

Article

Social and Individual Factors Predicting Students' Resilience: A Multigroup Structural Equation Model

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Abstract: We investigated students' resilience predictors during the COVID-19 pandemic. With a two-wave longitudinal sample ($n = 713$) of students from Greece, Germany, and Switzerland (eighth grade in autumn 2020 and ninth grade in autumn 2021), we determined which social and individual predictors longitudinally predicted resilience before and during the COVID-19 pandemic. We identified the high likelihood of individual factors (self-esteem, self-efficacy) fostering resilience by social factors (teacher, parents, and social resources). Multigroup structural equation modeling analyses demonstrated that the adolescent population was best typified by two growth trajectory classes: a low-anxiety class characterized by a low initial level of depression/anxiety and a high-anxiety class characterized by a higher initial level of depression/anxiety. The model was gender-, migration-, and country-invariant. Overall, the model showed that teachers overlook adolescents with high anxiety or depression levels, but parents support them more. These findings highlight the necessity to pay attention to students' depression or anxiety symptoms and to satisfy their basic psychological needs, as vital prerequisites for their meaningful, coherent engagement in modern societies despite the odds.

Keywords: anxiety; depression; COVID-19; resilience; self-esteem; self-efficacy; self-determination; students; teacher support; family support



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1. Introduction

In the field of psychology, resilience researchers have conducted a large amount of research and generated a substantial body of knowledge [1,2]. Resilience can be defined as “the capacity of a dynamic system to adapt successfully through multisystem processes to challenges that threaten the function, survival, or development of the system” [3] (p. 524). The systems Masten describes at the structural, societal, and individual levels influence an individual's capacity to adjust when confronted with challenges [3]. There are three main components of the concept of resilience, namely, adversities, protective factors, and positive adaptation [4–6]. Furthermore, resilience is a highly dynamic process characterized by various protective factors that refer either to intrapersonal factors such as individual competences and skills or to interpersonal factors such as relationships with family and school [2,7]. Therefore, fostering protective factors is crucial to promoting mental health [8].

In the present article, adopting a broader resilience definition, we consider that psychological need satisfaction as formulated by self-determination theory (SDT) [9,10] can be called a positive outcome if developmental adjustment is successful in adolescence when confronted with threatening conditions. The postulated connection between resilience processes and SDT is identified where challenging conditions for developing higher levels

of SDT apply. Developmental patterns supporting the odds of the system (not just the individual) to adapt successfully, especially under pressure, are at the core of this study. SDT, as a general theory on motivation in social contexts, has been applied comprehensively in educational contexts, assuming that if students satisfy their inherent psychological needs (autonomy, competence, and relatedness), they can foster deep-level learning, curiosity, and well-being and promote resilience and adaptive coping in response to change [11,12]. Autonomy is students' perceived agency over their lived experiences, competence refers to students' perceptions of their knowledge and skills regarding an assigned or chosen task, and relatedness concerns students' sense of connectedness with peers and teachers. The satisfaction of the above three psychological needs represents fulfillment of students' basic psychological needs, while their frustration conduces to ill being [13]. Concerning resilience, the authors theorize that when these needs are satisfied, they foster resilience and personal development. Conversely, frustrated needs can contribute to the development of psychopathology [10,14].

1.1. Resilience Outcomes at School

Our study is intended to promote understanding of resilience development at school within certain cross-cutting conditions of respective students. We believe that successful resilience outcomes are dependent on service ecologies and result from the interaction between what is provided to at-risk children, children's access to health resources on their own terms, and how well the resources provided address their unique problems and psychopathologies. According to Ungar [15], interventions that neglect to consider young people's perspectives as agentic consumers of a service lead to "professional myopia". Therefore, our focus on resilience in high school moves beyond individual students' academic problems and considers the service ecologies that influence successful resilience pathways.

Accordingly, researchers have examined basic psychological need satisfaction in relation to well-being in the school context, e.g., [16,17]. Notably, satisfaction of basic psychological needs represents a universal requirement for well-being, independently of demographic characteristics (e.g., age, nationality, gender) [18], personality traits, e.g., [19], or cultural background, e.g., [20], although specific situational features may differentiate the perceived meaning and effectiveness of need-supportive and need-thwarting practices [14]. Given that adolescents' basic psychological needs need to be supported by family and in school [21], need satisfaction could be a valuable opportunity for parents to set reasonable limits and afford optimal challenges for their children [22], as well as for educators to improve teaching practices for their students [16].

1.2. Impact of the COVID-19 Pandemic on Resilience Outcomes

Conducting the study during the COVID-19 pandemic, we examined how students successfully adapt and show more self-determination than we would expect given the circumstances. According to UNESCO [23], to control the spread of the COVID-19 pandemic, schools and higher education institutions were closed in 178 countries by the end of April 2020, affecting almost 1.5 billion learners worldwide. As a consequence, students have faced an uncertain situation not only with respect to their academic path, but also with their lives as a whole, affecting their mental health (e.g., by causing stress and anxiety) [24].

Findings from the impact of the COVID-19 pandemic on adolescent students' mental health are inconsistent. Several reviews, e.g., [25–27], examining the longitudinal changes in adolescent depression and anxiety symptoms before and during the COVID-19 pandemic indicated that mental health problems increased during the pandemic. To explore the pandemic's effects on Greek school communities, Lampropoulou et al. [28], aiming to identify students' mental health profiles, revealed that more than half of the high-school students who participated in their study struggled to some degree during the second wave of the pandemic. Similarly, a sample of 8079 adolescents (aged 12–18 years) in China reported an increased prevalence of anxiety and depression levels associated with the pandemic [29]. Furthermore, an online survey [30] conducted among 1586 families

in Germany revealed that children and adolescents faced more mental health problems (17.8% vs. 9.9%) and higher anxiety levels (24.1% vs. 14.9%) than before the pandemic, while children and adolescents with a low socioeconomic status, migration backgrounds, and a limited living space were affected significantly more. Levels of depressive and anxiety symptoms were also higher in adolescents with migration backgrounds in a study conducted online in Austria after a semester of remote schooling and almost a year of social distancing [31].

On the contrary, two-wave research [32] intended to explore changes in mental health outcomes in a sample of Swiss adolescents showed no noticeable effects of the pandemic on mental health in the later stages of the first COVID-19 wave. In addition, in a German longitudinal survey [33] conducted in two waves during the pandemic (May/June 2020 and December 2020/January 2021) with a sample of 1923 children, adolescents, and their parents, although anxiety and depression increased over time, the change in global mental health problems from Wave 1 to Wave 2 was not significant, and some changes were negligible. Furthermore, one-third of 1146 children and adolescents (aged 12–17 years) in Switzerland met the criteria for one mental health problem (anxiety, depression, ADHD- or ODD-related symptoms) during the first lockdown, although these levels (except for depression) remained similar to those before the pandemic, with girls reporting more mental health issues than boys during the lockdown [34]. Notably, in a study conducted after the third COVID-19 wave in Germany [35], anxiety in school students was lower in mid-2021 than in the first pandemic year, but still double compared to pre-pandemic data, while anxiety symptoms during the second pandemic year were especially high in females and in high-school students. In their meta-analysis, Raccanello et al. [36] focused on the bright side, mentioning that about 80% of the participants did not show mental health disorders and/or symptoms about one and a half years after the pandemic's onset. In a study in Norway, Elgersma et al. [37] showed that the pandemic did not lead to a deterioration in the mental health of immigrant adolescents compared to the mental health of non-immigrants.

