

## Adjusting to and thriving in a new school: Role of students' expectations, educational attitudes, and resilience during secondary school transition

Diana Kwarikunda, Nakalema Gladys, Charles Magoba Muwonge, Joseph Ssenyonga & Ulrich Schiefele

To cite this article: Diana Kwarikunda, Nakalema Gladys, Charles Magoba Muwonge, Joseph Ssenyonga & Ulrich Schiefele (2023): Adjusting to and thriving in a new school: Role of students' expectations, educational attitudes, and resilience during secondary school transition, International Journal of School & Educational Psychology, DOI: [10.1080/21683603.2023.2170939](https://doi.org/10.1080/21683603.2023.2170939)

To link to this article: <https://doi.org/10.1080/21683603.2023.2170939>



Published online: 02 Feb 2023.



Submit your article to this journal [↗](#)



Article views: 58




View related articles [↗](#)



View Crossmark data [↗](#)

## Adjusting to and thriving in a new school: Role of students' expectations, educational attitudes, and resilience during secondary school transition

Diana Kwarikunda <sup>a,b</sup>, Nakalema Gladys<sup>a</sup>, Charles Magoba Muwonge<sup>a</sup>, Joseph Ssenyonga<sup>a,c</sup>, and Ulrich Schiefele<sup>b</sup>

<sup>a</sup>Department of Educational Foundations and Psychology, Mbarara University of Science and Technology, Mbarara, Uganda; <sup>b</sup>Department of Educational Psychology, Univesität Potsdam, Potsdam, Germany; <sup>c</sup>Department of Psychology, Universität Konstanz, Konstanz, Germany

### ABSTRACT

For some students, the transition from primary to secondary school is a difficult and stressful event that can have potential negative effects on their psychological wellbeing, social adaptability, and academic achievement. Although several individual, environmental, and family protective factors have been investigated, direct and indirect contributions of expectations and educational attitudes on resilience have not yet been fully explored. In the present study, using a sample of 744 (8 schools, Study 1) and 39 (3 schools, Study 2) 8th grade (day or boarding) secondary school students in Uganda, we initially explored: (1) gender and residence status differences in transitioning students' resilience and educational attitudes, (2) predictive effects of educational attitudes, gender and residence status on resilience, (3) the direct and indirect effects of educational attitudes and expectations on resilience, and (4) the students' perspectives about the transition process. In study 1, data were collected using self-report questionnaires whilst in study 2 data were collected from focus group discussions. Quantitative results indicate that (i) girls reported to have received more physical care for better adjustment than boys, whilst day and male students reported to have received more psychological care during school adjustment than their counterparts, (ii), residence status was a stronger predictor of resilience than were gender and educational attitudes, and (iii) student's expectations had direct and indirect effects on resilience through educational attitudes. Results of the thematic analyses show that transitioning students have unrealistic expectations and mixed feelings during adjustment. To foster resilience of transitioning students, schools could cultivate a culture of high realistic expectations, peer connectedness, and positive educational attitudes, as well as organize several transitional strategies and activities that involve parents throughout the first year of lower secondary school.

### KEYWORDS

Resilience; school transition; educational attitudes; mixed methods research

### Introduction

At the commencement of each school year, thousands of students across the world make the transition from primary school to secondary school level (Elfers, 2011). In the months leading up to this time, these students are filled with a mixture of emotions and expectations of their next academic year as well as their social life (Akos & Galassi, 2014). Whilst some students are overly excited, other students are worried about the series of challenges (academic, social, emotional) waiting to be overcome (Aikins et al., 2005). Additionally, the timing of the transition from primary to secondary school usually coincides with the onset of adolescence that presents a lot of social, physical, emotional, and psychological changes (Langenkamp, 2010) that the students need to cope with. The change in nature of secondary schools compared with primary schools can be

overwhelming and challenging for students (Towns, 2010).

Specifically, for students coming from small rural schools, this impending change can be further complicated by fears of being lost, worries over new peer relations, anxiety over coping with increased workload, and the change in school culture/climate. As such, the move from primary school to the secondary school is one of the most challenging and stressful events young adolescents experience (Langenkamp, 2010), usually associated with numerous effects on the psychological, social, intellectual, and emotional well-being of students (Coelho & Romão, 2016). This can put students at risk of failure to cope, increased frustrations, interruption in academic growth, drop-out, and other psychological disorders such as anxiety (Akos et al., 2015). To navigate through such a stressful event, students' resilience plays a vital role in how students adjust and thrive. There are

several individual protective factors (e.g., students' expectations and sense of belonging) that are vital for promoting resilience. In the present study, we examine mediating effects of students' educational attitudes on the relationship between expectations and resilience during school transition.

### ***Why is a positive start important for 8th grade students?***

Given the various effects of school transitions on the wellbeing of the students, Samel et al. (2011) report that a positive start at such a time yields to positive school outcomes (i.e., academic, social and wellbeing). Failure to successfully adjust to a new school in the first months could result into academic vulnerability (Langenkamp, 2010), a decline in peer relations, a decline in emotional wellbeing (Akos et al., 2015), and a lack social competence, which are likely to continue throughout high school (Duncan et al., 2000). If not helped, such students develop maladaptive and health compromising behaviors (Pellegrini, 2002) and drop out of school (Ekstrom et al., 1986; Mwingirwa, 2016). Most of these negative school outcomes consistently become more salient within the first and second year of secondary school (Pereira & Pooley, 2017).

### ***Resilience framework in educational contexts***

The concept of resilience focuses on the factors in an individual's development that promote wellbeing and strength (Rutter, 1990). Masten et al. (1990) define resilience as the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances. Similarly, McGrath and Nobel (2011) define resilience as the capacity to respond adaptively to difficult circumstances and still thrive. Resilience involves the interplay between internal strengths of the individual and external supporting factors in the individual's social environment (Rutter, 1990). Kumpfer (1999) states that one internal resiliency factor alone does not lead to resilience but different transactional processes and factors in conjunction with one another can strengthen resilience. These factors can be stressors, environmental factors, and individual factors. When the resilience process is activated by incoming stimuli, the homeostasis in the individual is impaired. This can be perceived as a stressor or as a challenge. According to Kumpfer, the essence of resilience is perceiving the incoming stimulus as a challenge. On the other hand, environmental factors can be "protective" or "risk"

factors. These factors can buffer the negative effects of acute and chronic stress (Rutter, 2006).

Given that resilience varies over the course of a lifetime, it must be understood as a capacity which is influenced by context (Rutter, 2006). For school children, stressors can include dealing with a difficult academic task (Cem & Gul, 2018), resolving a conflict with a friend, moving to a new school or home, feeling anxious to tackle a typical school challenge among others (McGrath & Nobel, 2011; Nobel & McGrath, 2015). To successfully manage such everyday challenges, protective (i.e., individual, school and family) factors are vital. External protective factors such as high school and home expectations, school caring relations, peer caring relations, and parent caring relations, predict resilience (Cem & Gul, 2018; Rutter, 1990). These relations supply social support which can promote well-being, and a sense of acceptance, belonging, inclusion, confirmation, and appreciation that promote resilience.

