Research Paper



Using the big five personality traits to evaluate bullying roles in the school environment

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1. INTRODUCTION

Bullying in schools has long been recognized as a serious social and educational problem that affects pupils' psychological well-being, academic achievement, and overall school climate [1], [2]. This may include physical, verbal, relational, and cyber types of bullying [3], [4]. International studies have consistently reported adverse impacts of bullying on victims; however, bullies themselves also suffer long-term detrimental effects, such as poor peer relations, increased risk of delinquency, and mental health issues [5], [6].

ABSTRACT

Bullying among primary school pupils has become an alarming issue as it affects both emotional well-being and academic achievement. This study aims to identify the personality traits that influence pupils' tendencies to become bullies, victims, or bullyvictims. A total of 328 Year 6 pupils from several states in Malaysia participated in this survey-based research. The questionnaire instrument was developed based on the Big Five Personality Traits model and analyzed using descriptive statistics, ANOVA, and Confirmatory Factor Analysis (CFA). The findings revealed that personality dimensions such as emotional stability and agreeableness are strongly associated with pupils' roles in bullying. Victims scored higher in agreeableness, whereas bullies scored lower in emotional stability. This study contributes to a better understanding of the psychological factors influencing bullying behavior, providing important implications for the development of effective school-based prevention and intervention programs.

In the case of Malaysia, incidents of bullying continue to receive attention, both in academia and public areas. The Ministry of Education stresses the importance of providing safe and inclusive learning environments for students [7]. Nonetheless, bullying has remained an issue despite many anti-bullying campaigns and interventions reported throughout urban and rural schools. Hence, there is a need to delve deeper into the psychological and personality traits that form the basis of bullying behavior.

Personality traits, particularly those considered under the Big Five Personality Traits, have been proved to be good predictors of roles in bullying [8], [9]. Characteristics such as emotional stability, agreeableness, and conscientiousness tend to separate bullies from their victims. For example, bullies may exhibit aggressive tendencies when they do not show emotional stability; conversely, victims exhibiting agreeableness tend to be labeled so due to their empathic and compliant nature [10], [11].

The present research intends to identify bullying-related personality traits found among bullies, victims, and bully-victims among Year 6 pupils in Malaysia. By robustly applying quantitative research methods, the aim of this research is to contribute to the growing knowledge base on school bullying and to capitalize on empirical evidence to guide the design of effective intervention measures at the policy level and at the school level.

2. RELATED WORK

Over the past four decades' time span, many scholars have studied bullying, always warning about its multivariate character and the multiple and adverse effects involved on bullies and victims alike [1], [2], [5]. According to [1] school bullying was the first topic of study when he defined it as a systematic negative behavior intended to harm a fellow student who finds it difficult to defend himself. Since then, researchers have agreed that bullying is not confined to physical aggression alone but also consists of verbal, relational, and cyber forms [3], [4], [12]. These multiple forms of bullying are the key to the complexity of the phenomenon that corresponds to multidimensional frameworks for analysis.

2.1 Theoretical Perspectives on Bullying

Bullying behavior has been explained using different theoretical frameworks. The social-ecological theory considers bullying to be influenced by various layers of interaction-from individual to the peer group and school climate down to the broader societal context [6]. According to [5] school cultures, disciplinary structures, and teacher attitudes are critical to bullying incidence. Likewise, the theory of moral disengagement (Bandura, 1999) has been widely used to explain how children justify harmful behaviors by suppressing feelings of empathy and responsibility. Moral disengagement was shown to be a very strong predictor of bullying behavior in adolescents, lowering feelings of guilt in participants, while increasing their conformity to the group. These perspectives stress that both environmental and psychological factors must be approached in."