One of the bigger shortcomings of research on whether COVID-19 affected younger adolescents' mental health which can be called a threatening condition for adolescents' development is the fact that longitudinal studies connecting data before COVID-19, the onset of COVID-19 in spring 2020, and later stages are rare. This holds especially true when it comes to studies related to early adolescence in high school.

The field of public health has made a global commitment to address the mental health crisis affecting young people, with a growing focus on understanding and addressing their mental health struggles [38]. Racine et al. [39] conducted a comprehensive analysis of the prevalence of clinically significant depression and anxiety symptoms among young people worldwide during the COVID-19 pandemic. They collected data from 29 diverse samples of 80,879 children and adolescents, finding a collective prevalence of 25.2% for heightened depression symptoms and 20.5% for anxiety symptoms. These figures contrast pre-pandemic estimates of 12.9% for depression and 11.6% for anxiety. These findings suggest that one in four young people worldwide are experiencing clinically elevated depression symptoms, while one in five are struggling with clinically elevated anxiety symptoms. These findings also highlight that the incidence of mental health issues in young people during the pandemic has doubled. Interestingly, the prevalence of anxiety did not vary significantly across age groups, which suggests that factors such as parental and family resilience-oriented support may play a more significant role than the age of the child or adolescent, especially during the COVID-19 pandemic [3].

Making the discussion even more complicated, from a resilience point of view, not only must higher levels of depression and anxiety as aspects of developmental pressure during COVID-19 be identified, but the connection between fostering resilience processes for adolescents [40] with various levels of depression/anxiety and their positive development in terms of higher levels of self-determination should also be identified. Resilience patterns supporting the system to adapt successfully must be validated and considered.

Considering that Bronfenbrenner's bioecological theory [41] guides the search for etiological factors relevant to the onset of anxiety and depression, and that resilience occurs even in high-risk situations, more emphasis must be placed on the role that social and physical contexts play in positive outcomes when individuals experience high levels of stress [42]. Given that social support is considered a factor promoting mental health when people face stressful life events [43] and that family and teachers are included in the main sources of social influence that make up the microsystem [41,44], we thought it important to examine parental and teacher support in reducing students' anxiety and depression symptoms.

1.3. Social Support as Key Factor for Mental Health

Although studies suggest that the importance of parental support declines in adolescence and is replaced by peer support, meta-analyses show that this is not the case. Rather, the importance of family support and the social resources provided by family and friends remain high for adolescents [45]. Stice et al. [46] found that deficits in perceived parental support, but not peer support, predicted future increases in depressive symptoms and the emergence of major depression. The authors suggested that parental support may be more consistent and of higher quality based on parents' maturity and life experience. On the other hand, initial depressive symptoms and major depression were associated with decreased perceived peer support, suggesting support erosion that may be developmentally and population-specific. The study found that parents' age, ethnicity, and education were not significant factors in relation to parental support. In contrast, Garipey et al. [47] found that maternal support was especially important for girls, but not as important for boys, whereas paternal support was associated with lower depression in girls and boys. Still, parental support was the most consistently protective form of support for depression in young people in comparison to friends, teachers, and peers. When considering which parents support children with depression and anxiety problems, it is important to focus on specific parenting behaviors. Research has consistently shown that parents who are low in warmth and prone to overcontrol are associated with the development of internalizing, bidirectional, and transactional effects in children [48]. Specifically, high parental overcontrol is associated with anxiety and depression in children, whereas low parental warmth predicts depressive symptoms [49]. According to Fox et al. [48], lack of warmth can lead to negative self-perception, low self-esteem, and an increased risk of depression. On the other hand, parental warmth can enhance a child's self-esteem and reduce negative reactions, possibly preventing anxiety; at the same time, excessive comforting and soothing by very warm parents can impair a child's coping skills and increase the risk of anxiety. Taken together, these findings highlight the importance of parental warmth and avoidance of overcontrol in helping children with depression and anxiety problems.

Teacher academic support is an important factor in student well-being, although its precise placement in relation to support from parents and peers may vary in the literature. However, there is no doubt about its importance, as demonstrated by a meta-analysis of 342 studies [50]. Teacher academic support is consistently recognized as one of the most influential forms of support in adolescents' lives [47]. In terms of the supportive content students need in their relationships with teachers, we are informed by research based on Honneth's [51] recognition theory. Student well-being in school is positively associated with experiences of teacher recognition in the forms of caring, respect, and appreciation [52–54]. Of particular relevance is Graham et al.'s [53] finding that teachers associate student well-being with school practices that align with the aforementioned forms of recognition.

In addition to direct support, teachers also play a crucial role in facilitating peer support among students. By explicitly demonstrating support and encouraging students to support each other, especially in shared activities, teachers help to empower students through simple everyday acts of social support [50]. In relation to depression, various studies have demonstrated the impact of teacher support on the development of depressive symptoms [50,55,56]. In particular, a longitudinal study conducted over 5 years found that teacher support in grades 9 and 10 was significantly associated with levels of depressive

symptoms in the following year. However, the significance of the relationship between teacher support in grade 8 and depressive symptoms in the following year was only marginally significant and was no longer significant in grade 11. These findings suggest that teacher support is important at different points [57]. In a person-centered study, the results suggested that receiving moderate support from parents, teachers, and classmates was not sufficient to buffer against symptoms of depression. Instead, moderate (not high) levels of support were associated with higher reports of depressive symptoms in female adolescents [58], demonstrating that support for adolescents with depressive symptoms needs to be high to act as a buffer. Considering anxiety, the few studies covering anxiety and social support did not detect differences [58,59]. Hoferichter and Raufelder [60] found in their longitudinal study that specific forms of teacher support, such as social–emotional support, academic–learning support, rewards, and recognition, are associated with lower anxiety and lower levels of burnout for students. There is a need for further research to look at anxiety and its association with teacher support.

From the social–ecological perspective [42], students’ resilience draws not only on supportive systemic initiatives but also on individual resources [61,62]. For instance, self-esteem, as the understanding of an individual’s capacity and self-value [63], positively predicted students’ resilience [64] and mediated the relationship between social support and students’ well-being, e.g., [65–67]. Additionally, general self-efficacy, as individuals’ beliefs about their ability to perform a specific behavior successfully [68], positively predicted students’ resilience [69–71] and mediated the relationship between social support and students’ resilience [72].

Taken together, attempting to examine the effect of social and individual predictors on students’ satisfaction for autonomy, competence, and relatedness, we propose that social support from family and teachers, in accordance with anxiety/depression levels, has direct and indirect effects (through individual factors such as students’ self-esteem and self-efficacy) on psychological need satisfaction and, therefore, resilience. This bidirectional perspective is important not only from a theoretical point of view but also from an applied perspective, because psychological needs are potential targets for interventions aimed at strengthening individuals’ resilience in stressful conditions [73]. The COVID-19 pandemic offered a unique opportunity to address this issue and to learn the “hard way” for the post-COVID era.

