



# The Impact of the COVID-19 Pandemic on Bullying Victimization and Emotional Symptoms: A Longitudinal Study on Natives and Students With Immigrant Backgrounds

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## Abstract

The COVID-19 pandemic affected adolescents' social interactions and mental health. However, it is still unclear how the developmental trajectories of individuals at higher risk of social exclusion and victimization changed during this challenging period. Using the Latent Growth Curve Analysis (LGCA), the present study aims to investigate whether belonging to a minority ethnic group might be an additional risk factor, by analyzing trends over time in both bullying victimization (V) and emotional symptoms (ES) from the pre-pandemic period to 15-months after the outbreak. 826 students (46.4% females;  $M_{age}=15.22$ ;  $SD=0.63$ ; 18.5% with an immigrant background) attending the first year of high school were followed before the pandemic (T1-January 2020), to 12 months (T2-February 2021) and 15-months (T3-May 2021) after the outbreak. Findings highlighted the pervasive impact of the COVID-19 pandemic on all students, with no differences between natives and students with immigrant background. Indeed, results showed a decrease in victimization, especially the more systematic behaviors, and an increase in emotional symptoms over time. However, we found a greater growth in emotional symptoms in students who started with a lower level of victimization before the pandemic. It seems like a tsunami has passed and completely engulfed everyone. The present study warns about the return to school in face-to-face mode for adolescents after a period of great suffering, such as the COVID-19 pandemic.

**Keywords** Bullying victimization · COVID-19 pandemic · Emotional symptoms · Immigrant background · Adolescence

## Introduction

The last few years have been characterized by the global emergency of the COVID-19 pandemic, defined as “the biggest health emergency of our generation” (Jetten, 2020). The changes caused by this great event at the individual and social levels have affected both the interpersonal (i.e., peer relationships) and the intrapersonal (e.g., emotional symptoms) domains of adolescents (Cooper et al., 2021; Nocentini et al., 2021; Rossi et al., 2020), especially in the first months of the pandemic (Akkaya-Kalayci et al., 2020). Indeed, lockdowns and school closings have significantly impacted adolescents' social relationships, including aggressive behaviors, such as bullying victimization at school (Nocentini et al., 2021; Rossi et al., 2020). This behavior is implemented to intentionally hurt another peer and it is characterized by repetition, intentionality, and imbalance of power (Olweus, 1999). However, the differences in the

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effects of the COVID-19 pandemic on victims of bullying compared to non-victims are unclear. Additionally, although the literature is consistent about the main effects of the pandemic on emotional symptoms (i.e., the daily presence of at least one of four symptoms: sickness, worries, being unhappy or nervous, and low confidence; Goodman, 1997), it is not clear which students experienced the worst consequences of this catastrophic event and why (Shum et al., 2021). In particular, little is known about the effects on those who were already considered at risk for victimization and more likely to develop emotional symptoms before the pandemic, such as students with an immigrant background. The present study aims to fill this gap in the literature, specifically trying to understand whether belonging to an ethnic minority group might be an additional risk factor for the effects of the COVID-19 pandemic on victimization and emotional symptoms.

Literature has shown a high heterogeneity of findings on the impact of the pandemic on adolescents' mental health (Bouter et al., 2022; Daniunaite et al., 2021) mainly explained by individual, family, and community factors (e.g., Branje & Morris, 2021; Nocentini et al., 2021). On one hand, several studies highlighted an increase in youths' internalizing symptoms (e.g., Daly & Robinson, 2022; Fioretti et al., 2020), insomnia, and perceived stress (Rossi et al., 2020). Specifically, many adolescents showed the highest levels of parent-reported and adolescents-reported emotional symptoms when high levels of restrictions were in place (Shum et al., 2021). On the other hand, along with the negative impact of the pandemic on mental health, some research has highlighted an increase in well-being among adolescents, especially during the lockdown and school closures (e.g., Penner et al., 2021). In particular, this may have happened to students who were targets of bullying, which is one of the greatest risks facing adolescents in schools today (Smith, 2016). Indeed, in the absence of the context in which this behavior occurs, victims may have reported positive consequences in terms of well-being.

In general, experiences of bullying victimization have been associated with a wide range of negative outcomes including poor mental health, symptoms of depression and anxiety symptoms, and suicidal ideation (Hawker & Boulton, 2000; Kim et al., 2009; Moore et al., 2017), and self-harm (Fisher et al., 2012). Given that bullying occurs primarily within school settings (Karatzias et al., 2002) and that the COVID-19 pandemic radically changed the context for bullying dynamics, these two factors may have increased the likelihood of a reduction of it. Indeed, some studies from Italy, Canada, and Finland that analyzed bullying behavior during the first lockdown suggest a decrease in the prevalence of the phenomenon (Mastorci et al., 2021; Repo et al., 2022; Vaillancourt et al., 2021). Even so, research on

children and adolescents one year after the outbreak of COVID-19 in Norway found an increase in the prevalence of bullying compared to before the pandemic (Forsberg & Thorvaldsen, 2022).

