



The Role of Social Support in the Transition from Lower- to Upper-Secondary School in Slovenia: Anxiety in Focus

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Abstract

The complexities of individual (developmental changes) and contextual (change of school) factors interact during a school level transition period. The current study focuses on one aspect of possible difficulties, namely anxiety, and one potential support mechanism, specifically social support from family and peers, and their interplay during the school year when transitioning to a higher level of education. The study monitors anxiety levels of Slovene students ($N = 115$, 69.6% females) and the role of their social support through their transition using a longitudinal design with four time points—at the beginning of the school year, at the middle of the school year, at the end of the school year, and at the beginning of the new school year after the transition—in the context of the COVID-19 pandemic. The findings from an unconditional growth model show a significant difference in anxiety at the initial measurement, while the change in time is insignificant. The findings show that peer support is a significant predictor of anxiety at all four time points and that family support is a significant predictor of anxiety at three of the four time points (not significant at the end of school year). Students who report a higher sense of peer and family support report less anxiety. As identified in the study, social support is an important protective factor for higher anxiety levels; therefore, it is important to provide mechanisms of social support during a transition and throughout the pre- and post-transition school years.

Keywords Transition · Upper-secondary school · Anxiety · Social support · Slovenia

The transition from one educational level to another represents a significant contextual shift, consequently introducing new stressors for adolescents that may lead to a decrease in academic as well as social and emotional functioning (Eccles, 2004; Eccles & Roeser, 2011). Transition periods have been associated with a general decline in academic achievement, difficulties in socio-emotional functioning (Barber & Olsen, 2004; Eccles et al., 1993; Gutman & Midgley, 2000; Wigfield & Eccles, 1994), and increased anxiety (Doane et al., 2015; Frederickson, 2012; Galton & Morrison, 2000). A successful transition is a multidimensional construct that integrates social, emotional, and academic components, and it is achieved after successful adaptation to a new school context. A successful transition

on a long term leads to higher education and better job prospects as well as greater life satisfaction (Upadaya & Salmela-Aro, 2013). On the other hand, difficulties during a transition have been linked to leaving school early (McGee et al., 2003), behavioural problems (Weldy, 1990), depression (Newman et al., 2007), as well as anxiety and loneliness (Newman et al., 2007).

In different countries, children enter the school system and transition between different levels at different ages. On a general level, the first transition is the entrance into pre-school level (in all school systems), followed by the transition from primary to lower-secondary school (frequent, but not present in all school systems) and, further on, transition from lower- to upper-secondary school and university (again present in all school systems). In Slovenia, children make first transition to non-compulsory pre-school between age of 11 months and up to 5 years of age. At the age of 6, they transition to compulsory basic school. Primary and lower-secondary education is organised in a single-structure 9-year basic school. After 9 years of compulsory basic education at the age of 15 students may continue to

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2- to 5-year non-compulsory upper-secondary education. After completing the basic educational level, nearly all students (over 98%) proceed to upper-secondary education, which includes vocational, technical, or general secondary programmes (Eurydice, 2018). The fourth transition is transition to university and tertiary education at the age of 19.

In the present paper, we focus on the transition from lower- to upper-secondary school, that is at the age of 15, in Slovenia. Unlike most countries, in Slovenia, this transition follows a long and stable schooling period all within the same school, classroom, and thus peer group. The transition from basic to upper-secondary school is characterised by a change in social context, marked by new facilities (typically located further from their homes), a different peer group, new teachers, new subjects, and generally larger schools with fewer personal interactions. Students in the Slovene school system may be even more vulnerable during this transition because they have previously been in a stable school environment for 9 years without prior experience of the transition from lower- to upper-secondary school.

During the transition period from one educational level to another, adolescents are likely to experience difficulties in establishing new relationships and developing social support from teachers and peers (Eccles et al., 1993; Wentzel, 2009). Research shows that when entering upper-secondary school, students report concerns about being picked on and teased by older students, having harder work, getting lower grades, and getting lost in a larger, unfamiliar school (Lucey & Reay, 2000; van Rens et al., 2017).

