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RESEARCH ARTICLE / ARAŞTIRMA YAZISI

Cyberbullying Motivations and Moral Disengagement among Adolescent Cyberbullies: Exploring the Mediating Roles

Siber Zorbalık Motivasyonları ve Ergenler Arasında Ahlaki Ayrılma Siber Zorbalar: Aracılık Rollerininin İncelenmesi

Ahmet M. Abdülaliam[1]

Abstract:

The study aimed to identify the factors and motivations that lead cyberbullied adolescents to engage in cyberbullying and to develop a structural model of the interrelationships between cyberbullying, moral disengagement, and bullying motivations. The primary research sample consisted of 804 adolescents from High schools in the Kingdom of Saudi Arabia, with 302 adolescents identified as cyberbullies, aged between 16 and 19 years (M= 18.9, S.D= 1.6). The sample was obtained through electronic links distributed via email and social media platforms. The study used the Cyberbullying Questionnaire (CBQ- Bullying scale), Cyberbullying Moral Disengagement Scale, and Cyberbullying Motivations Scale. The findings of the study indicate that power and ideology are the most significant factors causing cyberbullying behavior from the perspective of cyberbullies, followed by instrumental, amusement, sadism, external factors, revenge, and finally moral disengagement. There are differences between males and females in cyberbullying factors that favor males. Furthermore, the findings revealed that cyberbullying motivations and moral disengagement are positive predictors of cyberbullying behavior. Using structural modeling, the study confirmed the mediating role of power and moral disengagement variables in the influence of other factors like ideology, revenge, amusement, and sadism on cyberbullying behavior, in addition to the direct effects of the variables of instrumentality, ideology, and revenge on cyberbullying.

Keywords: Cyberbullying, Cyberbullying motivations, Moral Disengagement, Cyberbullies

[1]Assoc. Prof., Qassim University, College of Languages and Social Sciences, Department of Psychology, Buraydah - Al-Qassim, a.abdelaliem@qu.edu.sa, Orcid id: 0000-0002-4561-3391
Address of Correspondence/Yazışma Adresi: Ahmet M. Abdülaliam, Qassim University, College of Languages and Social Sciences, Department of Psychology, Buraydah - Al-Qassim, **E-mail:** a.abdelaliem@qu.edu.

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Öz:

Çalışma, siber zorbalığa maruz kalmış ergenleri siber zorbalık yapmaya iten faktörleri ve motivasyonları belirlemeyi ve siber zorbalık, ahlaki kopukluk ve zorbalık motivasyonları arasındaki karşılıklı ilişkileri gösteren bir model geliştirmeyi amaçlamıştır. Birincil araştırma örneklemi, Suudi Arabistan Krallığı'ndaki orta okullardaki 804 ergenden Oluşmaktadır; Yaşları 16,6 ile 19,5 arasında değişen 302 ergen siber zorba olarak tanımlandı (Ort= 18,9, S.D= 1,6). Bu örnek, e-posta ve çeşitli sosyal medya platformları aracılığıyla elektronik bir bağlantı dağıtılarak elde edilmiştir. Çalışma araçları Siber Zorbalık Anketi (CBQ- Zorbalık Ölçeği), Siber Zorbalık Ahlaki kopukluk Ölçeği ve Siber Zorbalık Motivasyonları Ölçeğidir. Çalışmanın bulguları, güç ve ideolojinin siber zorbalık davranışının en önemli nedenleri olduğunu ve siber zorbalar açısından en önemli nedenler olduğunu, bunu araçsal, eğlence, sadizm, dış etkenler, intikam ve son olarak da ahlaki çözülmenin izlediğini göstermektedir. Erkeklerin lehine olan belirli siber zorbalık faktörlerinde erkekler ve kadınlar arasında farklılıklar Bulunmaktadır. EEk olarak, bulgular, siber zorbalık motivasyonlarının ve ahlaki kopukluğun, siber zorbalık davranışını olumlu yönde öngördüğünü ortaya koymuştur. Yapıcı modelleme kullanılarak, bazı değişkenlerin (güç ve ahlaki kopukluk) diğer değişkenlerin (araçsal, ideoloji, intikam, eğlence ve sadizm) siber zorbalık davranışı üzerindeki etkisinde aracılık eden rolü doğrulanmıştır, ayrıca, araçsallık, ideoloji ve intikam değişkenlerinin siber zorbalık üzerindeki doğrudan etkileri de vardır.

