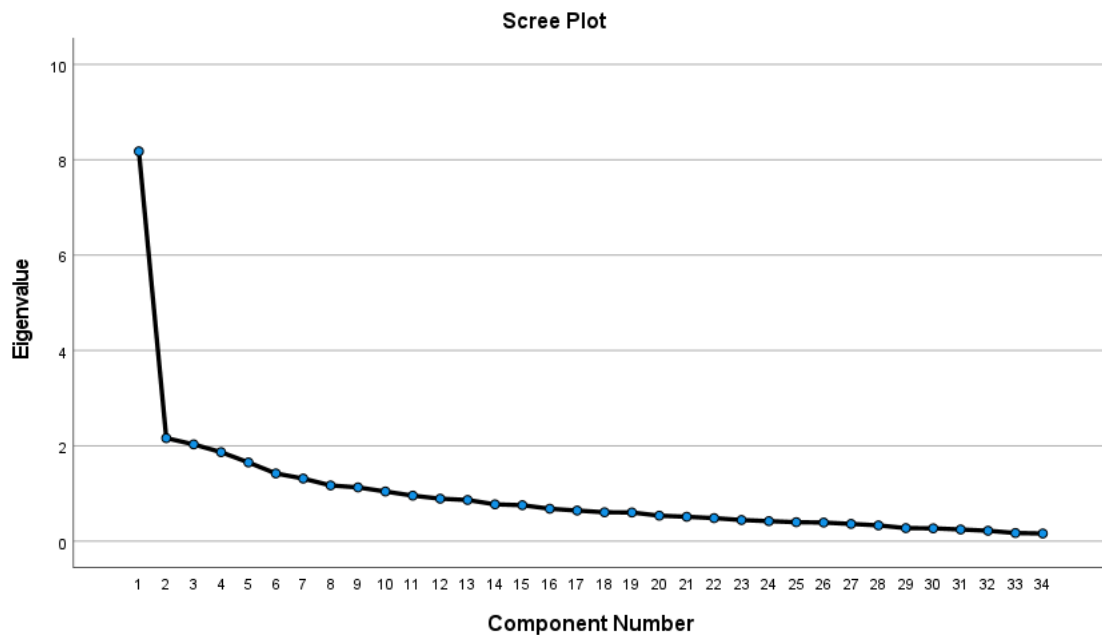
Scree Plot

Figure 1: Representing the eigenvalues
Source: SPSS V. 26

The above diagram shows the factors based on eigenvalue for each factor. It is obvious that the extracted factors are moving vertically and sharply downward, while the non-extracted ones appear in a horizontal shape. A horizontal line was drawn at the value (1) in order to separate the acceptable factors from the non-acceptable ones. As previously mentioned, all the factors whose eigenvalue is less than (1) will be neglected.

4.4 Determining the factors by using the matrix of components

In order to determine all the loading values of the factors with the basic components of factors, a certain ratio was given for the lack of loading with (0.40). Accordingly, we find that all the loading values in the matrix are more than (0.40), and the existing gaps refer to loading less than (0.40), and thus they are not shown in the matrix. 4.5 The extracted factors after rotation: When the factors are vertical, the saturation on factors can be estimated based on the correlation coefficients between the variables and the factors. Therefore, the absolute value of satisfaction increases with the increase in total variation. In factor analysis, it is well known that the extracted factors before rotation are less accurate, and thus we should improve these results by rotation, where table(5) shows the results after rotation.

Table 5: The extracted factors after rotation

Item	1	2	3	4
I frequently watch violent content on social media sites			0.690	
I play violent electronic games for long hours			0.408	
My family members don't listen to me		0.516		0.541
My family taught me to take my right by force		0.535		
My brothers practice violence against me				
My parents scold me hardly if I make a mistake				0.544
My parents constantly blame me even for the smallest things				0.681
My parents don't allow me to participate in social events		0.678		
I play electronic games at home			0.452	
I frequently watch violent and suspenseful movies		0.535	0.541	
My parents don't monitor my practices on social media sites or any other sites		0.466	0.420	
My parents stay away from home for long hours			0.444	0.423
My colleagues frequently make fun of me; therefore, I use power to defend myself.				0.566
There are no deterrent laws and regulations for bullying in school	0.771			
The educational counselor has ineffective role in reducing the phenomenon of bullying.	0.620			
The teacher refuses to listen to my complaint against those bullying me	0.716			
Bullying peers have the strongest position in school				
The school administration avoids interfering with students' problems	0.331			

The school doesn't take the appropriate action to solve students' problems related to bullying	0.345	
Sometimes, we get bullied by the teacher himself	0.456	
My family members are intolerant		0.463
I get bullied in the school bus	0.349	
I get bullied at school due to ethnic reasons		
I get bullied at school due to racist reasons	0.666	
I get bullied at school due to my color	0.759	
I feel that teachers discriminate in favor of other students	0.360	
There are no educational programs in the school about the risks of bullying	0.728	
There are no suitable activities and projects to develop students' skills and distract them from bullying	0.737	
Enhancing positive social values, such as respect, tolerance and cooperation is not effective at school	0.474	
Enhancing positive social values such as respect, tolerance and cooperation is not effective at home		0.639
School bullying takes place due to scholastic factors, such as inability to tolerate competition or poor understanding of school subjects	0.515	
Sometimes, my colleagues bully me because of my economic situation	0.406	
School bullying occurs due to school factors, such as discrimination, negligence, or aggression by teachers or peers		0.469
Providing social skills training programs in schools can help reduce bullying		

Source: (SPSS V. 26)