2.2 Personality Traits and Bullying Roles

Personality traits have been determined to be critical in predicting pupils' involvement in bullying. Studies have found that dimensions like agreeableness, conscientiousness, and emotional stability are consistently associated with bullying roles under the Big Five Personality Traits model [8], [9]. For instance [9] found emotional stability and agreeableness, when low, to be potential factors of bullying behavior, whereas instead medium-to-higher levels of agreeableness and conscientiousness tended to be associated with victimization. With that in mind, lately, some studies have given extra weight. Kokkinos and Kipritsi [13] argued for negative correlations between agreeableness and openness and bullying while placing extraversion with greater participation in bullying, either as a bully or bully-victim. The study in [14] found that empathy, which is greatly aligned with agreeableness, stood as an antivictim of aggressive behaviors. It was further stated in [14] that those pupils that are more connected to family and school, traits often accompanied by being conscientious and emotionally stable, would be less likely to engage in bullying. The above results seem to suggest that personality channels, either directly or through protective factors such as resilience, empathy, and social competence, play a role in bullying involvement.

2.3 Bullying in the Malaysian and Global Contexts

In the Malaysian context, some studies from Malaysia have pointed out that bullying continues to persist in both primary and secondary levels despite anti-bullying campaigns and policy interventions by the Ministry of Education [15].

Verbal bullying was found to be the most common type among Malaysian pupils, in line with other studies that put verbal aggression as socially tolerated and less likely to be reported [16]. It remains, according to reports by UNESCO [4] and WHO [17] worldwide, a serious hindrance to the attainment of Sustainable Development Goal 4 (Quality Education) with bullying affecting about one-third of the students around the globe.

When combined, these studies indicate bullying is a multifaceted issue depending on the setting, sometimes influenced by psychological or environmental factors. By combining theoretical frameworks with empirical studies, this study establishes the Big Five Personality Traits as an explanatory lens to better understand the bullying dynamics in Malaysian schools.

3. METHODOLOGY

3.1 Research Design

The study used a quantitative survey method, suitable for relating personality traits to bullying roles across a sizeable sample of pupils. The survey method also allows the collection of standardized data, which permits statistical comparison of different groups and identification of significant predictors of bullying behavior [8], [9]. Due to its ability to objectively measure psychological constructs and utilize advanced statistical methods, bullying research has widely relied on quantitative methodology [10], [11].

3.2 Population and Sample

The population sample consisted of Year 6 pupils from Malaysian primary schools. This age level has been selected as the transition period from childhood to adolescence, wherein bullying behaviors tend to increase, and peer group dynamics gain prominence [16]. Through stratified random sampling, 328 pupils were recruited from urban as well as rural schools across several states in Malaysia, thus providing diverse representation in terms of geographical location, socioeconomic status, and gender distribution. A sample of this size is justifiable for CFA and ANOVA, which require soliciting at minimum 200 participants for producing trustworthy results [7]. Table 1 recapitulates the demographic profile of the respondents in terms of gender, age, school location, and state distribution.

3.3 Research Instrument

The primary tool developed was the self-administered questionnaire, comprising two sections. The first section involved measuring pupils' personality traits by items adapted from the Big Five Inventory (BFI) for openness, conscientiousness, extraversion, agreeableness, and emotional stability. Responses were made on a 5-point Likert scale ranging from the options "Strongly Disagree" to "Strongly Agree." The second part of the instrument dealt with bullying involvement to ascertain some of the respondents being bullies; others, victims, and some bully-victims. This section was adapted from widely used bullying assessment scales validated in prior international studies [12], [18].

The Questionnaire Consisted of Three Sections

- 1. **Demographic Information-** (gender, age, school type, location).
- **2. Bullying Experience Scale** measuring roles as bully, victim, or bully-victim (adapted from Olweus [1] and Kowalski et al. [12].
- **3. Personality Scale-** 25 items rated on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree).

A pilot study with 30 pupils was administered for clarity and reliability purposes. The instrument achieved a Cronbach's alpha of 0.86, indicating good internal consistency.

