

The Role of Teachers in Moderating The Impact of Bullying on Academic Achievements Amongst Gen-z Through Psychosomatic Well-being

The Role of Teachers in
Moderating The Impact of
Bullying on Academic
Achievements
55

Pooja Agrawal, Assistant Professor, Faculty of Commerce & Management,
Vishwakarma University, Pune, India.

Omvir Gautam, Assistant Professor, Faculty of Commerce & Management,
Vishwakarma University, Pune, India.

Received: 29.11.2022

Revised: 28.01.2023

Accepted: 31.03.2023

Abstract

Purpose: Indian learning system is exceedingly modest since the inception of knowledge with a prominent thrust on academic performance. This article aimed to put some light on prevalent issues in the higher learning atmosphere across the University eco-system in Indian context. This study measured the impact of various bullying types (Verbal, Cyber, Relational and Physical) on psychosomatic well-being of Gen-Z which impacted to academic achievements along with teachers' role as moderating variable.

Design/Methodology: A Cross-sectional research was conducted by using self-administered questionnaires. The participants considered were from Gen-Z from Maharashtra, India. The survey piloted in between the August, 2021 to December 2021 semesters. The SPSS-Amos 24.0 version was used for inferential analysis to check for significant results of the variables undertaken in the study. The sample of (n=305) was drawn with convenience sampling from the population.

Results and Findings: The completed surveys were obtained from a targeted sample of 305 Gen-Z. The males accounted for 72.8 percent, while females for 27.2 percent. The bullying categories had a significant favorable influence on psychosomatic well-being. Further, results from this study demonstrate a positive and significant impact of psychosomatic well-being on academic achievements; however, the teacher's role as moderator also reveals positive impact on it.

Directions to future research and Limitations: The study's most significant limitation was its sample size. It does, however, provide important and valuable insights into student teaching-learning mechanisms. The second limitation was cross-sectional research design impedes the analysis of directionality of association among psychosomatic well-being and academic achievements. The implications of this study could be such as-developing conducive learning environment, new counseling strategies identifications. Moreover, future researchers can study more dimensions likewise gender as a moderator and Bystander Intervention Model implementation for bullied victims.

Originality/Value: Present study enhances the domain of existing literature by investigating the effect of a bullying on Gen-Z with respect to psychosomatic well-being and academic aspects. These dimensions were particular as Verbal Bullying (VB), Cyber Bullying (CB), Relational Bullying (RB), and Physical Bullying (PB) and psychosomatic well-being effectively explored; hence, the emphasis is on teachers' role in as effective medium to manage the motivation of depressed or bullied students with suggested measures such as career counseling and inculcation of ragging as a syllabus in curriculum in Indian settings.

Keywords: Academic achievements, Bullying types, Psychosomatic well-being, Teachers' role, Gen-Z, University

Paper type: Research paper

1. Introduction

In today's education world the tech-savvy students are engaged phenomenally in learning but sometimes they are feeling an environment of stress. A segment of students i.e. Gen-Z is the foremost group where, anxiety statuses are the important cause of the degradation of academic performance (Nelson et. al., 2012; Kuh., 2008; Hunter and Linder 2005). The term



Gurukul Business Review (GBR)
Vol. 19 (Spring 2023), pp. 55-69
ISSN : 0973-1466 (off line)
ISSN : 0973-9262 (on line)
RNI No. : UTTENG00072
Impact Factor : 2.82 (IIFS 2020)

bullying is an attention seeker and fascinating among Gen-Z. It is befalling everywhere such as family, schools, colleges, universities and workplaces. Enormous researches have noticed that schools, colleges and universities are highly noticeable spots where the recurrence of bullying is high (Al-Ali and Shattnawi, 2018; Holt et. al., 2017; Raskauskas, J., and Modell, 2011; Omotoso, 2010; Allen, 2010; Kartal, H., and Bilgin, 2009 and Jankauskien et. al., 2008). Maliki et al., (2009) also noticed that learning institutes are becoming insecure place for the students. A survey report published in Times of India (2017) revealed that 54 percent boys and 46 percent of girls reported the complaint of bullying during their school days. Additionally, an annual survey done by Ditch Label (2020) on bullying reflected that only 7 percent of students bullied verbal, 43 percent physical and 50 percent bullied by cyber. This attracts the attention of researchers, academicians, and practitioners to break down the existence of bullying at school, college and university level.

Bullying reflected as "recurrent acts of inexcusable hostility that are disturbing psychosomatic well-being of sufferer and where the strength is not equal" (Jankauskiene et. al., 2008). In other words, bullying refers to viciousness that hurts bullied victim and its recurrence at school amid numerous events when a student or set of students utilizes their power in harming individual or group (Coloroso, 2002; Schuster, 1996 and Olweus, 1993). Researchers (Rose and Monda, A 2011; Raskauskas and Modell, 2011) demarcated bullying is very dangerous for psychosomatic well-being (PWB) and found as a serious problem amongst students. Fundamentally, it has an adverse impact on scholar's academic, psychosomatic and community advancement (Ttofi and Farrington, 2011 and Kartal and Bilgin, 2009). Consequently, Allen (2010) highlighted that teacher comprehend bullying elements and results notwithstanding what they can do to reinforce their students in such circumstances. Moreover, Samara et al. (2020) fostered that transparent communication between parents, child and school management lead sound mental well-being of student. After analyzing the previous literature, it is diagnosed that bullying is a major issue in Gen-Z. With respect to it, the current research paper is focusing on the effect of bullying on psychosomatic well-being of Gen-Z which impacted on their academic achievements. The paper also analyzed the role of a teacher as a moderator between psychosomatic well-being of Gen-Z and their academic achievements.

2. Objectives

The primary goal of this study is to look into the effects of bullied students from various backgrounds, as well as to examine the influence of different types of bullying on various aspects of psychosomatic well-being.

The following research questions of this study are:

RQ1. Did there is the existence of students' bullying types in University/College campuses?

RQ2. Is there any link between the forms of bullying students engage in and their psychosomatic well-being?

RQ3. Was the impact of psychosomatic well-being on academic achievements leads to lower academic performance of students?

RQ4. Was the role of a teacher coming as a significant moderator between students' psychosomatic well-being and academic achievements?

Hypotheses Creation and Conceptual Framework

The current study attempted to investigate the existence of bullying types and their impact on psychosomatic well-being of Gen-Z with moderating role of a teacher.

3. Review of PWB and Bullying Types

Bullying got the attention of researchers and became a globalized concern which affecting the physical, psychological and communal well-being of a person (Samara et. al., 2020; Kowalski et. al., 2016). A plethora of previous researches (Stubbs- Richardson, M., & May, D. C., 2021; Chen et. al., 2020; McCuddy, T., and Esbensen, F. A. 2017; Pham and Adesman 2015) indicated that bullying is a construct of four different sub-elements namely Verbal Bullying (VB), Physical Bullying (PB), Cyber Bullying (CB) and Relational Bullying (RB). Furthermore, researchers (Omotoso, 2010; Quiroz et al., 2006; O'Connell et al, 1999; Colvin et

al, 1998 and Olweus D., 1993) recognized bullying as a hostile or unsocial behavior through-beating, threatening, hitting, bad name calling, abusive, commenting), social isolation, spreading rumors, ignorance etc.