Anahtar Kelimeler: Siber zorbalık, Siber zorbalık motivasyonları, Ahlaki kopukluk, Siber zorbalar

Introduction

With the increasing use of various tools and applications of modern technology by adolescents via the internet, the concept of cyberbullying has emerged (Li, 2006). It relies on modern technologies, which facilitate the bully's ability to disguise, making cyberbullying more attractive and widespread among users of electronic means of communication. The ease of transferring content, combined with weak emotional empathy on the part of the bully, contributes to the prevalence of cyberbullying (Muhammad, 2019; Khalil, 2021; Li & Fung, 2012; Xiao & Wong, 2013; Twyman et al., 2010).

A group or a single person may engage in a series of planned, repetitive acts of aggression when engaging in cyberbullying. Mobile phones, email, online chats, contact through different social media platforms, and personal blogs are all used to carry out this violent behavior (Calvete et al., 2010; Patchin & Hinduja, 2006; Li, 2007; Li & Fung, 2012; et al., 2016).

One of the most prevalent groups affected by cyberbullying is adolescents (Al-Rifai, 2018). Many studies have indicated the extent of cyberbullying in various countries in the Arab world and the Middle East, with rates ranging between 27% and 27.6% in the Kingdom of Saudi Arabia (Sakran & Alwan, 2016; Al-Zahrani, 2015). In Egypt, the prevalence of cyberbullying among high school students ranged between 58.9% and 75% (Abu El-Ela, 2017; Fahmy, 2021). The report of the International Computer Driving License-Arabia [ICDL-Arabia] in the UAE indicated that cyberbullying is one of the most common electronic threats that youth and adolescents are exposed to in Arab countries, It found that 60% of those surveyed have been subjected to online harassment, 16% have received inappropriate electronic content (links, pictures, videos, etc.), and 26% believe that their parents and teachers are not qualified to help them face any problem related to electronic threats (ICDL-Arabia, 2015).

The phenomenon of cyberbullying is very prevalent among adolescents in high school, as the percentage of those who participated in bullying through internet messages reached 59.6%, and those who were bullied reached 63.5% (Johnson, 2016). Additionally, 53% of adolescents were victims of cyberbullying (Adair, 2018), and the highest percentage of cyberbullying behavior was in the age group 18-21 years (Rao et al., 2019). In Egypt, the prevalence of cyberbullying among High school students ranged between 58.9-75% (Abu El-Ela, 2017). In King Saudi Arabia, 69% of bullies and 75% of victims are in the Tabuk region's High schools (Al-Enezi, 2021).

To confront this dangerous behavioral phenomenon, it is necessary to identify the motives and reasons that drive adolescent bullies to engage in such aggressive behavior, These motives can be identified as outlined by Baumeister (2001) and Pinker (2011) and include revenge, power, sadism, instrumentalism, ideology, amusement, and external factors.

Cyberbullying behavior may be due to the moral disengagement of bullies, This manifests as disrespect for social and impulsive traditions, misjudgment of risks, and bouts of aggression that appear according to one's inner feelings, excluding any inhibitory or hindering influence such as laws, social norms, and morals (Fanti & Henrich, 2015; Torkashvand et al., 2022). Moral disengagement encompasses a set of cognitive-social mechanisms that allow an individual to justify their blameworthy actions, maintain their self-esteem and social security, and avoid the internal control of the system of moral standards, enabling them to engage in immoral behavior without feeling the accompanying distress (Bandura, 2002).

In 1996, Bandura was the first to explain the concept of moral disengagement, which describes how individuals can engage in socially and ethically unacceptable behavior without feeling guilty or facing the resulting consequences, this concept extends social cognitive theory (Detert, et al., 2008). Moral disengagement, based on the

principles of Bandura's social cognitive theory, is used to explain how individuals justify unethical or socially unacceptable behavior from childhood through adolescence to adulthood, it describes the discrepancy between ethical standards and specific social situations or indicates an individual's confidence with non-compliance, the goal of this concept is to illustrate how unethical behavior is justified by overriding self-blame mechanisms and diminishing self-responsibility for hostile actions towards others (Bussey & Fitzpatrick, 2014; Bussey, et al., 2015; Cuadrado-Gordillo & Fernández-Antelo, 2019).

There are eight cognitive mechanisms involved in moral disengagement; moral justification, euphemistic labeling, advantageous comparison, dehumanizing the victim, attribution of blame, displacement of responsibility, diffusion of responsibility, and disregard or distortion of consequences (Bandura, 2002; Bandura, et al., 2001; Jackson & Sparr, 2005; Foster et al., 2020; Garbharran, 2013; Cuadrado-Gordillo & Fernández-Antelo, 2019).

Some studies have also indicated that motives for cyberbullying, such as entertainment and pleasure, are associated with mechanisms of moral disengagement. These motives are also linked to the motive of revenge, dominance, and control in committing cyberbullying, inflicting harm, and harming others (Tanrikulu & Erdur-Baker, 2021; Georgiou et al., 2022). The social cognitive theory emphasizes the role of moral disengagement as a major risk factor for engaging in cyberbullying among adolescents, which is one of the main characteristics of cyberbullying perpetrators (Chen et al., 2017; Kodama et al., 2016).