However, also in relation to the effects of the pandemic on the students' pre-pandemic involvement in bullying behaviors, the literature has showed mixed and controversial results. On one hand, Mlawer et al. (2022) found that adolescents with higher levels of pre-pandemic peer victimization reported a less positive change in anxiety symptoms two months after the outbreak of the pandemic. On the contrary, Kirkham et colleagues (2022) found an increase in perceived stress after the first COVID-19 lockdown (i.e., August-October 2020) for those high school students who experienced bullying compared to the non-bullied group. While other research found higher levels of loneliness during the lockdown (i.e., May 2020) than in past years for both victimized and non-victimized students (Repo et al., 2022).

Given these controversial results, some studies suggested that the impact of the COVID-19 pandemic on adolescents' mental health could be related to their pre-existing vulnerabilities, i.e., a systematic review including 21 empirical articles from four continents highlighted that students who were already at risk before the pandemic experienced more negative consequences than those who were not (Branje & Morris, 2021). Indeed, a greater impact of the COVID-19 pandemic on youths' mental health has been suggested for vulnerable adolescents with previous or current mental health difficulties (Panchal et al., 2021), and those from marginalized contexts (Hussong et al., 2021).

Among vulnerable students, there are those with an immigrant background, who were more likely to experience stress than their native peers before the pandemic (Xu et al., 2020). Indeed, they have to add the stressors associated with immigration (e.g., school adjustment, acculturation processes, and family financial condition) to the ordinary challenges of growing up (Cho & Haslam, 2010). As a result, students with an immigrant background are at higher risk for internalizing problems (e.g., anxiety, depression), somatic and sleep disorders (Ebbin & Blankship, 1988), higher levels of negative affect (Shin et al., 2007), and suicidal ideation (Hovey, 2000), than their native peers.

This state of vulnerability may have been exacerbated during a global emergency such as the COVID-19 pandemic. A study conducted in Norway (Lehmann et al., 2021) found that, during the COVID-19 pandemic, a greater percentage of adolescents with an immigrant background reported that school closure had a negative impact on them and that they were more worried about getting sick and their own future prospects than their peers. These concerns might also be related to several issues such as linguistic and cultural difficulties in accessing information about COVID-19 and how

to protect themselves and others, or to more bureaucratic barriers (e.g., postponement of decisions about their legal status; Kluge et al., 2020). In support of this, a longitudinal cross-cultural study conducted before and during the first six months of the COVID-19 pandemic found that the greatest increase in depression symptoms was reported by multi-racial adolescents (Barendse et al., 2022).

Additionally, before the COVID-19 pandemic, students with an immigrant background were more likely to be victims of bullying at school rather than their native peers (Elamé, 2013; Graham, 2016; Strohmeier et al., 2011). Notably, the consequences of this behavior were exacerbated for youths who are the target of bullying because of their ethnicity or immigrant background, since it is a core, stable characteristic. This led victims to believe that their social identity is the cause of their victimization, resulting in self-blame and feelings of inadequacy (McKenney et al., 2006). This condition had the potential to put them at greater risk for emotional vulnerabilities (Garnefski & Kraaij, 2014; Garnefski et al., 2005). However, to date, the long-term impact of the global emergency (i.e., the COVID-19 pandemic) on emotional symptoms and bullying victimization among students at high risk before the pandemic, such as students with immigrant backgrounds, is still unknown.

Notably, to better understand the overall effect of the COVID-19 pandemic and lockdown, on both youths' bullying victimization and mental health, the cultural context must be considered (Repo et al., 2022). Indeed, different containment measures may have had different impacts on the population, having therefore consequences on health. In this regard, Italy was the first European country to face the pandemic (WHO, 2020). The Italian school system, as well as in other countries, was particularly unstable during the first year of the pandemic. Indeed, during the first national lockdown, Italian high schools were closed from March to June 2020 and students started distance learning in March till the end of the school year; this was due to a decree of the Italian Ministry of Health (2020). Unfortunately, schools were closed again at the beginning of the next school year (i.e., from November 2020 to January 2021).

After that, secondary schools started with a schedule of 50% in presence, with containment measures and the requirement of quarantine for all students in the classroom in the event of a positive case and 50% of the school time with distance learning. These important changes may have affected adolescents' social relationships and caused great stress (Fioretti et al., 2020; Nocentini et al., 2021; Rossi et al., 2020).

## The Present Study

The scientific literature agrees that the outbreak of the COVID-19 pandemic and the related adopted measures to contain the spread of the virus had a great impact on adolescents' social interactions and mental health (Akkaya-Kalayci et al., 2020; Nocentini et al., 2021; Rossi et al., 2020). While those at higher risk before the pandemic experienced worse effects during the pandemic itself (Branje & Morris, 2021), it is still unclear how the developmental trajectories of emotional symptoms and victimization of these individuals changed over time during this challenging period.

Therefore, the aim of the present study was to investigate whether belonging to an ethnic minority group might be an additional risk factor compared to the majority group, by analyzing trends over time in both victimization (V) and emotional symptoms (ES) from the pre-pandemic period to 15-months after the outbreak.