Eccles et al. (1993) provided the theoretical foundation for the described changes in the stage-environment fit model. They argue that the drop in academic achievement and socio-emotional functioning in early adolescence can be (at least partly) attributed to the transition to lower-secondary school—more specifically, the important characteristics of lower-secondary schools: larger classrooms, more pressure, and less warmth from teachers. This includes an increase in competition and social comparisons, as well as disruption of peer groups and stable teacher support (Eccles & Roeser, 2006). In Slovenia, there are similar changes in the school context in middle adolescence during the transition from lower- to upper-secondary education.

Furthermore, the COVID-19 pandemic may have intensified the existing transition-related stress. Indeed, in their qualitative research from an earlier transition, Bagnall et al. (2022) found that the COVID-19 pandemic has exacerbated self-reported emotional difficulties, including anxiety, during the primary to lower-secondary school transition. In addition, Slovenia had one of the longest school closures in the second wave of the pandemic when compared to other EU countries (UNESCO, 2021). The school closure removed one of the most important contexts

for social and emotional development in adolescence (Schaffer, 2009), and as such presented a risk factor for the development of mental health difficulties, such as anxiety (Schaffer, 2009). There are now numerous cross-sectional examples of the negative impact of the COVID-19 pandemic on mental health in adult and adolescent samples indicating higher risk for adolescents (Fancourt et al., 2021; G  n  reux et al., 2020; Zhou et al., 2020).

It is, therefore, important to recognise possible support mechanisms. Social support is the most straightforward option (Bharara, 2020; Rogers et al., 2018; Waters et al., 2014) and has received the most research attention (Bharara, 2020). Social support fulfils one of the basic psychological needs—the need to relate (Ryan & Deci, 2017)—and as such fosters motivation in students to behave in socially appropriate ways and to focus on learning (Wang & Eccles, 2012) also in the process of transition. For example, research shows that changes in family and peer support are significantly associated with depressive symptoms in the transition to upper-secondary schools (Newman et al., 2007). That goes also for the COVID-19 context, where it has been established that social support serves as a recognised protective factor in response to prolonged lockdowns, contributing to flatter anxiety trajectories (Ao et al., 2020).

The most influential source of social support in adolescence are peers and teachers at school and parents at home (Eccles & Roeser, 2011). Family support remains stable during a transition, while peer and teacher support changes (Hill & Wang, 2015). With its continuity and stability, family support plays an important protective role during a transition period (Bharara, 2020; Symonds, 2015), with continuity being the strongest mechanism (Jindal-Snape & Miller, 2008). During a transition, the disruption of peer group dynamics—combined with the absence of adults outside the home, such as teachers—poses a risk for various difficulties, including emotional challenges such as increased anxiety (Eccles & Roeser, 2006). For example, research shows decrease in school belongingness, but not in peer support and family support, and an increase in depression during the transition to upper-secondary school (Newman et al., 2007). These changes may have been intensified during COVID-19 pandemics. Due to the school closures, peer support and teacher support were limited. Family support was still stable at that time, but may have been interrupted with stress influencing the family dynamics as well intensifying the relationships with spending more time together as usual.

The interplay between anxiety and social support has not yet been investigated in the transition period to upper-secondary school during COVID-19 pandemics. However, researchers have longitudinally tracked social support and overall school well-being during transitions. For example, during the primary to lower-secondary school transition,

Kiuru et al. (2020) analysed the transactional dynamics of interpersonal relationships, school well-being, and academic achievement. They found that closeness to parents and school peers promotes school well-being, whereas conflicts with teachers hinder it. Additionally, they demonstrated that a high level of well-being in school is beneficial for all types of interpersonal relationships, including those with parents, peers, and teachers, whereas school-related stress is associated with difficulties in interpersonal relationships. More specifically, the positive aspects of relationships with parents, such as closeness, rather than negative aspects like conflicts, play an important role in reducing the stress of a transition. Hence, parents continue to play an important supportive role (Castro et al., 2015; Duineveld et al., 2017). Similarly, Virtanen et al. (2020) followed adolescents longitudinally from primary to lower-secondary school and demonstrated that the levels of peer and parental support before the transition have significant effects on the level of cynicism, as well as beneficial effects on behavioural engagement and academic achievement. Benner et al. (2017) focused on the transition to upper-secondary school and reported an increase in depressive symptoms and feelings of loneliness across the transition. Additionally, peer support and school belongingness are linked to fewer socio-emotional disruptions as students move from lower- to upper-secondary school (Benner et al., 2017). In the transition to the tertiary level, Taylor and colleagues (2014) reported of negative relationship between internalising difficulties and social support, more specifically, internalising difficulties were negatively correlated with perceived social support from both friends and family.