The sex or gender may play an important role in both traditional and cyberbullying behavior; researches findings indicate that although both males and females are involved in cyberbullying online, males participate at greater rates than females (Cook et al., 2010). Additionally, females are more likely to be victims of cyberbullying (Smith et al., 2008; Hinduja & Patchin, 2010).

Due to the high prevalence of bullying behavior among adolescents in middle and high schools, the aim of the study is to understand the causes and motivations of adolescent bullies' cyberbullying behavior, the role that moral disengagement plays in this behavior, the extent to which these factors can be used to predict cyberbullying, and to develop a useful model that illustrates the interrelationships between cyberbullying, moral disengagement, and bullying motivations. The following are the study's research questions:

1.What are the motivations and factors of cyberbullying that are most important to adolescents from the point of view of bullies?

2.Do the motivations and factors causing cyberbullying differ according to the gender (male and female) of bullied adolescents?

3.Do motivations of cyberbullying and moral disengagement contribute to predicting cyberbullying behavior among bullied adolescents?

4.What structural model explains the direct and indirect causal effects of bullying motives and moral disengagement on cyberbullying behavior among bullied adolescents?

Methods

Research Design:
The research is based on a descriptive research design (Type: Causal-comparative), which is a type of non-experimental quantitative design where the researcher compares two or more groups. This comparison is performed with respect to a cause (which is the independent variable) that has already occurred (Creswell, 2014). Additionally, the research also utilizes a descriptive research design (Type: correlational), which is a non-experimental quantitative design in which the researcher applies correlational statistics to measure and describe the degree of association among variables or sets of scores (Creswell, 2012) to achieve its goals and answer its questions.

Participants:
The study sample consisted of 854 adolescents enrolled in high schools in the Al-Qassim educational region in the Kingdom of Saudi Arabia. The number of adolescents who engaged in high levels of cyberbullying (Bullies) was 302 (35.4%) (Males = 204, 32.5%, Females = 98, 32.5%), with a mean score of the latent factor ≥ 2.25. The mean age of the participants was 18.9 with a standard deviation of 1.6. The participants responded to the primary research tools, the links of which were electronically disseminated via email and social media, as well as the social communication programs in the targeted schools. The sample is a non-probability sample (Convenience sample), selected when the probability that every respondent included in the sample cannot be determined, or it is left up to each individual to choose to participate in the survey (Fricker, 2016; Patton, 2002). Table 1 presents the means and standard deviations of the study variables.

Table 1. Means and Standard deviations for the study sample of bullied adolescents and the total sample of the study variables

Variables	Bullies (N=302, 35.4%)	Males (N=205, 67.5%)	Females (N=98, 32.5%)
	M (S.D)	M (S.D)	M (S.D)
Cyberbullying	2.50 (0.10)	1.68(0.91)	1.44(0.88)
Cyberbullying motivations			
Revenge	3.60(0.67)	2.77(1.08)	2.57(0.96)
Power	4.08(0.65)	3.17(1.23)	3.06(1.24)
Sadism	3.88(0.72)	3.11(1.19)	2.80(0.97)
Instrumental	4.00(0.64)	3.21(1.25)	2.84(1.07)
Ideology	4.06(0.67)	3.26(1.32)	2.85(1.06)
Amusement	3.93(0.69)	3.12(1.20)	2.02(1.15)
External factors	3.80(0.71)	3.22(1.09)	3.04(1.09)
The total	3.47(0.80)	2.98(1.01)	2.86(0.96)

Variables	Bullies (N=302, 35.4%)	Males (N=205, 67.5%)	Females (N=98, 32.5%)
	M (S.D)	M (S.D)	M (S.D)
Moral Disengagement	3.45(0.91)	2.90(1.03)	2.37(0.52)

Table1 presents the descriptive statistics, including means and standard deviations, for the study variables (cyberbullying motives and moral disengagement) across the sample of bullied adolescents (total sample, males, and females).

Measures:

Cyberbullying Questionnaire (CBQ- Bullying scale):

The questionnaire, developed by Calvete et al. (2010), comprises two scales: The Bullying Scale with 16 items and the Victim Scale with 11 items. The Bullying Scale has been translated and its validity and reliability have been established in an Arabic environment.

Following items modifications, it includes 14 items, with graded responses (never = 0, sometimes = 1, often = 2). The scale's validity and reliability assessments yielded robust psychometric indicators. Internal consistency coefficients ranged from 0.385 to 0.910, and were significant (α=0.01).