Following the scientific literature, we tested three main hypotheses: (1) an overall decrease in victimization in both groups (i.e., natives and students with an immigrant background), in line with recent studies (Mastorci et al., 2021; Repo et al., 2022; Vaillancourt et al., 2021). In addition, following studies highlighting the major impact of the pandemic on more vulnerable and at-risk students (Barendse et al., 2022; Branje & Morris, 2021; Hussong et al., 2021), we hypothesized: (2) a greater increase in emotional symptoms for students with immigrant background compared to native students and (3) a greater increase in emotional symptoms for those who were victims of bullying prior to the pandemic (i.e., the more vulnerable ones).

## Method

### Participants

The participants were drawn from an ongoing longitudinal study, which started in 2019 and aims to investigate the psychological mechanism related to Prejudicial Ethnic Bullying (PEB) and to develop an intervention. For the participants' recruitment, high schools in the Tuscany region in Italy were contacted by e-mail. Students from 10 high schools were included in the present study, attending lyceum (30%), technical or vocational (70%) high schools. Specifically, 36 classrooms of grade 9th (i.e., the first year of high school) and 826 students were involved. Of them, 52.8% ( $n=436$ ) were males, 46.4% ( $n=383$ ) were females and 0.8% ( $n=7$ ) did not specify their gender. At time 1, the age ranges from 12 to 19 ( $M=15.22$ ;  $SD=0.64$ ).

We defined the students' immigrant background by looking at three questions about the country of birth of the

participants, their fathers, and their mothers. Concerning mothers' origin, 73.6% ( $n=608$ ) reported that their mother was born in Italy, 25.8% ( $n=213$ ) that was born abroad, and 0.6% ( $n=5$ ) did not define the mother's country of birth. Concerning fathers' origin, 78.8% ( $n=651$ ) of students declared that their father was born in Italy, 20.5% ( $n=169$ ) that was born abroad, while 0.7% ( $n=6$ ) did not define the father's country of birth. About students, 88.9% ( $n=734$ ) were born in Italy, 10.8% ( $n=89$ ) abroad, and 0.4% ( $n=3$ ) did not specify their country of birth. Consequently, two groups were defined: Italians, students born in Italy with both or at least one Italian parent (80.6%,  $n=666$ ); students with an immigrant background (18.6%;  $n=153$ ) composed by first-generation immigrants (8.4%;  $n=69$ ; i.e., students born abroad with foreign parents) and second-generation immigrants (10.2%;  $n=84$ ; i.e., students born in Italy from parents born abroad).

## Procedure

Three waves of data were gathered: data collection for time 1 occurred in January/February 2020 (before the outbreak of the COVID-19 pandemic in Italy), time 2 in February/March 2021 and time 3 in May/June 2021 (during the COVID-19 pandemic in Italy).

All students filled out a self-reported questionnaire, administered by trained researchers (i.e., psychologists). At time 1, 52.9% of students filled out the paper version of the questionnaires, while 47.1% filled it online, using computers at school. At time 2 and time 3, data were collected only online due to the COVID-19 restrictions. The researchers were connected to the classroom through an online platform, and the administration of the questionnaires was also done also under the supervision of the teachers. Students filled in the questionnaires through their personal smartphone or digital device.

Participants were assured of the anonymity of their responses. Informative materials about the study were sent to parents and teachers. Students under the age of 14 were required to provide their parental consent, in addition to their own, upon both school and class council approval of the study. Students were informed that they were free to withdraw from the study at any time. All procedures performed in studies involving human participants were approved by the ethics committee of the Catholic University of the Sacred Heart and adhered to the Helsinki Declaration of 1964 and its subsequent amendments or comparable ethical standards.

## Measures

*Emotional symptoms (ES).* The subscale of the Strength and Difficulties Questionnaires (SDQ) was used. It is a brief self-report questionnaire of 25 items that assesses conduct problems, hyperactivity, emotional symptoms, peer problems and prosocial behavior (Goodman, 1997, 2001). ES was assessed by 5 items (e.g., "I get a lot of headaches, stomach-aches or sickness", "I worry a lot", "I am often unhappy, down-hearted or tearful") rated on a three-point Likert scale (0 = not true, 1 = somewhat true, or 2 = certainly true). Cronbach's  $\alpha$  of the ES was 0.74, 0.77, and 0.80 at time 1, time 2, and time 3, respectively.

*Bullying Victimization.* Victimization was measured with the short version of the Florence Bullying Victimization scales (Palladino et al., 2016). The victimization scale consists of 7 items asking how often respondents have experienced physical, verbal and indirect behaviors as a victim (e.g., "I have been beaten up"; "Rumors about me have been spread"; "I have been excluded from activities") in the past couple of months. Each item was rated on a 5-point scale ranging from 1 (never) to 5 (several times a week). The internal reliability of victimization was 0.75, 0.78, and 0.78 at time 1, time 2 and time 3, respectively.

