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# Perception and prevalence of bullying in Malaysian higher education: A multifaceted analysis



Amran Abdul Halim<sup>1</sup>, Norazmi Anas<sup>2</sup>,\*, Zulkifli Mohd Ghazali<sup>3</sup>, Mohd Ahsani A. Malek<sup>4</sup>, Ishak Suliaman<sup>5</sup>, Ahmad Sanusi Azmi<sup>1</sup>, Shahril Nizam Zulkipli<sup>2</sup>

- <sup>1</sup>Faculty of Quranic and Sunnah Studies, Universiti Sains Islam Malaysia, Nilai, Malaysia
- <sup>2</sup>Academy of Contemporary Islamic Studies, Universiti Teknologi MARA, Perak Branch, Tapah Campus, Perak, Malaysia
- <sup>3</sup>College of Computing, Informatics and Media, Universiti Teknologi MARA, Perak Branch, Tapah Campus, Perak, Malaysia
- <sup>4</sup>Faculty of Islamic Studies and Humanities, Universiti Sultan Azlan Shah, Kuala Kangsar District, Malaysia
- <sup>5</sup>Department of Al-Quran and Al-Hadith, Academy of Islamic Studies, University of Malaya, Kuala Lumpur, Malaysia

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#### ABSTRACT

The escalating incidence of bullying cases within Malaysian higher education institutions underscores a disconcerting trend that arises from the confluence of academic pressures, financial strains, relational intricacies, and identity conflicts among students. This unsettling phenomenon engenders not only physical harm and emotional distress but, alarmingly, fatalities as well. In response, the imperative to curtail this deleterious spread through preemptive measures has prompted institutions to engage in student surveys. This research endeavors to illuminate the panorama of bullying perceptions prevailing among students within selected Malaysian higher education institutions. Employing a comprehensive analytical framework encompassing descriptive statistics, crosstabulation, independent samples ttest, and one-way ANOVA, this study scrutinizes the multifaceted dynamics underpinning bullying trends. Employing a combination of convenience sampling and online survey techniques, a cohort of 561 participants was garnered from four distinct higher learning establishments: Universiti Teknologi MARA (UiTM), Universiti Sains Islam Malaysia (USIM), Universiti Sultan Azlan Shah (USAS), and University of Malaya (UM). The outcomes of this investigation delineate a landscape in which bullying remains a persistent concern within the selected higher education institutions. Of particular significance is the perceptual contrast exhibited by bullies as compared to their peers, with the former demonstrating higher levels of support for bullying behavior. Consequently, institutional administrations are impelled to undertake comprehensive initiatives to comprehensively catalog instances of bullying, spanning both psychological and physical manifestations. These findings underscore the gravity of the issue and underscore the urgency for institutions to adopt proactive strategies to mitigate bullying, thereby cultivating environments conducive to holistic student well-being and nurturing scholastic excellence.

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## 1. Introduction

Bullying is a repeated or likely-repeated aggressive behavior, abusing weak people with the aim of displaying strength, which negatively affects the victims in physical, verbal, or psychological aspects. The main goal of bullying is to gain control

\* Corresponding Author.

Email Address: norazmianas@uitm.edu.my (N. Anas) https://doi.org/10.21833/ijaas.2023.08.004

© Corresponding author's ORCID profile: https://orcid.org/0000-0002-4176-7625

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and dominate other individuals either directly or indirectly (Halim et al., 2022). When it happens directly, open attacks such as physically hitting, kicking, pushing, and choking are involved, while calling names, threatening, and mocking are forms of malicious verbal teasing. On the other hand, indirect bullying involves one or more relational actions such as social isolation of individuals, deliberate exclusion, spreading rumors, damaging someone's reputation, making obscene faces or gestures behind someone's back, and manipulating friendships and relationships with others (Divecha and Brackett, 2020). Bullying is an act of violence discovered in today's world education sector and validated by the