The scale's divergent validity coefficient Z-value was significant (α=0.01), meaning that the scale was able to differentiate between high and low levels of cyberbullying behavior. Furthermore, the goodness of fit indices from the Confirmatory Factor Analysis (CFA) for the scale's validity (GFI: .974; AGFI: .947; CFI: .966; IFI: .968; NFI: .959), a chi-square value of (X2/df: 3.88) and RMSEA coefficient (0.044), collectively indicate that this scale is a reliable indicator of validity, the reliability coefficient of the bullying scale is high (alpha: .907, McDonald Omega: .910) (Megawer, & Rashwan, 2023).

Cyberbullying Motivations Scale:

The scale consists of 21 items distributed over 7 dimensions, with each dimension consisting of 3 items. The dimensions are revenge, ideology, power, amusement, sadism, external factors, and instrumentals.

Each item on the scale is answered according to the following gradation: strongly agree = 5, agree somewhat = 4, neither agree nor disagree = 3, disagree sometimes = 2, strongly disagree = 1. It was validated in an Arabic language environment, where the values of the internal consistency coefficients for the scale ranged between 0.719 and 0.930, and were significant (α = 0.01).

The values of the quality indicators of conformity to the model in confirmatory factor analysis indicated GFI: 0.999, AGFI: 0.986, CFI: 0.947, NFI: 0.986, IFI: 0.950, chi-squared value (X2 / df: 1.65), and the coefficient RMSEA: 0.015. The reliability coefficients were high and ranged between Alpha: 0.713-0.951 and Omega: 0.733-0.952 (Megawer & Rashwan, under publication).

Cyberbullying Moral Disengagement Scale:

Bussey and Fitzpatrick (2014) developed this scale, which consists of 16 items, each pair of items corresponds to one of the eight mechanisms of moral disengagement: Moral justification, euphemistic labeling, advantageous comparison, dehumanization, attribution of blame, displacement of responsibility, diffusion of responsibility, and disregard or distortion of consequences.

Responses for each item are scaled as follows: strongly agree = 5, agree somewhat = 4, neither agree nor disagree = 3, disagree sometimes = 2, strongly disagree = 1. The scale has been translated, and its validity and reliability have been established in an Arabic environment.

The scale's validity and reliability assessments yielded robust psychometric indicators. Internal consistency values ranged from 0.527 to 0.873, all significant at α = 0.01. Furthermore, the goodness-of-fit indices from the Confirmatory Factor Analysis (CFA) for the scale's validity (GFI: .960; AGFI: .868; CFI: .964; IFI: .986; NFI: .920), a chi-square value (X2/df: 1.94), and coefficient RMSEA (.033) indicate that this scale is a good indicator of validity. The reliability coefficients were high (Alpha: .946; Omega: .950) (Megawer & Rashwan, 2023).

Procedures:

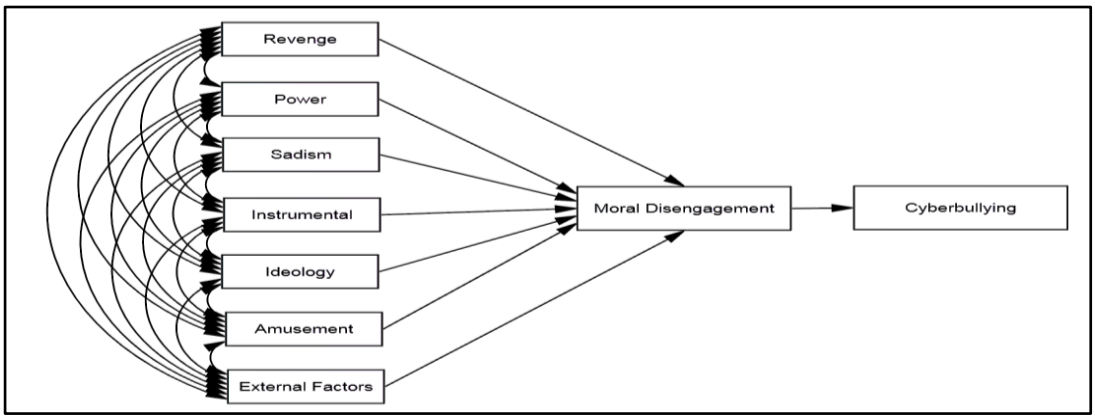
The tools were prepared and designed using the google documents service for electronic publication of the application on adolescent male and female high school students in the Al-Qassim educational region of the Kingdom of Saudi Arabia in the second semester of the academic year 2021/2022.

The tools were published electronically (by emails and WhatsApp groups of the target schools), after receiving informed approval for the application from the university evaluators. Participants completed study instruments, excluding incomplete responses. After data collection, the information was transferred for statistical analysis.