4.5 Discussing the results

After performing the rotation process by using (Varimax avec normalisation Kaiser), we noticed that there is a slight change, especially for saturation level, and the factors can be ordered as follows: The first factor: the first factor is considered as one of the most important factors affecting the phenomenon of school bullying from the perspective of the sample individuals, where most of its data are related to school itself. This factor accounts for (15.657%) of the total interpretation percentage. It includes statements, such as (there are no deterrent laws and regulations for bullying in school, the educational counselor has ineffective role in reducing the phenomenon of bullying, the teacher refuses to listen to my complaint against those bullying me, I get bullied in the school bus, I get bullied because of my race, I get bullied because of my color, I feel that teachers discriminate in favor of other students, there are no educational programs in the school about the risks of bullying), where these reasons could be called school factors. This finding agrees with (Halheit, 2023), which revealed that psychological, environmental as well as school and family-related factors are amongst the most important factors leading to the phenomenon of bullying. The second factor: the second factor accounts for (9.351%) of the total interpretation percentage, where this factor includes family, environmental and domestic causes, and some social causes. This factor includes statements, such as (my father doesn't allow me to participate in social occasions, I frequently watch violence movies, my parents don't monitor my practices on social media sites or any other sites, my family members don't listen to me, my family taught me to take my right by force), where these reasons refer to family factors. The results also agree with (Rehim et al., 2020), which revealed that the main causes leading to electronic bullying from the perspective of the sample individuals are related to family factors, such as the lack of parental monitor, the negative effects of media on children, the low cohesion level with ethics and values in our community, the spread of the phenomenon of violence, and finally the electronic bullying itself. The third factor: we noticed that the third factor accounts for (6.681%), where it is related to the effect of media on students' behavior. It includes items, such as (I play electronic games at home, I frequently watch violent and suspenseful movies, my parents don't monitor my practices on social media sites or any other sites, my parents stay away from home for long hours, I frequently watch violent content on social media sites, I play violent electronic games for long hours), where this factor refers to media factor. The study results also agree with (Rehim et al., 2020) which revealed that the negative effect of media on children is considered as one of the most influential factors leading to electronic bullying, where it was ranked second after family factors. However, (Rehim et al., 2020) didn't use factor analysis in determining factors. The results also agree with (Lahqi and Lahiqi, 2022), which highlighted family and peers as the most prominent factors in school bullying. The fourth factor: this factor accounts for (5.896%), which is related to the student's personal and psychological factor. It includes items, such as (my parents scold me hardly if I make a mistake; my parents constantly blame me even for the smallest things; school bullying occurs due to school factors, such as discrimination, negligence, or aggression by teachers or peers; my parents stay away from home for long hours; my colleagues frequently make fun of

me; therefore, I use power to defend myself). However, the rest of the factors have less interpretation ability than the first four factors, since they represent secondary factors from the respondents' perspective.

5 Conclusions

After conducting a meticulous rotation process utilizing Varimax with Kaiser normalization, our analysis revealed a nuanced understanding of the factors contributing to the pervasive issue of school bullying. Notably, our findings delineate four primary factors, each bearing distinct implications for understanding and addressing this complex phenomenon. The foremost factor, constituting 15.657% of the total interpretation percentage, underscores the profound influence of school-related dynamics on bullying experiences. This includes inadequate regulations, ineffective support mechanisms such as counseling, and discriminatory behaviors within educational settings. This resonates with prior research by (Halheit, 2023), affirming the multifaceted nature of bullying encompassing psychological, familial, school, and environmental dimensions. Furthermore, our exploration unearthed the significant role of familial and social environments, encapsulated in the second factor comprising 9.351% of the interpretation. Family dynamics, exposure to violence through media consumption, and the absence of parental monitoring emerge as critical contributors to bullying behaviors, corroborating findings by (Rehim et al., 2020) regarding the prevalence of familyrelated factors in electronic bullying. Moreover, the third factor, accounting for 6.681%, underscores the pervasive influence of media on students' conduct. Engagement with violent media content and lack of parental oversight over online activities emerge as pivotal factors contributing to bullying behaviors, aligning with prior research highlighting the adverse impact of media on children's behavior (Rehim et al., 2020). Finally, the fourth factor, representing 5.896% of the interpretation, sheds light on the intricate interplay of personal and psychological factors in perpetuating bullying dynamics. Instances of parental criticism, social ostracization, and retaliatory behaviors indicate the complex internalization of bullying experiences among students. While these primary factors offer crucial insights into the underlying mechanisms of bullying, it is imperative to acknowledge the nuanced nature of secondary factors, which although less pronounced, still hold relevance in understanding the broader landscape of bullying experiences. These findings not only deepen our comprehension of the multifaceted nature of school bullying but also underscore the imperative for comprehensive, multi-dimensional interventions encompassing educational, familial, and societal realms to foster safer, more inclusive learning environments.

6 Recommendation

Based on the findings, the study suggests several recommendations. Firstly, it emphasizes the importance of educating parents about providing social support and fostering positive treatment towards their children, as these factors significantly influence their well-being. Secondly, it advocates for the enforcement of existing penalties and laws

concerning bullying, alongside educational initiatives targeting both students and parents through regular meetings, seminars, and lectures. Thirdly, the study underscores the need for adequate allocation of social workers and psychologists who can effectively support both victims and perpetrators of bullying. Lastly, it highlights the importance of heightened supervision in schools and households regarding media content, including the imposition of restrictions on potentially harmful websites to mitigate the spread and impact of bullying. These recommendations aim to address various aspects of the issue and promote a safer and healthier environment for children and adolescents.

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