

# FROM EXPOSURE TO ACTION: PERCEIVED CAUSES AS A MEDIATOR AND TEACHERS' EDUCATION AS A MODERATOR IN BULLYING-RELATED INTERVENTIONS

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***Abstract:** This study examined whether teachers perceived causes of bullying mediate the association between bullying exposure and two bullying-related outcomes – recognition of bullying forms and intervention actions – and whether this indirect process varies by teachers' level of education. The analytic sample included 57 teachers, of whom 26 held a bachelor's degree and 31 held a master's degree. A first stage moderated mediation model (Hayes PROCESS Model 7) was tested using bootstrapping procedures. Results indicated that bullying exposure was positively associated with perceived causes only among teachers with a master's degree, whereas this association was not significant among teachers with a bachelor's degree. In turn, perceived causes significantly predicted both recognition of bullying forms and intervention actions, while the direct effects of bullying exposure on both outcomes were not significant. Conditional indirect effects showed that bullying exposure was indirectly associated with both outcomes through perceived causes only among teachers with a master's degree. This pattern was clearer for recognition of bullying forms than for intervention actions, for which the overall model was weaker. Overall, the findings suggest that teachers' exposure to bullying is associated with bullying-related responses not directly, but through the way bullying is cognitively interpreted, particularly among teachers with higher formal education*

***Keywords:** bullying; teachers; perceived causes of bullying; recognition of bullying forms; intervention actions; moderated mediation; education level.*

## Introduction

Bullying is widely recognized as a serious educational and psychosocial problem because it involves repeated harmful behaviour

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embedded in power asymmetries and may take multiple forms, including verbal, relational, physical, and cyber manifestations. Contemporary scholarship increasingly frames bullying as an ecological phenomenon shaped not only by individual traits, but also by peer norms, family influences, school climate, and broader socio-cultural models. From this perspective, understanding bullying requires attention not only to its prevalence, but also to the meanings attributed to it by the adults responsible for managing school life. In the Romanian context, recent evidence similarly suggests that teachers perceive bullying as a persistent reality of school life, most often in verbal and socio-emotional forms, while also acknowledging its broader emotional, relational, and institutional implications<sup>1</sup>.

Teachers occupy a central position in bullying prevention and intervention because they are often the first adults to witness peer aggression, interpret its seriousness, and decide whether and how to respond. Prior research shows that teachers' bullying-related competence is associated with a greater likelihood of intervention and, indirectly, with lower bullying levels in the classroom. Related studies further indicate that teachers with stronger self-efficacy are generally more likely to intervene and tend to use a broader repertoire of intervention strategies. These findings suggest that teacher action is not a simple reaction to observed incidents, but a professional response shaped by knowledge, confidence, and interpretive competence<sup>2,3</sup>.

At the same time, the literature indicates that teachers' responses to bullying depend not only on what they see, but also on how they cognitively frame what they see. Duong and Bradshaw<sup>4</sup> showed that teachers' perceived efficacy and perceived threat are significantly associated with their likelihood of intervening in bullying situations, while

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<sup>1</sup> M. Sterian & R.D. Nicoară, *Bullying in the Romanian educational system: Causes, forms, and teachers' perceived solutions*. *Euromentor Journal: Studies About Education*, 16(3), 2025.

<sup>2</sup> L. De Luca, A. Nocentini & E. Menesini, The teacher's role in preventing bullying. *Frontiers in Psychology*, 10, Article 1830, 2019

<sup>3</sup> S.M. Fischer, N. John & L. Bilz, Teachers' self-efficacy in preventing and intervening in school bullying: A systematic review. *International Journal of Bullying Prevention*, 3(3), 2021, pp.196-212.

<sup>4</sup> J. Duong & C. P. Bradshaw, Using the extended parallel process model to examine teachers' likelihood of intervening in bullying. *Journal of School Health*, 83(6), 2013, pp. 422-429.

Troop-Gordon and Ladd<sup>5</sup> demonstrated that teachers' victimization-related beliefs and strategies are meaningfully connected to student aggression and peer victimization. Taken together, these studies suggest that the pathway from exposure to intervention is likely filtered through teachers' beliefs, appraisals, and interpretations of bullying, rather than determined by exposure alone.