Data Analysis:

Several statistical methods, such as means and standard deviations, frequencies and percentages, relative importance index (RII), and multiple regression analysis (stepwise), were utilized with SPSS V.27. The AMOS V.25 program was also employed in structural equation modeling using the maximum probability equation methodology to verify the following hypothetical model.

Table 1. The hypothetical model that explains the role of some variables in the impact of bullying motives on cyberbullying



The results:

Motivations and Factors of Cyberbullying among adolescent bullies:

Table 2. The relative importance Index (RII) of the factors explaining cyberbullying (the cyberbullying Motivations and moral disengagement) among cyberbullies (N=302)

Variables	M (S.D)	Frequencies (%)	RII*	level Importance**	order
Cyberbullying motivations (means latent factor = 3.4)					
Revenge	3.60(0.67)	186 (61.6%)	0.72	high-medium	5
Power	4.08(0.65)	259 (85.8%)	0.82	Very high	1
Sadism	3.88(0.72)	212 (70.2%)	0.78	high-medium	3
Instrumental	4.00(0.64)	243 (80.5%)	0.80	Very high	2
Ideology	4.06(0.67)	224 (74.2%)	0.82	Very high	1
Amusement	3.93(0.69)	191 (63.2%)	0.78	high-medium	3
External Factors	3.80(0.71)	208 (68.9%)	0.76	high-medium	4
Moral Disengagement (means latent factor = 3.4)	3.45(0.91)	137(45.4%)	0.69	high-medium	6

* RII = Ratio of each response on a five responses scale "0.20" × means.
** Relative Importance Index (RII-Values) and Importance Level (Akadiri, 2011):
$0.8 \leq RII \leq 1$ (very high); $0.6 \leq RII \leq 0.8$ (high-medium); $0.4 \leq RII \leq 0.6$ (medium); $0.2 \leq RII \leq 0.4$ (medium-low); $0.0 \leq RII \leq 0.2$ (very low)

Table 2 presents the Relative Importance Index (RII) of the explanatory factors for cyberbullying from the perspective of cyberbullies. The importance levels of these factors vary from very high to moderately high. Factors classified as having very high relative importance include power and ideology, with an RII of 0.82, followed by instrumental factors at an RII of 0.80. In contrast, factors deemed to have moderate relative importance are amusement and sadism, each with an RII of 0.78, external factors at an RII of 0.76, and revenge with an RII of 0.72, while moral disengagement is rated as having the lowest relative importance, with an RII of 0.69.

Differences between males and females in the motivations and factors causing cyberbullying:

Table 3. Findings of the "T-test" for differences between Males and Females in cyberbullying motivations and moral disengagement

Variables		(Males = 204, Females = 98), (All = 302, F. degrees= 300)		
		M (S.D)	T	Seg.
Revenge	M	2.77 (1.08)	2.794	0.005
	F	2.57 (0.96)		
Power	M	3.17 (1.23)	1.222	0.222
	F	3.06 (1.24)		
Sadism	M	3.11 (1.19)	3.990	0.000
	F	2.80 (0.97)		
Instrumental	M	3.21 (1.25)	4.543	0.000
	F	2.84 (1.07)		
Ideology	M	3.26 (1.32)	4.869	0.000
	F	2.85 (1.06)		
Amusement	M	3.12 (1.20)	1.241	0.215
	F	3.02 (1.15)		
External factors	M	3.22 (1.09)	2.299	0.022
	F	3.04 (1.09)		

Variables		(Males = 204, Females = 98), (All = 302, F. degrees= 300)		
		M (S.D)	T	Seg.
The total degree	M	2.98 (1.01)	1.829	0.068
	F	2.86 (0.96)		
Moral Disengagement	M	2.90 (1.03)	9.222	0.000
	F	2.37 (0.52)		

In table 3, there were no statistically significant differences in cyberbullying motivations (power, amusement, and the total score) between males and females, however, there were statistically significant differences in cyberbullying motivations (revenge, sadism, instrumental, and ideology) as well as in moral disengagement at a significance level of α= 0.01, and external factors at a significance level of α= 0.05 in favor of males.