Individual factors such as hope for the future, self-feelings, internal locus of control, lofty expectations, and academic abilities have been positively linked to academic resilience (Cem & Gul, 2018). For transitioning students, being resilient means effective coping through, and management of stressors associated with transition, without compromising their social life, academic goals and values, and emotional and psychological wellbeing. In the next section, we discuss further the role of educational attitudes and expectations on students' resilience during school transitions.

### ***Expectations and educational attitudes***

To fully adjust to and thrive in a new school, which can be challenging and disconcerting, protective factors such as supportive relationships, sense of belonging, and positive expectations, are vital for the development of resilience (Pereira & Pooley, 2017; Samel et al., 2011). Students' expectations that are positive and realistic buffer transitioning students against the adverse effects of stress (Pereira & Pooley, 2017) and figure out their level of (emotional) engagement in school activities (Langenkamp, 2010). Also, students' expectations affect transitioning students' personal goals in education, which appears to be one of the most powerful predictors of academic achievement (Downey et al., 2009), academic persistence (Langenkamp, 2010), and resilience (Henderson, 2007).

However, transitioning students do not come solely with expectations; they also form different educational attitudes toward their current and future educational pathways (Eccles, 1983; Greenman, 2013). Educational attitudes are students' evaluations and expressions of

their affection and judgments (favorable or unfavorable) of the school, school experiences and importance that students attach to education for their personal lives or careers (Downey et al., 2009; Mickelson, 1990). Studies (e.g., Greenman, 2013; Kwarikunda et al., 2021; Tinto, 1993) show that these educational attitudes are related to students' perceptions, competences, interest, learning schema, and motivation beliefs. Moreover, Mickelson (1990) reports that educational attitudes are better predictors of educational attainment, especially in "at risk" children. If students report high aspirations and positive feelings toward their education, they are more likely to enjoy school (Schiefele, 1991), be more persistent (Langenkamp, 2010), and succeed in school with minimum difficulty (Akos et al., 2015). However, little is known of the indirect and direct contributions of students' expectations and educational attitudes on resilience, especially in developing countries.

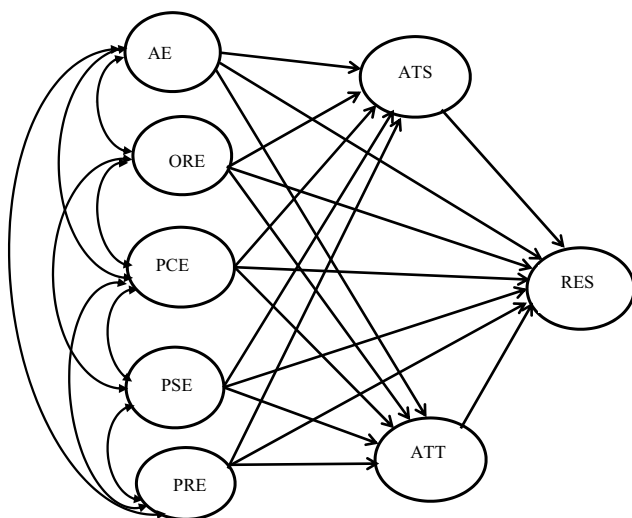
### Present study

Developing countries (e.g., Uganda) struggle with high dropout rates and poor academic achievement, especially in the first and second year (8th and 9th grade) of secondary school, with the highest dropout rates being recorded during the primary to secondary transition (Barber, & Barber & Olsen, 2004; Mwingirwa, 2016; Okot, 2001). As noted by UNESCO (2019), recruiting students in secondary school is easy, but keeping them during the first three years is quite challenging, especially in developing countries. For example, in 2017, the dropout rate during the secondary school transition in Uganda was high, with an improvement from 44.5% in 2016 to 38.95% (Kayongo et al., 2019). Further, reports show that the performance of 8th grade students within their first and second term of secondary school is poor, with 58% falling below average pass mark (50%) in most subjects offered (see Kayongo et al., 2019; UNESCO, 2019). Also, of the 209,432 8th grade day students enrolled in 2017, 32% dropped out with in the first two terms of 8th grade (Ministry of Education Report, 2019). Attempts to understand such dropout rates and poor academic achievement in transitioning students has been mostly directed to economic and cultural factors such as household poverty, gender-related cultural issues, and child labor, among others (e.g., Kayongo et al., 2019; Okot, 2001). However, there have been limited attempts to explore psychological factors such as students' expectations, their educational attitudes, and resilience during school transition in Uganda to understand the high dropout rate.

For successful transitions, several studies have highlighted helpful roles of distinct factors in the adjustment process among students. Such factors include: the educational attitudes with which students enter a new host institution (Hausmann et al., 2007), the transition culture of the new school (McInnis, 2001), students' expectations (Towns, 2010), and their resilience (Akos et al., 2015; Rutter, 2006), among others. Several studies have highlighted these educational attitudes are intrinsically related to other constructs, such as students' feelings and interest about learning (Tinto, 1993), their competence as result of academic achievement and motivation (Akos et al., 2015), school expectations (Towns, 2010), and school engagement and persistence in school (Greenman, 2013). Akos and Galassi (2014) noted that students' educational attitudes influence their decision to drop out or stay in school, perhaps, in turn, their resilience. Students who reported low and negative attitudes to school were more likely to drop out of school with poorer grades compared to their counterparts with high positive attitudes.

Also, the few existing resilience studies in educational settings have highlighted that resilience is a vital force for students' school perseverance and motivation (Henderson, 2007), especially on stressful and difficult events in school that usually trigger feelings of hopelessness, resulting in dropout. Since transitioning students have various educational attitudes and expectations of the new community, whilst facing educational adversity, the way students will adjust and thrive in this pristine environment both in social and academic terms depends on their expectations (Tinto, 1993). Students' expectations are beneficial for their resilience (see Henderson, 2007; Towns, 2010). However, it is unclear of the interplay between transitioning students' educational attitudes in the relationship between their expectations and resilience. Also, regardless of the vast amount of research on resilience, relations between education attitudes and resilience in transitioning secondary school students have not been explored.