Moreover, bullying is exaggerated by both direct and indirect ways (Bjärehed, et. al., 2020; Dedousis et. al., 2014; Smith et. al., 2012; Brighi, et. al., 2012; Carbone et. al., 2010; Agervold, 2007; Gardner & Johnson, 2001; Rayner et. al., 1999; O'Moore, Seigne, Smith & McGuire, 1998). Indirect hostility revealed through Relational bullying (social isolation, backbiting, whispering), while direct hostility indicates through Verbal bullying (embarrassment at public place, bad mouthing, allegation) as well as Physical bullying (hitting, threatening and pushing). Apart from this traditional bullying (VB, PB and RB); Cyber bullying (CB) is also becoming prominent way for the harassment of Gen-Z. It comprises by sending different obscene message, e-mails and videos through the new mode of communication (Cross et. al., 2015; Patchin, J. W. and Hinduja, S. 2015; Hinduja and Patchin 2014; Litwiller et. al., 2013). Enormous researchers (Romero-Reignier et. al., 2022; Chui et. al., 2022; Samara et. al., 2020; Anasori et. al., 2020; Wolke et al., 2015; Evans et al., 2014; Gini and Pozzoli 2009; Zapf; Einarsen and Mikkelsen, 2003; Einarsen, Hoel, and Vartia, 2003; Hawker and Boulton, 2000; Sharp, Thomson and Arora, 2000) diagnosed an adverse impact of parents' dissension and bullying victimization on the psychosomatic well-being of students, adolescents and refugee children. They also pointed out that this poor psychosomatic well-being impacted their self-admiration, interpersonal relationship, academic performance and emotional balance.

Furthermore, Conway et al., (2021) extended literature review revealed that workplace bullying acted as catalyst for stress, depression, psychological unwell-being, and anxiety of human-beings. Bullied persons have high suicidal tendency as compared to non-bullied (Skapinakis et. al., 2011). These research questions were revised as the subsequent null hypotheses, which can be either supported or rejected after data analysis. The underpinned null hypotheses constitute bullying as a major variable. Hence, these hypotheses are measuring the effect of bullying on psychosomatic well-being.

H01: There is no significant effect of verbal bullying on psychosomatic well-being.

H02: There is no significant effect of relational bullying on psychosomatic well-being.

H03: There is no significant effect of cyber bullying on psychosomatic well-being.

H04: There is no significant effect of physical bullying on psychosomatic well-being.

4. Review of Psychosomatic well-being and Academic achievements:

Psychosomatic well-being is a state of mind of a person when he is depressed, stressed and anxious. Previous research studies proven that bullying are a predictor for poor psychosomatic well-being. In this regard the present research is an attempt to analyze the impact of psychosomatic well-being on academic achievements of Gen-Z. A plethora of research studies giving an insight into it. Across world 10-15 percent of students are bullied twice or thrice in a month (Chaux et. al. 2009). Researchers (Reid, Monsen and Rivers, 2004; Twemlow, Fonagy, and Sacco, 2001) postulated that bullying influenced school, college and university culture negatively which impacted students' psychosomatic well-being like fear, anxiety, depression, suicidal thoughts. This poor psychosomatic well-being resulted in students' absenteeism rate, low self-esteem, distraction and poor academic performance (Juvonen, et. al., 2014; Turner et. al., 2013; Brank et. al., 2012 and Camodeca and Goossens 2005). Moreover, bullied victim felt unrest, anxiety and afraid from school/college because they perceived themselves unsafe at their place (Block, 2014; Mehta et. al., 2013; Roman and Murillo, 2011; Konishi et. al., 2010; Skrzypiec; 2008; Glew et. al., 2005).

Bullied victims were less ambitious and de-motivated towards their academic excellence and success (Laith and Vaillancourt, 2022; Samara et. al., 2021; Shukla et. al., 2016; Young-Jones et. al., 2015; Kokkinos and Kipritsi, 2012; Thijs and Verkuyten, 2008). On the basis of this discussion, the hypothesis can be frame as follows:-

H05: There is no substantial effect of psychosomatic well-being on students' academic achievements.

5. Review of Teachers' moderating role in psychosomatic well-being and academic achievements:

Teachers are considered as role models for their students. Enormous research indicated that

teachers are acting as catalyst in managing bullied victims' psychosomatic well-being, social life, sound academic excellence and prosperity (Lee et. al., 2022 and Samara et. al., 2020; Vedder, Boekaerts, and Seegers, 2005; Brewster and Bowen, 2004; Colarossi and Eccles, 2003; Malecki and Demaray, 2003). They suggested that teacher emotional support, post school clubs' activities, anti-bullying policies, and positive school climate worked a lot in maintaining psychosomatic well-being and well-being of bullied victims. Moreover, Affuso et. al., (2022) highlighted parents' and teachers' emotional support improvises motivation and self-esteem of bullied victims which influenced their academic success and performance positively. Furthermore, researchers recognized that if teacher is supportive and caring then bullied victims had minimum well-being issues and are less likely involved in abusive behavior like drinking alcohol, smoking, tobacco, and drugs consumption (McNeely and Falci, 2004). Students who had bullying incidents regularly and received less social support resulted in the poor level of well-being (Rigby, 2004). On the contrary, researchers (Fischer et. al., 2021; Doll et. al., 2004 and Bosworth et. al., 1999) propounded that teachers' empathetic behavior is not having an impact on bullied students' psychosomatic well-being. It was investigated that students were not shared their bullied incidents with their teachers because of teachers non-seriousness. Non-bullied students received high social sustenance from their teachers as compared to the bullied victim (Alasker, 2006; Demaray and Malecki, 2003). On the basis of the above literature, for the present research the following hypothesis can be formulated: H06: Teacher role does not account as a moderator amongst psychosomatic well-being and academic achievements.

On the basis of above discussion and hypotheses formulation, it is noticed that bullying is a construct of different types of bullying (VB, PB, RB and CB). Furthermore, it was assessed that these types of bullying have an adverse impact on psychosomatic well-being. Research also indicated that poor psychosomatic well-being created disturbance in the life of Gen-Z in different ways. Some researchers also talked about the role of a teacher in giving support to the bullied victim. On the basis of previous literature the following conceptual framework has been created for the current study.