3.4 Conceptual Framework

The study was guided by a conceptual framework grounded in the Big Five Personality Traits model, which has been widely used to explain individual differences in bullying involvement [13]. The framework Figure 1 illustrates the hypothesized relationships between pupils' personality traits and their likelihood of assuming roles as bullies, victims, or bully-victims. It assumes that traits such as low emotional stability and low agreeableness increase the risk of engaging in bullying, while high agreeableness and conscientiousness increase vulnerability to victimization.

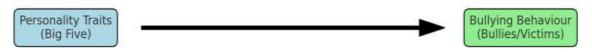


Figure 1. Conceptual Framework of the Study

4. RESULT AND DISCUSSION

4.1 Demographic Profile of Respondents

A total of 328 Year 6 pupils participated in this study. Table 1 summarizes the demographic distribution by gender, age, school location, and state. The sample was fairly balanced between male and female pupils, with a majority aged 12 years and attending urban schools.

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Pemboleh Ubah	Kategori	N	%		
Jantina	Lelaki	160	48.8		
	Perempuan	168	51.2		
Umur	11 tahun	110	33.5		
	12 tahun	218	66.5		
Lokasi Sekolah	Bandar	180	54.9		
	Luar Bandar	148	45.1		
Negeri	Johor, Selangor, dll.	-	-		

Table 1. Demographic Profile of Respondents

This distribution ensured representation of both urban and rural contexts. According to the research cited in [17], location of a school does have bearing on the bullying prevalence.

4.2 Types of Bullying Experienced

The analysis rendered verbal bullying as the most reported kind, followed by physical, relational, and cybernetic bullying. Figure 2 shows the percentage distribution of different types of bullying.

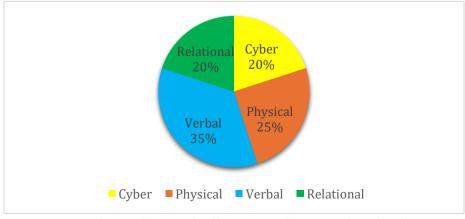


Figure 2. Distribution of Bullying Types (Carta Pai / Pie Chart)

This finding is in harmony with the findings of [2], [4] who also recorded verbal bullying as the most common form of bullying in primary schools.

4.3 Personality Traits of Pupils

Descriptive statistics for the five dimensions of the Big Five Personality Traits are presented in Table 2. The highest mean score was recorded for extraversion (M = 3.5, SD = 0.65), while the lowest was emotional stability (M = 2.7, SD = 0.72).

Dimensi Personaliti	Min	SP	Minima	Maksima
Keterbukaan	3.4	0.58	2.1	4.8
Ekstraversi	3.5	0.65	2.0	4.7
Kestabilan Emosi	2.7	0.72	1.9	4.6
Kebaikan Hati	3.2	0.61	2.0	4.9
Ketelitian	3.0	0.55	2.1	4.5

Table 2. Descriptive Statistics of Personality Dimensions

This indicates that while pupils generally perceived themselves as sociable and active, they also reported lower levels of emotional stability. In [9] similar themes were observed, enumerating low emotional stability to reconcile with aggressive behaviour.

4.4 Group Comparison: Bullies, Victims, and Bully-Victims

Table 3 and Figure 3 depict the comparison of mean scores of personality traits among the three groups.

Kumpulan	N	Min	SP	F-value	Sig. (p)
Pemangsa	95	3.08	0.62	4.21	0.015*
Mangsa	120	3.32	0.58		
Pemangsa-Mangsa	113	3.20	0.60		

Table 3. Comparison of Personality Scores by Group

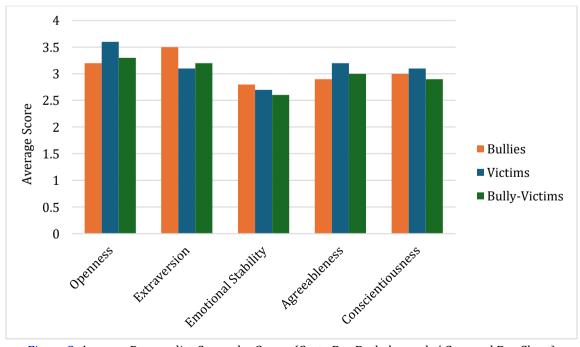


Figure 3. Average Personality Scores by Group (Carta Bar Berkelompok / Grouped Bar Chart)

The ANOVA yielded that there was a significant difference in emotional stability and agreeableness across the groups (F = 4.21, p < 0.05). Victims scored higher in agreeableness, whereas bullies showed significantly lower emotional stability. These findings align with [10], [8], these authors emphasized the role of socio-emotional skills in predicting bullying involvement.