More so, existing studies that explored gender differences in secondary school students' attitudes, focused on students' subject-specific attitudes such as general science (e.g., Potvin & Hasni, 2014), and Physics (e.g., Kwarikunda et al., 2021). To the best of our knowledge, no research study has focused on gender and residence-status differences in students' educational attitudes and resilience, in developing countries, even though notable gender effects on coping strategies (Hampel & Peterman, 2005), social support seeking (Frydenberg & Lewis, 1993) and various resilience factors during stressful events have been highlighted in developed countries. Gender and residence status differences in resilience and educational attitudes could show emergence of gender-specific and residence status-



**Figure 1.** Hypothesized structural model indicating the different direct and indirect contributions of expectations and educational attitudes on resilience. Note: ATS, Attitudes towards school; ATT, Attitudes towards transition activities; ORE, organisation expectations; AE, academic expectations; PCE, expectations for Parental care; PSE, Personal skills expectations; PRE, peer support; RES, Resilience.

specific behavioral characteristics at early secondary school age (Sun & Stewart, 2007), upon which supportive interventions could be designed. Additionally, students' qualitative feelings of the transition and adjustment process are also not known as most of the few studies conducted are quantitative in nature.

For well-informed, effectively designed educational interventions, aimed at ensuring positive adjustment and in turn high retention rate of students in secondary school in developing countries, there is a need to understand students' educational attitudes and their effects on students' resilience in transitioning to secondary school. Thus, to extend earlier resilience research in educational settings, whilst grounded in resilience theory (Masten, 2014; Obradović et al., 2012), we sought to explore the predictive and mediating relationship among students' expectations, educational attitudes, and resilience. Also, gender and residence-status differences in students' educational attitudes and resilience were explored. Students' qualitative feelings of the transition and adjustment process were also sought. We hypothesized that: H1: Gender differences exist in students' educational attitudes and resilience in favor of boys and that day students (who travel to and from school daily) are more resilient than boarding students (who reside at school); H2: Gender strongly predicts students' resilience; H3: Expectations have a strong indirect (positive) effect on students' resilience through educational attitudes (Figure 1).

## Study one

### Participants and procedures

The sample comprised 744 8<sup>th</sup> grade students (373 females, 371 males) with a mean age of 13.7 years ( $SD = 1.82$ , range = 13–16, skewness = 0.42) from eight randomly selected secondary schools from Masaka district, Uganda. Most of the students lived at school ( $n = 394$ , 53%). Of the day scholars, 76% (266 students) traveled a distance less than 10 kilometers between school and home every day. To ensure anonymity, each student was assigned a 6-digit code during the two data collection points. In addition to permission from the school administration, participants supplied written assent after the information session to confirm their voluntary participation in the study. The study received ethical approval (No. 13/03–17) from Mbarara University Research Ethics Committee prior to data collection.

### Measures

#### Expectations

During the students' first day at school (Time 1), transitioning students' expectations were assessed using a modified version of Towns' (2010) early secondary school questionnaire. The 18-items measure assessed students' social expectations during the primary to secondary school transition, their academic expectations (e.g., "having different teachers for different subjects will be good"), expectations of the extent of their parental influence, and expectations of how their new school would be organized. For each item, students rated their expectations on a 5-point Likert scale anchored at 1 (strongly disagree) to 5 (strongly agree). We changed some words of the items to adapt the tool to the Ugandan context (e.g., "grade 7" to "primary 7"). Confirmatory Factor Analysis (CFA) with full maximum likelihood indicated that the 4-factor model fitted well (see Table 1). Reliability coefficients indexed by Cronbach's alpha were satisfactory (see Table 2).

#### Educational attitudes

Later that year (7 months after Time 1 survey), students' educational attitudes and resilience were assessed. Students' attitudes toward the new school were assessed using a 25-item questionnaire adapted from Greenman (2013). Five items (e.g., "I am reluctant to participate in classes") were modified ("I am reluctant to participate in orientation activities") to assess students' attitudes to transition activities. All items were anchored on a 5-point Likert scale at 1 (strongly disagree) to 5 (strongly agree). CFA confirmed items loaded on the

**Table 1.** Fit indices on each section of the instrument used.

Scale	$\chi^2/df$	CFI	TLI	SMRMR	RMSEA
Expectations	1.83	0.93	0.92	0.054	0.065
Educational attitudes	1.76	0.94	0.94	0.055	0.064
Resilience	1.82	0.93	0.94	0.054	0.064

**Table 2.** Descriptive statistics, correlations and reliability coefficients for scales of the study variables.

Variable	M (SD)	1	2	3	4	5	6	7	8	9	10	11	12
<b>Attitudes</b>													
1.ATS	4.23 (0.17)	<b>0.92</b>											
2.ATT	4.52 (1.09)	0.43*	<b>0.94</b>										
<b>Expectations</b>													
3.OE	3.86 (0.86)	0.18*	0.17*	<b>0.82</b>									
4.AE	4.12 (1.45)	0.14*	0.59	.026*	<b>0.91</b>								
5.PCE	3.61 (0.93)	0.11	0.28*	0.42*	0.32	<b>0.82</b>							
6.PSE	4.22 (0.77)	0.28 <sup>b</sup>	0.25 <sup>b</sup>	0.38*	0.54*	0.57*	<b>0.74</b>						
7.PRE	4.57 (1.06)	0.13	0.02	0.28*	0.14 <sup>b</sup>	0.21 <sup>b</sup>	0.26*	<b>0.83</b>					
<b>Resilience</b>													
8.SO	3.76 (0.91)	0.50*	0.03	0.11 <sup>b</sup>	0.17	0.61*	0.38*	0.19*	<b>0.71</b>				
9.PCA	4.48 (1.05)	0.17*	0.06	0.09	0.13 <sup>b</sup>	0.67*	0.31*	0.28*	0.27*	<b>0.76</b>			
10.PSG	4.38 (1.01)	0.18*	0.44*	0.05	0.37*	0.49*	0.48*	0.18*	0.19*	0.31*	<b>.081</b>		
11.EC	4.12 (0.71)	0.21	0.06	0.02	0.45	0.61*	0.25*	0.27*	0.34*	0.45*	0.31*	<b>0.83</b>	
12.CE	3.17 (1.01)	0.11 <sup>b</sup>	0.08	0.02	0.90	0.64*	0.26*	0.37*	0.28*	0.41*	0.25*	0.28*	<b>0.81</b>

Note. ATS, Attitudes toward school; ATT, Attitudes toward transition activities; OE, organization expectations; AE, academic expectations; PCE, expectations for Parental care; PSE, Personal skills expectations; PRE peer support; PCA, Physical care; SO, Social skills; PSG, Psychological care; EC, Educational context; CE, Cultural context. <sup>b</sup>significant  $p < .01$ , \*significant  $p < .05$ , **boldfaced** are Cronbach's alphas.

two factors (i.e., attitudes toward school and attitudes toward transition programs). Reliability coefficients indexed by Cronbach's alpha were 0.92 and 0.94, respectively.

### Resilience

Also, at Time 2, students' resilience was assessed using 28 items adopted from Liebenberg et al. (2013) Youth version of the Child and Youth Resilience measure (YCYRM). Items were rated on a 5-point Likert scale anchored at 1 (not at all) to 5 (a lot). Students rated (1) their social and personal capabilities, (2) physical and psychological (e.g., "I feel safe when I am with my family") relations with their primary caregiver, and (3) educational and school cultural factors that eased their sense of belonging. CFA and reliability coefficients (see Tables 1 and 2 respectively) were satisfactory.