Majority of the aforementioned studies deal with early adolescents and their transition between primary and lower-secondary school, whereas the present study focuses on an older sample and a later transition. As the available research has predominantly focused on the primary to lower-secondary school transition (reviewed by Eccles & Roeser, 2006) that is also characterised by development processes of early adolescence, such as the onset of puberty, our study adds to the understanding of the processes of the lower- to upper-secondary school transition in a more stable middle adolescence period.

The Current Study

In the current study, we monitor the anxiety levels, as an indicator of emotional difficulties, of students through their transition from lower- to upper-secondary school using a longitudinal design with four time points in the context of the COVID-19 pandemic. Additionally, we observe the interplay between social support and anxiety, as one indicator of possible emotional difficulties, during this

transition. There has been no research on the interplay between social support and anxiety at multiple times during a transition: at the beginning of the school year, at the middle of the school year, at the end of the school year, and at the beginning of the new school year, after the transition, in the context of COVID-19 pandemics. We hypothesise that students show an increase in anxiety during the transition, specifically at the beginning of the next school year. As proposed in the stage-environment fit model (Eccles et al., 1993), individual changes (e.g. anxiety during the transition period) interact with contextual changes (e.g. change in the educational level). To understand the differential role of social support, we consider two types of social support in the analyses: family and peer support. As family support has been identified as an important support mechanism during a transition (Bharara, 2020; Symonds, 2015), we hypothesise that during the transition, family support has a significant effect on the anxiety level at all measurement points, with the largest effect size at the beginning of the next school year. As school connectedness significantly predicts well-being during a transition (Hanewald, 2013; Lester & Cross, 2015), we hypothesise that school belongingness as an indicator of peer support is significantly associated with lower levels of anxiety (Benner et al., 2017) at all measurement times, with the largest effect size at the beginning of the next school year. As gender is a significant factor in anxiety (Silverman & Treffers, 2011), with females reporting significantly higher levels of anxiety compared to males, we also include it in the analyses. As none of the studies has focused on the transition from lower- to upper-secondary school by monitoring emotional difficulties at different times during a transition and during the COVID-19 pandemic, we can only assume that the accumulated stress of both factors has a larger effect on emotional functioning. The present study also provides new insight into this direction.

Method

The study is part of a larger research project, Positive Youth Development in Slovenia: Developmental Pathways in the Context of Migration. The research project investigates the longitudinal pathways for positive youth development: identification of individual and contextual factors that promote positive outcomes on the level of individual, school, and society, which can prevent risky or problem behaviour. Specific focus was put on the context of school and the context of youth at risk in the periods of transition. The methodology of longitudinal research design was used to follow youth at the period of transition, from lower- to upper-secondary level from beginning of the pre-transition year of basic school (T1), to the middle of the pre-transition

year of lower-secondary level of basic school (T2), to the end of the pre-transition year of basic school (T3), and to the beginning of the 1st year of post-transition year in upper-secondary school (T4).

Participants

This current study includes data from participants who participated at T4 (115 students, 69.6% females). The initial pre-transition grade sample of the current study (i.e. T1) included students from 21 lower-secondary schools (578 students; 56.3% females). The students were 13–16 years old ($M = 13.96$; $SD = 0.38$). Given that the participants of the current study were motivated to take part in additional measurements, this subsample differed significantly from the initial sample regarding initial anxiety ($F(568) = 8.384$, $p = 0.004$), peer support ($F(569) = 5.075$, $p = 0.025$), academic achievement ($F(576) = 22.079$, $p < 0.001$), and gender ($z = -3.177$, $p = 0.001$). Specifically, the subsample used in the present study reported higher anxiety, lower peer support, higher academic achievement, and was mostly female.