World Health Organization (WHO) as a global health problem that can cause harm (Bowes et al., 2019). The untimely demise of Zulfarhan Osman Zulkarnain, a student enrolled at Universiti Pertahanan Nasional Malaysia (UPNM), on the 22nd of May 2017, sent shockwaves throughout the populace. This Malaysian tragic incident reverberated after Zulfarhan was subjected to a distressing episode of bullying, marked by a brutal and relentless physical assault inflicted upon him by his fellow students. This reprehensible act transpired through the utilization of implements such as belts, rubber pipes, cloth hangers, and a heated iron. Regrettably, these actions culminated in the infliction of severe burns on approximately 80% of the victim's bodily surfaces (Wahab and Sakip, 2019). This case worried the Malaysian community, and appropriate actions need to be taken to prevent this case from recurring in higher learning institutions. According to Harrison et al. (2022), studies on bullying in higher education institutions are not intensely researched compared to bullying cases that occur in schools, therefore, higher education institutions can obtain information related to bullying through questionnaires answered by students under their respective supervision as an initial step to overcome the spread of bullying practices. In general, cases of bullying that occur in institutions of higher education stem from psychological issues such as the pressures to maintain academic excellence, financial problems, relationship issues, and identity conflicts among the students themselves. Therefore, this study aims to identify the perception of bullying among students at selected higher education institutions in Malaysia.

#### 2. Literature review

## 2.1. Bullying and its effects on victims

In general, bullying occurs due to cultural factors and social inequality, especially the widening socioeconomic gap, increasing the risk of bullying in a nation (Tan et al., 2019). In addition, the factor of overweight or obesity causes an increase in the rate of bullying among students (Ganapathy et al., 2019), followed by the age difference factor that makes older students bully the younger and weaker students (Sabramani et al., 2021).

Bullying can occur in several forms whether physically (hitting, punching, kicking, extorting, damaging victim's belongings, and locking them in a room), verbally (mocking, threatening, insulting, addressing harsh words, etc.), social exclusion (disassociating the victims from a group or isolating them), and indirectly (spreading bad news and gossip and provoking others to dislike the victims) which have a direct impact on the victims (Muhopilah et al., 2020), such as physical health problems, behavioral and emotional disorders, problematic social development and poor academic achievement (Fig. 1). This is supported by Hysing et al. (2021) who stated that bullying has a direct

impact on sleep problems as well as affecting academic achievement.

Next, the risks of attention deficit/hyperactivity disorder (ADHD) symptoms also increase among the victims of bullying (Simmons and Antshel, 2021), followed by mental health problems such as anxiety, and symptoms of depression (Midgett and Doumas, 2019)-in line with the findings of Zhong et al. (2021) which showed that bullying has a direct positive and significant effect on depression as one of the symptoms of post-traumatic stress disorder (PTSD) (Plexousakis et al., 2019; Idsoe et al., 2021). Worse, bullying can lead to suicidal intentions among the victims (Pimentel et al., 2020; Duan et al., 2020; Yang et al., 2021; Zhao and Yao, 2022), while serious injuries from bullying can also cause death (Campisi et al., 2020). According to Halim et al. (2022), bullying occurs because the victims feel:

- · Shameful and embarrassed,
- Fearful to retaliate,
- Fearful of making things worse,
- Desire for acceptance,
- · Concerned about "snitching,"
- · Low self-esteem,
- · Failing to recognize bullying, and
- Thinking it would not help.

#### 2.2. Bullying in higher learning institutions

Bullying in higher education institutions can occur among both students and staff (administrative/support or academic) involving bullying cyberbullying traditional or (Tiamboonprasert and Charoensukmongkol, 2020; Hollis, 2021). Previous studies related to bullying in higher learning institutions focused more on bullying that occurred in the workplace involving employees, employers, and academics, while this study focuses more on bullying among students in higher learning institutions. The findings of Gündüz et al. (2021) stated that students of higher education institutions are affected by bullying experienced during their high school years, which has a lasting effect on the academic and social transition of students (Riffle et al., 2021). It is supported by the findings of Shelley et al. (2021) where the public believes that bullying at school carries serious impacts, and influences security considerations of higher education institutions. Pörhölä et al. (2019) firmly stated that the experience of being bullied also increases social stress and anxiety, as well as being sensitive to criticism of their learning performance, for not participating in their classes and not following their lecturer's instructions (Al-Rashdan, 2020). This situation is worse as it increases the risk of suicidal intentions (Bibi et al., 2021). In addition, students with special needs are also bullied by their classmates due to their deficiencies-by making fun of their incapacities and physical disabilities, discouraging them from participating in activities, as well as verbally abusing and name-calling them (Muhammad and Anis, 2021).