## Data Analysis

Preliminary analyses were carried out using IBM SPSS software. First, Little's (1988) Missing Completely at Random (MCAR) test was performed for victimization and emotional symptoms to compare participants with and without missing data. Secondly, based on approaches regarding sample size and power using structural equation modeling (Kim, 2005), the fit index Root Mean Square Error of Approximation (RMSEA) was used to compute the minimum sample size required to achieve a level of power 0.80. For the model of the present study, the minimum required sample size is 650.64 to achieve a level of power of 0.80, for a 0.05 (Kim, 2005), which is exceeded by our sample size of 826 participants.

Main analyses were performed using Mplus version 7 (Muthén & Muthén, 2017). We used Latent Growth Curve Analysis (LGCA). Notably, in this statistical technique there are latent factors representing the initial levels of statistical variables (i.e., intercepts) and their rates of change or developmental trends (e.g., slopes) (Muthén B., 2002). Because the time between each assessment point was not equally spaced, the three terms of each latent slope variable were fixed to 0, 1, 1.3 for time 1, time 2 (12-months after the time 1) and time 3 (15–16 months after time 1), respectively. Given the non-normal distribution of the variables, the MLR estimator was used. Moreover, since participants

**Table 1** Descriptive statistics: Mean, standard deviations, and Pearson's r bivariate correlations. Pearson's r bivariate correlations for Italian students are shown at the top of the diagonal, while Pearson's r bivariate correlations for students with immigrant backgrounds are presented at the bottom of the diagonal

	1.	2.	3.	4.	5.	6.
1.T1 Emotional Symptoms	--	0.588**	0.581**	0.158	0.286*	0.367**
2.T2 Emotional Symptoms	0.634**	--	0.799**	0.137	0.263**	0.321**
3.T3 Emotional Symptoms	0.615**	0.698**	--	0.100	0.209	0.327**
4.T1 Victimization	0.321**	0.158**	0.177**	--	0.387**	0.298*
5.T2 Victimization	0.229**	0.223**	0.171**	0.506**	--	0.792**
6.T3 Victimization	0.235**	0.236**	0.277**	0.482**	0.455**	--
Mean (SD) – Italian Students	3.47 (2.56)	4.29 (2.90)	4.54 (3.19)	1.41 (0.50)	1.34 (0.53)	1.25 (0.34)
Mean (SD) – Students with immigrant background	3.46 (2.55)	4.11 (2.69)	4.18 (2.77)	1.37 (0.48)	1.34 (0.46)	1.30 (0.45)

Note. \* $p < .01$ ; \*\* $p < .001$ ; SD= Standard Deviation; T1 = Time 1; T2 = Time 2; T3 = Time 3;

**Table 2** Fit indices for Constrained and Free Models

Models	$\chi^2$	df	p	CFI	RMSEA	SRMR	AIC	BIC
Constrained model	21.966	24	0.058	1.000	0.000	0.041	4795.597	4936.766
Free model	8.773	10	0.055	1.000	0.000	0.017	4809.804	5016.853

were nested in classrooms, this stratification variable was included in the model.

We tested for measurement invariance to verify whether there were differences between the majority (i.e., Italians) and minority (i.e., students with immigrant background) groups. Therefore, we estimated a free model, in which all the estimates are different across the two groups, and a constrained model, in which we constrained parameters to be equal between the groups. The different models were compared using several indices. First, the Satorra-Bentler scale (mean adjustment) chi-square (Muthén & Muthén, 2006) was used to examine the two models: a non-significant difference between the two values indicates an invariance between the two groups. Second, the changes in CFI, RMSEA, AIC, and BIC were evaluated. Chen (2007) suggests that changes of  $< 0.010$  in CFI and  $< 0.015$  in RMSEA indicate support for the more parsimonious model. Additionally, the Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) were considered for the evidence of invariance (Vrieze, 2012); i.e., that is, a lower AIC and BIC value indicates a better trade-off between fit and complexity.

The final model was evaluated according to the following indices: the chi-square ( $\chi^2$ ) statistic, the root-mean squared error of approximation (RMSEA), the comparative fit index (CFI), and the standardized root mean squared residual (SRMR). Recommended cut-off points for RMSEA and SRMR indices are 0.0830 and 0.0630, while recommended cut-off points for CFI are 0.90 and 0.95, respectively (Brown et al., 1993).

## Results

Retention rates between consecutive assessments ranged from 94.48 to 98.57% (95.84% between time 1 and 3). The results of Little's (1988) Missing Completely at Random (MCAR) ( $\chi^2(51) = 56.558$ ;  $p = .275$ ) showed that data were likely missing at random. Thus, all participants with data available at least one-time point were included in the analyses.

In Table 1 are provided bivariate correlations, means and standard deviations for all study variables (i.e., bullying victimization and emotional symptoms) for both groups (i.e., Italian students and students with immigrant background). More detailed descriptives (i.e., bivariate correlations, means and standard deviations) related to immigrant backgrounds (i.e., first-generation and second-generation immigrants) are presented in Supplementary Materials (see Table S1-S2).

