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Bullying in the Context of Adolescents' Experience of Spirituality and Loneliness

About the Lead Author

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The study examines the prevalence of bullying, bullying behaviors within different roles (aggressor, victim, defender, bystander) in the context of spirituality and loneliness in selected Slovak adolescents. The study also aims to examine the protective/risk significance of spirituality and loneliness in adolescents in the context of bullying. The results of the research have shown the prevalence of bullying in schools. It was found that 20,8% of adolescents had been victims of bullying, 3,8% being aggressors, 50,6% in the role of defenders and 39% as bystanders in the bullying process. Within each role group, victims of bullying showed significant differences in experiencing spirituality compared to adolescents who had not taken part in the bullying process. The differences were significant in terms of the importance and practice of spirituality in their lives. There were also significant differences in experiencing loneliness, confirmed in multiple role groups.

1 Introduction

Spirituality and loneliness are factors that can significantly influence the psychological experience of adolescents, including the context of bullying. Adolescents go through a period of intense change where they encounter changes in social relationships, self-knowledge, as well as in the search for their own identity. At this relatively critical time, loneliness can be a very negative experience which is often associated with feelings of anxiety, depression and low self-esteem and self-worth. On the other hand, spirituality can serve as an important protective coping resource, providing meaning or purpose in life.

Bullying among peers is a widespread problem in schools and carries serious consequences. The term bullying refers to a certain type of aggressive behavior that takes place under specific conditions (Říčan and Janošová 2010). In general, there are several definitions through which bullying can be defined (Janošová, Kollerová and Zábrodská 2014, 369). Olweus (1993, 2013) has described bullying as repeated exposure over time to negative events by an individual or several other persons. It is enacted through aggressive behavior where a adolescent intentionally causes injury or discomfort to another adolescent through physical contact, words or in other ways. It is characterized by intentional behavior (Rettew and Pawlowski 2016, 235) where a person or group of persons physically or verbally harms, hurts someone repeatedly or deliberately shows dominance and power over those unable to defend themselves (Rigby 2000; Roland 2000; Smith and Brain 2000). According to Wagner and colleagues (2009, 11), bullying is understood as the deliberate and repeated physical and psychological harming of a weaker individual (group) by a stronger individual (group). The basic forms of bullying are recognized (Kollerová, Pospíšilová and Janosová 2020) as being verbal attacks – name-calling, ridicule, humiliation; physical attacks – kicking, hitting, pushing; as well as attacks on relationships – exclusion from activities or groups. The most common type is verbal bullying such as name-calling and teasing (Waseem and Nickerson 2024, 1). When bullying occurs in the classroom, an adolescent usually occupies one of several roles (Wagner *et al.* 2009, 12). This is either the role of the aggressor, the victim, the defender or the bystander to the bullying process. In terms of personality traits, agreeableness, neuroticism and particularly in girls, extraversion, have been shown to promote defensive behavior (Janošová, Kollerová and Soukup 2018a). Bullying can occur in a variety of settings but is most prevalent in and around educational institutions. Among children, it occurs in schools and boarding schools (Sejčová 2021, 31).

Spirituality can be described as a profound aspect of human experience that transcends conventional language and understanding. It involves an inner journey of transcending the self and exploring the subtle energies that play a key role in mystical experiences across different spiritual traditions. From this perspective, spirituality is not limited to specific religious contexts but is a universal phenomenon that can be studied from a variety of perspectives, including cross-cultural and research perspectives. It encompasses both individual and collective aspects, seeking self-awareness, liberation, and a deeper connection to the essence of human consciousness (Gálik 2021, 14–15). Martin Dojčár (2017, 147) relates spirituality to *self-transcendence* interpreted as "*a process of inversion and singularity of consciousness that culminates in the state of non-intentional consciousness and manifests itself in prosocial behavior.*"