Within this broader framework, teachers' perceived causes of bullying appear to be a particularly promising, yet still insufficiently examined, explanatory mechanism. If teachers interpret bullying in terms of socio-emotional, familial, cultural, or institutional causes, they may be better able to identify its less visible forms and to respond in more coherent and purposeful ways. Romanian evidence offers an important indication in this direction. In a recent Euromentor study, teachers who identified lack of empathy as a major cause of bullying recognized a significantly greater number of bullying forms than those who did not. The same study found that teachers frequently linked bullying to negative social role models, parental disengagement, and insufficient sanctions, while also emphasizing empathic education and socio-emotional activities as essential preventive resources. These findings strongly suggest that causal interpretations are not peripheral opinions, but may structure teachers' recognition and response patterns<sup>6</sup>.

The Romanian educational context further strengthens the relevance of this line of inquiry. Diac and Grădinariu<sup>7</sup> argue that new Romanian legislative provisions regarding bullying have made teacher professional development an increasingly important priority, but also note that the effectiveness of anti-bullying action depends on how well normative prescriptions are translated into meaningful teacher competencies. Complementary evidence studies by Nicoară and colleagues shows that Romanian teachers and parents are currently navigating broader disciplinary debates, including the introduction of detention rooms. Notably, teachers in these studies favored counselling, conflict mediation, parental involvement, and teacher training over purely punitive

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<sup>5</sup> W. Troop-Gordon & G. W. Ladd, Teachers' victimization-related beliefs and strategies: Associations with students' aggressive behaviour and peer victimization. *Journal of Abnormal Child Psychology*, 43(1), 2015, pp. 45–60

<sup>6</sup> M. Sterian & R.D. Nicoară, 2025, op.cit.

<sup>7</sup> G. Diac & T. Grădinariu, Bullying phenomenon in schools: Teachers training needs and the Romanian new legislative provisions. *The Romanian Journal of Multidimensional Education*, 14 (4 Suppl. 1), 2022, pp. 273–287

approaches, which underscores a broader need for evidence-based, educationally grounded intervention models rather than reactive or disciplinary-only responses<sup>89</sup>

### **The current study**

This study examines whether teachers' perceived causes of bullying mediate the association between bullying exposure and two bullying-related outcomes: recognition of bullying forms and intervention actions. In addition, it tests whether this first-stage association varies according to teachers' level of education. By focusing on perceived causes as an interpretive mechanism, the study moves beyond descriptive accounts of teacher intervention and proposes a conditional process model linking exposure, interpretation, and professional response.

This focus addresses an important gap in the literature. Although previous research has shown that teachers' competence, self-efficacy, and beliefs are associated with bullying intervention, less is known about whether teachers' causal interpretations of bullying help explain how exposure becomes associated with recognition and action. Existing studies have largely examined whether teachers intervene, how confident they feel, or what general factors predict intervention, while giving less attention to the specific cognitive mechanisms through which teachers make sense of bullying situations and translate experience into professional responses<sup>101112</sup>.

The study is also particularly relevant in the Romanian educational context. Recent Romanian research points to the persistence of bullying in schools, the continued importance of teacher training, and the need for intervention frameworks that move beyond reactive or exclusively punitive responses. At the same time, prior findings suggest that Romanian teachers increasingly emphasize empathic education, conflict mediation, parental involvement, and socio-emotional support when addressing school discipline and peer aggression. In this context, examining whether perceived causes of bullying mediate bullying-related

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<sup>8</sup> G. Diac & T. Grădinariu, 2022, *op.cit.*

<sup>9</sup> R.D. Nicoară et al., Parents' perception and attitude on the introduction of the detention room in Romanian schools: An initial impact assessment and disciplinary alternatives. *Euromentor Journal: Studies About Education*, 15(4), 2024, pp. 95–115.