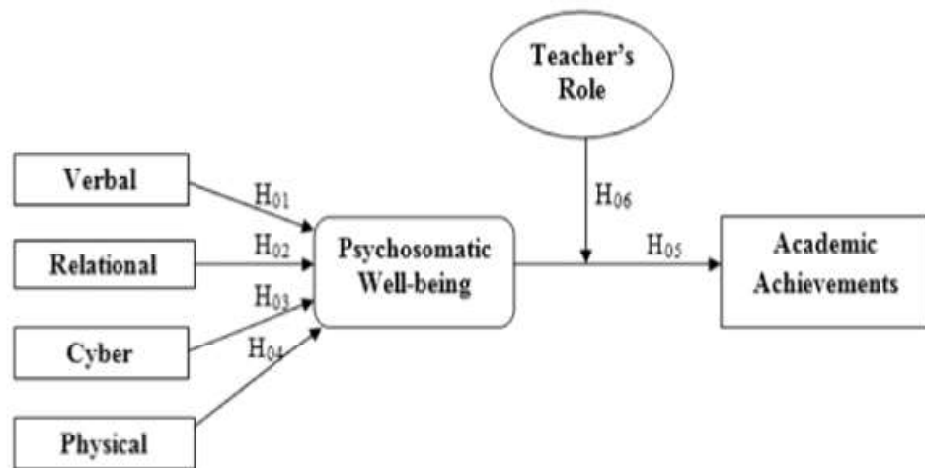


Figure 1.
Researchers conceptual model based on literature

6. Research Methodology and Model Description

Data

The study considered a random sample of 305 participants from management institutes located in Maharashtra, India. The self-structured questionnaire was circulated to Gen-Z (sampling unit) from major cities of Maharashtra. The university having minimum 400 students registered in management programme have been considered as criteria for selection of sampling unit. The data collection tool i.e. questionnaire was disseminated by e-mail and physical distribution. The sampling method employed was random. 310 questionnaires were distributed as in person along with 950 questionnaires e-mailed to the targeted respondents. Out of 1260 only 379 responses were gathered and after eliminating 74 incomplete and

partially filled questionnaires, constituting 30.07 % response rate for the current study.

Variables (Measures) Used in study

The variables for bullying were defined as cyber (CB), relational (RB), physical (PB) and verbal (VB). The variable such as PWB and AA were pivotal constructs in the study. For the independent variables, PWB and the bullying types are affecting the dependent variable AA. The variable (PWB) is the principal mind set at people usually feel anxiety, depression, anger and threaten and could have an adverse impact on their academic progress or achievements. All variables explained in theoretical framework as described earlier in one of sections. The items which has been drawn for each contributing variable has been explained in Table 2

The construct bullying has four sub-constructs like CB, RB, PB and VB. each type of bullying has 3 items or statements mentioned in Table 2. Moreover, one of the pivotal moderating variables is teachers' role (TR) could be estimated by either good as group 1 or bad as group 2. TR was estimated by probing the students to specify the degree which they supposed that PWB could affect AA keeping TR as moderator. Lastly, PWB has six items in data collecting instrument affecting the AA, which has five items.

Instrumentation

This section deals with a self-constructed questionnaire to search the answer of research questions. The preliminary segment have overall data and figures about the study and pursued basic demographical information determinants; gender, age, education, and university residents. The data collecting tool consists of information about students in terms of bullying types like CB, RB, PB and VB associated with PWB and AA (23 items), for which the respondents were enquired to specify their response for each of bullying type behavior by giving preference on five point Likert scale; always as 5; frequently as 4; occasionally as 3; rarely as 2 and never as 1. Every continuum of scale was apportioned a unique value to expedite the data exploration. The values for which are displayed in Table 2. In the last section, named "bullying types," facts were pursued. This section had several pivotal subsections: bullying types, psychosomatic well-being and academic achievements. Participant Responses were chronicled on a five-point Likert scale.

Research Methodology adopted

This section deals with the data collection procedure as first step towards research methodology involved in the current article. The sampling unit is basically Gen-Z in higher educational institutes. The participants were Gen-Z from different universities and colleges located in Maharashtra, India. The survey has been piloted in between August, 2021 to December 2021 semester. For survey students from different institutions of Maharashtra, India has been taken. The Gen-Z was targeted with convenience sampling. The survey was administered in bilingual language (Hindi and English) to deduce reachable to Gen-Z. The intent of the survey tool was made very clear to Gen-Z in terms of aspects like bullying, PWB, AA and TR.

In current study, estimation of antecedents affecting PWB, and to measure the moderating effects of TR towards AA, Structural Equation Modeling (SEM) was used. Reliability analysis and Confirmatory Factor Analysis (CFA) was employed. Almost all questionnaires item was evaluated by imparting the maximum likelihood method. The consistency is measured by Reliability analysis as an estimating method for the consistency by measuring items in form of Cronbach's alpha.

Further, by employing CFA, which is used to assess whether restrained items of the model are reliable with predictor variables using covariance, we may comprehend the construct validity and relevance of the measurement model.

Structural Equation Modeling (SEM) could be employed to ascertain the validity of the theoretical model and cause-effect relationship among the variables statistically. The bullying is categorized in four categories rigorously CB, VB, PB and RB. The types of bullying are analyzed with respect to PWB, further measuring academic achievements amongst Gen-Z.

The primary objective is to ascertain the moderating effects of TR, for which it was suitable to impart SEM to evaluate diverse impact of moderators. Also study establishes the validity and casual relation of measurement model. The moderating impact of teachers' role by categorizing into two groups; teachers' role is classified as good teaching role and bad teaching role. Lastly moderator TR impact was assessed by employing 2 difference tests among the two models. SPSS 24.0 (IBM) for windows and AMOS 23.0 software (IBM) was incorporated.

7. Results and Implications

Demographical Characteristics of Respondents

The sample exhibits demographical information in Table 1. It also disseminates of participants by gender, age, education, and university residency.

Table 1.
Descriptive statistics for Demographics

Variables	Items	Frequency	Percentage
Gender	Female	83	27.2
	Male	222	72.8
Age	Less than 18 years	14	4.6
	19 years to 21 years	160	52.5
	22 years to 24 years	131	42.9
Education	Graduate	202	66.2
	Post Graduate	89	29.2
	Others	14	4.6
University Resident	Hostlers	253	82.9
	Day Scholars	52	17.1

Gender measured in two categories namely female with 27.2 percent (n=83) and male 72.8 percent (n=222). Demographic age represents three sections in which category 19 years to 21years has maximum contribution 52.5 percent (n=160) as compared to remaining two categories. In terms of availing education the graduate category encounters highest 66.2 percent (n=202), while others contributes minimum 4.6 percent (n=14). Lastly, University residency plays significant part of this research work where hostlers category shows 82.9 percent (n=253) as compared to day scholars 52 percent (n=17.1).

Reliability and Validity Analysis

The term Reliability and Validity in this study was accomplished by the measurement model. After reliability analysis TR on AA has to be assessed. In this study, the suggested measurement model comprises of VB, RB, PB and CB. The CFA results show that the deliberate model fits the information in a critical manner. The model fit indices of CFA on normalized model are GFI=0.945; AGFI=0.918; CFI=0.905; IFI=0.902, RMR=0.038 and RMSEA=0.056), Standardized Regression Weights (SRW) for these things were under 0.5. Hence, these things were annihilated and CFA was achieved on the standardized model. Presenting to the results of CFA on altered or corrected model, all variables stacking are significant and all SRW are above 0.5 (allude Table 2).