Specifically, our study was intended to further the understanding of the progression of social and individual factors in predicting students’ resilience and how they relate to anxiety/depression levels during the pandemic. This dynamic progression among the variables could possibly act differently in different cultural contexts. With the aim of testing the role of anxiety/depression levels on how social and individual factors predict students’ resilience in various cultural contexts, the study was conducted in three countries: Greece, Germany, and Switzerland. Regarding these three countries, there are some existing controversial findings from longitudinal studies comparing anxiety/depression levels before and during the COVID-19 pandemic. Specifically, in Greece, a two-wave longitudinal study (T1: November 2020; T2: November 2021) was conducted to assess the pandemic’s effects on university students’ stress, anxiety, and depression, revealing a severe increase in the prevalence of stress (T1: 37.4%; T2: 47.3%), anxiety (T1: 27.2%; T2: 41.1%), and depression (T1: 47%; T2: 55%) [74]. On the contrary, Voltmer et al. [75], examining two points—the year before the COVID-19 pandemic (2019) and the year of the COVID-19 pandemic (2020)—in a study with German university students, did not find significant differences in perceived stress and self-reported symptoms of depression and only a minor elevation in anxiety between 2019 and 2020. Notably, in a longitudinal prospective study [76] during the first lockdown of the COVID-19 pandemic and one year after the lockdown in Switzerland, within a large, national sample of 553 adolescents (age range 12–18 years in 2021), participants reported less COVID-19-related stress one year after the lockdown, and mental health statuses remained stable.

Following our theoretical outline, we considered the effects of the COVID-19 pandemic on adolescent students' self-determination development to understand resilience processes—not only focused on COVID-19, but also shedding light on the post-COVID era. The question addressed, however, is a general problem of non-interventional longitudinal research; the independent variable is time, and the effects of changes over time caused by a pandemic, for example, can usually only be determined ex post in this research paradigm because they cannot be “controlled” in terms of an intervention design. Moreover, an integrated understanding of how socioecological and individual factors may collectively influence levels of anxiety/depression has important implications for identifying, preventing, and treating students' anxiety and depression.

1.4. Current Study

Following Masten [1], resilience outcomes can be assessed in two ways: with a specific resilience scale or by exploring outcomes (in our case, SDT levels) in the context of risks. The worldwide COVID-19 crisis, internationally identified as threatening students' resilience, e.g., [77–79], could be perceived as a context of risk, a need-thwarting situation, threatening the basic psychological needs of autonomy, competence, and relatedness [80,81]. Additionally, as the term “mental health” is very broad, the aspect of mental health on which we are focusing our attention is relevant [33]. Therefore, we focus on levels of depression and anxiety in early adolescence.

Hypotheses

We formulated the following nine hypotheses:

Hypothesis 1 (H1). *Higher levels of the social predictor “family” in Wave 1 lead to higher and more positive levels of individual predictors in Wave 2 in accordance with depression/anxiety levels. These levels will be higher for students with higher levels of depression/anxiety than for those with low levels of depression/anxiety.*

Hypothesis 2 (H2). *Higher levels of the social predictor “teacher” in Wave 1 lead to higher and more positive levels of individual predictors in Wave 2 in accordance with depression/anxiety levels. This holds especially true for students with low levels of depression/anxiety.*

Hypothesis 3 (H3). *Higher levels of the individual predictors in Wave 1 lead to higher levels of self-determination in Wave 2 in accordance with depression/anxiety levels.*

Hypothesis 4 (H4). *Higher levels of self-determination in Wave 1 lead to higher levels of self-determination in Wave 2 in accordance with depression/anxiety levels.*

Hypotheses 5 (H5). *Higher levels of the social predictor “family” in Wave 1 have an indirect effect through individual predictors on self-determination in Wave 2, with higher levels of the social predictor “family” leading to higher levels of self-determination in accordance with depression/anxiety levels.*

Hypotheses 6 (H6). *Higher levels of the social predictor “teacher” in Wave 1 have an indirect effect through individual predictors on self-determination in Wave 2, with higher levels of teacher support leading to higher levels of self-determination in accordance with depression/anxiety levels.*

Hypothesis 7 (H7). *As the measured concepts are suggested to be general and therefore fit all adolescents, the applied model will be invariant by country and therefore apply to all three countries studied.*

Hypothesis 8 (H8). *As the measured concepts are suggested to be general and therefore fit all adolescents, the applied model will be invariant by gender.*

Hypothesis 9 (H9). As the measured concepts are suggested to be general and therefore fit all adolescents, the applied model will be invariant by migration background.

We established a conceptual measurement model based on these nine hypotheses (see Figure 1).

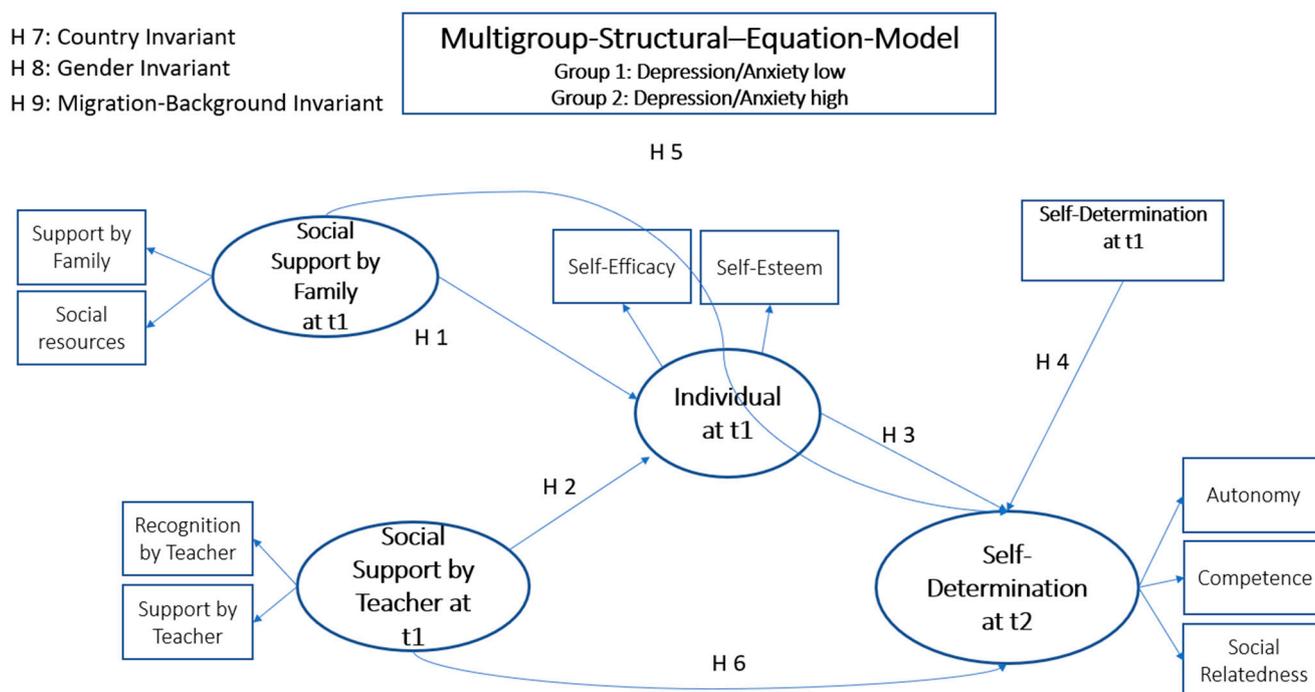


Figure 1. The conceptual measurement model. Note: this figure demonstrates the conceptual measurement model based on the nine hypotheses.