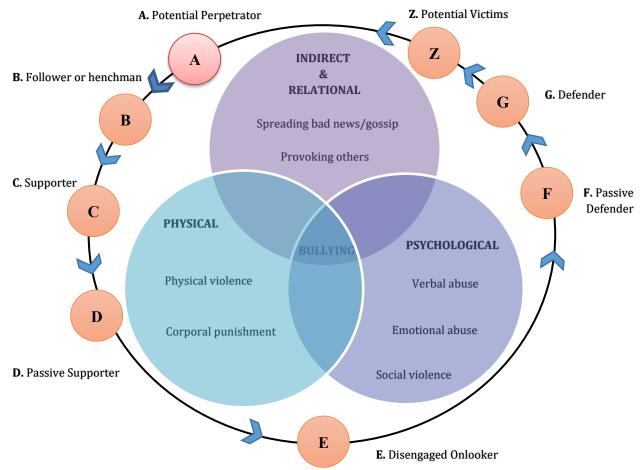


Fig. 1: Theoretical framework for bullying (Integrated from Witteriede and Paulus (2008), UNESCO (2017), and Muhopilah et al. (2020))

In addition to bullying that occurs among students that involve their classmates, there are also other studies that point to bullying that occurs between instructors/lecturers and students in higher education institutions, as reported by Asio (2019). This shows that bullying can happen at all levels in higher education institutions, affecting the reputation and performance of the people involved whether the bully, the victim, and the respective higher education institution. According to Myers and Cowie (2017), there are three main roles that had been focused on by past studies related to bullying in institutions of higher education, namely the perpetrator, the target, and the bystander-whether the bullying occurs in a college or university (Shelley et al., 2021). Lund and Ross (2017) suggested that further research related to bullying should be done involving multi universities and examining the demographic differences of gender or race/ethnicity that affect bullying in higher education institutions. The findings of the study by Pörhölä et al. (2019) showed that cultural and gender differences affect the form of bullying at the university level, and continue to the workplace (Jones et al., 2019). According to Chowdhury (2020), there are several factors that cause bullying among students, namely: (i) the lack of morality, (ii) the lack of empathy, (iii) the uneven power distribution, (iv) peer influence, and (v) poor childhood development. Therefore, higher education institutions need to be more

sensitive and responsible in terms of the law and cooperate with various parties, especially the students, in an effort to stop bullying from continuing, from time to time (Harrison et al., 2022).

#### 3. Research method

## 3.1. Sample and data collection

As this study focuses on the perceptions and attitudes toward bullying in higher learning institutions, the sample consists of university students. In particular, the undergraduates are the targeted participants since the majority of them live on campus. To determine the sample size, the table developed by Krejcie and Morgan (1970) was employed. Since the population of the study was expected to be more than 100,000 participants, the minimum sample size was 384 participants. Using convenience sampling and online survey techniques, this study managed to get 561 participants from four different higher learning institutions: (i) Universiti Teknologi MARA (UiTM), (ii) Universiti Sains Islam Malaysia (USIM), (iii) Universiti Sultan Azlan Shah (USAS), and (iv) University of Malaya (UM).

#### 3.2. Measures

The metrics incorporated within the questionnaire are grounded in established

psychological research paradigms. This survey instrument encompasses three distinct sections: (i) Demographic particulars, (ii) Instances of bullying encompassing the roles of victim, bully-victim, and bully, and (iii) Perceptions concerning instances of bullying. The evaluation of perceptions towards bullying was executed through the utilization of a Likert-type scale, comprising five points, ranging from "strongly disagree" to "strongly agree," encompassing a compilation of fourteen distinct items. It is noteworthy that this questionnaire underwent comprehensive validation procedures, thereby attesting to its robustness, and has been previously deployed in numerous instances of empirical inquiry (Radliff et al., 2016; Werth et al., 2015). Hence, this study only measured the internal consistent reliability using Cronbach's alpha value. The items are reliable since Cronbach's alpha value is 0.654, which exceeds the threshold of 0.6 (Hair et al., 2017).