Table 2.
Standardized estimates and factor loading

Items	Estimate	Factor loading	t-statistic
VB3<-VB	1.000	0.548	1.4140***
VB2<-VB	1.018	0.714	14.178***
VB1<-VB	1.184	0.795	14.097***
PB3<-PB	1.000	0.878	3.134***
PB2<-PB	1.098	0.769	24.717***
PB1<-PB	0.989	0.786	23.244***
RB3<-RB	0.988	0.787	22.144***
RB2<-RB	1.012	0.746	24.175***
RB1<-RB	.0884	0.519	17.197***
CB3<-CB	1.000	0.678	1.312***
CB2<-CB	1.371	0.901	26.548***
CB1<-CB	0.778	0.616	13.614***

*** Statistically significant at 99 %

Moreover, the model fit indices such as GFI=0.948, the AGFI= 0.966, the NFI=0.972, IFI=0.978, and the RMR=0.021 of the modified model achieved the suggested threshold levels, so it is advisable that modified model is better than the standard model. On the basis of CFA, some selected items as VB, PB, RB and CB. The reliability analysis was also performed on each item, and found no problems with scales, because the values of alpha (α) are above 0.7 for all statements in table 3.

Variables	Statements	Cronbach alpha (α)	Sources of Statements drawn
Verbal Bullying (VB)	<ul style="list-style-type: none"> • Mostly verbal bullying has taken place at your study place. • I have been called by the name based on race, religion or ethnicity • Someone has used abusive/insulting language at study place 	0.771	Wang, J., Iannotti, R. J., & Nansel, T. R. (2009)
Relational Bullying (RB)	<ul style="list-style-type: none"> • How often has someone been left out of activities or have others refused to play/socialize with you at study place. • I have been ignored by others • People have told lies about you 	0.842	Wang, J., Iannotti, R. J., & Nansel, T. R. (2009)
Cyber Bullying (CB)	<ul style="list-style-type: none"> • Someone is entering into your private page without your permission through the Internet. • People using internet as a slandering tool against you. • Someone spreading rumors about you through the Internet. 	0.867	Çetin, B., Yaman, E., & Peker, A. (2011).
Physical bullying (PB)	<ul style="list-style-type: none"> • Sometimes pushed around, slapped or punched by others. • I have been threatened by others. • People had taken things from me. 	0.901	Wang, J., Iannotti, R. J., & Nansel, T. R. (2009)
Psychosomatic Well-being (PWB)	<ul style="list-style-type: none"> • If you had felt miserable or depressed • You Felt anxious • You Felt as though you might have a breakdown • Ever Had you felt difficulty falling asleep or staying asleep • You ever suffered from nightmares • You ever been experienced a twitching of your face, head or shoulders 	0.761	Kellner, R. (1987); Hesketh, T., Zhen, Y., Lu, L., Dong, Z. X., Jun, Y. X., & Xing, Z. W. (2010).
Academic Achievements (AA)	<ul style="list-style-type: none"> • Bullying affected negatively yours' academic level • Due to of Bullying the exam results were poor • Bullying creates an adverse environment at study place • Students' academic performance emerges due to Verbal abuse affected most • Bullying dampens you to join classroom 	0.734	Choy, J. L. F., O'Grady, G., & Rotgans, J. I. (2012)

Table 3.
Survey statements and
Cronbach alpha (α) after
employing (CFA)

Results of the Standard Structural Model

The variables such as VB, RB, PB, CB, PWB, and AA were assessed for covariance structure analysis, constituting a total of 305 participants, and maximum likelihood technique, which is identified to be reliable and asymptotically effective when assessing the determinants of large samples as shown in figure 2.

Table 4.
Results of the Standard Model.

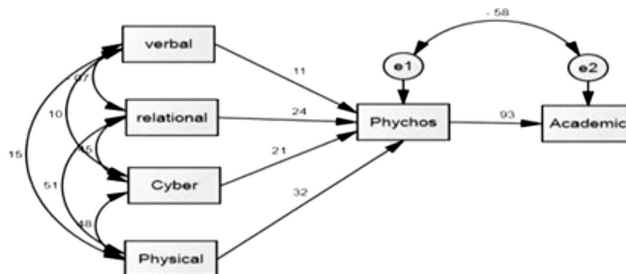
Hypotheses	Path	Estimate	S.E	β	t-value (β /SE)	P	Decision
H1	PWB<-VB	.111	.114	0.2789	2.4464	.034	Accept
H2	PWB<-RB	.236	.072	0.3972	5.5166	***	Accept
H3	PWB<-CB	.206	.084	0.3161	3.7630	***	Accept
H4	PWB<-PB	.317	.080	0.5797	7.2462	***	Accept
H5	AA<-PWB	.933	.078	0.8107	10.3965	***	Accept
H6	AA<- TR<PWB	.050	0.64	0.216	7.4425	***	Accept

Note: *** indicates significance at the 1% level.

The χ^2 measurement is the main statistic for estimating goodness-of-fit for conclusion that the model is apt as χ^2 estimator is low and the p-value of χ^2 is high. Here, the $\chi^2/df= 3.626/3$ i.e. CMIN=1.209. The model fit indices of the basic measurement model, were like the goodness-of-fit index (GFI = 0.928), adjusted goodness-of-fit index (AGFI = 0.910), normed fit index (NFI=0.993), relative fit index (RFI=0.965), Tucker Lewis index (TLI=0.994), comparative fit index (CFI=0.998), the root-mean-square residual (RMR = 0.028) and Root-mean-square error of approximation (RMSEA=0.026). Moreover, RMSEA value 0.026 which is less than 0.05 as p-value to be considered a very good model fit. The other model fit indicators like GFI, NFI, AGFI, TLI, and RFI were above 0.90, which is itself a good considerable model fit indices. Therefore, all indices of the modified model are apt for the concluding data analysis.

The research question "Did there is existence of students' bullying types in University" also justified as for all variables undertaken in study shows r above 0.5 i.e. 50 percent correlation coefficient. Further, the outcomes from inferential analysis about the effects of VB, RB, CB, and PB on PWB and PWB over AA are shown in Table 5. Mainly, the effect of VB on PWB was significant with positive ($\beta_{VB}=0.0278, p < 0.01$). Consequently the, Hypotheses 1, "There is significant impact of verbal bullying over psychosomatic well-being was accepted. This comprehends that the verbal bullying is fair enough to affect the psychosomatic well-being of students. Second Hypothesis, "There is significant impact of RB over PWB was significant with path coefficients ($\beta_{RB}=0.397, p < 0.01$) laid positive path from VB to PWB and hence hypothesis 2 was supported. Third, in the current study, the impact of CB is measured by questions about the pertinent reasons for cyber bullying. As per results, CB had a positive effect on PWB, and the path coefficients was significant ($\beta_{CB}=0.316, p < 0.01$). Hence, Hypothesis 3, "there is a significant effect of CB over PWB found significant. Similarly for Hypothesis 4, "there is significant effect of PB over PWB shows that higher the physical bullying leading more psychosomatic well-being disorders among the students and significant ($\beta_{PB}=0.579, p < 0.01$). Moreover, among the four contributing (latent) variables in research, PB had the most significant effect on PWB and accounts for the maximum β value. Lastly, Hypothesis 5, "there is a significant effect of PWB on AA found significant with ($\beta_{PB}=0.810, p < 0.01$) and hence it also positive with standard regression weights 0.933. Thus, the Hypothesis 5 was supported. Figure-2 depicts the structural model.