### Analyses

Initially, data were screened for missing values, normality, sampling adequacy, and sphericity. Full-Information-Maximum likelihood estimator was used to manage the 0.5% missing values due to its efficiency compared to other methods (Wang & Wang, 2012). Using the Shapiro-Wilk test for normality distribution, data passed the normality test with a nonsignificant value ( $p = 0.78$ ). Also, data passed the Kaiser-Meyer-Olkin measure of sampling adequacy ( $KMO = 0.93$ ). To assess

for sphericity, Bartlett's test was conducted. A significant Chi square value ( $\chi^2 = 2789.65$ ,  $p < 0.05$ ) was obtained, showing adequate quality of the correlation matrix of the items. Additionally, the zero-order correlations between the different items for each variable were all  $< 0.85$ , showing the absence of multicollinearity in the variables.

Following the above tests, validity and reliability tests of the instrument sections were conducted. Firstly, we conducted a CFA on each section of the instrument, to confirm whether data fit the hypothesized measurement model (i.e., items used to measure the different variables contributed significantly to doing so). Hu and Bentler's (1999) model fit criteria (Comparative Fit Index (CFI), Tucker-Lewis Index (TLI)  $\geq 0.90$ , Standardized Root Mean Square Residual (SRMSR)  $\leq 0.08$ , and Root Mean Square Error of Approximation (RMSEA)  $\leq 0.06$ ) were followed. Data were a good fit (see Table 1). Secondly, Cronbach's alphas, as an index of internal reliability, were also examined for each section of the instrument. Values obtained were in an acceptable range (see Table 2).

To evaluate for residence status and gender variations across educational attitudes and resilience (hypothesis 1), independent t tests were conducted. Following Cohen's recommendations (Cohen, 1988), the d effect sizes for significant t values were calculated. The d effect sizes were interpreted as small ( $d \geq 0.20$ ), medium ( $d \geq 0.50$ ) and large ( $d \geq 0.80$ ). For prediction (hypothesis 2), we formed two models following Keith's recommendations (Keith, 2015). In model one, resilience was

regressed on students' gender (using bivariate regressions). The R-square value was noted. In Model 2, all three independent variables were included in the regression equation at the same time. The R<sup>2</sup> value was also noted. Given that there was substantial improvement in the R<sup>2</sup> value, model two was considered a better fit and thus used for further interpretations (Cohen, 1988; Keith, 2015).

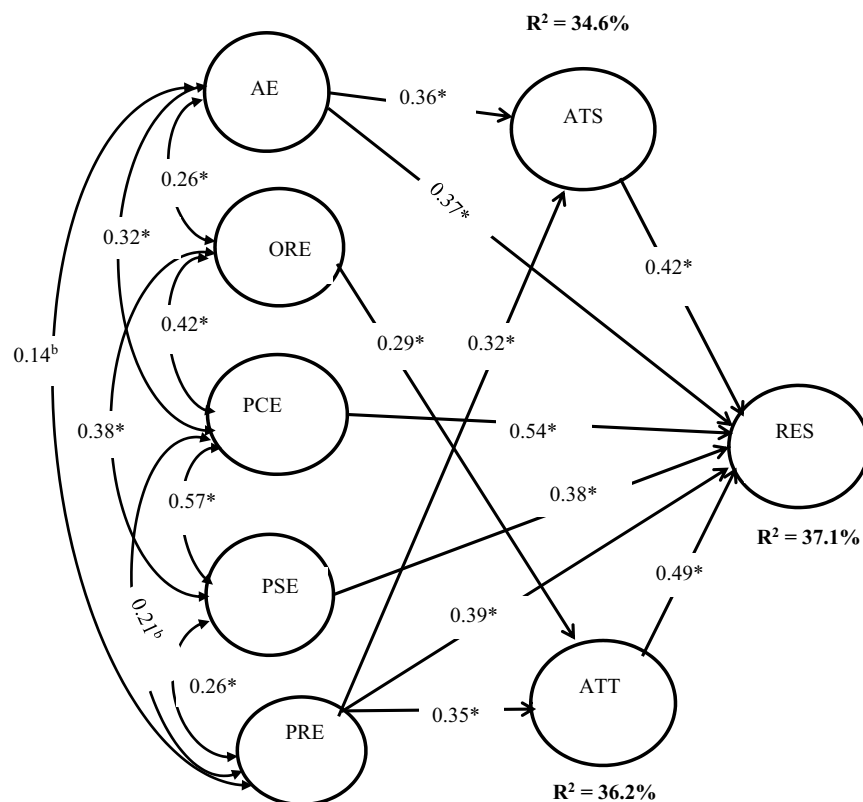
To examine the direct and indirect effects of expectations and educational attitudes on resilience (H3), we conducted path analyses using Mplus 8 (Muthén & Muthén, 2017). Initially the hypothesized measurement model (Figure 2) was assessed to determine data fit (Wang & Wang, 2012). In the next steps, partial and full mediation models were evaluated for the significance of indirect paths and direct paths from expectations through educational attitudes to resilience. Improvements in the model after adding direct paths were assessed using a chi-square difference test, until a non-significant value was obtained (Shreiber et al., 2006). Following recommendations by Hu and Bentler's (1999), the model was deemed fit if  $\chi^2$  was not significant ( $p > 0.05$ );  $\chi^2/df < 5$ ; CFI and TLI were  $\geq 0.90$ ; RMSEA  $\leq 0.06$ , and SRMR  $\leq 0.08$ .

## Results

Table 1 presents results of a CFA. Results of the CFA indicate measurement model fit data even after some sections of the instrument wordings were changed to fit the study context. The correlations presented in Table 2 indicate positive relations between expectations, educational attitudes, and resilience of transitioning secondary school students. Moderate associations were noted between students' expectations of increased parental care and resilience ( $r$  values range from 0.49 to 0.67,  $p < 0.05$ ), students' attitudes toward school and their expectations for social skills development ( $r = 0.28$ ,  $p < 0.01$ ), and students' attitudes toward transition activities and the psychological care they received ( $r = 0.44$ ,  $p < 0.05$ ).

### Differences in educational attitudes and resilience according to gender and residence status

Table 3, differences were noted in students' resilience and educational attitudes with respect to their gender and residence status. In terms of their educational attitudes, significant differences were noted in their attitudes toward transitional activities in favor of female ( $t = 8.46$ ,  $t = 0.01$ ,



**Figure 2.** Results of the Path analysis indicating coefficients of determination and significant standardized beta correlation coefficients. Note: ATS, Attitudes towards school; ATT, Attitudes towards transition activities; OE, organisation expectations; AE, academic expectations; PCE, expectations for Parental care; PSE, Personal skills expectations; PRE, peer support; RES, Resilience. <sup>b</sup>significant at  $p < 0.01$ , \*significant at  $p < 0.05$

$d = 0.52$ ) and day students ( $t = 3.49$ ,  $t = 0.03$ ,  $d = 0.72$ ). No significant gender differences existed in their attitudes toward school activities.