Multiple linear regression for predicting cyberbullying:

Table 4. Multiple regression analysis (stepwise) for Predicting Cyberbullying

Variables	(R)	(R^2)	F	Durbin–Watson Test	Beta	T	VIF
Instrumental	0.865	0.749	396.224 **	0.734	0.217	5.20 **	4.53
Power					0.217	6.63 **	3.39
Moral disengagement					0.206	7.15 **	2.65
Revenge					0.115	4.40 **	2.18
Ideology					0.135	3.44 **	4.87
sadism					0.094	2.59**	4.14

Dependent variables: cyberbullying behavior

In Table 4, the multiple linear regression model was statistically significant, as indicated by the F-ratio of 396.224 (α = 0.01) and the coefficient R2 of 0.749, showing a significant regression analysis of variance. It was found that 74.9% of the variance in adolescents' cyberbullying behavior was explained by the independent variables (cyberbullying motives and moral distance), contributing to predicting cyberbullying. Additionally, the Durbin-Watson test yielded a value of 0.734, which is less than 2, meeting one of the key assumptions of multiple regression analysis (Mukhtar & Subhash, 1993). The Variance Inflation Factor (VIF) values are within the acceptable range, being less than 5, confirming the absence of multicollinearity among the independent variables in the analysis (Shrestha, 2020; Daoud, 2017). Furthermore, based on the standard regression coefficient (Beta), the regression equation is: Cyberbullying= 0.217 (Instrumental) + 0.217 (Power) + 0.206 (Moral disengagement) + 0.115 (Revenge) + 0.135 (Ideology) + 0.094 (sadism)

The Structural Modeling of Cyberbullying Motives, Moral Disengagement, and Cyberbullying Behavior:

Based on previous findings, the cyberbullying motives (amusement, external factors) did not contribute to predicting cyberbullying behavior and were therefore excluded from the hypothesized causal model (Figure 1). This study used structural equation modeling (SEM) to confirm the modeling of the remaining variables. A reanalysis was conducted based on the results of the initial structural equation modeling (SEM) analysis. Table 5 display the quality fit indices of the final causal model:

Table 5. Indicators of the quality of conformity to the final model that explains the direct and indirect effects of disengagement from moral commitment and bullying motives on cyberbullying behavior

Indicator		Maximum
χ^2	18.499**	No chi-square significance
df	10	
chi-square: χ^2/df	1.84	< 2
GFI	0.994	The quality of the conformity increases as the indicator approaches one
AGFI	0.974	
CFI	0.998	
IFI	0.993	
NFI	0.997	
RMSEA	0.037	The quality of the conformity increases as this indicator approaches (0), and if it is more than (0.1), the model will be rejected

Table 5 indicates that the fit indices for the final causal model, which explain the reciprocal causal effects between variables, are well-aligned with the sample data. The ratio of chi-square (χ2/df) was less than 5. The fit indices values, including GFI, AGFI, CFI, IFI, and NFI, were high, and the RMSEA index was under 0.05. This indicates the quality of the causal model in explaining these relationships. Figure 2 displays the final model obtained using the standardized regression coefficients.

Figure 2. The causal model that explains the role of some variables in the impact of bullying motives on cyberbullying

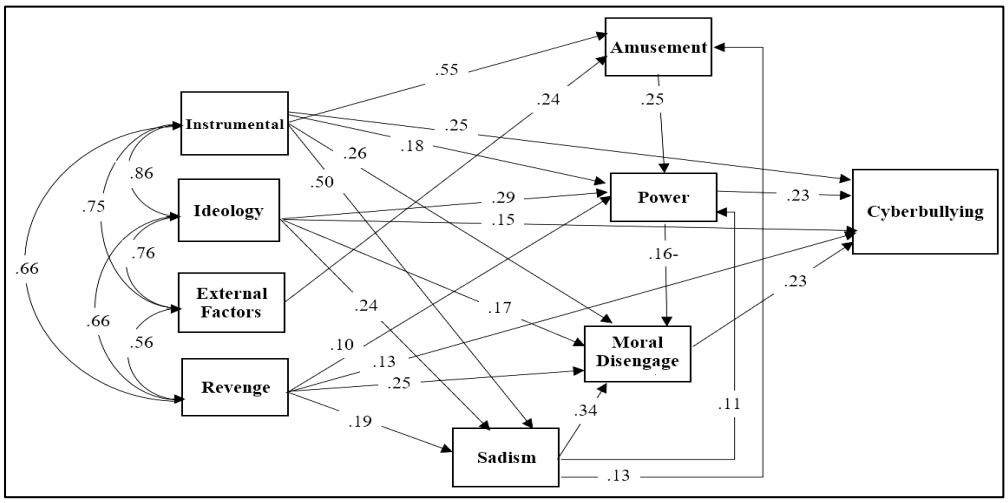


Table 6. The causal effects of the study variables on cyberbullying behavior

Indirect effects		Beta	Direct effects	Beta
Power	Instrumental	0.18**	Instrumental	0.25**
	Ideology	0.29**		
	Revenge	0.10**	Ideology	0.15**
	Amusement	0.25**		
	Sadism	0.11**	Revenge	0.13**
Moral Disengagement	Instrumental	0.26**		
	Ideology	0.17**	Power	0.23**
	Revenge	0.25**		
	Sadism	0.34**	Moral Disengagement	0.23**
	Power	-0.16**		

Figure 2 and Table 6 display the variables that directly influence cyberbullying behavior, which include instrumentality, power, moral disengagement, ideology, and revenge. However, there are also variables that indirectly influence cyberbullying behavior, such as the effects of instrumentalism, ideology, revenge, and sadism due to power and moral disengagement. On the other hand, there are also the amusement effects due to power and the effects of power and sadism due to moral disengagement.