Figure 2.
Structural model



8. Results of the Moderating Effects of Teachers' role (TR)

Teaching Role as Moderator

The technique of multiple group analysis (MGA) was performed to assess the moderating effects of teachers' role on academic achievements. The techniques of MGA mainly investigate the variance of path coefficients amongst two unique groups (Bae, B. 2011). In this article, participants were allocated into two clusters based on their teaching roles. Participants with a decision-making ability were placed in a good group (n=234), however, participants with low involvement in decision-making were categorized into a bad group (n=71). We predicted the relevance of the difference among these two groups by equating their 2 estimates. Table 5, shows the moderating effect TR. As overall model, goodness-of-fit indices attained the recommended level with indices CMIN=1.527, AGFI=0.933, GFI=0.991, CFI=0.992 and RMSEA=0.042. Moderating effect did not affect the construct relationships as of earlier modification indices of the structural model but in case of the bad model or bad as group 2, the VB was found insignificant with PWB, though all relationships from table 5 present acceptable Z-scores and estimates fairly good enough.

Good (Group 1), n=234			Bad(Group 2), n=71		
Dimensions (relationship)	Estimate	Sig. level (P)	Estimate	Sig. level (P)	Z-score
PWB<-VB	.099	.034	.089	.142	2.146
PWB<-RB	.216	***	.228	.006	2.417
PWB<-CB	.169	.002	.236	.001	2.258
PWB<-PB	.337	***	.340	***	2.748
AA<-PWB	.850	***	1.126	***	2.048

Table 5.
Moderating effects of
Teaching Role on
Academic achievements

Regression weights for table 6 were non-standardized estimates. CMIN/DF-1.527, GFI-0.991, AGFI-0.933, CFI-0.992 & RMSEA0.042

Indirect Effects on Academic through Psychosomatic

	B	Z value	P-Value
PWB->AA	0.292	7.44	(p < 0.01)
PWB->AA	0.006	4.68	(p < 0.01)

Table 6.
Indirect effects of
moderator Teachers role

The results suggest that the moderating indirect effect of PWB to AA is significant ($\beta = 0.292, p < 0.01$), and that the ($\beta = 0.06, p < 0.01$); therefore, indirect effect for both groups good and bad is significant and hence, the magnitude of indirect effect for the bad model is less than the indirect effect of a good model for criterion academic achievement, table 6. Thus the model is significant with moderating results of PWB to AA showing the concern of TT being moderator with respect to all bullying types (VB, RB, CB, and PB) considered here in this study. H6 is accepted.

9. Discussion

The bullying concept has not been unexplored but still it is a burning and attention seeking concept for researchers. The current paper focused on the different forms of bullying- VB, PB, RB and CB and its impact on psychosomatic well-being as well as academic achievements of the Gen-Z. This study also emphasized on the teachers' moderating role as good or bad between psychosomatic well-being and academic achievements of Gen-Z. Enormous researchers (Romero-Reignier et. al., 2022; Chui et. al., 2022; Samara et. al., 2020; Anasori et. al., 2020; Wolke et al., 2015; Evans et al., 2014; Omoteso, Rose and Monda, A, 2011; Raskauskas and Modell, 2011; Wang et. al., 2011; Quiroz et. al., 2006; O'Connell et. al, 1999; Colvin et. al,

1998; Olweus D., 1993) investigated that bullied victims revealed poor psychosomatic well-being which increased suicidal tendency amongst them. Results revealed that all forms of bullying (VB, PB, RB and CB) have a substantial effect on the psychosomatic well-being of students. This finding is consistent with the studies of enormous researchers (Stubbs-Richardson, M., & May, D. C., 2021; Samara, et. al., 2020; Chen et. al., 2020; Wolke et. al., 2015; Evans et. al., 2014; Gini and Pozzoli, 2009; Zapf, Einarsen, Hoel, and Vartia, 2003; Hawker and Boulton, 2000; Sharp, Thompson, and Arora, 2000). They quoted that bullying is adversely associated with the psychosomatic well-being of students which is generally indicated through lack of self-admiration, poor interpersonal relationship, substandard academic performance, mediocre emotions, depression, anxiety and worry etc. Therefore, null hypotheses (H01, H02, H03, and H04) are rejected, stating all alternate hypotheses are accepted as shown in Table 4.

Furthermore, the analysis found that students' psychosomatic well-being impacted their academic achievements. This outcome is in tune with various authors (Samara et. al., 2021; Laith and Vaillancourt, 2020; Block, 2014; Mehta et. al., 2013; Roman and Murillo, 2011; Konishi et. al., 2010; Skrzypiec; 2008; Glew et. al., 2005) which quoted that bullied victims are unable to concentrate on their studies and hampered their academic progression because of poor psychosomatic well-being. Therefore, null hypothesis (H05) is rejected and the alternate hypothesis is supported as shown in Table 4.

The last step of this research is to measure moderating role of teachers as good or bad between psychosomatic well-being and academic achievements of Gen-Z. Results revealed that teachers' moderating role as good is highly significant as compared to teachers' role as bad. This finding is in line with numerous researchers (Lee et. al., 2022; Samara et. al., 2020; Vedder, Boekaerts, and Seegers, 2005; Brewster and Bowen, 2004; Colarossi and Eccles, 2003; Malecki and Demaray, 2003) who postulated an important and moderating role of teacher between psychosomatic well-being and academic achievement of the students. In contrast some researchers (Fischer et. al., 2021; Perren and Alasker, 2006; Malecki and Demaray, 2003) postulated that bullied students are not getting much support from their teachers as compared to non bullied victims. So, hypothesis H06 is not supported results in acceptance of alternate hypothesis as shown in Table 5.

10. Limitations

The first limitation of the current study was its sample size. However, it gives significant, valuable insights into the teaching-learning phenomena among students; through the practice of the teachers' role in academic performance. The second limitation was exploiting cross-sectional design precludes the testing of directionality of the association among Psychosomatic Well-being (PWB) and Academic achievements (AA). The variable PWB may include the types like anger, depression, suicidal pattern, anxiety, and mental trauma to be assessed by future researchers, and meanwhile, it comes as one of the limitations. Similarly, academic achievements in this research excluded some other variants of AA such as career-path, goal- settings, livelihood concerns, etc. Thirdly, the bullying types likewise verbal, cyber, physical, and relational are different in magnitude with each other is not ascertained. These bullying types might be addressed further and these four forms of bullying would be measured in futuristic studies.