2. Materials and Methods

2.1. Participants and Procedure

Consent forms were secured from parents and students, with no incentives provided. The research team delivered a brief verbal introduction to the survey before the students completed an anonymous online questionnaire, which took around 35 to 60 min. Prior to sampling, local ethical committees were approached in all countries, with the University of Zurich’s Ethics Committee granting approval for the project given its international scope. Recruitment efforts in Germany were focused on 14 schools in the Baden-Württemberg area, while contact was made with schools in Athens, Larisa, and Crete in Greece, resulting in the recruitment of 14 schools and 48 classes. Additionally, 20 schools and 32 classes across the Aargau, Basel-Stadt, and Solothurn cantons in Switzerland were recruited.

We collected the representative random two-wave longitudinal sample data of seventh-grade students ($n = 850$; Germany_n0 = 200, Greece_n0 = 317, Switzerland_n0 = 333) in autumn 2019 (Wave 0), eighth-grade students ($n = 732$; Germany_n1 = 167, Greece_n1 = 250, Switzerland_n1 = 315) in autumn 2020 (Wave 1), and ninth-grade high school students ($n = 636$; Germany_n2 = 123, Greece_n2 = 256, Switzerland_n2 = 257) in autumn 2021 (Wave 2). Some students participated in all three waves ($n = 540$) and some in Waves 1 and 2 ($n = 567$). We collected data from Wave 0 in autumn 2020, during the first COVID-19-related school shutdown, and Wave 1 in autumn 2021, still during COVID-19 but with no school shutdown. We faced no such restrictions with Wave 2 in autumn 2021.

Wave 0: The German sample (see Table 1) comprised 47.5% female students (M age = 12.67 years), and 33.0% had no migration background. The Greek sample comprised 51.7% female students (M age = 12.28 years), and 54.6% had no migration

background. The Swiss sample comprised 45.9% female students (M age = 12.65 years), and 34.8% had no migration background.

Table 1. Demographic data.

Wave	Sample	Gender (Female %)	Mean Age (M_age) at the Time of the Respective Wave	Age SD	No Migration Background (%)
Wave 0	German	47.5	12.67	0.70	33.0
	Greek	51.7	12.28	0.82	54.6
	Swiss	45.9	12.65	0.68	34.8
Wave 1	German	48.5	13.47	0.66	28.7
	Greek	53.1	13.12	1.00	59.2
	Swiss	46.0	13.60	0.67	32.4
Wave 2	German	47.4	14.48	0.73	30.9
	Greek	51.0	14.06	0.89	57.8
	Swiss	45.5	14.60	0.72	32.3

Note: This table presents demographic data for German, Greek, and Swiss samples across all three waves.

Wave 1: The German sample (see Table 1) comprised 48.5% female students (M age = 13.47 years), and 28.7% had no migration background. The Greek sample comprised 53.1% female students (M age = 13.12 years), and 59.2% had no migration background. The Swiss sample comprised 46.0% female students (M age = 13.60 years), and 32.4% had no migration background.

Wave 2: The German sample (see Table 1) comprised 47.4% female students (M age = 14.48 years), and 30.9% had no migration background. The Greek sample comprised 51% female students (M age = 14.06 years), and 57.8% had no migration background. The Swiss sample comprised 45.5% female students (M age = 14.60 years), and 32.3% had no migration background.

In terms of attrition between Wave 1 ($n = 636$) and Wave 2 ($n = 567$), we found no significant differences concerning the tested sociodemographic variables between participants (gender: $t(567) = -1.509$, $p > 0.05$; migration background: $t(567) = 0.468$, $p > 0.05$). Therefore, we considered the two samples comparable.

For data analysis, students were allocated to high-anxiety/depression and low-anxiety/depression groups according to their Hopkins Symptom Checklist (HSCL) [82] scores. The HSCL-25 score is the sum of items divided by the number of items answered. An HSCL-25 mean score of 1.75 was used as a screening cutoff point and as a possible psychiatric case [83]. A mean score of 1.75 has also been used as a cutoff point in other studies [84], and it was therefore used in our analyses. We applied this cutoff score to differentiate between students with high and low levels of anxiety/depression. Using this criterion, 47.4% ($n = 342$) of the participants were allocated to the high-anxiety/depression group and 52.6% ($n = 375$) to the low-anxiety/depression group.

2.2. Measures

2.2.1. Symptoms of Anxiety and Depression

The HSCL [82] was used to evaluate symptoms of anxiety and depression, with 24 items such as “I feel fear” and “I have thoughts of ending my life”. The original 25-item scale was reduced by one item (loss of sexual interest or pleasure) due to the participants’ young age range (approximately 12–14 years old). Participants rated the items on a four-point Likert scale, from 1 (not at all) to 4 (extremely), with high internal consistency (Wave 1_overall: $\alpha = 0.95$; Wave 1_Swiss: $\alpha = 0.95$; Wave 1_Germ: $\alpha = 0.95$; Wave 1_Greek: $\alpha = 0.96$) (Wave 2_overall: $\alpha = 0.96$; Wave 2_Swiss: $\alpha = 0.95$; Wave 2_Germ: $\alpha = 0.96$; Wave 2_Greek: $\alpha = 0.96$).

2.2.2. The Four Social Indicators

Two Teacher Indicators

Recognition by teacher. Following Honneth's [51] recognition theory regarding teachers' recognition of students, we measured three subscales, empathy, solidarity, and law (Wave 1_overall: $\alpha = 0.91$; Wave 1_Swiss: $\alpha = 0.92$; Wave 1_Germ: $\alpha = 0.91$; Wave 1_Greek: $\alpha = 0.90$), by applying a revised nine-item version of Böhm-Kasper et al.'s [85] scale on recognition relations between teachers and students, using a four-point Likert scale ranging from 1 (do not agree at all) to 4 (strongly agree).

Academic support from teacher. We measured academic support from teachers using a modified scale by Hertel et al. [86] on the degree of academic support provided and positive teacher–student relationships. We measured the five items (Wave 1_overall: $\alpha = 0.88$; Wave 1_Swiss: $\alpha = 0.88$; Wave 1_Germ: $\alpha = 0.88$; Wave 1_Greek: $\alpha = 0.87$) on a four-point Likert scale ranging from 1 (do not agree at all) to 4 (strongly agree, e.g., "When I need additional support, I receive it from my teachers").