The comparison between the two LGC models (i.e., constrained and free; Table 2) showed a non-significant difference in the chi-square test (TRd = 13.16; p-value for TRd,  $\Delta df = 0.52$ ). Similarly, other indices considered (i.e., CFI, RMSEA, AIC and BIC) suggested that the constrained model might be a better solution compared to the free model. These findings implied that the structure of the tested model was invariant between the two groups, highlighting no differences among Italians and students with an immigrant background.

The final constrained model showed a good fit ( $\chi^2(24) = 21.966$ ,  $p = .058$ , CFI = 1.000, RMSEA = 0.000 [CI 0.000-0.036], SRMR = 0.041). All the estimates of the tested model are shown in Table 3.

**Table 3** Latent Growth Curve Constrained Model standardized parameter estimates for Victimization and Emotional Symptoms

Factor variances	Est.	S.E.	P-value
Intercept (V)	<b>1.097</b>	0.155	<b>p &lt; .001</b>
Slope mean (V)	<b>-0.298</b>	0.108	<b>.006</b>
Intercept (ES)	<b>1.630</b>	0.170	<b>p &lt; .001</b>
Slope mean (ES)	<b>0.546</b>	0.191	<b>0.004</b>
Correlation between Intercept (V) and slope (V)	<b>-0.616</b>	0.142	<b>p &lt; .001</b>
Correlation between Intercept (ES) and slope (ES)	-0.097	0.318	0.760
Correlation between Intercept (V) and Intercept (ES)	<b>0.413</b>	0.088	<b>p &lt; .001</b>
Correlation between Slope (ES) and Slope (V)	<b>0.325</b>	0.162	<b>0.045</b>
Correlation between Slope (ES) and Intercept (V)	<b>-0.300</b>	0.128	<b>0.019</b>
Correlation between Intercept (ES) and Slope (V)	-0.129	0.082	0.117

Note. Significant (i.e.,  $p < .05$ ) estimates are in bold  
 ES=Emotional Symptoms; V = Victimization

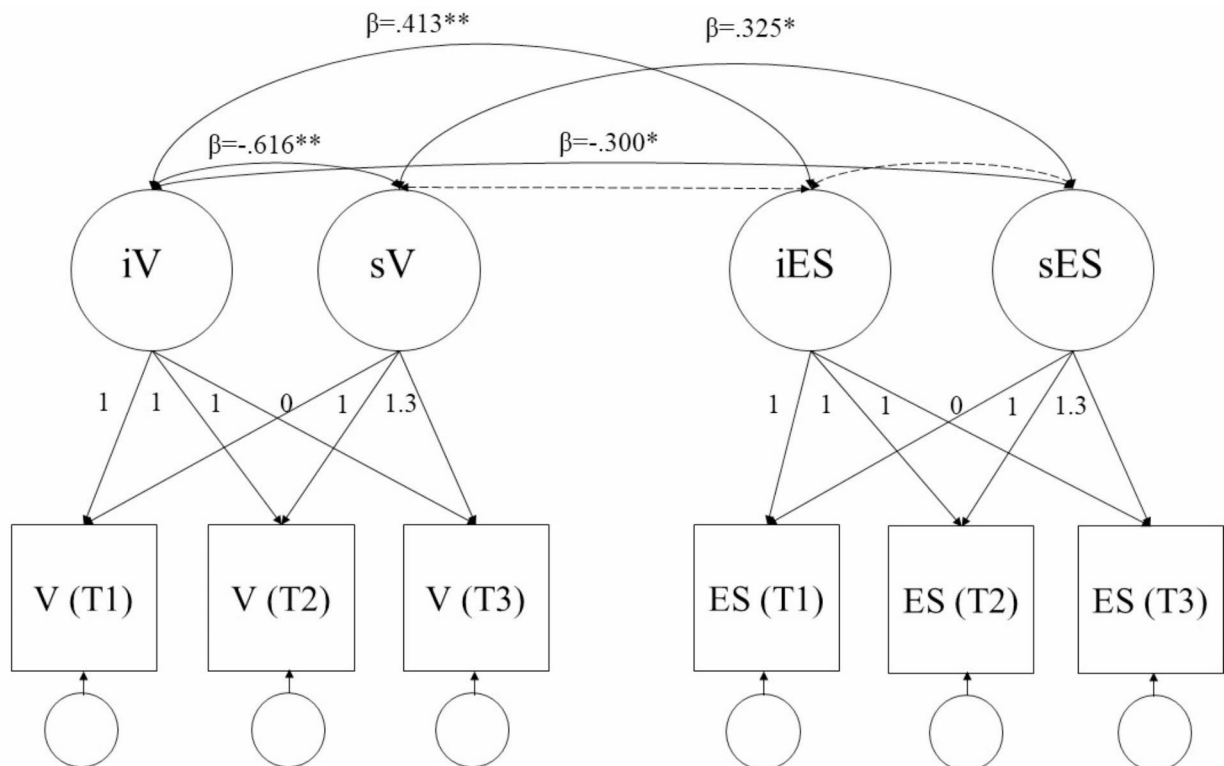
Firstly, the LGCA results showed that the intercept of victimization was significant and positive ( $\beta = 1.09$ ;  $p < .001$ ). While the estimated slope mean of victimization was significant and negative ( $\beta = -0.298$ ;  $p = .006$ ), suggesting a significant decrease in victimization over time. Additionally, also the correlation between the intercept and the slope was

found to be significant ( $\beta = -0.616$ ;  $p < .001$ ), showing that higher initial levels are related to steeper decline over time, and lower initial levels are related to slower declines or less steep negative slope.