## 3.3. Data analysis

The data was analyzed using Statistical Package for the Social Sciences (SPSS) version 26. Descriptive statistics and crosstabulation were employed to analyze the demographic information and bullying category. Furthermore, independent samples t-test and one-way ANOVA were also used to identify the differences between gender, level of education, and bullying category according to the mean perception score. This parametric test is suitable for the study because it satisfies the normality assumption (as in Table 1), by which the skewness values are between -1.5 and +1.5 as suggested by Tabachnick and Fidell (2013).

Table 1: Normality assumption test

Vari	iable	Skewness	Kurtosis			
Gender	Male	0.987 (0.203)	1.158 (0.403)			
Gender	Female	1.499 (0.119)	3.311 (0.238)			
Level of	Diploma	1.249 (0.145)	3.258 (0.289)			
education	education Degree		1.559 (0.291)			
	Not involved	1.384 (0.107)	2.765 (0.214)			
Dullaine	Bystander	0.969 (0.398)	0.026 (0.778)			
Bullying	V: ation	-0.760 (0.913)	-0.302			
category	Victim	-0.760 (0.913)	(2.000)			
	Bully	-	-			

#### 4. Results and discussions

The result of the study was discussed according to four sections: (i) Students' profile, (ii) Bullying category, (iii) Perception of students toward bullying, and (iv) Perception of students toward bullying according to demographic information.

#### 4.1. Students' profile

The demographic information of the respondents is tabulated in Table 2. This study involved 25.5% males, and 74.5% females, which somewhat reflects the gender ratio of undergraduates for public universities in Malaysia. This study involved four public universities, with the highest sample coming

from UiTM with 283 (50.4%) students, followed by USIM, USAS, and UM with 126 (22.3%), 99 (17.5%) and 54 (9.7%) students respectively. This study also focused on undergraduate students (diploma and degree) across all years of studies.

**Table 2:** Demographic information of the respondents

Pr	ofile	Frequency	Percentage (%)
Gender	Male	143	25.5
Genuer	Female	418	74.5
	UiTM	283	50.4
University	USIM	126	22.3
University	USAS	99	17.5
	UM	54	9.7
Chada	Diploma	283	50.4
Study level	Bachelor's degree	278	49.6
	Year 1	333	59.4
Year of	Year 2	127	22.6
	Year 3	60	10.7
study	Year 4	40	7.1
	Year 5	1	0.2

#### 4.2. Bullying category

The students were categorized as the victim, bully, bully-victim, or not involved in bullying based on their responses to the survey. Bullies are defined as students who admitted to participating in bullying perpetrations and are not considered victims. Students who claimed as victimized and not perpetrated are categorized as victims. Bystanders are defined as students who see other students being bullied. Students who denied engaging in or being a victim of bullying are labeled as not involved. Table 3 shows the total sample according to the bullying category, where the highest sample is students not involved in bullying at 92.5% (n=519), followed by bystanders, victims, and bullies with 6.2% (n=35), 0.9% (n=5) and 0.4% (n=2) respectively. Table 4 shows the crosstabulation table between the demographic information of the students and the bullying category. The information is related to the gender, university, and education level of the students. Based on the crosstabulation table, bullying happened in all four public universities since there is a number of students who experienced it either as a bully, a victim, or a bystander, as shown in Table 4. The bullying cases involved male and female students in both diploma and bachelor's degree programs.

**Table 3:** Total sample according to the bullying category

Bullying category	Frequency	Percentage	
Bully	2	0.4	
Victim	5	0.9	
Bystander	35	6.2	
Not involved	519	92.5	
Total	561	100	

#### 4.3. Perception of students toward bullying

The perception of students toward bullying was measured using the average score of part D in the questionnaire. The range of the average score is between 14 to 70, and the higher scores denote more pro-bullying perceptions. Table 5 shows the

perception of students toward bullying according to the bullying category. The bullies have the highest score compared to the others with a mean score of 41. The other bullying categories of victim, bystander and not involved have a close score to each other at 27.80, 25.20, and 25.13 respectively.

Based on these scores, the students in the bully category have more pro-bullying perceptions compared to the other categories. Therefore, to determine the significant differences in the perception scores between bullying categories, the One-way ANOVA was employed.