Instruments

Anxiety

The LAOM Anxiety Scale (Kozina, 2012) was used to measure general anxiety and the three components of anxiety: emotions (e.g. “I feel uncomfortable and I don’t know why”), decisions (e.g. “I have troubles deciding on one thing”), and worries (e.g. “I worry a lot”). The scale consists of 14 items. The participants indicated the extent to which the statements were true for them (1 = *never* to 5 = *always*). The reliability and validity of the instrument have been well-documented in Slovene samples (Kozina, 2012). Cronbach’s α in the present study was 0.91 at T1, 0.92 at T2, 0.93 at T3, and 0.93 at T4. Confirmatory factor analysis (CFA) for hierarchical multidimensional structure showed adequate fit across all four measurement points (T1: root-mean-square error of approximation [RMSEA] = 0.10, comparative fit index [CFI] = 0.94; T2: RMSEA = 0.08, CFI = 0.96; T3: RMSEA = 0.08, CFI = 0.95; and T4: RMSEA = 0.07, CFI = 0.96).

Peer Support

Students’ sense of belongingness at school was used as a measure of peer support. The scale is designed and used in the Program for International Student Assessment (PISA; Organisation for Economic Co-operation and Development [OECD], 2020). The measure reflects how accepted, respected, and supported students feel in their social context

at school. Students reported their sense of belongingness for six items (“I feel like an outsider [or left out of things] at school”; “I make friends easily at school”; “I feel like I belong at school”; “I feel awkward and out of place in my school”; “Other students seem to like me”; and “I feel lonely at school”) using a 4-point rating scale (1 = *strongly disagree* to 4 = *strongly agree*). Cronbach’s α in the present study was 0.82 at T1, 0.81 at T2, 0.80 at T3, and 0.86 at T4. CFA showed an adequate fit across all three measurement points (T1: RMSEA = 0.06, CFI = 0.99; T2: RMSEA = 0.03, CFI = 0.99; T3: RMSEA = 0.14, CFI = 0.94; and T4: RMSEA = 0.08, CFI = 0.97). Aligned with the modification indices, when theoretically justified, error terms were allowed to covary.

Family Support

Five items from the Developmental Assets Profile (DAP; Scales, 2011) were used to assess the students’ perceived family support (“I have a family that gives me love and support”; “I ask my parents for advice”; “I have parents/guardians who are good at talking to me about things”; “I feel safe and secure at home”; and “I am spending quality time at home with my parent(s) when we do things together”). The participants ranked each item according to a 4-point rating scale (1 = *not at all or rarely* to 4 = *extremely or almost always*). CFA was conducted to establish the goodness of fit for a measure of family support (T1: RMSEA = 0.08, CFI = 0.97; T2: RMSEA = 0.00, CFI = 1.00; T3: RMSEA = 0.00, CFI = 1.00; and T4: RMSEA = 0.03, CFI = 0.99). Aligned with the modification indices, when theoretically justified, error terms were allowed to covary. Cronbach’s α in the present study was 0.75 at T1, 0.83 at T2, 0.81 at T3, and 0.84 in T4.

Gender

Gender was assessed with an open-ended question What is your gender? (coded as 1 = female, 2 = male, and 3 = other).

Procedure

In the research project Positive Youth Development in Slovenia: Developmental Pathways in the Context of Migration, we targeted all lower- and upper-secondary school types, considering the proportion of students that attended each type of school in Slovenia and the number of additional hours of the Slovene language per school as an indicator of the proportion of migrant students in the school. All lower- and upper-secondary schools were divided into two groups according to the number of additional hours of the Slovene language offered to migrant students. Those