Both the intercept and the slope of emotional symptoms were significant and positive ( $\beta = 1.63$ ;  $p < .001$ ;  $\beta = 0.546$ ;  $p = .004$ , respectively), highlighting a significant increase in emotional symptoms over time. Since there were no differences between the two groups considered in the present study (i.e., natives and students with an immigrant background) the increase in emotional symptoms affected all students considered. The correlation between intercept and slope was non-significant.

Additionally, we found a significant negative correlation between the intercept of victimization and the slope of emotional symptoms ( $\beta = -0.300$ ;  $p = .019$ ). This result suggests that higher initial levels of victimization are related to a slower increase of emotional symptoms over time, and lower initial levels of victimization are related to the steeper increase of emotional symptoms over time. Therefore, even if all students increased their emotional symptoms over time, the greater growth occurred in those who were less or not victimized before the pandemic.

We also found significant correlations both between the intercepts of victimization and emotional symptoms ( $\beta = 0.413$ ;  $p < .001$ ) and between their slopes ( $\beta = 0.325$ ;



\* $p < .05$ ; \*\* $p < .001$ ; ES=Emotional Symptoms; V=Victimization; T1=Time 1; T2=Time 2; T3=Time 3

**Fig. 1** Latent Growth Curve Constrained Model parameter estimates for Victimization and Emotional Symptoms

$p = .045$ ). This means that the higher the initial level of victimization the students experienced, the higher were their emotional symptoms at the time 1; the change in students' victimization over time of students' victimization was correlated with the change in their emotional symptoms.

Finally, the correlation between the intercept of emotional symptoms and the slope of victimization was not significant.

## Discussion

The aim of the present study was to investigate whether belonging to a minority ethnic group might be an additional risk factor compared to the majority group, by analyzing trends over time in both bullying victimization and emotional symptoms from the pre-pandemic period to 15-months after the outbreak.

Unexpectedly, the results of the present study suggested an invariant structure of the test model between the two groups considered (i.e., Italians and students with an immigrant background), highlighting no differences between them. Therefore, the COVID-19 pandemic had a pervasive effect on students, regardless of their background. This finding is not consistent with the literature, which suggests a greater impact of the event on adolescents with pre-existing vulnerabilities (e.g., Branje & Morris, 2021). However, the magnitude of this event places it in the context of the major emergencies of our time. Thus, this result is in line with other research investigating the pervasive effect of historical events (e.g., economic crisis; Motti-Stefanidi & Asendorf, 2017) or natural disasters on the population (Kar & Bastia, 2006), regardless of the individuals' background before the catastrophic event. Indeed, these are events that completely change people's lives, altering their routines and lifestyles.

The present study highlighted a decrease, with a small effect, in bullying victimization from the pre-pandemic up until 15 months later. Notably, the mean of the initial level of victimization suggested a low frequency of this behavior in the present sample. However, Italian national data on bullying prior to the pandemic also reported a low percentage of victims among adolescents (approximately 13.6%; Cavallo et al., 2018). Looking at the negative correlation between the intercept and the slope of victimization, it was found that students who were more victimized at time 1 (i.e., pre-pandemic), decreased more over time, suggesting a greater reduction in the systematic victimization. This is in line with previous studies (Mastorci et al., 2021; Vaillancourt et al., 2021) and it could be explained by the governmental measures adopted against the spread of the virus (De Souza & Levandoski, 2022). On the contrary, Forsberg and Thorvaldsen (2022) found in a Norwegian sample an increase in

bullying one year after the outbreak of the COVID-19 pandemic. However, different containment measures in Norway may have had different effects on youths and their health outcomes. Indeed, schools in Norway were completely closed during the first lockdown in 2020 but not in the following year. After that first period, they were always open, even during the subsequent waves of COVID-19. They used the restrictions to prevent the spread of the virus (Forsberg & Thorvaldsen, 2022) but schools were open for students. Instead, in Italy, high schools were repeatedly closed during the 2020–2021 school year, and when they opened, students were able to attend classes organized with 50% face-to-face and 50% of school time with a remote connection. Additionally, access to the school was allowed if all containment measures (e.g., spending recess at one's desk, security distancing from other people, reduction of number of people in the classroom) were in place. These factors had a significant impact on face-to-face social relationships and therefore on the likelihood of bullying behaviors. In this regard, teachers played an important role in enforcing safety rules. The ban from attending common spaces in the school structure due to covid regulations may have prevented contact and interactions between students. Indeed, some studies (Vaillancourt et al., 2010, 2021), identified the cafeteria, outside break spaces, and the hallways as places at risk for bullying. The ban on not attending these places during this time of emergency may be related to the decrease in bullying. In addition, teachers were responsible for monitoring compliance with the rules, and their supervision may have been an additional relevant factor in the decrease in bullying victimization.