Fabian and colleagues (quoted in Maximov and Lovašová 2023, 2) have argued that spirituality primarily manifests itself as an individual phenomenon that draws attention to spiritual experiences and links them to the search for meaning, individual transcendence and the effort to find, maintain or transform a relationship with sacred things. Maximov and Lovašová (2023, 1) speak of spirituality as an important dimension of an individual's experience that influences their behavior and contributes to the formation of one's own identity. The adult world often fails to give young people the necessary "norm" of life and rather distorts it on purpose. Moreover, it often encloses them in its patterns of behavior (Sedláček 2020, 57). Jedličková (2018, 278) confirms that factors that contribute to a more meaningful adolescent life include, for example, engagement in activities, values, maintaining optimism, cultivating the spiritual component of life, religiosity, creativity, relationships with others, pleasure in life and hope for the future. The ability to maintain value goals and give meaning to life even when circumstances change also supports successful coping with the burdens associated with the everyday realities of life. Stríženec (2007, 35) refers to adolescence as a "period of identity". He says that during this period, individuals have a variety of religious experiences, as well as doubts and controversies. It is possible that adolescents often experience resistance to spirituality as well. Doubt, resistance, as well as openness to spiritual themes are characteristic of the period of adolescence.

Madsen and colleagues (2024, 1–11) reviewed a number of qualitative studies that examined the impact of spiritu-

ality on mental health. They found that spirituality is often perceived as an important factor influencing mental health, providing emotional support and meaning in life. Spirituality may contribute to better stress management, increasing mental resilience and promoting positive self-perception. It is linked to trust, which has three components: competence, forbearance and integrity (Sedláček 2024, 86). The results of another study (Fatmilarini *et al.* 2023, 192) have shown that higher levels of spiritual well-being are associated with better quality of life. Participation in spiritual or religious activities contributes to improved overall well-being and reduces feelings of loneliness, thus contributing to better mental health.

Loneliness is an intrinsic and unpleasant experience that arises when a person experiences a quantitative or qualitative loss in social life. This is different from physical loneliness or living in isolation. Indeed, a person can feel lonely even in the presence of other people, while another individual can live alone and not feel lonely (Chana, Marshall and Harley 2016). Some people can spend a considerable amount of time alone without feeling lonely at all, while others feel lonely even though they are almost constantly around other people (Winkler *et al.* 2023, 179). According to Lichner (2018, 25–37), high levels of loneliness can contribute to various forms of risk behaviors. Yang (2024, 79–83) examined the relationship between bullying, loneliness and perceived social support in adolescents. They found that perceived social support plays a key role in mitigating the negative effects of loneliness and bullying. Bullying was positively correlated with experiencing loneliness, with students who had higher levels of loneliness being more likely to be bullied. Higher levels of experiencing loneliness were associated with a higher risk of bullying. Perceived social support was also higher for students who live with their parents. This was found to reduce levels of experiencing loneliness and bullying. As such, improving perceptions of social support can significantly reduce the experience of loneliness and bullying behavior. Loneliness can have a profoundly negative impact on an individual's health and early intervention can play a very important role in preventing the problems associated with it (Chana, Marshall and Harley 2016, 298).

The objective of our research is to examine the prevalence of bullying, bullying behaviors within different roles (aggressor, victim, defender, bystander) in the context of spirituality and loneliness in selected Slovak adolescents. The study also aims to examine the protective/risk significance of spirituality and loneliness in adolescents in the context of bullying.

2 Methods

2.1 Sample and Procedure

Total number of 1164 respondents participated in our study. Age and nationality were set as inclusion criteria. The criterion for endorsement of bullying behavior was set as the occurrence of the behavior in the last two or three months (Solberg and Olweus 2003). Due to failure to meet the established criteria, 445 respondents were excluded. Our final sample included a total of 719 adolescents aged from 16 to 19 years (M = 17.8; SD = 1.11), of which 194 were male (M = 17.6; SD = 1.08) and 525 women (M = 17.9; SD = 1.11). The study population was composed entirely of high school students.