11. Implications and future direction of research

The current research indicated that bullying has an adverse impact on the psychosomatic well-being of Gen-Z which resulted in poor academic achievements as well as performance. The conceptual framework developed through this research has several managerial implications for practice. Firstly, educational institutes can form committees for grievance management and counseling which facilitate psychological support and well-being to bullied victims. By this, they can build a conducive learning atmosphere as well as trust among Gen-Z. Secondly, the role of a teacher becomes more challenging in diminishing the bullying effect on Gen-Z. With this teachers can develop new strategies to counsel bullied victims through empathy, counseling, mentoring, guidance and emotional support. This insight

gives an opportunity to the researchers and academicians too to consider this and analyze the mediating role of teachers in the well-being of Gen-Z in their further research work. Thirdly, the contextual role of verbal (VB), physical (PB), relational (RB), and cyber (CB) bullying with academic excellence and psychosomatic well-being of Gen-Z and gender as a moderator can be the scope for research. Fourth, researchers can also recognize the role of Bystander intervention model (Latané and Darley, 1970) in helping bullied victims by conducting a pre and post test as well as the role of gender in its implication and prevention of bullying. Furthermore, Higher Learning Institutes and Industries can organize awareness campaigning for Bystander Intervention Model to reduce the poisonous effect of bullying among Gen- Z. Fifth; researchers can interrogate the role of Leader-Member Exchange theory in the implication of Bystander Intervention Model to curtail the effect of bullying among Gen-Z. Lastly, the researchers can also diagnose the answer of a research question that how Higher Learning Institutes can develop a sustainable learning ambiance.

12. Conclusion

Bullying has always been a prevalent concern for the organization. This cross-sectional study provides indications that how the bullying types in the college/University affected the mental cognition of students. In this study the hostlers' contribution in terms of demographics was high as compared to day scholars, the reason they are more prone towards senior students and confined to prolong hours on campuses only. The bullying type's verbal, cyber, physical and relational triggers the Psychosomatic Well-being, leads to mental anxiety among Gen-Z. The primary objective of this research is full-filled as all the alternative hypotheses are supported. Moreover, Psychosomatic Well-being leads to superseded of the academic achievements of the students in an academic environment in terms of their lower grades, placements and career growth. This study has found that the teachers' role act as a moderator in urging the impact of psychosomatic outcomes on academic achievements. The teachers' role furnished a significant impact on the academic achievements while, the teacher's role categorized well as a group is more effective as per the bad as a group considered, although both are significant in terms of standardized regression weights. This study may graft teachers' role in resilience for students to manage the youth bullying with some variables like empathy, counseling sessions. Moreover, the importance of different bullying types in the betterment of Gen-Z and how they are addressed through different psychological tests, counseling - sessions, mentor-mentee relation and career path stimulus and progression.

References

- Affuso, G., Zannone, A., Esposito, C., Pannone, M., Miranda, M. C., De Angelis, G., & Bacchini, D. (2022). The effects of teacher support, parental monitoring, motivation and self- efficacy on academic performance over time. *European Journal of Psychology of Education*, 1-23.
- Agervold, M. (2007). Bullying at work: A discussion of definitions and prevalence, based on an empirical study. *Scandinavian journal of psychology*, 48(2), 161-172.
- Al-Ali, N. M., & Shattnawi, K. K. (2018). Bullying in School. In *Well-being and Academic Achievement*.
- Allen, K. P. (2010). A bullying intervention system in high school: A two-year school-wide follow-up. *Studies in Educational Evaluation*, 36(3), 83-92.
- Anasori, E., Bayighomog, S. W., & Tanova, C. (2020). Workplace bullying, psychological distress, resilience, mindfulness, and emotional exhaustion. *The Service Industries Journal*, 40(1-2), 65-89.
- B. J. and Brausch, A. M. 2013 and Wang, J., Iannotti, R. J., and Nansel, T. R. 2009).
- Bae, B. *Structural Equation Modeling with AMOS 19: Principles and Practice*; Cheongram Book: Seoul, Korea, 2011. (In Korean)
- Bjärehed, M., Thornberg, R., Wänström, L., & Gini, G. (2020). Mechanisms of moral disengagement and their associations with indirect bullying, direct bullying, and pro-aggressive bystander behavior. *The Journal of Early Adolescence*, 40(1), 28-55.
- Block, N. (2014). The impact of bullying on academic success for students with and without exceptionalities.
- Bosworth, K., Espelage, D. L., & Simon, T. R. (1999). Factors associated with bullying behavior in middle school students. *The journal of early adolescence*, 19(3), 341-362.