Regarding students' resilience, notable significant differences existed in their physical and psychological care received. Although female students reported to have received physical care more than the male students ( $t = 2.23$ ,  $t = 0.02$ ,  $0.03$ ,  $d = 0.52$ ), it was the reverse for psychological care. Male students reported receiving more psychological care than their female counterparts ( $t = 2.65$ ,  $t = 0.01$ ,  $d = 0.52$ ). Whilst no significant differences were noted in physical care received among day and boarding students, significant differences in psychological care received were noted in favor of day students ( $t = 3.02$ ,  $t = 0.02$ ,  $d = 0.72$ ).

### Gender, residence status, and educational attitudes as predictors of resilience

Both regression models were significant. From Table 4, results indicate that gender accounted for 21.5% of variance in transitioning students' resilience. However, when all three predictors were included altogether in model two, the  $R^2$  value increased by 43.6%. Specifically, students' residence status ( $\beta = 0.34$ ,  $p < 0.001$ ) has slightly more powerful influence on their resilience than their gender ( $\beta = 0.21$ ,  $p < 0.001$ ) and educational attitudes ( $\beta = 0.20$ ,  $p < 0.001$ ).

### Direct and indirect effects of expectations on resilience through educational attitudes

Initially, we assessed the fit of the measurement model with our data. Fit indices from CFA indicated acceptable

fit for the 8-factor model ( $\chi^2/df < 1.46$ ,  $CI = 0.025-0.036$  at 90%;  $CFI = 0.94$ ,  $TLI = 0.94$ ;  $RMSEA = 0.05$ , and  $SRMR = 0.04$ ). On assessing the full- and partial-mediation structural models, a  $\chi^2$  difference test with MLMV estimator indicated that the partial mediation model was a better fit ( $\Delta\chi^2 = 19.53$ ,  $p < 0.05$ ).

Significant indirect effects of expectations on resilience through educational attitudes were noted. Specifically, the relation between expectations of peer support and resilience was mediated by students' attitudes toward transitioning activities ( $\beta = 0.29$ ,  $p < 0.001$ ,  $SE = 0.044$ ) and attitudes toward school ( $\beta = 0.18$ ,  $p < 0.001$ ,  $SE = 0.054$ ), with the former demonstrating stronger Total indirect effects of peer support expectations were significant ( $\beta = 0.47$ ,  $p < 0.001$ ,  $SE = 0.057$ ).

On evaluating the direct path coefficients of expectations and educational attitudes on Resilience (see Figure 2), unlike students' expectations on how their new school would be organized ( $\beta = 0.32$ ,  $p = .06$ ,  $SE = 0.037$ ) students' academic expectations ( $\beta = 0.37$ ,  $p < 0.05$ ,  $SE = 0.025$ ), expectations of the extent of their parents' influence ( $\beta = 0.54$ ,  $p < 0.001$ ,  $SE = 0.043$ ), expectations of support from their peers ( $\beta = 0.39$ ,  $p < 0.05$ ,  $SE = 0.027$ ) and expectations of personal skills growth ( $\beta = 0.38$ ,  $p < 0.05$ ,  $SE = 0.037$ ) directly contributed to their resilience. Compared to students' expectations of how their new school would be organized ( $\beta = 0.29$ ,  $p < 0.05$ ,  $SE = 0.028$ ), their expectations of support from fellow peers ( $\beta = 0.35$ ,  $p < 0.05$ ,  $SE = 0.035$ ) had high contributions on their attitudes toward transition activities. On the other hand, students' academic expectations ( $\beta = 0.36$ ,  $p < 0.05$ ,  $SE = 0.026$ ) had higher contributions on their attitudes toward school than their expectations of peer support ( $\beta = 0.30$ ,  $p < 0.05$ ,  $SE =$

**Table 3.** Descriptive statistics and  $t$  – statistics for Gender and residence status differences in Educational attitudes and Resilience.

	Gender				Residence status			
	Male M (SD)	Female M (SD)	$t$	$p$	Day M (SD)	Boarding M (SD)	$t$	$p$
PCA	3.76(1.22)	4.03(1.05)	-2.23	0.027	3.45(1.21)	3.51(0.87)	3.02	0.06
SO	3.12(0.99)	3.31(1.02)	3.01	0.056	3.88(1.16)	3.43(0.91)	2.87	0.014
PSG	4.22(0.77)	3.84(1.08)	2.65	0.012	4.13(1.09)	3.82(0.83)	3.02	0.023
CE	3.02(0.75)	3.17(0.73)	2.87	0.61	4.22(1.64)	4.39(0.82)	2.78	0.16
EC	4.52(0.71)	4.48(0.94)	2.93	0.12	4.10(1.08)	4.47(0.77)	-3.66	<0.001
ATS	4.18(0.48)	4.10(0.38)	8.01	0.59	4.34(0.32)	4.24(0.63)	3.01	0.67
ATT	4.06(0.63)	4.75(0.61)	-8.46	0.01	3.99(0.62)	3.24(0.45)	3.49	0.03

Note. PCA, Physical care given; SO, Social skills; PSG, Psychological care given; CE, Cultural context; EC, Educational context; ATS, Attitudes toward school; ATT, Attitudes toward transition activities.

**Table 4.** Results of multiple regressions of gender, residence status and educational attitudes on resilience.

	Model 1			Model 2		
	$\beta$	$t$	$p$	$\beta$	$t$	$p$
Gender	.24	2.85	<0.001	0.21	2.45	<0.001
Residence status				0.34	3.93	<0.001
Educational attitudes				0.20	2.47	<0.001
$R^2$	0.215			0.651		

Note: \*\* significant,  $P < .001$ .



0.035). Regarding students' educational attitudes, their attitudes toward transition programs and activities ( $\beta = 0.32, p < 0.001, SE = 0.035$ ) had higher contributions on their resilience than their attitudes toward school ( $\beta = 0.49, p < 0.001, SE = 0.038$ ). The model explained 34.6% of variation in students' attitudes toward school, 36.2% of variation in students' attitudes toward transition programs and activities, and 37.1% of variation in students' resilience.

## Study two

Between Time 1 and Time 2, qualitative data were collected using Focus Group Discussions (FGD). For equal representation, schools were clustered into three groups that is: (i) Universal Secondary Education (USE) schools, which are government aided schools that provide free secondary school education, (ii) Non-USE schools, which are government aided schools in which each student must pay termly school fees to access education services and (iii) Private schools which are privately owned schools that do not receive any financial aid from the government. In private schools, students pay high termly fees to access educational services.