lower- and upper-secondary schools with the highest number of additional hours of the Slovene language for migrant students were invited to participate in the study. Meanwhile, another group of lower- and upper-secondary schools that offered fewer additional hours of the Slovene language for migrant students was randomly sampled and invited to participate in the study. After a school agreed to participate, two classes per upper-secondary school were randomly selected to participate in the study, while all classes from each selected lower-secondary school were included in the study. After obtaining informed consent from the parents of underage students, the students participated by completing a survey on paper or online due to COVID-19 restrictions. On average, data collection took 30 min. The survey consisted of positive (e.g. empathy) and negative (e.g. anxiety and victimisation) indicators of adolescent well-being. The data collection was supervised by the school coordinator (teacher or school counsellor), who answered any questions from students. The first data collection (i.e. T1) took place during the second wave of the COVID-19 pandemic in Slovenia (between October and December 2020). As part of the subsequent restrictions, there was a school lockdown with remote schooling that began on 19 October 2020. A total of 578 students of pre-transition year participated. Data collection at T2 took place between January and March 2021 (with school lockdown still ongoing). The lower-secondary school students returned to school after 15 February 2021, while the upper-secondary school students returned after 8 March 2021. A total of 578 students of pre-transition year participated. Data collection at T3 took place between May and June 2021, at which time all the students were back in school. A total of 551 students of pre-transition year participated. Data collection at T4 took place in the following school year. The 9th grade sample was sent an email asking them to participate. The students' emails were collected after receiving their informed consent from their parents. The students who took part in the study at T4 entered a competition to receive a €30 voucher. A total of 115 students of pre-transition year participated. The current study was approved by the Committee for Ethical Research at the Faculty of Arts of the University of Maribor.

Data Analyses

As a preliminary analysis, we screened the data for the number and patterns of missing values separately for each time point. The anxiety items had 0.7% missing values at T1, 1.4% at T2, and 0.6% at T3 and no missing values at T4. After examining the descriptive statistics, correlations, and reliabilities (using IBM SPSS Statistics 28), we first employed latent growth curve models (LGCs) to examine the longitudinal change over time using Mplus (Version 8.6; Muthén & Muthén, 1998–2021). We entered manifest variables for anxiety into the models. We used a robust maximum likelihood algorithm to assess parameters in the model. With this algorithm, the estimates of the parameters and their standard errors are based on all available data (Peugh & Enders, 2004). First, we estimated the unconditional LGCs, which created the latent factors (intercept and slope, the parameters describing the growth curve) for the observed repeated measures: anxiety. This approach allowed us to examine the intra-individual change over time. We fixed the intercepts at 1 so they remained equal. The values assigned to the factor loadings of the slope reflected the data collection time intervals (i.e. each value represented 3 months). In the second step, we examined conditional LGCs by adding covariates into the model (gender, peer support, and family support) at the individual level (estimating the effects of the covariates on the latent growth parameters). A direct effect of the covariates enabled us to examine whether the covariates explained (some of) the inter-individual differences in the growth curves (Stoel et al., 2004). Because peer support and family support change throughout the school year, we included them as time-variant covariates; we included gender as a time-invariant covariate. We applied the following cut-off values for an adequate fit: CFI > 0.90, RMSEA < 0.08, and standardised root-mean-square residual (SRMR) < 0.08 (Hair et al., 1998).

Results

Descriptive Statistics

Table 1 shows the mean and standard deviation of anxiety, peer support, and family support at each time point. The

Table 1 Anxiety, peer support, and family support for the four time points

	T1		T2		T3		T4	
	M	SD	M	SD	M	SD	M	SD
Anxiety	2.87	0.56	2.95	0.66	2.78	0.79	2.93	0.74
Peer support	3.09	0.56	3.03	0.61	3.03	0.59	2.31	0.30
Family support	17.19	2.57	16.65	2.88	16.68	2.99	16.37	3.12

skewness and kurtosis values for all included variables are between -2 and 2 and are considered acceptable.

The descriptive statistics show an increase in anxiety from the beginning of the school year (T1) to the beginning of the new school year (T4), with a drop at the end of school year (T3). The descriptive statistics show a decrease in both types of support from T1 to T4.

LGCMs

Unconditional LGCMs

We used unconditional LGCMs (measurement models, without covariates) to calculate the intra-individual differences in the growth curve of anxiety over the four time points (within-person model) of the lower- to upper-secondary school transition (Table 2).