<sup>10</sup> L. De Luca, A. Nocentini & E. Menesini, 2019, *op.cit.*

<sup>11</sup> J. Duong & C., P. Bradshaw, 2013, *op.cit.*

<sup>12</sup> W. Troop-Gordon & G. W. Ladd, 2015, *op.cit.*

responses—and whether this mechanism differs by teachers' level of education—has direct relevance for teacher professional development, prevention programs, and school policy<sup>13</sup>. Accordingly, the present study tests a first-stage moderated mediation model in which bullying exposure is associated with recognition of bullying forms and intervention actions indirectly through teachers' perceived causes of bullying, with teachers' level of education moderating the association between bullying exposure and perceived causes. By integrating exposure, causal interpretation, and response within a single analytical framework, the study aims to contribute a more refined understanding of how teachers respond to bullying in school settings.

### **Objectives and hypotheses**

The present study pursued two related objectives. First, it examined whether teachers' perceived causes of bullying mediate the association between bullying exposure and two bullying-related outcomes: recognition of bullying forms and intervention actions. Second, it tested whether teachers' level of education moderates the association between bullying exposure and perceived causes of bullying, thereby conditioning the indirect associations between exposure and the two outcomes.

Accordingly, the following hypotheses were tested:

**H1.** Bullying exposure is positively associated with teachers' perceived causes of bullying.

**H2a.** Teachers' perceived causes of bullying are positively associated with recognition of bullying forms.

**H2b.** Teachers' perceived causes of bullying are positively associated with intervention actions.

**H3.** Teachers' level of education moderates the association between bullying exposure and perceived causes of bullying, such that this association is stronger among teachers with a master's degree than among teachers with a bachelor's degree.

**H4a.** Bullying exposure is indirectly associated with recognition of bullying forms through teachers' perceived causes of bullying, conditional on teachers' level of education.

**H4b.** Bullying exposure is indirectly associated with intervention actions through teachers' perceived causes of bullying, conditional on teachers' level of education.

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<sup>13</sup> M. Sterian & R.D. Nicoară, 2025, op.cit.

## Method

The present study employed a quantitative, cross-sectional design to examine the mechanisms through which teachers' exposure to bullying is associated with bullying-related professional responses. Specifically, the study tested a conditional process model in which teachers' perceived causes of bullying were examined as a mediator of the association between bullying exposure and two outcomes: recognition of bullying forms and bullying-related intervention actions. In addition, the study investigated whether this first-stage indirect process varied according to teachers' level of education. This analytical framework was aligned with the study objectives and hypotheses and was intended to move beyond a direct-effects perspective by clarifying the interpretive pathway linking exposure to bullying-related responses.

## Participants

The final analytic sample consisted of 57 Romanian pre-university teachers retained after the removal of duplicate cases from a larger working database. Participation was voluntary and anonymous. The sample was predominantly female (approximately 93%) and included teachers working in both urban (84.2%) and rural (15.8%) schools. In terms of teaching level, most participants worked in primary education (61.4%), followed by lower-secondary education (24.6%) and upper-secondary education (14.0%). The sample was heterogeneous with respect to professional experience, with the largest subgroups represented by teachers with 0–5 years of experience (35.1%) and those with more than 20 years of experience (42.1%). The mean age was approximately 45 years. For the purposes of the moderated mediation analysis, the key grouping variable was teachers' level of education: 26 participants held a bachelor's degree and 31 held a master's degree.

## Measures

Data were collected through a structured questionnaire focused on bullying-related perceptions, experiences, and school responses. Within the broader research framework from which the present analysis was derived, the questionnaire included items assessing demographic and professional characteristics, teachers' exposure to bullying situations, perceived causes of bullying, recognition of bullying forms, and intervention-related practices. Because several items allowed multiple responses, the relevant variables were recoded into numerical indicators

suitable for statistical analysis. Higher scores reflected greater exposure, a broader endorsement of perceived causes, recognition of a wider range of bullying forms, and a broader repertoire of intervention actions, respectively.

**Bullying exposure.** Bullying exposure was operationalized as a numerical indicator reflecting teachers' reported exposure to bullying situations. Higher scores indicated greater exposure. In the analytic sample, scores ranged from 0 to 3.