The study had 1164 responders. Age and nationality were the inclusion requirements. According to Solberg and Olweus (2003), the presence of the specified behavior within the previous two to three months served as the requirement for validating bullying behavior. Because they didn't fit the predetermined requirements, 445 responders were disqualified. A total of 719 adolescents between the ages of 16 and 19 were included in our final sample (M=17.8; SD=1.11); 194 of them were male (M=17.6; SD=1.08) and 525 of them were female (M=17.9; SD=1.11). Students from secondary schools made up the entire research group.

The survey data was collected between January and March of 2022. The Ethics Committee of Trnava University no. 3/2022 gave its approval. The Declaration of Helsinki served as the foundation for the research. Participants in the study were free to stop at any time without facing any repercussions, and participation was entirely voluntary. Both in-person and online methods were used to collect data, which was voluntary and anonymous. We conducted correlation matrix, testing differences, simple mediations and regression analysis were carried out, with a confidence level of CI=95%. The program Jamovi 1.6.28 was used for statistical operations.

2.2 Measures

Revised Olweus Bully/Victim Questionnaire (Olweus 2006)

The Olweus Bully/Victim Questionnaire was shortened in order to quantify bullying behavior. A brief definition of bullying was given in the questionnaire's introduction. Six

questions on the questionnaire examined the various roles that students played in the classroom (aggressor, victim, defender, non-bully participants). According to Solberg and Olweus (2003), the behavior must have occurred within the previous two or three months in order for bullying to be confirmed-it cannot only have occurred in the last week or right now.

Loneliness Scale (De Jong Grieveld and Van Tilburg 2006)

The six items on the scale are all related to loneliness. The measure consists of two subscales: emotional loneliness (three items) and social loneliness (three items). Using a five-point Likert scale, the respondent assigns a rating to each statement (1 strongly disagree, 5 strongly agree). Despite being very old, this instrument has been employed recently.

Spirituality

Two basic items served as indicators of spirituality: (1) Spirituality plays a significant role in my life; and (2) I believe that spiritual practice plays a significant role in my life, with a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). We aim to examine the perceived significance of spirituality and the perceived significance of engaging in spiritual practices by posing these two queries.

3   Results

3.1   Descriptive Analysis

Our study population consisted of 719 adolescents aged from 16 to 19 years (M=17.8; SD=1.11), including 194 males (M=17.6; SD=1.08; 27%) and 525 females (M=17.9; SD=1.11; 73%). Respondents most commonly had one sibling (N=360; 50.1%) or two siblings (N=177; 24.7%). Respondents most commonly came from a rural (N=388; 54%) and a district town (N=262; 36.4%).

Within the roles related to bullying in our sample, 135 respondents (20.8%), including 19 males (2.9%) and 116 females (17.9%), were in the role of victim; 253 respondents (39%), including 47 males, were in the role of bystander (7.25 respondents were in the role of aggressor (3.8%), of which 10 were men (1.5%) and 15 were women (2.3%) and 328 respondents (50.6%), of which 54 were men (8.3%) and 274 were women (42.3%) were in the role of defender.

3.2   Correlation Analysis

Due to the nature of the data, we decided to use Spearman's correlation coefficient as the key coefficient despite the normal distribution of the data.

We analyzed the *experience of spirituality*, specifically the importance and practice of spirituality, for all role groups (victim, aggressor, defender, bystander). A statistically significant positive weak relationship was confirmed with the importance of spirituality in only the role of victim of bullying; no statistically significant relationship was confirmed in the other role groups in the context of the importance and practice of spirituality.

In the context of *perceived loneliness*, we demonstrated a statistically significant negative relationship with the role of victim, namely in the case of overall loneliness (p<0.001; ρ=-0.221), this relationship is of medium effect. We also demonstrated a statistically significant negative relationship partially, and thus with social loneliness (p<0.001; ρ=-0.225) and emotional loneliness (p<0.001; ρ=-0.178). Both partial variables show a weak effect. With overall loneliness, we showed a statistically significant negative relationship with role aggressor (p=0.007; ρ=-0.107), as well as with social loneliness (p=0.028; ρ=-0.086) and emotional loneliness (p=0.003; ρ=-0.116). All the relationships are of weak to negligible effect. We showed a statistically significant negative association with overall loneliness in defenders (p=0.003; ρ=-0.117), as well as social loneliness (p=0.005; ρ=-0.11) and emotional loneliness (p=0.011; ρ=-0.10). All these relationships are of weak effect. In the case of overall loneliness, we identically showed a statistically significant negative relationship in the bystander role context (p=0.01; ρ=-0.101), as well as with both social loneliness (p=0.01; ρ=-0.099) and emotional loneliness (p=0.033; ρ=-0.084). The results of the correlation analysis are summarized in Table 1.