## Participants and procedures

Participants were 39 8th grade students (20 male) from three secondary schools. From each school cluster, one school was selected. Thirteen participants were randomly selected from each school to take part in a 40-minute FGD. It should be noted that the schools and students selected for study 2 took part in study 1. To minimize pre-exposure, we ensured that neutral open-ended questions were used during the FGDs. Prior to the FGD, the selected students were informed of the study details including the purpose of the FGD and ethical procedures. Then, students assented voluntarily before they took part in the study. To prevent participants from calling each other by name, each student was given a tag with a code that was used during the FGD. The FGDs were moderated by the first author (DK) with aid from CMM. Recordings from the FGDs were labeled A, B, C in respect to the school cluster for anonymity. All members of the team are qualified in qualitative data collection and analyses (see author biographies).

## Measures

Following critical analyses of literature and the word choice in the instruments used to assess students' expectations and educational attitudes, students were asked to

narrate more about their (i) expectations and realities about secondary school (FGD question: "what did you expect to find in secondary school, that was different for you in primary school?"), (ii) feelings and perspectives about their teachers, friends, and classes ("how do you feel about your new school, teachers and friends?"), and (iii) activities that they find helping during the adjustment process ("How are you adjusting to the new school and in which transition activities do you engage in?"). The discussions were held in English, which is the official language in school.

## Analyses

Analyses were guided by Braun and Clarke (2006) 6-step approach to thematic analysis. Their framework not only supplies explicit sequential guidelines for qualitative research but also offers specific strategies for overseeing the analytic phases of the collected data (Charmaz, 2019). Initially, each member of the research team listened to a randomly recorded file of one of the FGDs to familiarize themselves with the data. Then, the research team met and listened to the audio recording (labeled A) together and each person jotted down rough notes independently of their early impressions of the data for first analytic observations. The team then compared the notes they had developed with a transcribed version of the recording. This was done to find any errors in question interpretation by the student.

After ascertaining that the notes made by the research team matched the transcript of recording A, codes were then identified in the second step. We used open coding since we did not have any preset codes. Each member of was given transcript A and tasked to code it separately by highlighting any segment of the data that was relevant to the research topic. This was by hand working through every page of the hardcopies of the transcripts using pens and highlighters of assorted colors. After, we met to compare, discuss, and modify the codes.

Upon agreement on the codes generated in transcript A, a list of codes to be used for the two remaining transcripts of FGD recording B and C was generated. The codes were developed and modified throughout the whole coding process. Copies of the transcription and generated list of codes were given to each research team member for coding. Any new potential codes identified that were absent (or missed) in the first trial transcription were usually discussed and included on the list of codes upon agreement by majority of the research team members. The research team met to compare individual coded transcripts to ascertain similarity in linked codes and search for themes in the third step. As Braun and Clarke (2006) explain, a theme is characterized by its significance

to the research topic or question. We critically examined the codes to find their similarity. Codes that clearly fitted together were put under the same theme.

In the fourth step, the themes were reviewed, changed. Data relevant to each theme were put together in tables using Microsoft excel. Each theme was color-coded similarly like the codes in it. Then the themes were defined and confirmed based on majority agreement of the research team members. Once the themes were developed and agreed upon by the research team, KD cross checked the transcriptions to organize quotes and narrations for each theme in the last step. The research team held regular meeting to harmonize and discuss interpretations of the data (especially quotes and narratives).

## Findings

### Theme 1: enthusiastic for a fresh start

Students viewed secondary school as a new opportunity to start a fresh academic and social life. They expressed how excited they were to move from their earlier schools to a new school. Cheerfully, students expressed enjoying every bit of their fresh start away from the prying eyes of their parents and former teachers.

Student B illustrates this feeling in quote

*Am enjoying secondary school . . . so far, it is an amazing experience. No one knows me here which is good. It is a fresh start for me . . . My parents and the new teachers treat me differently . . . My parents do not “baby” me anymore but give me more chances to . . . I feel fantastic that my teachers are less controlling. I am not always under their watch . . .*

Similarly, Student D said:

*This is a chance for me to a new life . . . . Am a changed person . . . . No more craziness . . . only serious business. It is another opportunity to show my parents that I can be better . . . I can be mature and focused . . . I am going to do better for myself this time around.*

Most Students were enthusiastic about the new school and classroom activities. They described how interesting the new subjects were. To the students, the classroom settings were pleasant, tidy, and organized. One student A was quoted,

*Compared to primary school, secondary school is remarkably interesting. I am eager to start . . . We are learning new subjects . . . I have visited the laboratory many times so far and saw many new laboratory instruments. The classrooms are spacious . . . I like my new school . . .*

Other students used word like “eager to attend new classes . . .,” “. . . super excited . . .” “I am Curious . . .” and “. . . Interested . . .,” to narrate how driven they were.

### Theme 2: transition (orientation) activities

Whilst some students (mostly in private schools) reported the presence of orientation activities at their new school, most students reported that such activities were entirely absent in their schools. Where transition activities were provided, students reported that these activities lasted for only a brief period within the first week of school. Any student that reported late due to difficulties in securing finances missed such activities. Also, students narrated that during these activities much emphasis was put on the introduction of school administrators, and school rules and regulations. Unfortunately, little focus was drawn to address students’ difficulties in adjustment, expectations, attitudes, and other psychological issues associated with transition. Several students narrated:

*The orientation program was held four days after our reporting day . . . . . I remember much focus was on introducing school administrators . . . . . teachers were also introduced . . . . . Most of the time was spent explaining the consequences of breaking each of the school rules . . . . No information was given to us on how we survive in secondary school . . . . I was extremely disappointed . . . (Student F)*

*I reported late . . . . What do orientation programs mean? What did you folks do? . . . . I have no idea . . . . I had to learn and get around school on my own . . . (Student G)*

*Ha! We did not have such activities at school. For us it was just a short talk on the assembly and then off we went to class . . . . . I had no idea where my class was, who the head teacher was . . . . . up to now, we are just there trying to survive around (Student J)*

*I was looking forward to the orientation dance . . . . . I had planned everything . . . . the dress, shoes . . . . . thought it could be a fun time to get to know my classmates . . . . . but this school is different . . . . Such orientation activities are absent . . . . We started off with classes . . . . It is hard to get around . . . . No introductions were made . . . . We just dived right into academic stuff . . . (Student D in a government school)*

### Theme 3: mixed feelings

Although most of the students were excited about the new educational level, some expressed feelings of dislike and sadness. They expressed their worry of being insignificant and unnoticed in the larger population at their new school. The transitioning students move from being the oldest (and sometimes most respected students) to the youngest and unfamiliar students in the new school. Dealing with such a change arouses mixed feelings in students since they are unsure of when and how they will be significant and recognizable in the new school. Several students with concern narrated:

*At the moment, I am there (50–50) . . . there are many older students everywhere . . . . . I do not know if my teachers notice how talented I am . . . I am never noticed . . . (Student E)*

*I am worried my teachers do not notice my talents because everyone is good . . . . It is for my own benefit that I am not noticed . . . . . do you notice that we are the youngest and lowest . . . . . although it is good for now, it bothers me . . . . (Student G).*

Although some students expressed excitement, the same students expressed fears of not fitting in (common among those that perceived themselves as older than their peers). To these students, their attitudes toward their body changes and new school settings were narrated using mixed statements. Student A and Student G, who reported that they were 16 and 5 years respectively, narrated how generally school is fun although they are worried that they do not fit in well with their peers in class. Student G said:

*I am only 5 years old . . . . I have bigger breasts and appear taller and curious . . . . My classmates call me mama (meaning mother) . . . . It is not fun in class . . . I do not like it that I do not fit in well in my class . . . but when I am with other students from other classes, I feel at ease . . . . . happy to fit in with them . . . .*

#### **Theme 4: unrealistic expectations**

Students gave different narrations of their expectations in secondary school. Although most students agreed that what they expected is what is happening in secondary school, a group of students reported that some of their expectations were quite different from the realities in secondary school. Mostly, this related to the amount of freedom students expected to have. Many students expected to be more free, autonomous, and independent. However, to their dismay, the status quo remained. Instead, parents and teachers were perceived to be overly controlling and cautious of the students' behavior. One student, Student D was quoted,

*It is no different. My mother watches all my moves . . . . She checks everything. . . . . from my arrival time at home to my departure time at school . . . I am under more scrutiny from my teachers too. I never expected this much control and "babying" . . . . Teachers are too controlling and demanding . . . .*

To such a student, the reality was marred quite differently from their expectations.

Other students (P, U and Z respectively) used statements like "I had this beautiful picture of secondary school in my mind, but the reality is quite different . . . .," "what I expected is completely different from . . . ." and "it's like waking up to a completely different scene . . . ." to

narrate how the expectations of their perceived freedom and independence were unreal.

## **Discussion**

Results of the present study show that transitioning 8th grade students have lofty expectations and educational attitudes, are enthusiastic and excited, enter their new school with mixed feelings, and are resilient. This contrasts with other h other studies that reported most students being less enthusiastic, liking school less (Barber & Olsen, 2004), having low expectations of the quality of school life (Akos & Galassi, 2014), and a low sense of school belonging and connectedness (O'brennan & Furlong, 2010; Pereira & Pooley, 2017). However, as expected, not all students were adjusting well to the new school. A group of students reported having difficulty finding their way around the school, had unrealistic expectations, were emotionally distressed, had mixed feelings, were not receiving support from their peers, parents, and teachers, were bullied, and body shamed. Given that social relations are important for resilience (Pereira & Pooley, 2017) and dealing with psychological distress (Samel et al., 2011; Suldo et al., 2015), these students are at a greater risk of dropping out of school if not given prompt attention. Due to minimum attention given to psychological wellbeing of students as showed by lack of a school psychologist in Ugandan schools, it is these students that account for the high dropout rate on transition. As we discuss the study findings, we also highlight the possible educational implications of the study findings and give recommendations for the development of resilience in transitioning students.

No statistically significant gender or residence status differences were noted in students' attitudes toward school. Similar findings were noted by Greenman (2013). Significant differences were noted in students' resilience and attitudes to transition activities about their gender and residence status. Notably, are the differences in physical and psychological care received according to gender and residence status. In line with Sun and Stewart (2007), our findings further highlight the effects of gender on fostering resilience through various protective factors. Whilst female and boarding students reported receiving a lot of physical care to foster their resilience, their male and day schooling counterparts reported to have received more psychological support. A plausible explanation for such findings is the influence of cultural factors. As noted in Berry et al. (2011), cultural factors often decide how people express their distress, help seeking behaviors, and socialization practices. Gender influences intentions to seek

help, desire for social support, and desire to express need for physical care (Rueger et al., 2008).

Whilst women show more favorable intentions to seek psychological and physical care than men, these intentions are always negatively influenced by the social-cultural interpretations attached to outward expression of distress (Berry et al., 2011). For example, African males are more likely to manage personal physical and psychological problems on their own, share with their friends if they cannot solve them on their own before contacting their family as compared to western or Asian men (De Choudhury et al., 2017). Probably, that is why male students presume to need less physical care as compared to females. Furthermore, the findings highlight the cultural narrative in Uganda which stresses the importance of supplying basic physical needs, especially for adolescent girls and boarding students, to prevent them from being distracted from classwork and feeling needy that could increase their vulnerability. On the other hand, a Ugandan male student is culturally viewed as a person who can survive with minimal requirements. Given that day students come from very low-income families, physical needs are usually inadequate. Akos and Galassi (2014) state that students from low socio-economic groups are more likely to be resilient than their counterparts.

As much as providing physical care is important, psychological care by primary care givers is equally important, given that students who experience strong bonds with adults or their caregivers are less likely to be depressed, disengaged from school, and more likely to take part and persist in school (Banatao, 2011). Langenkamp (2010) noted that students with high feelings of family support have more academic values and feel more satisfied with school. When students do not have a nurturing home-like life, they become more vulnerable. Thus, teachers and other caretakers of students in boarding schools should be more caring, compassionate, and open to conversations in which students can talk about other challenges of transition outside classwork. Also, parents of female and boarding students should create some time, and a safe place to address their children's psychological needs. A positive home climate can help children's psychological wellbeing (Akos & Galassi, 2014).

In the present study, gender, residence status and education attitudes predicted students' resilience. Whilst in other studies gender was the best predictor of resilience (e.g., Arnold & Doctoroff, 2003; Fergusso et al., 2003), findings in the present study revealed that residence status was the best predictor of resilience. In Uganda, the residence status of the student is determined by the caretakers' financial status rather than

gender or the distance between school and home. Students from lower income families mostly reside at home regardless of how far the school is from home. As suggested by Rutter (2006) our findings also support that student who come from lower-income families are more likely to prove significant resilient characteristics. It is possible that walking with their peers from school to home every day provides a safe space and platform to improve how they relate and communicate with each other, increasing their sense of togetherness and the feeling of belongingness, and thus improve their peer support systems.

Additionally, our findings are consistent with resilience theory, given that positive associations between students' expectations, their educational attitudes and resilience existed. Elevated expectations in schools encourage and remind students that they can achieve beyond their own belief (Townes, 2010). Consistent with Unger's (2005) suggestion that the ethos of lofty expectations serves as a protective factor for resilient students, we have proved that students' educational attitudes are equally important protective factors. Specifically, educational attitudes partially mediate the relationship between expectations and resilience. Students' expectations of support from their peers have strong positive contributions to their resilience through educational attitudes. Positive educational attitudes influence students' engagement in and likeness of school activities, their persistence and academic motivation (Banatao, 2011). Thus, quality positive relationships between peers enhance students' educational attitudes. If students experience positive peer relationships at school, they are more likely to have positive attitudes toward school, engage in cooperative learning, educational games, and thus achieve academic success.