**Perceived causes of bullying.** Perceived causes of bullying were operationalized as an indicator reflecting the number or breadth of causes endorsed by teachers in relation to bullying. Higher scores indicated a broader causal understanding of the phenomenon. In the analytic sample, scores ranged from 1 to 6.

**Recognition of bullying forms.** Recognition of bullying forms was operationalized as an indicator reflecting the range of bullying forms identified by teachers in school settings. Higher scores indicated recognition of a broader range of bullying manifestations. In the analytic sample, scores ranged from 1 to 4.

**Bullying-related intervention actions.** Intervention actions were operationalized as an indicator summarizing the bullying-related actions reported by teachers. Higher scores indicated a broader repertoire of intervention practices. In the analytic sample, scores ranged from 0 to 4.

**Teachers' level of education.** Teachers' level of education was used as the moderator in the conditional process model and distinguished between participants holding a bachelor's degree and those holding a master's degree.

### **Procedure and Data Analysis**

The analysis was conducted in two stages. First, descriptive statistics were computed for all study variables in order to examine central tendency, variability, and score range. Zero-order correlations were also inspected to assess whether the preliminary associations among bullying exposure, perceived causes of bullying, recognition of bullying forms, and intervention actions were consistent with the proposed conceptual model.

Second, the hypotheses were tested using a first-stage moderated mediation model corresponding to PROCESS Model 7. In both estimated models, bullying exposure was entered as the predictor, perceived causes of bullying as the mediator, and teachers' level of education as the moderator of the path linking bullying exposure to perceived causes. Two

outcome variables were examined separately: recognition of bullying forms and bullying-related intervention actions. Prior to computing the interaction term, bullying exposure was mean-centered. Conditional indirect effects and the index of moderated mediation were estimated using nonparametric bootstrapping with 5,000 resamples, consistent with recommended practice in conditional process analysis<sup>14</sup>.

## Results

The final analytic sample comprised 57 teachers, of whom 26 held a bachelor's degree and 31 held a master's degree. Descriptive statistics indicated moderate variability across the main study variables. Bullying exposure had a mean of 1.67 (SD = 0.89, range = 0-3), perceived causes of bullying had a mean of 3.33 (SD = 1.31, range = 1-6), recognition of bullying forms had a mean of 2.37 (SD = 0.90, range = 1-4), and bullying-related intervention actions had a mean of 3.07 (SD = 1.10, range = 0-4).

**Table 1. Means, standard deviations, ranges, and zero-order correlations among the main study variables**

Variable	M	SD	Range	1	2	3	4
1. Bullying exposure	1.67	0.89	0-3	—	.32	.16	.15
2. Perceived causes of bullying	3.33	1.31	1-6	.32	—	.50	.33
3. Recognition of bullying forms	2.37	0.90	1-4	.16	.50	—	—
4. Bullying-related intervention actions	3.07	1.10	0-4	.15	.33	—	—

*Note.* Correlations are zero-order Pearson coefficients.

At the bivariate level, bullying exposure was positively associated with perceived causes of bullying ( $r = .32$ ). In turn, perceived causes were positively associated with both recognition of bullying forms ( $r = .50$ ) and bullying-related intervention actions ( $r = .33$ ). By contrast, the correlations between bullying exposure and the two outcome variables were small ( $r = .16$  for recognition;  $r = .15$  for intervention), suggesting that any association between exposure and the outcomes may operate indirectly through teachers' causal interpretations of bullying.

To test the proposed conditional process model, a first-stage moderated mediation analysis was conducted using PROCESS Model 7. In this model, bullying exposure was entered as the predictor, perceived

<sup>14</sup> A. F. Hayes, *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (3rd ed.). Guilford Press, 2022

causes of bullying as the mediator, and teachers' level of education as the moderator of the path linking bullying exposure to perceived causes. Recognition of bullying forms and bullying-related intervention actions were examined in separate models. Bullying exposure was mean-centered prior to the computation of the interaction term, and conditional indirect effects were estimated using 5,000 bootstrap resamples.