**Table 4:** Demographic according to the bullying category

Domographia -		Total				
Demographic -	Bully	Victim	Bystander	Not involved	Total	
		Ger	nder			
Male	2 (1.4%)	1 (0.7%)	15 (10.5%)	125 (87.4%)	143 (100%)	
Female	0 (0.0%)	4 (1.0%)	20 (4.8%)	394 (94.3%)	418 (100%)	
		Univ	ersity			
UiTM	0 (0.0%)	4 (1.4%)	15 (5.3%)	264 (93.3%)	283 (100%)	
USIM	1 (0.8%)	0 (0.0%)	3 (2.4%)	122 (96.8%)	126 (100%)	
USAS	1 (1.0%)	1 (1.0%)	9 (9.2%)	87 (88.8%)	98 (100%)	
UM	0 (0.0%)	0 (0.0%)	8 (14.8%)	46 (85.2%)	54 (100%)	
		Edu	cation			
Diploma	0 (0.0%)	4 (1.4%)	15 (5.3%)	264 (93.3%)	283 (100%)	
Degree	2 (0.4%)	1 (0.4%)	20 (7.2%)	255 (91.7%)	278 (100%)	

**Table 5:** Perception score according to bullying category

Table 3. I el ception scole acc	or uning to builying category
Bullying category	Score
Bully	41
Victim	27.80
Bystander	25.20
Not involved	25.13

Table 6 shows the ANOVA test results among the groups of bullying categories. The results indicate that there are differences among the groups of bullying categories since the p-value 0.005 (F=4.263) is less than 0.05. Hence, this study proceeds with

multiple comparisons using Fisher's Least Significant Difference (LSD) test (Nanda et al., 2021) in order to identify which groups are different. As expected, there are significant differences between the mean perception score of bullies compared to the other categories (victim, bystander, and not involved) since the p-values are less than 0.05 as shown in Table 7. There are no differences between the mean of perception scores between the victim, bystander, and not involved categories.

Table 6: Analysis of variance (ANOVA) test

	Sum of squares	df	Mean square	F	Sig
Between groups	535.581	3	178.527	4.263	0.005
Within groups	23326.751	557	41.879		
Total	23862.332	560			

**Table 7:** Multiple comparisons between bullying categories

Multiple comparisons (I – J)	Mean differences (I – J)	Sig
Not involved – Victim	-2.6709	0.359
Not involved – Bystander	-0.0709	0.950
Not involved – Bully	-15.8709	0.001
Victim – Bystander	2.6000	0.401
Victim – Bully	-12.2000	0.015
Bystander – Bully	-15.8000	0.001

## 4.4. Perceptions of students according to the demographic factor

This section discusses the perceptions of students toward bullying according to their gender and education level. Table 8 shows the mean perception score of the males being higher than the females, at 28.0559. This indicates that the male students are more pro-bully compared to the female students. Thus, to identify whether there are significant differences between the mean perception score of

the males and females, the independent samples ttest was employed. The result from Table 9 shows significant differences between the mean perception scores of the males and females since the p-value of 0.000 is less than 0.05 with a 3.8143 mean difference. On the other hand, the mean perception score between diploma and bachelor's degree students are close to each other at 24.6502 and 25.7878 respectively.

**Table 8:** Descriptive statistics for gender and education level

Variable		N	Mean	SD	SE mean
Gender	Male	143	28.0559	7.0058	0.58586
	Female	418	24.2416	6.0657	0.29668
Education level	Diploma	283	24.6502		
	Degree	278	25.7878		

**Table 9:** Independent sample t-test for gender and education level

Levene's test					t-test for e	quality of means		
Variable	F	Sig	t	df	Sig. (2- tailed)	Mean Difference	95% CI of th	ne difference
Gender	4.231	0.040	-6.232 -5.808	559	0.000 0.000	3.8143 3.8143	5.0165 5.1086	2.6121 2.5201
Education	4.629	0.032	-2.070	559	0.039	-1.1376	-2.2172	-0.0580
Level			-2.067		0.039	-1.1376	-2.2186	-0.0566