Table 1
Bivariate Correlation Analysis

Role	Spirituality importance	Spirituality practice	Emotional loneliness	Social loneliness	Total loneliness
Victim	0.094*	0.07	−0.178***	−0.225***	−0.221***
Aggressor	0.03	0.05	−0.116*	−0.086*	−0.107**
Defender	0.05	0.04	−0.10*	−0.11**	−0.117**
Bystander	0.065	0.05	−0.084*	−0.099**	−0.101**

Note: *p<0.05, **p<0.01 ***p<0.001

3.3 Testing Differences

In the next analysis, we tested the differences between adolescents in each role group (victim, aggressor, defender, witness) compared to adolescents who did not take part in the bullying. The analyzed data had a normal distribution, Welch's reliability coefficient was applied.

3.3.1 Role of Victim

We demonstrated statistically significant differences between the role of victim of bullying compared to adolescents who were not bullied on the spirituality importance scale (t(212)=-2.43; p=0.016; d=-0.234) with a mean difference of −0.467 points. Victim role scored a mean of M=3.84 (SD=1.98) compared to non-bullied respondents who scored significantly higher on the importance of spirituality (M=4.31; SD=2.01). We also demonstrated statistically significant differences between the victim role and the general population for practicing spirituality alone (t(229)=-2.14; p=0.034; d=-0.2) with a mean difference of −0.404 points. Victim scores averaged M=2.72 points (SD=1.91) compared to the general population who averaged M=3.12 points (SD=2.12).

In relation to loneliness with respect to victim role, we similarly demonstrated statistically significant differences compared to non-bullied students overall (t(217)=5.88; p<0.001; d=0.56) with a mean difference of 3.067 points. Victims rated perceived loneliness significantly higher (M=20.5; SD=5.35) compared to non-bullied respondents (M=17.43; SD=5.57). Equally significant differences were demonstrated for both emotional loneliness (t(217)=4.82; p<0.001; d=0.461) with a mean difference of 1.356 points and social loneliness (t(210)=5.79; p<0.001; d=0.56) with

a mean difference of 1.711 points. Victims scored identically higher on average for emotional loneliness (M=10.56; SD=2.88) compared to the general population (M=9.21; SD=3.00), as well as for social loneliness, where victims scored an average of M=9.93 points (SD=3.05) compared to students who were not bullied (M=8.22; SD=3.06). The results are described in Table 2.

Table 2
Testing Differences in Victims

Variables	Unbullied adolescents		Victim		t	p	Cohen's d
	M	SD	M	SD			
Spirituality importance	4.31	2.01	3.84	1.98	−2.43	0.016	−0.234
Spirituality practice	3.12	2.12	2.72	1.91	−2.14	0.034	−0.2
Loneliness	17.43	5.57	20.5	5.35	−5.88	<0.001	0.56
Emotional loneliness	9.21	3.00	10.56	2.88	4.82	<0.001	0.461
Social loneliness	8.22	3.06	9.93	3.05	5.79	<0.001	0.56

3.3.2 Role of Aggressor

The role of the aggressor compared to students who were not bullied did not show statistically significant differences in the importance of spirituality (t(26.2)=-0.783; p=0.44; d=-0.156) or in the practice of spirituality (t(26.3)=-1.255; p=0.22; d=-0.247).