The first-stage regression model predicting perceived causes of bullying was statistically significant,  $F(3, 53) = 5.21, p = .003, R^2 = .228$ . The interaction between bullying exposure and teachers' level of education was also significant,  $B = 1.106, SE = 0.382, t(53) = 2.90, p = .005$ , indicating that the association between bullying exposure and perceived causes differed by education level. Probing this interaction showed that bullying exposure was not significantly associated with perceived causes among teachers holding a bachelor's degree,  $B = -0.277, SE = 0.315, t(53) = -0.88, p = .384$ . In contrast, among teachers holding a master's degree, bullying exposure was a significant positive predictor of perceived causes,  $B = 0.829, SE = 0.215, t(53) = 3.85, p < .001$ . Thus, greater exposure to bullying was associated with a broader endorsement of bullying causes only among teachers with higher formal education.

**Table 2 Regression coefficients for the first-stage moderated mediation model predicting recognition of bullying forms**

Predictor	B	SE	t	p
<b>Mediator model: Perceived causes of bullying</b>				
Bullying exposure × Education level	1.106	0.382	2.90	.005
<b>Outcome model: Recognition of bullying forms</b>				
Perceived causes of bullying	0.343	0.086	4.00	< .001
Bullying exposure	-0.012	0.126	-0.10	.924
Education level	0.167	0.212	0.79	.433

*Note.* Mediator model:  $F(3, 53) = 5.21, p = .003, R^2 = .228$ . Outcome model:  $F(3, 53) = 6.13, p = .001, R^2 = .258$ . Conditional effects of bullying exposure on perceived causes were non-significant among teachers with a bachelor's degree ( $B = -0.277, SE = 0.315, t = -0.88, p = .384$ ) and significant among teachers with a master's degree ( $B = 0.829, SE = 0.215, t = 3.85, p < .001$ ).

With regard to the first outcome, the regression model predicting recognition of bullying forms was statistically significant,  $F(3, 53) = 6.13, p = .001, R^2 = .258$ .

= .001,  $R^2 = .258$ . Perceived causes of bullying significantly predicted recognition of bullying forms,  $B = 0.343$ ,  $SE = 0.086$ ,  $t(53) = 4.00$ ,  $p < .001$ . By contrast, the direct effect of bullying exposure was not significant,  $B = -0.012$ ,  $SE = 0.126$ ,  $t(53) = -0.10$ ,  $p = .924$ , and the main effect of education level was also non-significant,  $B = 0.167$ ,  $SE = 0.212$ ,  $t(53) = 0.79$ ,  $p = .433$ . The conditional indirect effect of bullying exposure on recognition of bullying forms through perceived causes differed by education level. For teachers with a bachelor's degree, the indirect effect was not statistically significant, indirect effect =  $-0.095$ , 95% bootstrap CI  $[-0.318, 0.190]$ . For teachers with a master's degree, however, the indirect effect was positive and statistically significant, indirect effect =  $0.284$ , 95% bootstrap CI  $[0.102, 0.509]$ . The index of moderated mediation was also significantly different from zero, index =  $0.379$ , 95% bootstrap CI  $[0.073, 0.719]$ ,  $p_{boot} = .018$ . Taken together, these findings indicate that bullying exposure was indirectly associated with recognition of bullying forms through perceived causes only among teachers with a master's degree.

The same moderated mediation model was then estimated with bullying-related intervention actions as the outcome. In this case, the overall regression model accounted for a modest proportion of variance and did not reach conventional statistical significance,  $F(3, 53) = 2.21$ ,  $p = .098$ ,  $R^2 = .111$ . Nevertheless, perceived causes of bullying significantly predicted intervention actions,  $B = 0.262$ ,  $SE = 0.115$ ,  $t(53) = 2.29$ ,  $p = .026$ . Neither the direct effect of bullying exposure,  $B = 0.062$ ,  $SE = 0.169$ ,  $t(53) = 0.37$ ,  $p = .714$ , nor the main effect of education level,  $B = -0.031$ ,  $SE = 0.284$ ,  $t(53) = -0.11$ ,  $p = .914$ , was statistically significant. The conditional indirect effects again differed by education level. For teachers with a bachelor's degree, the indirect effect was not statistically significant, indirect effect =  $-0.073$ , 95% bootstrap CI  $[-0.306, 0.128]$ . For teachers with a master's degree, the indirect effect was statistically significant, indirect effect =  $0.218$ , 95% bootstrap CI  $[0.025, 0.436]$ . The index of moderated mediation was significantly different from zero, index =  $0.290$ , 95% bootstrap CI  $[0.009, 0.672]$ ,  $p_{boot} \approx .040$ . Although the conditional pattern was similar to that observed for recognition of bullying forms, the evidence for intervention actions was weaker and should therefore be interpreted with greater caution.