Two Family Support Indicators

Support from family. The Support from Family subscale of the Resilience Scale for Adolescents [87] consists of five items focused on family support and family cohesion for adolescents (e.g., "In my family, we support each other"). The participants rated the items on a five-point Likert scale (Wave 1_overall: $\alpha = 0.88$; Wave 1_Swiss: $\alpha = 0.90$; Wave 1_Germ: $\alpha = 0.89$; Wave 1_Greek: $\alpha = 0.86$) ranging from 1 (totally disagree) to 5 (totally agree).

Social resources. The Social Resources subscale of the Resilience Scale for Adolescents [87] consists of five items (Wave 1_overall: $\alpha = 0.85$; Wave 1_Swiss: $\alpha = 0.86$; Wave 1_Germ: $\alpha = 0.88$; Wave 1_Greek: $\alpha = 0.81$) focused on social resources such as support from family and friends (e.g., "I always have someone that can help me when I need it"). The participants rated the items on a five-point Likert scale ranging from 1 (totally disagree) to 5 (totally agree).

2.2.3. Two Individual Indicators

Self-esteem. The Rosenberg Self-Esteem Scale [88] assesses an individual's global worthiness on a 10-item scale, with higher scores indicating higher self-esteem (Wave 1_overall: $\alpha = 0.84$; Wave 1_Swiss: $\alpha = 0.85$; Wave 1_Germ: $\alpha = 0.86$; Wave 1_Greek: $\alpha = 0.81$). The participants rated the items on a four-point Likert scale ranging from 1 (not true at all) to 4 (completely true, e.g., "I wish I could respect myself more").

Self-efficacy. The General Self-Efficacy Scale is a psychometric scale by Schwarzer and Jerusalem [89] developed to assess optimistic self-belief regarding coping with various challenging demands in life (e.g., "I am confident that I could deal efficiently with unexpected events"). The 10-item scale (Wave 1_overall: $\alpha = 0.91$; Wave 1_Swiss: $\alpha = 0.89$; Wave 1_Germ: $\alpha = 0.92$; Wave 1_Greek: $\alpha = 0.92$) is measured on a four-point Likert scale ranging from 1 (not true) to 4 (completely true).

2.2.4. The Dependent Variable

Self-determination. Following Deci and Ryan's [90] SDT on humans' basic psychological needs, we measured the three subscales (autonomy, competence, and relatedness) on short scales with three items each (e.g., "I was free to do things in my own way"). The 18-item scale (Wave 1_overall: $\alpha = 0.77$; Wave 1_Swiss: $\alpha = 0.79$; Wave 1_Germ: $\alpha = 0.76$; Wave 1_Greek: $\alpha = 0.75$) (Wave 2_overall: $\alpha = 0.68$; Wave 2_Swiss: $\alpha = 0.74$; Wave 2_Germ: $\alpha = 0.67$; Wave 2_Greek: $\alpha = 0.63$) was measured on a four-point Likert scale ranging from 1 (not true at all) to 4 (completely true).

2.2.5. Sociodemographic Indicators

Country. We assessed the students' study participation with the three response options (1 = Switzerland, 2 = Germany, and 3 = Greece).

Gender. We assessed the students' genders with three response options (0 = boy, 1 = girl, and 3 = other).

Migration background. Not having a migration background meant the student and both of their parents were born in the country where the study took place, and all three possessed only a German, Greek, or Swiss passport. Having a migrant background was operationalized such that one or more of the aforementioned conditions did not apply.

2.3. Analytic Strategy

This study's aim was threefold. Firstly, we aimed to test the conceptualization of introduced resilience processes by using social and individual support aspects in accordance with depression/anxiety levels. Secondly, we explored whether the adolescents suffered from elevated depression and anxiety scores and if these scores differed over time. Thirdly, we aimed to identify how these support aspects affected self-determination over time to help aid prevention and intervention programs.

Therefore, we conducted this study's statistical analysis in two steps: First, we investigated intercorrelations between the variables, and we presented descriptive analyses as means and standard deviation for the ten applied measures. Second, using structural equation modeling (SEM), we tested for longitudinal effects on the applied measures. For the sample description analyses, we used IBM SPSS Statistics (Version 25). For all conducted SEM analyses, we used Mplus (Version 8.9).

3. Results

3.1. Analytic Step 1: Intercorrelations and Descriptive Statistics of the Applied Measures

First, we tested the intercorrelations of all variables (see Table 2) and ensured that no multicollinearity problems existed in our analyses.

Table 2. Correlations between measures.

	1	2	3	4	5	6	7	8	9	10
Hopkins Symptoms_wave1	1									
Hopkins Symptoms_wave2	0.59 ***	1								
Teacher Academic Support_wave1	−0.18 ***	−0.11 **	1							
Recognition by teacher_wave1	−0.24 ***	−0.10 *	0.65 ***	1						
Social Resources_wave1	−0.28 ***	−0.19 ***	0.29 ***	0.30 ***	1					
Family Support_wave1	−0.41 ***	−0.23 ***	0.36 ***	0.35 ***	0.59 ***	1				
Self-Esteem_wave1	−0.66 ***	−0.42 ***	0.33 ***	0.31 ***	0.38 ***	0.39 ***	1			
Self-Efficacy_wave1	−0.32 ***	−0.29 ***	0.29 ***	0.27 ***	0.34 ***	0.36 ***	0.46 ***	1		
SDT_wave1	−0.55 ***	−0.36 ***	0.33 ***	0.38 ***	0.35 ***	0.38 ***	0.60 ***	0.37 ***	1	
SDT_wave2	−0.41 ***	−0.52 ***	0.24 ***	0.29 ***	0.31 ***	0.34 ***	0.45 ***	0.28 ***	0.55 ***	1

Note. *** = $p < 0.001$; ** = $p < 0.01$; * = $p < 0.05$.

When comparing the mean levels of depression/anxiety between the waves, we identified very interesting results (see Table 3). Firstly, we noticed that between Wave 0 (start of COVID-19) and Wave 2 (1.5 years into the pandemic), as well as for the overall sample and all country subsamples, adolescents exhibited significantly higher levels of depression/anxiety (see Table 3). All samples except Germany exhibited significantly higher levels of depression/anxiety for Wave 1 in comparison to Wave 0. When comparing depression/anxiety levels in Wave 1 to those in Wave 2, we had higher levels at Wave 2 for all subsamples except Greece. Summing up these results, we identified a clear increase in depression/anxiety over the pandemic's course.

Table 3. Mean levels (and standard deviations) of depression/anxiety for all waves and countries.

Variables	Wave 0	Wave 1	Wave 1	Wave 2	Wave 0	Wave 2
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Overall Sample	1.79 (0.58)	1.87 (0.68) **	1.86 (0.69)	1.92 (0.71) *	1.78 (0.57)	1.92 (0.74) ***
Switzerland	1.84 (0.58)	1.90 (0.67) *	1.90 (0.67)	2.00 (0.70) **	1.86 (0.59)	2.01 (0.69) ***
Germany	1.89 (0.60)	1.87 (0.69)	1.80 (0.69)	1.93 (0.73) **	1.80 (0.58)	1.90 (0.72) *
Greece	1.68 (0.55)	1.83 (0.69) ***	1.84 (0.71)	1.84 (0.78)	1.68 (0.53)	1.84 (0.78) ***

Note. *** = $p < 0.001$, ** = $p < 0.01$, * = $p < 0.05$.