At T1, a significant intercept indicates a significant difference in anxiety. An insignificant slope indicates a non-significant change over time. The covariance between the intercept and slope (describing the relationship between the starting point and the rate of change) is also insignificant.

Conditional LGCMs

We present the findings of the conditional LGCMs for anxiety with gender, included as a time-invariant predictor of the intercept and slope, and peer support and family support included as time-variant covariates. This allows us to explain the variation in the parameters between individuals. The LGCM for anxiety (Fig. 1) shows an adequate fit to the data: CFI = 0.98, RMSEA = 0.05, 90% confidence interval (CI) [0.00, 0.09], and SRMR = 0.12. Gender is significantly associated with the intercept of anxiety, indicating that the initial levels of general anxiety vary across the genders. Females report higher anxiety. Gender is not associated with the rate of change. Peer support is a significant predictor of anxiety at all four time points. Family support is a significant negative predictor of anxiety at three of the four time points. Students who reported greater peer and family support reported lower anxiety.

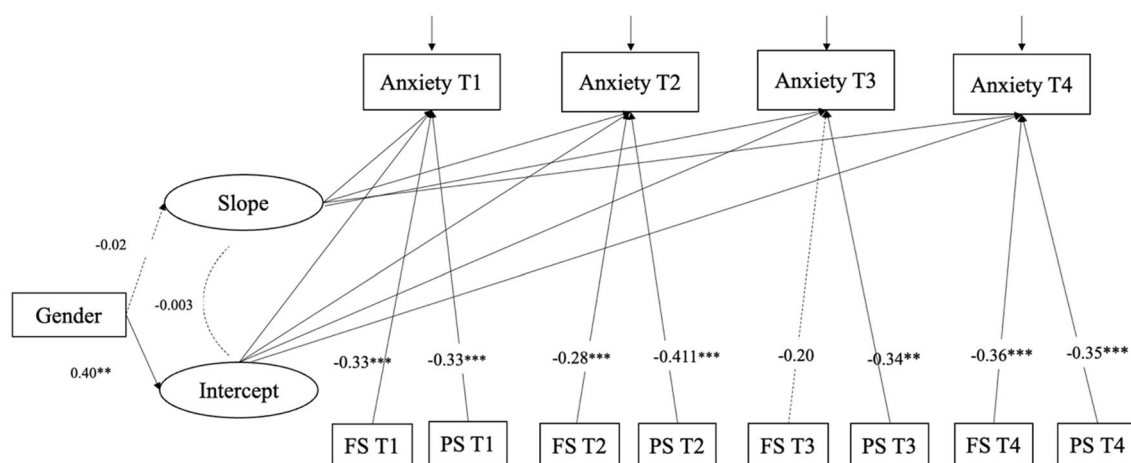
Table 2 Unconditional latent growth curve model parameters and fit indices of anxiety over four time points

	Intercept			Slope		Model fit		
	<i>M</i>	Var	<i>r</i> (intercept \times Slope)	<i>M</i>	Var	CFI	RMSEA	SRMR
Anxiety	2.87 ***	0.01	0.00	−0.02	0.02	0.99	0.08	0.08

Var = variance.

CFI, comparative fix index; RMSEA, root-mean-square error of approximation; and SRMR, standardised root-mean-square residual.

*** $p \leq .001$



Note *** $p \leq 0.001$; ** $p \leq 0.05$; and * $p \leq 0.10$

Fig. 1 The conditional latent growth curve models for anxiety measured at four time points (T1–T4). The models include one time-invariant covariate (gender) and two time-variant covariates,

namely peer support (PS) and family support (FS). The estimates are unstandardised coefficients. Solid lines represent significant paths and dashed lines indicate non-significant paths

Discussion

The complexities of individual (developmental changes) and contextual (change of school) factors interact during a transition. We examined one aspect of possible difficulties—anxiety—and a potential support mechanism—support from family and peers—and their interplay during the school year when transitioning to a higher level of education.