**Table 3 Regression coefficients for the first-stage moderated mediation model predicting bullying-related intervention actions**

Predictor	B	SE	t	p
<b>Outcome model: Bullying-related intervention actions</b>				
Perceived causes of bullying	0.262	0.115	2.29	.026
Bullying exposure	0.062	0.169	0.37	.714
Education level	-0.031	0.284	-0.11	.914

*Note.* Outcome model:  $F(3, 53) = 2.21, p = .098, R^2 = .111$ . The first-stage mediator model is identical to that reported in Table 2.

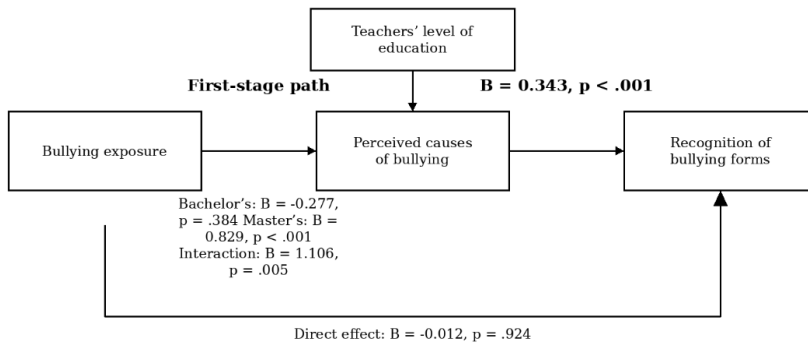
Overall, the findings support a conditional indirect process in which bullying exposure was not directly associated with either recognition of bullying forms or bullying-related intervention actions. Instead, exposure was indirectly associated with both outcomes through perceived causes of bullying, and this pattern was observed only among teachers with a master's degree. At the same time, the model was more robust for recognition of bullying forms than for intervention actions, suggesting that causal interpretation may be more closely linked to recognition than to reported intervention behaviour.

For **recognition of bullying forms**, the conditional indirect effect of bullying exposure through perceived causes of bullying was not significant among teachers holding a bachelor's degree (indirect effect = -0.095, 95% bootstrap CI [-0.318, 0.190]). In contrast, among teachers holding a master's degree, the indirect effect was positive and statistically significant (indirect effect = 0.284, 95% bootstrap CI [0.102, 0.509]). The index of moderated mediation was also significant (index = 0.379, 95% bootstrap CI [0.073, 0.719],  $p_{boot} = .018$ ), indicating that the indirect association between bullying exposure and recognition of bullying forms through perceived causes differed as a function of teachers' level of education.

For **bullying-related intervention actions**, the conditional indirect effect of bullying exposure through perceived causes of bullying was not significant among teachers holding a bachelor's degree (indirect effect = -0.073, 95% bootstrap CI [-0.306, 0.128]). By contrast, among teachers holding a master's degree, the indirect effect was statistically significant (indirect effect = 0.218, 95% bootstrap CI [0.025, 0.436]). The index of moderated mediation was significant (index = 0.290, 95% bootstrap CI [0.009, 0.672],  $p_{boot} \approx .040$ ). However, because the overall outcome model

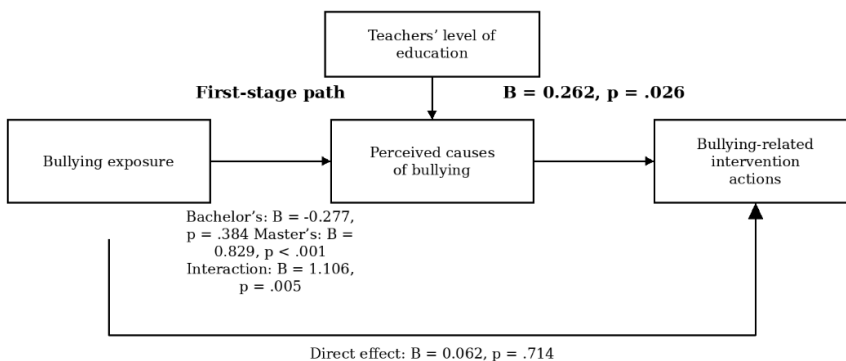
did not reach conventional statistical significance, these findings should be interpreted with caution.