4.5 Overall Discussion

It can therefore be concluded that bullying among Malaysian primary school pupils is not only rife but is also tied extremely closely to underpinning personality trends. From the descriptive analysis, jargon or verbal types of bullying are found to be the most common, followed by physical, relational, and cyber kind of lavishing. This pattern cannot be contradicted with global findings by UNESCO [4] and WHO whereby it is reported that verbal bullying remains the most common yet less likely to end up in a formal complaint. Since verbal bullying has continued for a long time, this indicates that cultural norms or peer group practices may in some way endorse such behaviors, thereby presenting complications to address from a conventional disciplinary stand. From the personality point of view, the results indicated that emotional stability and agreeableness play important roles in differentiating between bullies, victims, and bully-victims. People who were labeled as bullies or aggressors scored significantly lower on emotional stability, reinforcing the idea that highly neurotic individuals tend to act out in aggression and impulsivity [9], [13]. Victims showed high agreeableness scores, implying that the peers would put into their categoriess children who are empathetic and compliant, which is consistent with other studies [8]. Bully-victims represented a particular profile, combining characteristics of both aggressiveness from bullies and vulnerability from their victims, in agreement with [8] observations.

These results strengthen the theoretical bases claiming bullying as an interaction between environmental and psychological factors. The social-ecological theory suggests that individual traits interact with school and peer group contexts to shape bullying behaviors [6]. In this study, pupils with low emotional regulation were more susceptible to acting out in environments that lacked strong teacher monitoring or peer accountability. Similarly, the moral disengagement framework helps explain why certain pupils justified their aggressive behaviors while minimizing empathy toward victims.

Comparison with global studies reiterates these patterns as universal. For example, Kokkinos and Kipritsi [13] demonstrated similar linkages between extraversion and bullying involvement in continental Europe, while Nguyen and Wright [14] indicated that connectedness at school decreased the likelihood of both bullying and victimization in the Viet Nam settings. The agreement of the Malaysian findings with the global ones further substantiates a strong, cross-cultural Big Five framework for exploring bullying patterns; while, at the same time, cultural differences such as collectivist beliefs across Asia may go some way toward strengthening the notion of group conformity in understanding bullying.

Therefore, these findings have far-reaching implications. At the level of policy, they bring strength to the Ministry of Education's thrust for safe learning environments [15], but also propose the inclusion, in curricula, of socio-emotional learning (SEL). Training programs that target emotional regulation, empathy, and resilience could help reduce bullying by addressing the root psychological traits that predispose pupils to involvement. International models of the whole-school approach, emphasizing collaboration among teachers, parents, and students, provide a promising framework to be adapted in Malaysia [19], [20].

The research findings determined that at the school level, teachers should be trained not only in disciplinary procedure but in being able to recognize and stimulate the socio-emotional potentialities of the pupil as well. For instance, peer support systems could be promoted through interventions to protect highly agreeable pupils from victimization. Similarly, programs to promote emotional stability and self-management could discourage aggression by potential bullies.

In general, the study adds to an increasing body of evidence indicating that personality traits are not peripheral but central to understanding the roles in bullying. It places the Malaysian case under the realm of global research and points out that apart from systemic intervention, psychological assessment is necessary. Future inquiries should consider using a longitudinal design to determine how personality traits and bullying behaviors vary across developmental stages, and on the other hand, be qualitative in approach to provide rich data regarding the lived experiences of pupils.