Our results also showed an increase in emotional symptoms over time. This is consistent with the literature in showing the great impact of the pandemic, immediately after the first outbreak (Fioretti et al., 2020; Nocentini et al., 2021; Rossi et al., 2020) until a long time later (Santomauro et al., 2021). Indeed, even if during the second and the third waves of our data collection, students went back to 75% in classroom learning, we were still in a state of emergency with containment measures (e.g., wearing the mask was mandatory along with distancing from other people) and mandatory classroom quarantines in the event of even one positive case. Consequently, students went to school in a state of alert. Additionally, the class was a potential risk place for the spread of the virus, so many students continued to quarantine to avoid positive contacts. The fear of infecting family members at home and other similar factors (i.e., loss of work, low SES) may have been additional stressors. The pandemic may have had different effects on adolescents; those who experienced loneliness or depressive symptoms during the lockdown and those who showed better adjustment in regards to parent-child relationship

quality (Branje & Morris, 2021) or a reduction of daily stress and social pressure (Bruining et al., 2021). However, after spending half of the school year in blended learning, the students' back-to-school typology may have harmed both groups of adolescents. Alternating between distance learning and going to school, the anxiety of being infected by the virus, classroom quarantines, and the uncertainty of the situation day by day may have increased the emotional symptoms of those who experienced symptoms of depression and anxiety during the total lockdown, and these could have harmed those who had shown good adjustment, by disrupting their daily routine and increasing their stress. Furthermore, students included in the present study faced the COVID-19 pandemic during their adolescence. This is a period of physical, emotional and social transformation (Blakemore, 2012) where social relationships are crucial in order to develop an independent sense of identity (Larson et al., 1996). The peer context has direct effects on social development, including self-esteem and social adjustment (Berndt, 2002). Higher levels of social connectedness in adolescence are related to better well-being over time (Jose et al., 2012). The national lockdown and later, the containment measures reduced the possibilities of interacting with peers in several contexts (i.e., school, sport, neighborhood, other organized activities). So, the increasing emotional symptoms of the present sample could be also related to the lack of social interactions during adolescence. In addition, the correlation between the intercept and the slope of emotional symptoms was not significant: regardless of pre-existing conditions, everyone seemed to experience an increase in emotional symptoms, due to the extraordinary situation they were living (e.g., Santomauro et al., 2021).

Unexpectedly, with an effect size between the low and medium range, the correlation between the intercept of victimization and the slope of emotional symptoms was significant and negative, suggesting that the COVID-19 pandemic had a greater impact on emotional symptoms for those who were not victimized before the pandemic than for those who were victimized. On one hand, this could be because the possibility of an increase in emotional symptoms was greater for this subgroup. On the other hand, this finding, in line with Mlawer et al. (2022), contradicts our hypothesis but highlights the large impact of the pandemic on students' mental health. Specifically, it seems that the pandemic affected the phenomenon of bullying victimization, at least during the period examined in this study. Additionally, students who were not victims of bullying before the pandemic showed a greater increase in emotional symptoms. This suggests that the emergency affected not only students that were already at risk (i.e., they already had a high score on emotional symptoms), but also all others (i.e., students who started from a low score of emotional symptoms).

This finding is also consistent with Repo and colleagues (2022), who found higher levels of loneliness during the lockdown in both victimized and non-victimized students before the pandemic. The explanation may also be related to the numerous difficulties that the pandemic caused for to the population; many families were facing economic crisis (Codagnone et al., 2020), which may have been reflected in adolescents' fears and worries. Regarding the stressors associated with distance learning, some students may also have suffered from school burn out (Salmela-Aro et al., 2021). All in all, in the aftermath of the greatest global disaster in recent times, it seems that a tsunami (Jetten, 2020) has passed and completely engulfed everyone.

Furthermore, we found a positive correlation between victimization and emotional symptoms' intercepts. This means that prior to the COVID-19 pandemic, students who were victimized experienced higher level of emotional symptoms. This finding corroborates the studies in the literature about the short-term consequences of bullying which result in low levels of psychological well-being and social adjustment, and high levels of psychological distress (Rigby, 2003).

Finally, a positive correlation was found between the slopes of victimization and emotional symptoms, indicating that those adolescents who decrease more in victimization, increased more in emotional symptoms and vice versa. This result could potentially be viewed as a spurious relationship (Haig, 2003), in which the pandemic COVID-19 acts as a third influencing factor. In fact, no significant association was found between the intercept of emotional symptoms and the slope of victimization.

## Strengths, Limitations, and Future Research

The present study contributes to the literature in several ways. To the best of our knowledge, this is the first study to examine the longitudinal trajectories of bullying victimization and emotional symptoms in adolescents during the COVID-19 pandemic, considering their ethnic background as a possible risk factor. In particular, the scientific literature on the evolution of bullying behaviors after the outbreak of the virus is very limited, especially considering the Italian context, which was the first European country to be affected by the pandemic. Thus, the decrease in bullying victimization during the pandemic has contributed to highlight the role of structural factors and mechanisms related to it, also regarding bullying against students with an immigrant background on which literature is still limited. Finally, given the magnitude of the COVID-19 pandemic (Jetten, 2020; WHO, 2020), this study also contributes to the literature on the impact of historical events on people's lives.