**Figure 1 Moderated mediation model predicting recognition of bullying forms**



*Note.* Unstandardized regression coefficients are reported. Teachers' level of education moderated the association between bullying exposure and perceived causes of bullying. The indirect effect of bullying exposure on recognition of bullying forms through perceived causes was significant only among teachers with a master's degree.

**Figure 2 Moderated mediation model predicting bullying-related intervention actions**



*Note.* Unstandardized regression coefficients are reported. Teachers' level of education moderated the association between bullying exposure and perceived causes of bullying. The indirect effect of bullying exposure

on bullying-related intervention actions through perceived causes was significant only among teachers with a master's degree, although this pattern should be interpreted with caution given the non-significant overall outcome model.

### Discussion

The present study examined whether teachers' perceived causes of bullying mediate the association between bullying exposure and two bullying-related outcomes—recognition of bullying forms and bullying-related intervention actions—and whether this indirect process varies according to teachers' level of education. Overall, the findings support a conditional indirect model: bullying exposure was not directly associated with either outcome, but was indirectly associated with both through teachers' perceived causes of bullying, and this pattern was observed only among teachers holding a master's degree. These results suggest that teachers do not move automatically from exposure to professional response. Rather, exposure appears to become professionally meaningful when it is cognitively organized into an explanatory understanding of why bullying occurs.

From a theoretical perspective, these findings are consistent with research showing that teachers' responses to bullying are shaped not only by what they witness, but also by how they interpret and evaluate bullying situations. Previous studies have shown that intervention is associated with teachers' competence, self-efficacy, and beliefs<sup>15</sup>, while teachers' likelihood of intervening also varies as a function of perceived efficacy and threat appraisal<sup>16</sup>. In a similar vein, Troop-Gordon and Ladd<sup>17</sup> showed that teachers' victimization-related beliefs and strategies are meaningfully connected to student aggression and peer victimization. The present study extends this line of research by identifying perceived causes of bullying as a plausible cognitive mechanism linking exposure to bullying with professional responses. In this sense, the findings are also compatible with ecological approaches that conceptualize bullying as a phenomenon embedded in interpersonal, family, school, and socio-cultural contexts rather than as an isolated behavioural event<sup>18</sup>.

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<sup>15</sup> S. M., Fischer et al. (2021), op.cit.

<sup>16</sup> J. Duong & C. P. Bradshaw, 2013, op.cit.

<sup>17</sup> W. Troop-Gordon & G. W. Ladd, 2015, op.cit.

<sup>18</sup> J. S. Hong, & D. L. Espelage, *A review of research on bullying and peer victimization in school: An ecological system analysis. Aggression and Violent Behavior*, 17(4), 2012, pp311-322.

A central finding of the study is that this interpretive process was conditional on teachers' level of education. The association between bullying exposure and perceived causes of bullying was significant only among teachers with a master's degree, and the conditional indirect effects on both outcomes were likewise significant only in this group. One possible interpretation is that higher formal education may support a broader conceptual repertoire for organizing school experiences and linking bullying episodes to socio-emotional, familial, institutional, or cultural determinants. At the same time, education level should not be treated as a simple proxy for competence. It is more likely to capture broader differences in training, reflective orientation, and professional preparation. Even so, the present findings suggest that teachers' educational formation may shape the way exposure is transformed into interpretive and professional response. This interpretation is compatible with prior Romanian work showing that teacher training and professional preparation remain central in the implementation of anti-bullying policies<sup>19</sup>. It is also broadly consistent with Romanian findings indicating that education level is associated with differences in how teachers evaluate school discipline, relationships, and intervention alternatives<sup>20</sup>.