Within overall loneliness, there were statistically significant differences between role aggressor and non-bullied students (t(25.5)=2.443; p=0.022; d=0.531) with a mean difference of 3.22 points. Individuals in the role of aggressor scored an average of M=21.16 points (SD=6.48) compared to non-bullied students (M=17.94; SD=5.59). We did not find a statistically significant difference between role aggressor and non-bullied students on social loneliness (t(25.5)=1.950; p=0.062; d=0.420). However, within emotional loneliness, we demonstrated a statistically significant difference between role aggressor and non-bullied adolescents (t(25.)=2.825; p=0.009; d=0.59) with a mean difference of 1.821 points. Aggressors on average scored M=11.24 (SD=3.166) compared to non-bullied adolescents (M=9.42; SD=3). Table 3 summarizes our results.

Table 3
Testing Differences in Aggressors

Parameter	Unbullied adolescents		Aggressor		t	p	Cohen's d
	M	SD	M	SD			
Spirituality importance	4.23	2.02	3.92	1.91	−0.83	0.44	−0.156
Spirituality practice	3.06	2.09	2.56	1.94	−1.255	0.22	−0.247
Loneliness	**17.94**	**5.59**	**21.16**	**6.48**	**−2.443**	**0.022**	**0.531**
Emotional loneliness	**9.42**	**3.00**	**11.24**	**3.166**	**2.825**	**0.009**	**0.59**
Social loneliness	8.52	3.11	9.92	3.52	1.95	0.062	0.42

3.3.3 Role of Defender

In terms of experiencing the importance of spirituality, we found no statistically significant differences between the role of defender and students who did not engage in bullying (t(645)=-1.265; p=0.206; d=-0.099) or practicing spirituality (t(645)=-0.928; p=0.354; d=-0.073).

In the case of loneliness, we demonstrated statistically significant differences between the role of defender and students who did not engage in bullying, both overall (t(646)=3.113; p=0.002; d=0.245) with a mean difference of 1.38 points, both partially for emotional loneliness (t(645)=2.806; p=0.005; d=0.22) with a mean difference of 0.66 points, and for social loneliness (t(646)=2.904; p=0.004; d=0.23) with a mean difference of 0.71 points. For overall loneliness, defenders scored M=18.75 points on average (SD=5.63) compared to non-bullied students (M=17.37; SD=5.61). For emotional loneliness, defenders scored an average of M=9.82 (SD=2.98) compared to non-bullied students (M=9.15; SD=3.04), and for social loneliness, identically, defenders scored higher (M=8.93; SD=3.14) compared to non-bullied students (M=9.15; SD=3.10). We also demonstrated a statistically significant difference in the social loneliness measure (t(646)=3.113; p=0.002; d=0.245) with a mean difference of 1.375 points. Individuals in the defender role scored an average of M=18.75 (SD=5.63) compared to the non-bullied students, which scored M=17.37 (SD=5.61). The results are summarized in Table 4.

Table 4
Testing Differences in Defenders

Parameter	Unbullied adolescents		Defender		t	p	Cohen's d
	M	SD	M	SD			
Spirituality importance	4.32	2.02	4.12	2.00	−1.265	0.206	−0.099
Spirituality practice	3.12	2.10	2.96	2.08	−0.928	0.354	−0.073
Loneliness	**17.37**	**5.61**	**18.75**	**5.63**	**3.113**	**0.002**	**0.245**
Emotional loneliness	**9.15**	**3.04**	**9.82**	**2.98**	**2.806**	**0.005**	**0.22**
Social loneliness	**17.37**	**5.61**	**18.75**	**5.63**	**3.113**	**0.002**	**0.245**

3. 3. 4 Role of Bystander

For the role of bystanders compared to students who did not participate in bullying, we did not find statistically significant differences for the importance of spirituality (p=0.10) or for practicing spirituality (p=0.13).

We demonstrated statistically significant differences between the role of bystander and students who were not bullied for experiencing overall loneliness (t(519)=2.34; p=0.02; d=0.19) and for experiencing social loneliness (t(513)=2.381; p=0.02; d=0.19). In the case of emotional loneliness, we showed no statistically significant difference between the role of bystander compared to non-bullied students (t(534)=1.922; p=0.055; d=0.155). The results are described in Table 5.