As our structural equation model analyzed the development between Waves 1 and 2, we especially noted that for all samples at Wave 1, levels of depression/anxiety exceeded the internationally accepted cutoff point ($M = 1.75$) for caseness as defined by Mollica et al. [91] and Winokur et al. [92]. This was also established for the German version of the Hopkins scale by Glaesmer et al. [93]. Thus, we established the “odds” of depression/anxiety for the participating adolescent students and asked (via the set resilience frame) how and if these odds could be addressed, specifically for students with higher levels of depression/anxiety, by familial or teacher support (see hypotheses) to develop higher levels of SDT.

Following this analysis plan, we ran *t*-tests (see Table 4) to analyze for mean differences between the two students’ groups, one with high- and one with low-level depression/anxiety, in the seven applied measures in our sample.

Table 4. Mean levels (and standard deviations) of seven observed variables.

Variables	Range	Low-Level	High-Level	t (df)	p	Cohen’s d
		Depression/Anxiety (n = 375)	Depression/Anxiety (n = 342)			
Teacher Academic Support_wave1	1–4	3.27 (0.59)	3.00 (0.69)	5.36 (688)	<0.001	0.31
Recognition by teacher_wave1	1–4	3.31 (0.49)	3.04 (0.61)	6.09 (660)	<0.001	0.24
Social Resources_wave1	1–5	4.56 (0.53)	4.26 (0.82)	5.76 (700)	<0.001	0.21
Family Support_wave1	1–5	4.43 (0.55)	3.90 (0.89)	9.31 (691)	<0.001	0.33
Self-Esteem_wave1	1–4	3.27 (0.45)	2.62 (0.56)	16.18 (663)	<0.001	0.53
Self-Efficacy_wave1	1–4	3.08 (0.51)	2.76 (0.62)	7.12 (627)	<0.001	0.27
SDT_wave1	1–4	3.00 (0.39)	2.61 (0.39)	12.92 (687)	<0.001	0.45

The mean levels for all seven observed constructs in the structural equation computations are presented in Table 4. We detected highly significant differences for all constructs, with mostly low to moderate effects. Students with low levels of depression/anxiety had higher levels for all seven observed variables than students with high levels of depression/anxiety.

3.2. Analytic Step 3: Testing for Longitudinal Effects Using Structural Equation Modeling

To assess the influence of social and individual factors on adolescent students’ self-determination levels, we employed multigroup SEM and subjected our model to various tests to assess its adequacy, specifically for students with lower levels of depression/anxiety. We gauged the precision of model fit using both incremental fit indices, specifically the comparative fit index (CFI) and the Tucker–Lewis index (TLI), as well as absolute fit indices, including the root mean square error of approximation (RMSEA) and the standardized root mean square residual (SRMR).

An excellent model fit is typically indicated by CFI and TLI values of 0.95 or higher, while values falling within the range of 0.90 to 0.94 suggest an adequate fit [94,95]. As for the RMSEA and SRMR, values of 0.05 or lower are indicative of an excellent fit, while values ranging from 0.06 to 0.08 suggest an adequate model fit. It is noteworthy that

the RMSEA index takes into account adjustments for model complexity, ensuring that model accuracy is not unduly influenced by the number of parameters included in the model [94]. These tests played a pivotal role in validating the accuracy of our model as we examined the longitudinal effects of social and individual factors on adolescent students' self-determination.

The measures of local fit for all five latent variables of the tested model are displayed in Figure 2, showing a great fit for all latent variables. The overall multigroup model tested (see Figure 2) fit the data well: $\chi^2(66, n = 717) = 133,771, p < 0.001, CFI = 0.950, TLI = 0.932, RMSEA = 0.054,$ and $SRMR = 0.057$ (see Figure 2). The RMSEA and SRMR values are adequate but not on the lower end of the accepted range. This is due to the heterogeneity of our data, being from three different countries and over two waves. The overall factor of family social support significantly increased levels of individual support, especially for students with high levels of depression/anxiety ($b_{low_depranx} = 0.24, p < 0.05; b_{high_depranx} = 0.56, p < 0.01$). Even when a direct effect of family social support on SDT was not detected, a significant indirect effect (wavy line) over individual support on SDT was identified for students with high levels of depression/anxiety ($p_{low_depranx} > 0.05; b_{high_depranx} = 0.30, p < 0.05$).

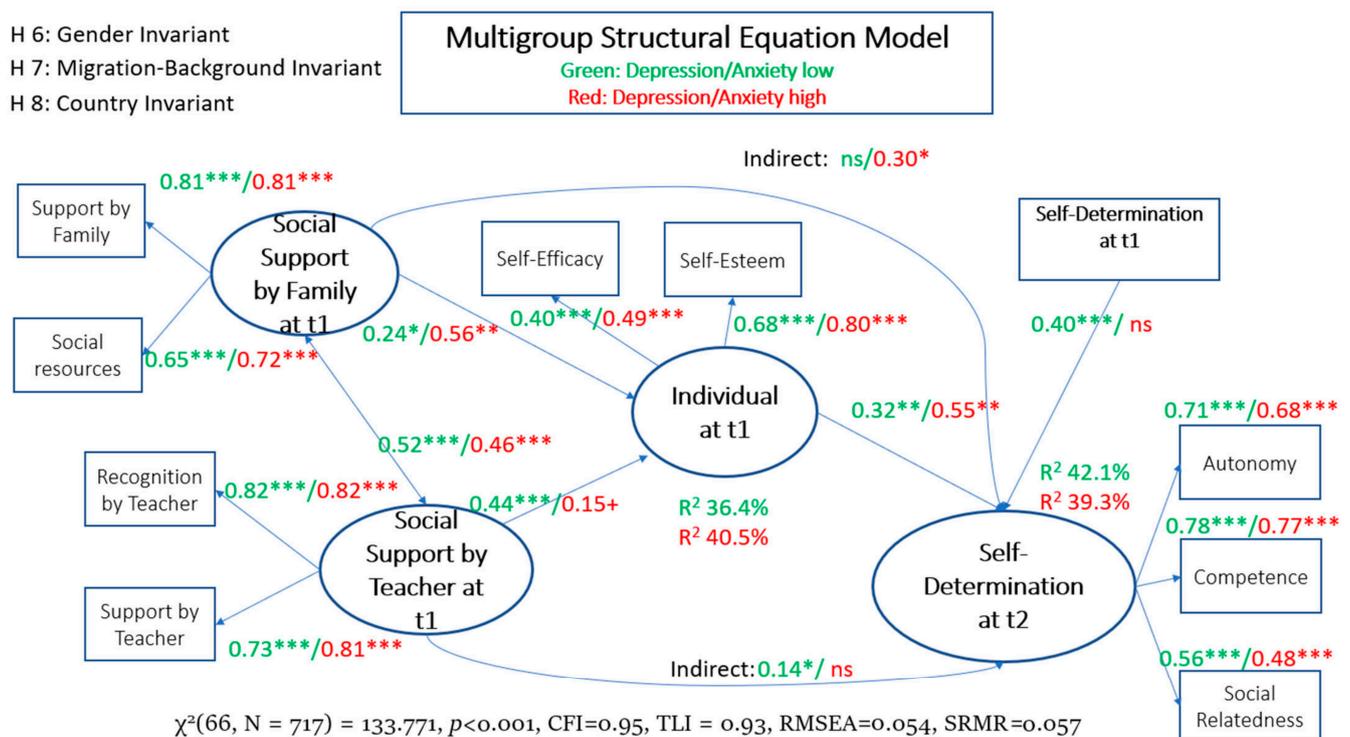


Figure 2. Overall structural equation model. Note: this figure displays the overall structural equation model as a simplified representation, only with significant standardized paths *** = $p < 0.001$, ** = $p < 0.01$, * = $p < 0.05$, + = $p < 0.10$, ns = non-significant.