Another important aspect of the findings is the asymmetry between the two outcomes. The model was clearly more robust for recognition of bullying forms than for bullying-related intervention actions. Although perceived causes of bullying significantly predicted both outcomes, the explanatory pattern was stronger for recognition, whereas the model predicting intervention actions accounted for a smaller proportion of variance and did not reach conventional statistical significance at the overall model level. This suggests that causal understanding may contribute more directly to the recognition of bullying than to intervention itself. Recognition is likely to depend more immediately on interpretive schemas, whereas intervention may additionally depend on self-efficacy, procedural clarity, institutional support, emotional regulation, and confidence in the likely effectiveness of one's response<sup>21</sup>. The present study therefore helps distinguish between two related but non-identical professional capacities: recognizing bullying and acting on it.

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<sup>19</sup> G. Diac & T. Grădinariu, 2022, op.cit.

<sup>20</sup> M. Sterian & R.D. Nicoară, 2025, op.cit

<sup>21</sup> S. M. Fischer et al. (2021), op.cit.

The findings are also meaningful in the Romanian educational context. Recent Romanian studies have shown that teachers perceive bullying as a persistent reality of school life, tend to identify verbal and socio-emotional forms more readily than physical or cyber forms, and frequently associate bullying with factors such as lack of empathy, parental disengagement, weak institutional responses, and negative social models. The same study suggested that teachers who interpret bullying through empathic and socio-emotional lenses tend to recognize a broader range of bullying manifestations, which is conceptually consistent with the present finding that perceived causes are positively associated with recognition. At the same time, Romanian debates on detention rooms and school discipline have highlighted teachers' preference for counselling, mediation, parental involvement, and educational alternatives over purely punitive responses. Taken together, these studies and the present findings support a less punitive and more interpretive understanding of anti-bullying intervention, one in which effective response depends not only on detecting incidents, but also on understanding their underlying causes and relational dynamics.

These results have practical implications for teacher education and school policy. Anti-bullying training should not focus exclusively on identifying bullying incidents, but should also strengthen teachers' capacity to interpret bullying in causal, relational, and systemic terms. Programs that improve awareness without deepening explanatory understanding may support recognition only partially and may be insufficient to sustain effective intervention. More broadly, the findings suggest that teacher preparation should integrate bullying detection, socio-emotional understanding, reflective analysis, and institutionally supported response strategies, especially in educational contexts where anti-bullying legislation and school procedures are still being translated into everyday professional practice<sup>22</sup>.

Several limitations should be considered when interpreting these findings. The study relied on a relatively small analytic sample, a cross-sectional design, and self-reported data, all of which limit generalizability and do not permit causal inference. In addition, teachers' level of education was treated as a categorical moderator, although it may reflect more specific underlying dimensions, such as training content, prior anti-bullying preparation, pedagogical orientation, or professional self-efficacy.

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<sup>22</sup> G. Diac & T. Grădinariu, 2022, *op.cit.*

Future research would therefore benefit from replicating this model in larger samples, using longitudinal designs and multi-informant data, and incorporating additional explanatory variables—such as self-efficacy, school climate, leadership support, and prior training—to clarify more fully the conditions under which exposure is translated into recognition and intervention. Despite these limitations, the present study contributes a theoretically coherent and empirically informative model suggesting that the path from exposure to bullying-related response is shaped by causal understanding and conditioned by teachers' educational formation.

### Conclusions

The present study supports a conditional indirect model linking teachers' exposure to bullying with recognition of bullying forms and bullying-related intervention actions through perceived causes of bullying. More specifically, bullying exposure was not directly associated with either outcome, but was indirectly associated with both through teachers' causal interpretations of bullying, and this pattern was observed only among teachers with a master's degree. The findings suggest that teachers' responses to bullying depend not only on exposure itself, but also on how bullying is cognitively understood. At the same time, the model was more robust for recognition than for intervention actions, indicating that causal understanding may contribute more directly to identifying bullying than to acting on it. Overall, the study highlights the importance of strengthening teachers' interpretive competence within anti-bullying training and professional development.

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