#### 5. Conclusion

This research scrutinizes instances of bullying within a specific subset of higher education institutions, concurrently exploring the perceptions of students regarding such occurrences. The study's revelations underscore the persistence of bullying problems within the purview of the chosen higher education institutions—namely, UiTM, USIM, USAS, and UM. Pertaining to students' perceptions towards bullying, a salient observation emerges, indicating that individuals assuming the role of bullies exhibit the highest scores, thereby implying a more favorable stance towards bullying in comparison to their peers. Consequently, it becomes imperative for institutional leadership to undertake a multifaceted approach to gather information encompassing the entirety of bullying incidents, encompassing both psychological and physical manifestations. This achieved objective can be through the administration of meticulously designed questionnaires to students, with a crucial emphasis on preserving the confidentiality of participants' identities to encourage candid responses and cooperative engagement.

despite However, the intriguing insights garnered, it is important to acknowledge several limitations intrinsic to this study. First, the research scope remains confined to four specifically selected higher education institutions, thereby necessitating prudence when attempting to extrapolate findings to the broader landscape of Malaysian higher education. Furthermore, the study's cross-sectional nature engenders inherent constraints in capturing continuous causal effects. As a prospective avenue advancing scholarship, forthcoming investigations should consider a more expansive sample encompassing the entire gamut of higher education institutions across Malaysia. Additionally, the adoption of a longitudinal research design emerges essential as an strategy comprehensively unraveling the nuanced dynamics of bullying over time, thereby enriching the understanding of its perpetuation and impact on student well-being.

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## Compliance with ethical standards

#### **Conflict of interest**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

#### References

Al-Rashdan HS (2020). The effect of bullying at Yarmouk University on students' performance from their point of view. International Journal of Psychosocial Rehabilitation, 24(1): 9061-9082.

Asio JMR (2019). Students bullying teachers: Understanding and behavior of college students from a higher education institution. Journal of Pedagogical Research, 3(2): 11-20. https://doi.org/10.33902/JPR.2019254157

Bibi A, Blackwell SE, and Margraf J (2021). Mental health, suicidal ideation, and experience of bullying among university students in Pakistan. Journal of Health Psychology, 26(8): 1185-1196.

https://doi.org/10.1177/1359105319869819 **PMid:31441329** 

Bowes L, Aryani F, Ohan F, Haryanti RH, Winarna S, Arsianto Y, and Minnick E (2019). The development and pilot testing of an adolescent bullying intervention in Indonesia–the ROOTS Indonesia program. Global Health Action, 12(1): 1656905. https://doi.org/10.1080/16549716.2019.1656905

PMid:31512573 PMCid:PMC6746296

Campisi SC, Carducci B, Akseer N, Zasowski C, Szatmari P, and Bhutta ZA (2020). Suicidal behaviours among adolescents from 90 countries: A pooled analysis of the global schoolbased student health survey. BMC Public Health, 20: 1102. https://doi.org/10.1186/s12889-020-09209-z

PMid:32772922 PMCid:PMC7416394

Chowdhury F (2020). Bullying of students in academic institutions: A qualitative study. Educational Process: International Journal, 9(2): 122-132. https://doi.org/10.22521/edupij.2020.92.4

Divecha D and Brackett M (2020). Rethinking school-based bullying prevention through the lens of social and emotional learning: A bioecological perspective. International Journal of Bullying Prevention, 2(2): 93-113. https://doi.org/10.1007/s42380-019-00019-5

Duan S, Duan Z, Li R, Wilson A, Wang Y, Jia Q, and Chen R (2020).
Bullying victimization, bullying witnessing, bullying perpetration and suicide risk among adolescents: A serial mediation analysis. Journal of Affective Disorders, 273: 274-279

https://doi.org/10.1016/j.jad.2020.03.143 PMid:32421613

Ganapathy SS, Tan L, Sooryanarayana R, Hashim MH, Saminathan TA, Ahmad FH, and Abdul Aziz NS (2019). Body weight, body weight perception, and bullying among adolescents in Malaysia. Asia Pacific Journal of Public Health, 31(8\_suppl): 38S-47S.

https://doi.org/10.1177/1010539519879339 **PMid:31617372** 

Gündüz Ş, Akgün F, and Özgür H (2021). Determination of secondary school students' levels of sensitivity towards cyberbullying and cyberbullying behaviour. Participatory