Discussion:

The results of the current study showed that the factors of high importance and causative factors for cyberbullying from the perspective of bullies are the factors of power, ideology, instrumental, followed by amusement and sadism, external factors, revenge, and moral disengagement. These factors were most important among adolescents who were bullied. This shows that the cyberbully has a sense of power and authority, which is shown by his technological prowess in masking himself while engaging in cyberbullying and his skills in using social networking, websites, and digital devices with a high level of professionalism. These abilities allow him to achieve goals that give him a sense of effectiveness and personal amusement in bullying and engaging in sadistic and aggressive behavior toward the victim. The cyberbullying behavior of the bully may be due to ideological ideas that may relate to the family, social class, tribal, or socioeconomic level of the victim. This may also be due to the external factors that the bully is exposed to in the social environments surrounding him, such as the family, school, and society as a reaction, or revenge for the abuse that the bully was subjected to in previous environments. All of this is accompanied by a kind of moral disengagement among bullies, which is evident in their denial of the relative importance of the moral aspect in a high way, although it came in relative importance to a high-medium degree. (Al-Enezi, 2021; Bussey & Fitzpatrick, 2014; George 2014; Kodama et al., 2016; Jung & Park, 2020; Nocera et al., 2022; Sharma, 2020). In cyberbullying, there are three common motives: amusement and entertainment, responding to abuse and bullying, and revenge (Hamuddin et al., 2019).

The results indicate that there are differences in the perception of the factors and motives predicting cyberbullying in different genders (males and females), especially in the factors (revenge, sadism, instrumental, ideology) and moral disengagement in favor of males. This may be due to the increase in the prevalence of bullying behavior, whether traditional or electronic, among males compared to females, due to the psychological and physical characteristics that adolescents go through during this period. Males may feel physical strength and try to prove themselves, while the majority of females may feel the beginning of complete femininity and try to appear cute. These personality traits are reflected in social relations with others and flexibility in dealing with females, unlike males. Also, the higher rate of cyberbullying behavior among males than among females may be due to parental upbringing methods that view

males as men who must have the characteristics of strength and courage, which contributes to the emergence of aggressive behavior significantly, unlike females, whose upbringing methods may focus on being more submissive. It can also be explained that the percentage of cyberbullying behavior among males is higher than that of females in light of the nature of cyberbullying, which relies on electronic means of communication to cause harm to the victim. Cyberbullying behavior is often visible and noticed by others, and females may be less daring to engage in it than males. Sarcastic comments, insults, and blaming others on social media may be considered a disgrace to females, especially with the confirmation of some studies that adolescents confirmed that they are subjected to cyberbullying by people they do not know and communicate with them via the Internet (Al-Zahrani, 2015), and this may not be achieved with females in a large percentage.

According to adolescents who have been bullied, instrumental behavior is one of the most crucial predictors of cyberbullying behavior, which supports earlier findings. Here, the bully engages in conduct to further his objectives, which may include extorting the victim, exacting retribution, establishing his authority, imposing control, or winning the respect of others. The findings of this study also support the notion that one of the primary drivers of bullying behavior is the bully's sense of power. When someone bullies someone else out of a desire to control them or to elevate themselves in the organization or social milieu in which they are present. The findings also showed that moral disengagement is achieved through specific mechanisms that allow the individual to justify his reprehensible actions; To maintain his self-respect and social security, avoid internal control of the system of moral standards prevailing in society, and act immorally without feeling upset and remorse. The findings corroborate that a bully's ideology and beliefs about victims may motivate him to engage in bullying behavior. The bully may be motivated to engage in bullying behavior by his perceptions of the victim's social status or physical appearance, jealousy, the victim's weakness, the fact that he is a member of a social minority, a member of an undesirable group, of the opposite gender, or because the victim has a low social and material status. In addition, the findings corroborate that vengeance is one of the causes and predictors of cyberbullying, where the bully's behavior was motivated solely by a desire for revenge in response to the victim's provocative behavior that provoked the bully's wrath, and where the victim was subjected to abuse or bullying as a result. Furthermore, the findings revealed that sadism or enjoyment in offending others is one of the predictors of cyberbullying and one of the aggressive personality characteristics that bullies may possess.