5. CONCLUSION

This study set out to examine the relationship between personality traits and bullying roles among Year 6 pupils in Malaysian primary schools. Based on the Big Five Personality Traits theory and observations from 328 pupils, the research has argued for emotional stability and agreeableness to be the most relevant traits separating bullies, victims, and bully-victims. Verbal bullying emerged as the most common form, consistent with both Malaysian and international studies, while bully-victims demonstrated a complex overlap of vulnerabilities and aggressiveness.

The results therefore enrich the knowledge further by validating the social-ecological perspective that emphasizes the interplay of an individual trait with school environments and, at the same time, the moral disengagement framework that explains how pupils rationalize unhealthy behaviors. By aligning with international findings from Europe, Asia, and global agencies such as UNESCO and WHO, this study reinforces the cross-cultural relevance of personality-based explanations of bullying.

In essence, the findings have been established for the focus of intervention against bullying and suggest that it should extend beyond punishment towards the socio-emotional development of pupils. Where intervention in bully behavior will enhance emotional-related, empathy-based, and resilience skills to diminish the causal aspects-generating behavior in bullying-and should be in line with the Malaysian Ministry of Education agenda and international agenda, such as SDG 4 and SDG16, for inclusive, safe, and equitable education.

This study carries implications for teachers, school administrators, and the policymakers. Teacher training should orient educators to identifying personality-related vulnerabilities for instance, low emotional stability or high agreeableness as well as to the development of classroom activities that nurture peer support and conflict resolution. School leaders should put in place whole-school anti-bullying policies where parents, peers, and the wider community are involved, thereby maintaining a level of consistency and sustainability in the prevention and intervention strategies. Policymakers should then ensure that socio-emotional learning is explicitly made a part of the curriculum within national education policy, and in addition, have it supported by on-going teacher professional development.

Said study provides insights, but it comes with its limitations: by way of the cross-sectional design, it is not possible to make a causal inference, while the use of self-reported data is prone to social desirability bias. Future research should longitudinally account for change over time and consider multi-informant data (teachers, parents, and peers) for triangulation. Let's add that there may be narrative approaches that go qualitative to really deepen our understanding of the lived experiences behind the numbers.

In summary, from this study, it can be gleaned that bullying in schools can never be understood except in reference to the psychological profile of pupils. Applying both personality assessment and systemic interventions, all involved parties can work toward mutually beneficial, target-specific approaches geared toward avoiding-plus mitigating-bullying-and-creating-safe-environments-for-learning. From grassroots to implementation, it is in addressing the psychological basis of bullying that this becomes-of-not-soITE-well-being-at-an-individual-level-beginning-to-pave-the-way-towards-Malaysia's-vision-of-inclusive-and-equitable-education.

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Author Contributions Statement

Name of Author	С	M	So	Va	Fo	I	R	D	0	E	Vi	Su	P	Fu
Ahmad Shahrir Bin Said	✓	✓	✓		✓	✓		✓	✓	✓		✓	✓	✓
Zolkeple Haron		✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	

C: Conceptualization I: Investigation Vi: Visualization M: Methodology R: Resources Su: Supervision

So: Software D: Data Curation P: Project administration Va: Validation O: Writing - Original Draft Fu: Funding acquisition

Fo: Formal analysis E: Writing - Review & Editing

Conflict of Interest Statement

The authors declare that there is no conflict of interest regarding the publication of this manuscript.

Informed Consent

Informed consent was obtained from all participating pupils prior to the data collection. In addition, written consent was obtained from parents or legal guardians of pupils under 18 years of age. Participation in the study was without coercion, and respondents were reassured about the confidentiality and anonymity of their answers.

Ethical Approval

This study received ethical clearance from the stakeholders, all procedures performed in this study involving human participants were conducted in accordance with institutional guidelines and the Declaration of Helsinki.

Data Availability

The datasets generated and analyzed during the current study are not publicly available due to confidentiality agreements with participating schools. However, the data can be obtained from the first author upon reasonable request.

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