Teacher support also significantly increased levels of individual support, especially for students with low (but not with high) levels of depression/anxiety ($b_{low_depranx} = 0.44, p < 0.001; b_{high_depranx} = 0.15, p = 0.10$). Additionally, a significant indirect effect (wavy line) of teacher support over individual support on SDT was identified for students with low (but not with high) levels of depression/anxiety ($b_{low_depranx} = 0.14, p < 0.05; p_{high_depranx} > 0.05$). Together, family and teacher support explained a very high level of individual factor variance ($R^2_{low_depranx} = 36.4%; R^2_{high_depranx} = 40.5%$).

Increases in individual factors significantly increased levels of SDT ($b_{low_depranx} = 0.32, p < 0.01; b_{high_depranx} = 0.55, p < 0.01$). The overall model explained 42.1% of the variance in SDT for students with low levels of depression/anxiety and 39.3% of the variance for

the students with low levels of depression/anxiety, indicating the model had very high explanatory strength. We also tested for the effect of the SDT at Wave 1 to SDT at Wave 2 and detected a significant regression path for students with low levels of depression/anxiety ($b_{low_depranx} = 0.40, p < 0.001; p_{high_depranx} > 0.05$).

Invariance Testing for Country, Gender, and Migration Background

In this multi-country study, we also needed to test measurement invariance across the three countries, both genders, and migration backgrounds. This plan was vital, because in addition to factor loadings (configural invariance), the factorial structure (measurement invariance) and the means (scalar invariance) needed to be tested for equivalence between groups. The χ^2 test statistic has disadvantages when testing for invariance that have been acknowledged in recent times, and as mentioned previously [96], it is sensitive to sample size. When the sample size is large, the test statistic will be significant even for small differences between the observed covariance matrix and the model-specified covariance matrix—it will reject models that fit reasonably well for sample sizes over 400 [97]. For this reason, we applied the compensatory test for measurement invariance for higher sample sizes developed by Cheung and Rensvold [98]. Chen examined various goodness-of-fit criteria for this compensatory test and suggested more than one stringent goodness-of-fit criterion when the sample size is adequate ($n > 300$). Chen recommended the CFI and RMSEA as equally sensitive to all types of invariance. For testing invariance, a change of ≥ -0.010 in the CFI, supplemented by a change of ≥ 0.015 in the RMSEA would indicate noninvariance [96].

Having established the model's overall structure, we then tested for measurement invariance—first across all three involved countries (Germany_n = 183; Greece_n = 271; Switzerland_n = 320), both genders (female_n = 359; male_n = 381), and for migration background (no_MB = 268; with_MB = 360)—in the factor loadings (configural invariance) and in the factorial structure (metric invariance), and the means are equivalent (scalar invariance) across groups. On the country invariance comparison, we identified configural invariance with a non-significant result ($\chi^2(10) = 10.521, p > 0.05$). For metric ($\chi^2(20) = 44.068, p < 0.01$) and scalar ($\chi^2(10) = 37.785, p < 0.001$) invariance, we identified significant results. Applying Cheung and Rensvold's [98] rules to our models on country invariance comparison for metric and scalar invariance, the identified CFI of 0.004 and the RMSEA of 0.009 between the configural multigroup model and the metric multigroup model indicated metric invariance. A similar situation (CFI = 0.015 and RMSEA = 0.001) held for the comparison between the metric and scalar multigroup models, with a CFI difference that was slightly too high but acceptable.

When testing for gender invariance comparison, we identified configural invariance with a non-significant result ($\chi^2(5) = 4.528, p > 0.05$). For metric ($\chi^2(10) = 22.818, p < 0.01$) and scalar ($\chi^2(5) = 20.424, p < 0.001$) invariance, we identified significant results. Applying Cheung and Rensvold's [98] rules to our models on gender invariance comparison for metric and scalar invariance, the identified Δ CFI of 0.004 and the Δ RMSEA of 0.007 between the configural multigroup model and the metric multigroup model indicated metric invariance. A similar (Δ CFI = 0.010 and Δ RMSEA = 0.002) situation held for the comparison between the metric and scalar multigroup models.

When testing for configural variance, $\chi^2(5) = 3.021, p > 0.05$, as compared to metric variance, $\chi^2(10) = 13.066, p = 0.05$, and scalar $\chi^2(5) = 10.830, p > 0.05$, we identified nonsignificant χ^2 tests, thereby establishing the same model relevance for migration backgrounds.

Summarizing the results on invariance testing, despite the different countries, genders, and migration backgrounds, we identified clear indications of an equivalent measurement for the developed model on predicting social determination, because the latent factors were considered adequate in terms of invariance model fit. In terms of content, this indicated that the introduced and empirically analyzed SEM provided an empirically reliable measure for all tested students. By applying Cheung and Rensvold's [98] rules to

our models on invariance comparison, we reduced sample size effects and minimized χ^2 test statistic disadvantages.

4. Discussion

Since the onset of COVID-19 pandemic, young people around the world have faced significant disruptions to their normal lives. These disruptions include widespread social isolation, reduced face-to-face interactions with peers, missed important events, increased stress within families, and limited access to supportive figures such as teachers. These factors may have contributed to a rise in mental health problems among young individuals [36,99].

We were able to identify a significant increase in depression and anxiety levels in adolescents when comparing data from three distinct European countries collected before, at the outset of, and after the COVID-19 pandemic. The challenges described during the pandemic had the potential to trigger psychological distress and mental health issues in adolescent students. Indeed, cross-sectional and longitudinal studies conducted to date suggest an increase in the prevalence of mental health problems among young people during the COVID-19 pandemic [37].

As our main notion was not only to identify psychological challenges during the pandemic, but also to learn how adolescent students' SDT could be supported despite these odds, we investigated resilience pathways. We clearly identified the importance of supporting adolescent students, particularly during challenging times, through social and academic support from families and teachers, albeit to varying degrees. We found that for students with higher depression/anxiety levels, the family (not the teacher) was the main source of support. Other studies also revealed family social support as the main protective factor of students' mental health during the pandemic, e.g., [100–102]. However, considering that the lack of in-person instruction not only alters the learning environment but also disrupts traditional learning patterns [103], as observed by Bilz [104], we were able to identify that depressed or anxious students are only moderately identified by their teachers because they tend to be silent and/or absent. Teachers' awareness of these students is lost. Bilz [104] found in a study with sixth and tenth graders that teachers were less able to perceive their students' psychological well-being. In terms of internalizing problems, there was a larger gap in congruence between the teachers' perception and students' self-reports; for girls, the congruence was higher. It is possible that external problems may be registered more frequently because they disrupt classroom interactions to a greater extent and initiate increased teacher–student contact. The greater agreement between self and external perceptions among girls may be due to the generally better quality of the teacher–girl relationship, which provides teachers with more information [105].