Educational Research, 8(1): 70-89. https://doi.org/10.17275/per.21.4.8.1

- Hair JF, Hult GTM, Ringle CM, Sarstedt M, and Thiele KO (2017). Mirror, mirror on the wall: A comparative evaluation of composite-based structural equation modeling methods. Journal of the Academy of Marketing Science, 45(5): 616-632. https://doi.org/10.1007/s11747-017-0517-x
- Halim AA, Anas N, Noor MSM, Zani MQM, Salaeh A, Said WM, and Aris H (2022). Bullying symptoms and their effects on victims. International Journal of Academic Research in Business and Social Sciences, 12(11): 1707–1715.
- Harrison ED, Hulme JA, and Fox CL (2022). A thematic analysis of students' perceptions and experiences of bullying in UK higher education. Europe's Journal of Psychology, 18(1): 53-69

https://doi.org/10.5964/ejop.3669

## PMid:35330856 PMCid:PMC8895698

- Hollis LP (2021). Human resource perspectives on workplace bullying in higher education: Understanding vulnerable employees' experiences. 1st Edition, Routledge, New York, USA. https://doi.org/10.4324/9781003051923
- Hysing M, Askeland KG, La Greca AM, Solberg ME, Breivik K, and Sivertsen B (2021). Bullying involvement in adolescence: Implications for sleep, mental health, and academic outcomes. Journal of Interpersonal Violence, 36(17-18): NP8992-NP9014.

https://doi.org/10.1177/0886260519853409

PMid:31179829

Idsoe T, Vaillancourt T, Dyregrov A, Hagen KA, Ogden T, and Nærde A (2021). Bullying victimization and trauma. Frontiers in Psychiatry, 11: 480353.

https://doi.org/10.3389/fpsyt.2020.480353

#### PMid:33519533 PMCid:PMC7841334

- Jones L, Boesten J, and Riazuddin H (2019). Bullying and harassment in research and innovation environments: An evidence review. UK Research and Innovation, Swindon, UK.
- Krejcie RV and Morgan DW (1970). Determining sample size for research activities. Educational and Psychological Measurement, 30(3): 607-610.

https://doi.org/10.1177/001316447003000308

Lund EM and Ross SW (2017). Bullying perpetration, victimization, and demographic differences in college students: A review of the literature. Trauma, Violence, and Abuse, 18(3): 348-360.

https://doi.org/10.1177/1524838015620818

PMid:26759417

- Midgett A and Doumas DM (2019). Witnessing bullying at school: The association between being a bystander and anxiety and depressive symptoms. School Mental Health, 11(3): 454-463. https://doi.org/10.1007/s12310-019-09312-6
- Muhammad Y and Anis F (2021). Bullying in universities: A qualitative analysis of the lived experiences of students with special needs. Sir Syed Journal of Education and Social Research, 4(1): 388-397. https://doi.org/10.36902/sjesr-vol4-iss1-2021(388-397)
- Muhopilah P, Tentama F, and Yuzarion Y (2020). Bullying scale: A psychometric study for bullying perpetrators in junior high school. European Journal of Education Studies, 7(7): 92-106.
- Myers CA and Cowie H (2017). Bullying at university: The social and legal contexts of cyberbullying among university students. Journal of Cross-Cultural Psychology, 48(8): 1172-1182. https://doi.org/10.1177/0022022116684208
- Nanda A, Mohapatra BB, Mahapatra APK, Abiresh Prasad Kumar Mahapatra APK, and Mahapatra APK (2021). Multiple comparison test by Tukey's honestly significant difference (HSD): Do the confident level control type I error. International Journal of Statistics and Applied Mathematics, 6(1): 59-65. https://doi.org/10.22271/maths.2021.v6.i1a.636

- Pimentel FDO, Della Méa CP, and Dapieve Patias N (2020). Victims of bullying, symptoms of depression, anxiety and stress, and suicidal ideation in teenagers. Acta Colombiana de Psicología, 23(2): 230-240. https://doi.org/10.14718/ACP.2020.23.2.9
- Plexousakis SS, Kourkoutas E, Giovazolias T, Chatira K, and Nikolopoulos D (2019). School bullying and post-traumatic stress disorder symptoms: The role of parental bonding. Frontiers in Public Health, 7: 75.