- Brank, E. M., Hoetger, L., & Hazen, K. P. (2012). Bullying. *The Annual Review of Law and Social Science*, 8, 213-230.
- Brewster, A. B., & Bowen, G. L. (2004). Teacher support and the school engagement of Latino middle and high school students at risk of school failure. *Child and Adolescent Social Work Journal*, 21(1), 47-67.
- Brighi, A., Guarini, A., Melotti, G., Galli, S., & Genta, M. L. (2012). Predictors of victimisation across direct bullying, indirect bullying and cyberbullying. *Emotional and behavioural difficulties*, 17(3-4), 375-388.
- Camodeca, M., & Goossens, F. A. (2005). Children's opinions on effective strategies to cope with bullying: The importance of bullying role and perspective. *Educational research*, 47(1), 93-105.
- Carbone-Lopez, K., Esbensen, F. A., & Brick, B. T. (2010). Correlates and consequences of peer victimization: Gender differences in direct and indirect forms of bullying. *Youth violence and juvenile justice*, 8(4), 332-350.
- Çetin, B., Yaman, E., & Peker, A. (2011). Cyber victim and bullying scale: A study of validity and reliability. *Computers & Education*, 57(4), 2261-2271.
- Chaux, E., Molano, A., & Podlesky, P. (2009). Socio-economic, socio-political and socio-emotional variables explaining school bullying: A country-wide multilevel analysis. *Aggressive Behavior: Official Journal of the International Society for Research on Aggression*, 35(6), 520-529.
- Chen, C., Yang, C., Chan, M., & Jimerson, S. R. (2020). Association between school climate and bullying victimization: Advancing integrated perspectives from parents and cross-country comparisons. *School psychology*, 35(5), 311.
- Choy, J. L. F., O'Grady, G., & Rotgans, J. I. (2012). Is the Study Process Questionnaire (SPQ) a good predictor of academic achievement? Examining the mediating role of achievement-related classroom behaviours. *Instructional Science*, 40(1), 159-172.
- Chui, W. H., Weng, X., & Khiatani, P. V. (2022). Associations among bullying victimization, family dysfunction, negative affect, and bullying perpetration in Macanese adolescents. *International journal of offender therapy and comparative criminology*, 66(1), 28-49.
- Colarossi, L. G., & Eccles, J. S. (2003). Differential effects of support providers on adolescents' mental well-being. *Social Work Research*, 27(1), 19-30.
- Coloroso, B. (2002). *The bully, the bullied, and the bystander*. Toronto, ON: Harper Collins.
- Colvin, G., Tobin, T., Beard, K., Hagan, S., & Sprague, J. (1998). The school bully: Assessing the problem. Developing interventions and future research directions. *Journal of Behavioral Education*, 8, 3, pp. 293-319.
- Conway, P. M., Høgh, A., Balducci, C., & Ebbesen, D. K. (2021). Workplace bullying and mental well-being. *Pathways of job-related negative behaviour*, 101-128.
- Cross, D., Barnes, A., Papageorgiou, A., Hadwen, K., Hearn, L., & Lester, L. (2015). A social-ecological framework for understanding and reducing cyber bullying behaviours. *Aggression and Violent Behavior*, 23, 109-117.
- Dedousis-Wallace, A., Shute, R., Varlow, M., Murrhy, R., & Kidman, T. (2014). Predictors of teacher intervention in indirect bullying at school and outcome of a professional development presentation for teachers. *Educational Psychology*, 34(7), 862-875.
- Demaray, M. K., & Malecki, C. K. (2003). Perceptions of the frequency and importance of social support by students classified as victims, bullies, and bully/victims in an urban middle school. *School Psychology Review*, 32(3), 471-490.
- Doll, B., Song, S., & Siemers, E. (2004). Classroom ecologies that support or discourage bullying. *Bullying in American schools: A social-ecological perspective on prevention and intervention*, 161-183.
- Evans, C. B., Fraser, M. W., & Cotter, K. L. (2014). The effectiveness of school-based bullying prevention programs: A systematic review. *Aggression and Violent Behavior*, 19(5), 532-544.
- Fischer, S. M., Wachs, S., & Bilz, L. (2021). Teachers' empathy and likelihood of intervention in hypothetical relational and retrospectively reported bullying situations. *European Journal of Developmental Psychology*, 18(6), 896-911.
- Gardner, S., & Johnson, P. R. (2001). The leaner, meaner workplace: Strategies for handling bullies at work. *Employment relations today*, 28(2), 23.
- Gini, G., & Pozzoli, T. (2009). Association between bullying and psychosomatic problems: A meta-analysis. *Pediatrics*, 123(3), 1059-1065.
- Glew, G. et al. (2005). Bullying, psychosocial adjustment, and academic performance in elementary school. *Archives of Pediatrics & Adolescent Medicine*, 159(11), 1026-1031.

- Hawker, D. S., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *The Journal of Child Psychology and Psychiatry and Allied Disciplines*, 41(4), 441-455.
- Hesketh, T., Zhen, Y., Lu, L., Dong, Z. X., Jun, Y. X., & Xing, Z. W. (2010). Stress and psychosomatic symptoms in Chinese school children: cross-sectional survey. *Archives of Disease in Childhood*, 95(2), 136-140.
- Hinduja, S., & Patchin, J. W. (2014). *Bullying beyond the schoolyard: Preventing and responding to cyberbullying*. Corwin press.
- Holt, M. K., Green, J. G., Tsay-Vogel, M., Davidson, J., & Brown, C. (2017). Multidisciplinary approaches to research on bullying in adolescence. *Adolescent research review*, 2(1), 1-10. <https://timesofindia.indiatimes.com/city/bengaluru/42-per-cent-of-kids-bullied-at-schools-says-survey/articleshow/59801107.cms> Accessed on 10-04-2022.
- Hunter, M.A. and Linder, C.W. (2005), "First-year seminars", in Upcraft, M.L., Gardner, J.N., Barefoot, B.O., et al. (Eds), *Challenging and Supporting the First Year Student: A Handbook for Improving the First Year of College*, Jossey-Bass, San Francisco, CA, pp. 275-291.
- Jankauskiene, R., Kardelis, K., Sukys, S., & Kardeliene, L. (2008). Associations between school bullying and psychosocial factors. *Social Behavior and Personality*, 36(2), 145-162.
- Juvonen, J., & Graham, S. (2014). Bullying in schools: The power of bullies and the plight of victims. *Annual review of psychology*, 65, 159-185.
- Kartal, H., & Bilgin, A. (2009). Bullying and School Climate from the Aspects of the Students and Teachers. *Eurasian Journal of Educational Research (EJER)*, (36).
- Kellner, R. (1987). A symptom questionnaire. *J Clin Psychiatry*, 48(7), 268-274.
- Kokkinos, C. M., & Kipritsi, E. (2012). The relationship between bullying, victimization, trait emotional intelligence, self-efficacy and empathy among preadolescents. *Social psychology of education*, 15(1), 41-58.
- Konishi, C., Hymel, S., Zumbo, B. D., & Li, Z. (2010). Do school bullying and student teacher and academic achievement. *Canadian Journal of School Psychology*, 25(1), 19-39.
- Kowalski, R. M., Morgan, C. A., Drake-Lavelle, K., & Allison, B. (2016). Cyberbullying among college students with disabilities. *Computers in Human Behavior*, 57, 416-427.
- Kuh, G.D. (2008), *High-Impact Practices: What they Are, Who Has Access to them, and Why they Matter*, Association of American Colleges and Universities, Washington, DC, available at: <http://provost.tufts.edu/celt/files/High-Impact-Ed-Practices1.pdf> (accessed July 31, 2016).
- Laith, R., & Vaillancourt, T. (2022). The temporal sequence of bullying victimization, academic achievement, and school attendance: A review of the literature. *Aggression and Violent Behavior*, 101722.
- Lee, J., Roh, B. R., & Yang, K. E. (2022). Exploring the Association between Social Support and Patterns of Bullying Victimization among School-aged Adolescents. *Children and Youth Services Review*, 106418.
- Litwiller, B. J., & Brausch, A. M. (2013). Cyber bullying and physical bullying in adolescent suicide: the role of violent behavior and substance use. *Journal of youth and adolescence*, 42(5), 675-684.
- Maliki, A. E., Asogwara, C. C., & Ibu, J. E. (2009). Bullying and its Effects on the Academic Performance of Secondary School Students in Nigeria. *J Hum Ecol*, 25(3), 209-213.
- McCuddy, T., & Esbensen, F. A. (2017). After the bell and into the night: The link between delinquency and traditional, cyber-, and dual-bullying victimization. *Journal of research in*
- McNeely, C., & Falci, C. (2004). School connectedness and the transition into and out of well-being-risk behavior among adolescents: A comparison of social belonging and teacher support. *Journal of School Well-being*, 74(7), 284-292.
- Mehta, S. B., Cornell, D., Fan, X., & Gregory, A. (2013). Bullying climate and school engagement in ninth-grade students. *Journal of school well-being*, 83(1), 45-52.
- Murillo, J., & Román, M. (2011). Latin America: School bullying and academic achievement. *Cepal Review*.
- Murillo, J., & Román, M. (2011). Latin America: School bullying and academic achievement. *Cepal Review*.
- Nelson, K.J., Smith, J.E. and Clarke, J.A. (2012), "Enhancing the transition of commencing students into university: an institution-wide approach", *Higher Education Research & Development*, Vol. 31 No. 2, pp. 185-199.
- O'Moore, M., Seigne, E., McGuire, L., & Smith, M. (1998). Victims of workplace bullying in Ireland. *The Irish Journal of Psychology*, 19(2-3), 345-357.