The first focus of the present study was the actual change in anxiety from the beginning to the end of school year and during the transition (at the beginning of the next school year). Based on reviews (Barber & Olsen, 2004; Eccles et al., 1993; Gutman & Midgley, 2000; Wigfield & Eccles, 1994), we hypothesised that there is an increase in anxiety during the transition—that is at the beginning of the next school year at a new educational level. The findings from the unconditional growth model revealed a significant difference in anxiety at the initial measurement (significant intercept), but the change in time is insignificant (insignificant slope). This finding is contrary to our expectations and indicates that anxiety is stable and not influenced by the transition. As COVID-19 presumably represents additional stressor, the findings are even more contrary to our expectation. This stability is likely rooted in the biases of the students who agreed to participate at T4 right after they had transitioned to their upper-secondary school. The first three measurements (T1–T3) took place in the school under supervision of the school coordinator while T4 was solely a self-motivated response to an email. The cumulative stress of the transition and the COVID-19 pandemic should not be neglected. Due to the pandemics, the levels could have been higher the usual and, therefore, the peak in the transition period not so evident. This added stress might have maintained a stable level of anxiety throughout the transition. The students who participated also reported a significantly higher anxiety level compared with the initial sample. Based on this difference, we can assume that their anxiety is high and stable and, therefore, either not subject to contextual influences or already heavily under the pandemics influence. The students who participated at T4 also showed higher academic achievement, indicating that this subsample may not be at risk of transition difficulties associated with academic drop, but rather a general difficulty associated with anxiety and low peer support.

We also evaluated family support and peer support and their associations with anxiety. We expected that family support and peer support are associated with lower anxiety, and this association is highest during the transition. We included school belonging, as a measure of peer support, and family support as time-varying covariates in the conditional LCGMs. We found that peer support is a significant predictor of anxiety at all four time points, and

family support is a significant predictor of anxiety at three of the four time points (not significant at the end of school year [T3]). Students who reported greater peer and family support report lower anxiety. Consistent with the findings from a meta-analysis (Bharara, 2020), our study substantiates the important role social support plays throughout the schooling period, including transitions. As identified by Butler et al. (2022), all different types of social support—including family, school, and peer support—play a significant role in the mental health of children and adolescents. In fact, these different types are cumulative and significant across the life span. The measure of school belongingness used in our study mostly represents a positive bond with school peers. This bond is at risk during a transition, although we found that school belongingness plays an important role throughout the school year as well as during the transition. The transition process does, however, disrupt the peer processes (Ryan et al., 2013): Students are moving to bigger schools, new classrooms, and new settings where they are now the newest and youngest members.

Interestingly, the effect sizes are similar for family support and peer support at the beginning of the school year (T1), while the effect size for peer support is higher in the middle and at the end of school year (T2 and T3). This could indicate that family support is especially important during the transition period, from grade to grade or school to school, while in the middle of the school year, school peer support is more important. In our case, the middle of the school year was also a time of school closure. The instability of peer group, due to lockdown, may have been connected to higher anxiety levels and was reflected also in higher effect size in that time. Nevertheless, the COVID-19 might have stabilised the peer connections, including the use of online tools to communicate, and the students may have also felt peer support during the transition. To gain a deeper understanding, it would make sense to include additional measurements throughout the transitional school year.

The importance of family support has been widely investigated and found to have positive effects on students' academic success and mental health (Corville-Smith et al., 1998). Overall, the findings are in line with research showing the importance of family support on the one hand and peer and school support on the other hand. For example, Duchesne et al. (2009) found that parental support, especially from mothers, predicted fewer anxiety symptoms across transitions. In general, family support is optimal when it combines age-appropriate expectations for autonomy and closeness. We have taken into account that during the upper-secondary school transition, adolescents spend less time with their family members (Collins & Laursen, 2004). In our case, this was actually the case in the actual time of transition, from T3 to T4, as there was a time without

lockdown, and we assume that adolescents spent more time with their peers as opposed to their family.