https://doi.org/10.3389/fpubh.2019.00075

#### PMid:31024876 PMCid:PMC6465416

Pörhölä M, Almonkari M, and Kunttu K (2019). Bullying and social anxiety experiences in university learning situations. Social Psychology of Education, 22(3): 723-742. https://doi.org/10.1007/s11218-019-09496-4

Radliff KM, Wang C, and Swearer SM (2016). Bullying and peer victimization: An examination of cognitive and psychosocial constructs. Journal of Interpersonal Violence, 31(11): 1983-2005

https://doi.org/10.1177/0886260515572476

#### PMid:25711618

Riffle LN, Kelly KM, Demaray ML, Malecki CE, Santuzzi AM, Rodriguez-Harris DJ, and Emmons JD (2021). Associations among bullying role behaviors and academic performance over the course of an academic year for boys and girls. Journal of School Psychology, 86: 49-63.

https://doi.org/10.1016/j.jsp.2021.03.002 PMid:34051917

Sabramani V, Idris IB, Ismail H, Nadarajaw T, Zakaria E, and Kamaluddin MR (2021). Bullying and its associated individual, peer, family and school factors: Evidence from Malaysian national secondary school students. International Journal of Environmental Research and Public Health, 18(13): 7208. https://doi.org/10.3390/ijerph18137208

PMid:34281145 PMCid:PMC8297093

Shelley WW, Pickett JT, Mancini C, McDougle RD, Rissler G, and Cleary H (2021). Race, bullying, and public perceptions of school and university safety. Journal of Interpersonal Violence, 36(1-2): NP824-849NP.

https://doi.org/10.1177/0886260517736272

PMid:29294955

Simmons JA and Antshel KM (2021). Bullying and depression in youth with ADHD: A systematic review. Child and Youth Care Forum, 50(3): 379-414.

https://doi.org/10.1007/s10566-020-09586-x

- Tabachnick BG and Fidell LS (2013). Using multivariate statistics. 6<sup>th</sup> Edition, Pearson, Boston, USA.
- Tan L, Ganapathy SS, Sooryanarayana R, Hasim MH, Saminathan TA, Mohamad Anuar MF, and Rosman A (2019). Bullying victimization among school-going adolescents in Malaysia: Prevalence and associated factors. Asia Pacific Journal of Public Health, 31(8\_suppl): 18S-29S.

https://doi.org/10.1177/1010539519870665

PMid:31470742

- Tiamboonprasert W and Charoensukmongkol P (2020). Effect of ethical leadership on workplace cyberbullying exposure and organizational commitment. The Journal of Behavioral Science, 15(3): 85-100.
- UNESCO (2017). School violence and bullying: Global status report. In the International Symposium on School Violence and Bullying: From Evidence to Action, UNESCO, Seoul, South Korea.
- Wahab AA and Sakip SRM (2019). An overview of environmental design relationship with school bullying and future crime. Environment-Behaviour Proceedings Journal, 4(10): 11-18. https://doi.org/10.21834/e-bpj.v4i10.1631
- Werth JM, Nickerson AB, Aloe AM, and Swearer SM (2015). Bullying victimization and the social and emotional maladjustment of bystanders: A propensity score analysis. Journal of School Psychology, 53(4): 295-308.

https://doi.org/10.1016/j.jsp.2015.05.004 PMid:26270274

- Witteriede H and Paulus P (2008). Teachers in bullying situations (Tibs). Final Project Report, Leuphana University of Lueneburg, Lüneburg, Germany.
- Yang B, Wang B, Sun N, Xu F, Wang L, Chen J, and Sun C (2021). The consequences of cyberbullying and traditional bullying victimization among adolescents: Gender differences in psychological symptoms, self-harm and suicidality. Psychiatry Research, 306: 114219.

https://doi.org/10.1016/j.psychres.2021.114219

PMid:34614443

- Zhao R and Yao X (2022). The relationship between bullying victimization and suicidal ideation among Chinese adolescents: The role of depressive symptoms and gender differences. Journal of School Violence, 21(1): 60-80. https://doi.org/10.1080/15388220.2021.1985327
- Zhong M, Huang X, Huebner ES, and Tian L (2021). Association between bullying victimization and depressive symptoms in children: The mediating role of self-esteem. Journal of Affective Disorders, 294: 322-328.

 $https://doi.org/10.1016/j.jad.2021.07.016\ \textbf{PMid:34311332}$