- O'connell, P. A. U. L., Pepler, D., & Craig, W. (1999). Peer involvement in bullying: Insights and challenges for intervention. *Journal of adolescence*, 22(4), 437-452.
- Olweus, D. (1993). Bully/victim problems among school children: Long-term consequences and an effective intervention program. In S.Hodgins (Ed). *Mental Disorder and Crime*. Newbury Park, CA: Sage, pp. 317-349.
- Omotoso, B. A. (2010). Bullying behavior, its associated factors and psychological effects among secondary students in Nigeria. *Journal of International Social Research*, 3(10).
- Patchin, J. W., & Hinduja, S. (2015). Measuring cyber bullying: Implications for research. *Aggression and Violent Behavior*, 23, 69-74.
- Perren, S., & Alsaker, F. D. (2006). Social behavior and peer relationships of victims, bully-victims, and bullies in kindergarten. *Journal of child psychology and psychiatry*, 47(1), 45-57.
- Quiroz, H., J. Arnette, and R. Stephens (2006a) *Fighting the bully battle: Bullying fact sheet series*. Westlake Village, CA: National School Safety Center.
- Quiroz, H., J. Arnette, and R. Stephens (2006b). *Fighting the bully battle: Discussion activities for school communities*. Westlake Village, CA: National School Safety Center.
- Raskauskas, J., & Modell, S. (2011). Modifying anti-bullying programs to include students with disabilities. *Teaching exceptional children*, 44(1), 60-67.
- Rayner, C., Sheehan, M., & Barker, M. (1999). Theoretical approaches to the study of bullying at work. *International Journal of Manpower*.
- Reid, P., Monsen, J., & Rivers, I. (2004). Psychology's contribution to understanding and managing bullying within schools. *Educational Psychology in Practice*, 20(3), 241-258.
- Rigby, K. (2004). Addressing bullying in schools: Theoretical perspectives and their implications. *School Psychology International*, 25(3), 287-300.
- Romero-Reignier, V., Prado-Gascó, V., & Mónaco, E. (2022). The influence of self-esteem and (cyber) bullying on adolescents' well-being: a question of gender?
- Rose, C. A., Monda-Amaya, L. E., & Espelage, D. L. (2011). Bullying perpetration and victimization in special education: A review of the literature. *Remedial and special education*, 32(2), 114-130.
- Samara, M., Da Silva Nascimento, B., El-Asam, A., Hammuda, S., & Khattab, N. (2021). How can bullying victimisation lead to lower academic achievement? A systematic review and meta-analysis of the mediating role of cognitive-motivational factors. *International*
- Samara, M., El Asam, A., Khadaroo, A., & Hammuda, S. (2020). Examining the psychological well-being of refugee children and the role of friendship and bullying. *British journal of educational psychology*, 90(2), 301-329.
- Schuster, B. (1996). Rejection, exclusion and harassment at work in schools: an integration of results from research on mobbing, bullying, and peer rejection *European Psychologist*. 1, 4, pp. 293-317.
- Sharp, S., Thompson, D., & Arora, T. (2000). How long before it hurts? An investigation into long-term bullying. *School Psychology International*, 21(1), 37-46.
- Shukla, K., Konold, T., & Cornell, D. (2016). Profiles of student perceptions of school climate: Relations with risk behaviors and academic outcomes. *American journal of community psychology*, 57(3-4), 291-307.
- Skapinakis, P., Bellos, S., Gkatsa, T., Magklara, K., Lewis, G., Araya, R., & Mavreas, V. (2011). The association between bullying and early stages of suicidal ideation in late adolescents in Greece. *BMC psychiatry*, 11(1), 22.
- Skrzypiec, G. (2008). *Living and learning at school*. Conference annual de la Australian Association for Research in Education.
- Smith, H., Polenik, K., Nakasita, S., & Jones, A. P. (2012). Profiling social, emotional and behavioural difficulties of children involved in direct and indirect bullying behaviours. *Emotional and Behavioural Difficulties*, 17(3-4), 243-257.
- Stubbs-Richardson, M., & May, D. C. (2021). Social contagion in bullying: an examination of strains and types of bullying victimization in peer networks. *American journal of criminal justice*, 46(5), 748-769.
- Thijs, J., & Verkuyten, M. (2008). Peer victimization and academic achievement in a multiethnic sample: The role of perceived academic self-efficacy. *Journal of educational psychology*, 100(4), 754.
- Ttofi, M. M., Farrington, D. P., Lösel, F., & Loeber, R. (2011). Do the victims of school bullies tend to become depressed later in life? A systematic review and meta-analysis of longitudinal studies. *Journal of Aggression, Conflict and Peace Research*, 3(2), 63-73.
- Turner, M. G., Exum, M. L., Brame, R., & Holt, T. J. (2013). Bullying victimization and adolescent mental well-being: General and typological effects across sex. *Journal of Criminal Justice*, 41(1), 53-59.

- Twemlow, S. W., Fonagy, P., Sacco, F. C., Gies, M. L., & Hess, D. (2001). Improving the social and intellectual climate in elementary schools by addressing bully-victim-bystander power struggles. *Caring classrooms/intelligent schools: The social emotional education of young children*, 162-181.
- Vedder, P., Boekaerts, M., & Seegers, G. (2005). Perceived social support and well being in school; The role of students' ethnicity. *Journal of youth and adolescence*, 34(3), 269-278.
- Wang, J., Iannotti, R. J., & Nansel, T. R. (2009). School bullying among adolescents in the United States: Physical, verbal, relational, and cyber. *Journal of Adolescent well-being*, 45(4), 368-375.
- Wang, J., Nansel, T. R., & Iannotti, R. J. (2011). Cyber and traditional bullying: Differential association with depression. *Journal of adolescent well-being*, 48(4), 415-417.
- Wolke, D., & Lereya, S. T. (2015). Long-term effects of bullying. *Archives of disease in childhood*, 100(9), 879-885.
- Young-Jones, A., Fursa, S., Byrket, J. S., & Sly, J. S. (2015). Bullying affects more than feelings: The long-term implications of victimization on academic motivation in higher education. *Social psychology of education*, 18(1), 185-200.
- Zapf, D., Einarsen, S., Hoel, H., & Vartia, M. (2003). Empirical findings on bullying in the workplace. *Bullying and emotional abuse in the workplace: International perspectives in research and practice*, 103125.