As difficulties in establishing and maintaining positive peer relationships are associated with multiple negative developmental outcomes including loneliness, school dropout, internalising symptoms, aggression, criminality, and substance use (Hussong, 2000), the support mechanisms at the school level need to be promoted, especially during transition. This is especially important as peer support and school belongingness are critical factors for emotional well-being (Lester & Cross, 2015) and mental health (Benner et al., 2017), but not so much for the academic component of a positive transition (Bharara, 2020). In this regard, support from teachers is also needed, as in the context of the upper-secondary school transition, students lose contact with their lower-secondary teachers and have not yet developed a relationship with their new, upper-secondary teachers. In addition to building supportive relationships with students, teachers also play an important role as co-organisers of peer relationships in newly formed peer groups. As upper-secondary schools are typically more anonymous settings and more academically oriented, students are likely to receive less individualised attention from teachers as well as less support in building inclusive peer groups that promote school belongingness. This is especially important in the period of school closures, such as the one during COVID-19 pandemics.

As expected, we found that gender is significantly associated with the intercept of anxiety, indicating that the initial levels of general anxiety vary across the genders, with females reporting higher anxiety. However, gender is not associated with the rate of change. According to a meta-analysis (Bharara, 2020), the overall research shows that gender plays an important role in the adaptation to new school contexts, with boys reporting more difficulties. Girls also generally report higher achievement and connectedness with school (Bharara, 2020), both of which serve as protective factors. For example, Waters et al. (2014) reported that girls have more anxiety during a transition, but at the same time, they have more advanced social skills. This was also the case in our sample, which comprised mostly girls, and probably underlies why we did not detect extra difficulties during the transition.

Limitations and Future Directions

The high dropout rate during the transition resulted in a biased and non-representative sample, and thus, the findings have very limited generalisability. However, the sample size is large enough: Over 100 for the 12 variables used. As suggested, 5–10 cases per variable are sufficient to assure statistical power (Bollen, 1989; Nunnally &

Bernstein, 1967). Moreover, McNeish and Harring (2017) suggested a minimum sample size of 100. We have shown the importance of social support to reduce anxiety: It was an important protective factor at all time points. However, the directionality of the relationships between social support and anxiety can also be (and probably is) twofold as indicated in Taylor et al. study (2014). That means that the students that are more anxious also have difficulties in establishing and maintaining supportive relationships with others. In future studies, it would make sense to investigate the directionality of these relationships using cross-lagged panel models in larger representative samples. This could be explored further in future studies as, in our study, the focus was in social support as one of the mechanisms associated with lower anxiety and a mechanism of support during transition. Due to the obvious biases in our sample, we recommend that future research includes at-risk students with lower academic achievement and/or a lower socioeconomic status, given that they are in need of greater transitional support (Donaldson et al., 2023). However, this approach does include challenges associated with tracking students when they change schools. Finally, as the majority of studies published in the field of protective and risk factors during a transition originate for the UK or the US, as evidenced in meta-analysis and thematic reviews (Donaldson et al., 2023; Spernes, 2022), our study broadens the knowledge in the field by adding a new national context.

Conclusions and Practical Implications

This study is the first to monitor students in Slovenia when transitioning from lower- to upper-secondary school. As the research design is a challenge on its own, these studies are rare and even non-existent in Slovenia. As successful transition leads to numerous positive outcomes on a long run as well as is associated with less difficulties in socio-emotional functioning, our findings add to the understanding of the processes during the transition. Social support, both family and peer support, has been shown to be associated with lower level of anxiety all through the period of transition. Therefore, the need for transitional support programmes is self-evident but not yet recognised in Slovenia, at least not on a systemic level. There are several documented ways (Donaldson, et al., 2023) in which we can support a positive transition, such as extracurricular involvement in school activities (Bharara, 2020), peer mediation, and peer counselling (Butler et al., 2022). Even though there are some examples of targeted transition intervention (e.g. positive transition; Coelho et al., 2018), these are mainly focused on one school type, and there is a recognised lack of transition support programmes that would follow students from one school type to another (Donaldson

et al., 2023). The methodological difficulties in following the transition of each student are an obvious obstacle. Even though we did not find an increase in anxiety during the transition, perhaps due to the non-representativeness of the sample, it is still evident how important it is to provide mechanisms of social support during this period.

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Declarations

Conflict of interest The authors declare that they have no known conflict of interest to disclose.

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