As Holzer et al. [106] indicated, prolonged periods of school closure have negative consequences on pupils' satisfaction of basic psychological needs. Considering the observations on resilience processes for achieving higher levels of SDT during the COVID-19 pandemic and in line with Ungar's [15] recommendations, it would be beneficial to leverage these findings and adapt this knowledge to pay attention to students' depressive and/or anxiety symptoms and to satisfy their basic psychological needs, a vital prerequisite for their meaningful and coherent engagement in modern societies despite the odds.

Our results are based on other studies [107] identifying learners' academic performance as being influenced by psychological characteristics, academic fit, and students' engagement. Our research established the case that there is a positive relation between the internal locus of control as self-determination and self-efficacy with academic fit [107].

Our study focused on school-based resilience as a means of promoting individual and social adaptability and reducing the burden of acute adversities such as COVID-19 in educational systems. We acknowledge that although it is important for adolescents to persevere in school despite challenges, we must also examine the factors that influence them. Utilizing Masten's [108] ordinary magic approach, we argue that resilience, both in general and in the school setting, consists of ordinary rather than extraordinary processes. However—and this seems essential to us—these ordinary processes require focus on

students' psychological needs and an understanding that individual students have specific needs, so no one-size-fits-all approach exists. For teachers, as an example, it did not seem within the ordinary to identify and support depressive students.

To evaluate high-school students' development, we needed to gain insights into school systems that not only promote positive practices but also reduce existing threats to students' positive development. Schools are dynamic systems that should influence students' resilience processes, and, because resilience outcomes are not universally applicable, researchers must consider individual and environmental factors in addition to schools.

The findings align with previous research on resilience pathways, which emphasizes the importance of social support from families, as well as the specific quality of their relationships with educators, in determining school integration and success [109]. Failure to provide inclusive opportunities for specific groups of students, such as those from immigrant backgrounds, can lead to them to feel ignored by the school, consequently impacting their learning and growth negatively [110]. Additionally, teachers who prioritize high academic achievement may unintentionally create obstacles in building strong relationships with all students in the classroom, particularly disadvantaging students from underprivileged backgrounds who require additional support [111–113].

By examining the results internationally for three countries, we identified (in-)stability of the respective resilience processes longitudinally for very different groups of students. Our argument is, following Matsopoulos and Theron [114], that effective collaboration among all adults involved in schools, including teachers, school psychologists, and social workers, is crucial for creating a nurturing school environment that focuses on promoting student resilience, especially among the most vulnerable students. The stress experienced by the individual student is also systemic stress when related to a pandemic [115]. We emphasize the importance of caring adults in the school community and their role in providing support to students (a multisystemic resilience approach), particularly school psychologists [116]. However, it is essential for these adults to genuinely accept the collective responsibility of fostering student resilience during times of crisis in order to achieve this goal.

It is equally important to consider and address students' ecological resources [61,109]. The conclusions drawn in this study are in line with earlier research [38], which underscores the inadequacy of solely emphasizing the development of individual qualities in young people to foster resilience.

We have been highly interested in comparing resilience processes of vulnerable students despite the pandemic in three countries with different school systems and diverse organization and structures [117]. Interestingly, the invariance testing of the model was held for all three countries, despite their differences. Additionally, the way each country reacted to the pandemic was not comparable [117,118]: Between March and May 2020, schools across Germany shut down. However, the decision on when to reopen varied among the country's 16 federal states, each with its own authority over school policies. Additionally, the duration of the closure differed based on grade level. In Switzerland, only during the initial wave of the COVID-19 pandemic in March 2020 did all schooling transition to online teaching. In Switzerland, schools resumed regular activities in May 2020. In Greece, from March to May 2020, secondary and high schools shifted to distance learning, while primary schools and kindergartens remained closed from March 2020 as well. Most schools in Greece reopened in September 2020, but from November 2020 to February 2021, the decision to open or close schools depended on the weekly number of coronavirus cases in each specific area.

5. Conclusions

Following a systemic (not an individualistic) approach to resilience [40,107], we established that for all three participating countries, individual supportive factors such as self-esteem and self-efficacy for students' SDT growth were highly dependent on parental and teacher support. The often-told resilience stories, such as that self-efficacy is one of the

core factors supporting adolescents' positive development despite the odds [38] and that self-esteem promotes resilience and preserves mental well-being in times of adversity [119], tell us only part of the ordinary narrative and lay the responsibility of resilience on adolescents' shoulders. These stories very often hinder our understanding of the systemic approach to the source of desperately needed self-efficacy or self-esteem for adolescents.

It is also of particular value to mention that the results of our research weaken the dominant narrative that migrant students' cultural deficits are the main or only cause of their resilience problems in the school environment. By establishing our results internationally for three countries across genders and for students with and without migration backgrounds, we were able to show that the resilience processes analyzed are longitudinally stable and hold for very different groups of students.

6. Limitations

Our assessment of self-determination was based on adolescent students' self-perceptions, but incorporating teachers' perspectives could also be beneficial because they can influence students' self-determination. Data from other (non-European) countries could also contribute to a fuller understanding of how social and individual factors predict adolescent students' resilience under high-stakes circumstances and various contexts.

Our research represents progress in monitoring self-determination data during the COVID-19 pandemic, but we must not draw causal connections or make broad conclusions about adolescent development due to our limited dataset, which comprised mainly only two data points separated by a year. It is important to recognize that self-determination patterns can change over time, and the factors influencing them may also undergo changes. This is also in line with resilience research, which must be viewed in context.

We should also acknowledge that the pandemic likely influenced our findings, given that the second wave of data was collected during a later stage of the pandemic. Other studies have demonstrated that the pandemic's early stages negatively impacted mental health and self-determination, potentially influencing our findings as well [25,26]. Ultimately, we believe these conclusions will have long-term relevance, but we should remain cautious as we continue to learn more about how COVID-19 will affect adolescents' development.

The pandemic influenced students' participation and by that also the attrition. Even if the samples were comparable in terms of gender and migration background, we do not know why the dropouts happened.

Even if we addressed the question of the attrition during the pandemic by detailed analyses, we do not know the special and also possibly country-specific reasons why students chose not to participate in Wave 2.

We must also consider how cultural differences may have influenced the reporting of mental health symptoms and the interpretation of support from family and teachers. Marginalized children and families were facing heightened difficulties during the COVID-19 pandemic due to various sources of stress within the system, family, and community, e.g., [115]. In response, schools must prioritize providing fair and inclusive support through collaboration, policy making, and culturally sensitive practices that are applicable during and after the pandemic. It is essential for schools to recognize the distinct needs of diverse family cultures, the historical experiences of marginalization, and the strengths and preferences of the communities they serve.

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