Table 5
Testing Differences in Bystander

Parameter	Standard		Bystander		t	p	Cohen's d
	M	SD	M	SD			
Spirituality importance	4.32	2.04	4.06	1.96	−1.628	0.10	−0.13
Spirituality practice	3.13	2.14	2.89	1.99	−1.483	0.13	−0.12
Loneliness	**17.65**	**5.54**	**18.72**	**5.80**	**2.344**	**0.019**	**0.19**
Emotional loneliness	9.31	3.01	9.7	3.04	1.922	0.055	0.155
Social loneliness	**8.34**	**3.05**	**8.95**	**3.24**	**2.38**	**0.018**	**0.19**

3.4 Regression Analysis

Based on the results of the correlation analysis, we decided to proceed to regression analysis, where we examined the overall experience of spirituality as a predictor for victims based on the role in bullying, and loneliness was tested as a predictor for all roles (victim, aggressor, defender, witness), based on the subscales of emotional and social loneliness.

For the victim role, we examined the predictive power of the variables' importance of spirituality, social and emotional loneliness. Given collinearity values that did not exceed 1.7, we proceeded to binomial logistic regression analysis. Overall, the model proved significant ($p<0.001$; N2R=0.09) and explained 9% of the variance. On deeper analysis of predictors, we did not show the importance of spirituality ($p=0.166$; $z=1.38$) as a significant predictor. With respect to experiencing loneliness, emotional loneliness was not found to be a significant predictor ($p=0.147$; $z=-1.45$) and social loneliness was found to be a significant predictor ($p=0.002$; $z=-3.10$), where an individual with lower levels of social loneliness is 0.873 times less likely to be a victim of bullying (OR=0.873).

Table 6
Regression Analysis of Selected Variables

	Effect	Estimate	SE	95% CI		p
				LL	UL	
Victim	Spirituality importance	0.094	0.07	−0.04	0.22	0.166
	Emotional loneliness	−0.07	0.05	−0.16	0.02	0.147
	Social loneliness	**−0.14**	**0.04**	**−0.22**	**−0.05**	**0.002**
Aggressor	**Emotional loneliness**	**−0.21**	**0.09**	**−0.40**	**−0.02**	**0.032**
	Social loneliness	−0.03	0.09	−0.20	0.09	0.750
Defender	Emotional loneliness	−0.4	0.04	−0.11	0.03	0.264
	Social loneliness	−0.05	0.04	−0.12	0.02	0.181
Bystander	Emotional loneliness	−0.01	0.04	−0.09	0.06	0.701
	Social loneliness	−0.05	0.04	−0.13	0.02	0.136

Based on the correlation analysis, for the other roles, we focused only on the predictive power of loneliness, given the absence of association of the roles with experiencing spirituality, which is a requirement for regression analysis.

For aggressors, our model composed of emotional and social loneliness proved significant, explaining 5.23% of the total variance (p=0.009; R2N=0.0523). Collinearity did not exceed 1.50, and thus it is possible to work with the data as is. Emotional loneliness figures as a significant predictor in our dataset (p=0.032; z=-2.149), where an individual with lower levels of social loneliness is 0.811 times less likely to be the aggressor of bullying (OR=0.811). Social loneliness did not show significant prediction (p=0.75).

For defenders, we tested the predictive ability of emotional and social loneliness in the same way. Our model proved significant overall but explained only 1.97% of the total variance (p=0.008; R2N=0.0197). However, neither of our variables partially proved to be a significant predictor, as neither emotional loneliness (p=0.264) nor social loneliness (p=0.181) reached the necessary levels of significance, and thus we consider the overall model to be non-significant.

For bystanders, neither the overall model proved significant (p=0.051; R2N=0.0124) and, identically, neither emotional loneliness (p=0.701) nor social loneliness (p=0.136) proved significant and thus have no predictive power for bystanders.