Despite numerous prior studies concluding their connection to bullying behavior, the variables (amusement and external factors) did not seem to contribute to the prediction of cyberbullying behavior among harassing adolescents. According to the researcher, the indirect impacts of some variables on predictive variables, as supported by the findings of the current study, may explain the lack of direct and substantial effects of some variables in predicting cyberbullying behavior. The findings of the constructivist model, which explain the direct and indirect causal effects of cyberbullying motives and moral disengagement on the behavior of cyberbullying among bullying adolescents, confirmed the mediating role of some variables (instrumental, ideology, revenge, amusement, and sadism) through power and moral disengagement, conveying the influence of these variables on cyberbullying behavior and thereby changing the adolescents' beliefs. This finding has important implications for minimizing cyberbullying behavior because the effects of the other variables are controlled. The findings also showed that the variables (instrumental, ideology, revenge, power, and moral disengagement) have an immediate impact on cyberbullying behavior.

The results confirm that moral disengagement is one of the motives for cyberbullying behavior, which is consistent with the findings of the study by Pornari and Wood (2010), the study by Torkashvand et al. (2022), and Esposito et al. (2022). These studies asserted that moral disengagement was associated with both aggressiveness or sadism and bullying, where the bully justifies their behavior by removing responsibility and naming their behavior nicely. This is consistent with the findings of many previous studies that confirmed that moral disengagement is one of the most important motives and factors for cyberbullying (Knauf et al., 2018; Kodama et al., 2016; Hymel et al., 2005; Menesini et al., 2003).

According to the previous results, the bully seeks to confirm to himself and others his point of view and ideas by practicing cyberbullying behavior, thinking that he is superior to many of his friends, or that he is more experienced and skilled in dealing with technological innovations and facilitating them according to his desires and motives, which is consistent with the findings of Abu Ela's Study (2017). The Abu Al-Diyar study (2021), which highlighted the negative correlation between empathy and self-esteem on the one hand, and cyberbullying conduct on the other, can be used to understand the current findings. It also accords with the findings of the study by Ahmed and Ahmed (2020), which showed that the bully lacks self-regulation behaviors and some mental habits (impulsive management, listening to others with understanding, thinking flexibly, and reciprocal thinking), as well as with the study by Adam (2021), which showed that the feelings of worthlessness in others and low self-esteem are the main factors that contribute to someone becoming a bully. This clarifies the significance of the findings. Because of the confluence of these factors with the person's lack of restraint, impulsivity, and empathy for others, he may turn to cyberbullying conduct.

The previous findings are consistent with those of Hamuddin et al. (2019), which confirmed the three motives behind adolescents' practice of cyberbullying, amusement, response to abuse, and the expression of disturbing feelings. The findings of the Fluck (2017) study also confirmed that the motives of bullying are achieving goals, power, sadism, ideology, and revenge. The findings of Varjas et al. (2010) revealed that the internal motives of cyberbullying related to bullying traits are redirection of feelings, revenge, amusement, boredom, incitement, protection, jealousy, and seeking a benefit or a new personal experience. These findings also agree with what was confirmed by the study of Bussey and Fitzpatrick (2014), where the level of moral disengagement increases among the bully and they do not adhere to moral and social standards and values. The findings of the Jung and Park study (2020) also confirm Kodama et al. (2016) that lack of ethical compliance is a relevant factor and cause of cyberbullying behavior. The current results support the

results of a study by Falla et al. (2021), which found that moral disengagement mediates the link between aggressive conduct and empathy and cyberbullying in adolescents.

Conclusion and Recommendations:

Based on the findings of the present study, it is recommended that parents and teachers be educated on the importance of monitoring children's use of social media and various internet applications. This can help reduce the incidence of cyberbullying behavior, it is important to educate children about the potential consequences of such socially unacceptable behaviors. To achieve this objective, it is possible to rely on enhancing the children's religious and spiritual motivations. It is also recommended to rationalize adolescents' use of social media and the internet, while encouraging them to engage in beneficial activities such as practicing various hobbies. Strengthening children's moral commitment by parents and the school is also recommended. According to the findings, moral disengagement is a crucial factor in adolescents' cyberbullying behavior.

Declarations

Ethics Approval and Consent to Participate
The study obtained permission from the Ethics Committee of Qassim University with decision number 59598, dated 14/4/2021. Ethical rules were followed during the study, and consent forms were obtained from the participants. Approval was also obtained from the education management of Al-Qassim for the application in high schools.

Consent for Publication
Not applicable

Availability of Data and Materials
Not applicable.

Competing Interests
The author declares that no competing interests in this manuscript.

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Authors' Contributions
AA carried out the proposal of the main idea of the research, AA and AA contributed to the collection of data, analysis. AA carried out revision of the article content. All authors have read and approved the final article.

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