On the other hand, the present study should be considered in light of some limitations that may affect the generalizability of the results. Firstly, the sample of students with an immigrant background is relatively small compared to their Italian peers who participated in the study. However, it is in line with the national data; that is, in the 2019/2020 school year, Italian schools enrolled a total of 8.484.000 students of which approximately 876.801 (10.3%) had non-Italian citizenship. Of these, 804.678 (23.3%) were high school students (Ministero dell'Istruzione, 2021). Secondly, the present study did not consider some moderating factors (i.e., ethnic identity; Kiang et al., 2006; group orientation; Iturbide et al., 2009) that could have highlighted differences in the trajectories of natives and students with an immigrant background during the COVID-19 pandemic. Besides, the model analyzed did not take into consideration the gender of the participants. Since previous studies in the literature have highlighted the variance in the analysis of internalizing symptoms and bullying behaviors among boys and girls (Jose & Ratcliffe, 2004; Popp et al., 2014), future research should further investigate gender differences. Third, the minority group in the present sample included both first- and second-generation of immigrants, but some research has shed light on several factors related to belonging to one generation versus another (e.g., Berry, 1997). Indeed, first-generation immigrant students had direct experience with at least two different cultures in two different countries, and they may find difficult, for example, to learn a language and know a culture that is different from their own. Conversely, second-generation immigrant students, who grew up in one country were only exposed to the culture of their home country. This could lead to different acculturation processes unfolding in the host country (Berry, 1997). Even in an emergency like the outbreak of the COVID-19 pandemic, being a first- or second-generation immigrant may result in different processes. For example, studies showed that first-generation immigrant students have lower language skills and fewer contact with native peers than second-generation immigrant students (Tonsing, 2014). During the COVID-19 pandemic, these factors may have affected access to services and information systems. In the present study, we have examined the variables analyzed for the two generations of immigrants only in the descriptive analyses (see Table S1-S2). Unfortunately, in-depth analysis of these subgroups was not possible due to the limited number of subjects with an immigration background. However, future research should consider both first and second-generation immigrant students and analyze possible differences between the two groups. Fourth, given the long-term nature of the COVID-19 pandemic, this study focused on three assessments over 15 months after the outbreak of the pandemic, when the spread of the virus was still a public emergency. It might

be interesting to analyze subsequent phases by investigating trajectories in the post-pandemic period. Again, with students not seeing each other due to the lockdown and restrictive measures imposed by the government, they could have bullied other students online. However, the literature on this topic is contradictory, as there are either studies that found an increase in cyberbullying among adolescents in different countries since the outbreak of the COVID-19 pandemic (Patchin & Hinduja, 2022; Shin & Choi, 2021) or research that has not emphasized an increase in the phenomenon (Repo et al., 2022). Future studies could further analyze the trajectories of cybervictimization along the trajectories of face-to-face victimization during the COVID-19 pandemic.

Finally, the results of the present study are closely related to the Italian context, and the restrictive measures taken by the government to slow the spread of the virus, may have influenced the specificity of the results gained. Thus, this study is context-specific, and the results cannot be generalized to other countries.

## Conclusion and Implications for Practice

This study provided an overview of the impact of the COVID-19 pandemic in the Italian context up to 15 months after the outbreak. The results of the present study showed a decrease in bullying victimization for all students, regardless of their immigrant background, in a historical period where face-to-face relationships were hampered by lockdowns or restrictions and social distancing. However, these results led us to ask what will happen when students are back to the so-called “normality”. The school community must face a new and difficult situation in which students return to the classroom together, after a long period of great stress and mainly without face-to-face interactions. Notably, even if we emphasize the pervasive effect of the COVID-19 pandemic on all students, regardless of their immigrant background, the return to a “normal” school context, as before the pandemic, could once again mean a risk of victimization for students with immigrant backgrounds. Therefore, this vulnerability would exacerbate the challenges experienced during the previous pandemic years. It is important to monitor the incidence of bullying in the years following the pandemic and to analyze in future research the impact of inclusive policies and the effectiveness of interventions to prevent bullying.

Furthermore, this study corroborates findings in the literature regarding the major psychological impact of the COVID-19 pandemic on adolescents, not only on those who were at risk before the outbreak (e.g., students with an immigrant background) but on all the others. Students coming back to the classroom after this challenging period

are stressed and affected by psychological problems and anxiety. In addition, they may also have difficulties learning in person and suffer from low engagement with the school. Therefore, the school community, teachers, and educators should be aware of the students' conditions after a period of high challenges such as the COVID-19 pandemic, to support and help them (e.g., by promoting socio-emotional skills; Salmela-Aro et al., 2021) and make efforts to increase resilience for times of crisis.

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**Data Availability** The data that support the findings of this study are available from the corresponding author upon reasonable request.

## Declarations

**Competing interests** The authors have no competing interests to declare that are relevant to the content of this article.

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