4 Discussion and Conclusions

In terms of the prevalence of bullying, it was found that 20.8% of the students had been victims of bullying, 3.8% were aggressors, 50.6% were in the role of defenders and 39% were bystanders. The prevalence of school bullying among adolescents' ranges between 5.4% and 67.5% (Hymel and Swearer 2015, 294). The number of victims in Slovakia stands at 20.61% (Várnai *et al*. 2022) among children aged 11–15 years. As many as 25.76% of Slovak schoolchildren have been in the role of the aggressor. Overall, physical forms of aggression among schoolchildren appear in up to 30.51% of bullying cases regardless of the role groups. Other research (Papanikolau, Chatzikosma and Kleio 2011, 433) has indicated that 17.5% of schoolchildren have been victims of bullying, and up to 16.5% have taken part in bullying.

Subsequently, the relationships between *experiencing spirituality* (the importance and practice of spirituality) *and bullying rates* were examined across the role groups. There was a positive relationship found between the importance of spirituality and being the victim of bullying, suggesting that higher levels of experiencing spirituality are associated with higher rates of victim bullying. The other role groups did not demonstrate relationships in the context of spirituality. Victims of bullying showed significant differences in experiencing spirituality compared to adolescents who did not participate in bullying. The differences were significant regarding the importance of spirituality to their lives as well as the practice of spirituality. Aggressors, defenders and bystanders did not differ in experiencing spirituality compared to non-bullied students. When analyzing spiritual well-being and bullying in adolescents, previous results have shown that adolescents who had higher levels of spiritual well-being were less likely to be bullied by classmates as well as being less likely to engage in bullying (Dutkova *et al*. 2017, 8). When examining the relationships between spirituality, happiness, altruism and prosocial behavior in bullying bystanders, happiness and altruism were shown to be associated with bystander prosocial behavior (García-Vázquez *et al*. 2022, 1838). Spirituality and happiness have an inverse relationship in that they increase prosocial behavior through the positive effects of altruism. The results of the study provide evidence that there is an opportunity to increase prosocial behavior by enhancing spirituality, altruism and happiness. Therefore, it is important to consider promoting these positive factors in adolescents to contribute to the prevention of bullying.

The relationships between *loneliness and bullying rates* across the role groups were examined. Regarding experiencing loneliness, there was a significant difference confirmed in the experience of emotional loneliness between aggressors and students who did not participate in bullying. In the case of loneliness, significant differences were found between the role of defender and adolescents who did not participate in bullying, both in overall loneliness and social and emotional loneliness. For victims of bullying, the negative association between experiencing social and emotional loneliness and experiencing bullying was confirmed. Victims rated perceived loneliness significantly higher compared to non-bullied students. Victims experiencing higher levels of loneliness were more likely to experience bullying. Bullying brings physical and psychological injury with it, affecting performance and increasing levels of loneliness, self-harm and suicidal behavior (Wolke *et al*. 2015; Armitage 2021). Social support plays an important role, reducing the risk of bullying (Mischel and Kitsantas 2020, 70) and positively influencing an individual's well-being (Kalaitzaki, Tsouvelas and Koukouli 2021, 454).

When examining the protective/risk predictors (spirituality, loneliness), spirituality was not found to be a significant predictor in the context of victim bullying. Emotional loneliness featured as a significant predictor in the dataset with an individual with a lower level of social loneliness less likely to become the aggressor of bullying. Social loneliness was not shown to be a significant predictor. For defenders, neither of the current variables (spirituality, loneliness) should be significant predictors. The same results were confirmed in the role group of bystanders. A research study by Howell and Miller-Graff (2014, 1985, 1991–1993) focused on the role of social support, spirituality and emotional intelligence in promoting resilience. The results of the study showed that after accounting for childhood victimization, other potentially traumatic events and current symptoms of depression and anxiety, higher resilience was associated with higher levels of spirituality, emotional intelligence, and support from friends (not family). The findings suggest that protective factors are more influential than negative experiences and psychopathology in determining resilient functioning. It is evident that spirituality, social support, and emotional intelligence are interrelated aspects that may contribute to individuals' resilient coping with difficult life situations and adverse conditions.

Acknowledgement

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