### **Educational implications**

Considering our study findings, attitudes toward school and transitional activities are crucial for promoting resilience. Thus, secondary schools should not only create a culture of high realistic expectations but also foster the development and maintenance of high educational attitudes for all students to keep students and experience greater rates of academic success (Pereire & Pooley, 2017). Clear instructions on a school's culture can be provided to students during transition activities. As reported by students, such transition programs should not run for only a few days (such as a week or less) but rather, we recommend that these programs should run through the whole first academic year of secondary school. Also, within these programs, activities should incorporate aspects that nurture a high sense of

belongingness, self-awareness, autonomy, and teacher rapport outside of classwork (Shortt et al., 2006). Also, during these programs, students should be given a platform to discuss their expectations so that any unrealistic expectations are noticed as early as possible. Teachers should take note of students' unrealistic expectations and help resolve them as early as possible. If not resolved, feelings of frustrations and disappointment may arise that could in turn inform students' choice to drop out (Ekstrom et al., 1986). However, we caution the use of coercion to direct students toward involvement in such school transition activities since coercion makes students fearful and anxious, which might undermine students' educational attitudes and expectations of autonomy (Banatao, 2011).

As earlier mentioned, some students reported being body shamed, teased, and bullied which has a negative impact on their self-esteem, emotional engagement and need to connect with peers. To help students with peer problems, teachers can take an initiative-taking approach in promoting positive peer relationships (Ming-Tak, 2008). Such approaches may include teaching social-emotional skills, conflict-resolution skills, and critical thinking skills (Kemple & Hartle, 1997). Additionally, teachers can encourage cooperative learning by getting students to learn in randomized groups. Through cooperative learning, students can know more about each other, improve their relations, feelings, attitudes, and achievement (Kemple & Hartle, 1997; Kyndt et al., 2013). Activities that foster peer acceptance should also be incorporated in the transition programs to reduce risks of peer victimization. In such activities, students should be guided into conversations that enable them to appreciate individual differences not only in body structure and shape but also in other aspects and that these differences are normal. By encouraging them to be empathetic to the bullied peers, the students can take responsibility to intervene whenever bullying, teasing and body shaming occur (Whitson, 2013). Enforcing school norms and policies against bullying of any form is highly recommended.

There are students who reported having issues connecting with their peers but not with other senior students, probably because they do not feel comfortable relating with their agetates but their seniors. Although classroom groupwork seems to enhance connection between students and thus their ease to relate (Kyndt et al., 2013; Ming-Tak, 2008), such students would not benefit much from such a program. Thus, we would recommend incorporation of peer connection supportive program (Kemple & Hartle, 1997). In this program, senior students can support incoming freshmen through leadership outreach programs that nurture

a conducive environment through inspiring each other, sharing their experiences, and working together to find solutions to some challenges they face during transition. Peer connection programs have been reported to improve graduating rates of participating students and cut by half the number of students who would otherwise drop out (Ross, 2022).

Further, in the present study, expectations for parental care strongly contribute to students' resilience. As much as students reported a need for increased autonomy and independence, they still need physical and psychological care from their parents. Thus, parents should be equally encouraged to actively be involved in students' transition activities. Not only should they supply physical care, but also psychological care to students, especially female and boarding students. During some transition activities, parents should be invited to school and actively take part in activities that promote open communication between them and their children.

Also, we strongly recommend the establishment and recruitment of a school psychologist for Ugandan schools, a position that is currently lacking, so that most of the psychological issues, especially in transitioning boarding students, are addressed earlier. Whilst using several positive educational approaches that promote positive psychology in school (Seligman et al., 2009), the school psychologist could support schools to put more focus on students' strengths, their positive experiences, competency building, and on what is going well rather than focus on pathology, difficulties, deficits, and what is not working. Special attention should be given to students with greater needs than their peers such as students who appear alone, have few quality friends, tend to avoid school, have low esteem, are emotionally distressed, and show aggressive behaviors. These behaviors are indicators that these students are having difficulty adjusting to the new school, are being body shamed, and or being bullied by their peers.

### **Limitations and future directions**

Our study was cross sectional – a design that does not imply causal inferences. A longitudinal study could be designed in this regard. Moreover, research can be done to explore the interplay of these factors during inter-school transitions of secondary school students in other grades. Additionally, an extension of this current study can be done to explore the role of school leaders' and teachers' attitudes, goal orientations, and expectations on students' adjustment process, given that teachers and school leaders are key stakeholders in students' day-to-day planning and coping.

## Conclusions

Firstly, students differed significantly in their resilience and educational attitudes with respect to gender and residence status. Secondly, gender, residence -status and educational attitudes were strong predictors of students' resilience. Thirdly, educational attitudes partially mediated the relationship between student's expectations and resilience in transitioning secondary school students. Finally, some transitioning students have unrealistic expectations, experience bullying and body shaming, and mixed feelings during adjustment. To foster resilience of transitioning students, schools could cultivate a culture of high realistic expectations and positive educational attitudes, as well as organize several transitional strategies and activities that involve parents throughout the first year of lower secondary school.

## Acknowledgments

We would like to thank the students for their willingness to take part in the study, the teachers who helped us during the data collection phase, KAAD for partly funding the project, and Dr. Thomas Hunt for proofreading the manuscript.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## Funding

The study was partially funded by Katholischer Akademischer Ausländer Dienst (KAAD).

## Notes on contributors

**Diana kwarikunda** is a student at the University of Potsdam. Her current research interests are in educational psychology and school psychology whilst using a mixed methods approach. She has published several articles e.g. in the African journal of research in science and mathematics education.

**Nakalema Gladys** is a lecturer of special needs education at Mbarara University of science and Technology. She specializes in problematic and health compromising behaviors at the University.

**Charles Magoba Muwonge** is a senior lecturer of educational psychology and education foundations at Mbarara University of science and Technology. His current research interests are in cross cultural psychosocial barriers to mathematics learning currently corroborating with other 10 researchers in Europe and Asian for this project.

**Joseph Ssenyonga** is a Postdoc fellow at the University of Konstanz in Germany. He is also a senior lecturer of educational psychology at Mbarara University of science and

Technology. His research interest is in maladaptive behaviors in secondary school.

**Ulrich Schiefele** is a professor of educational psychology at the University of Potsdam. He is currently the chair, department of educational psychology. His current research interests are goal orientations and teacher behaviors under the project "Teach" that is funded by the Germany research fund. He has served as editor for different journals in Europe.

## ORCID

Diana Kwarikunda  <http://orcid.org/0000-0002-1747-1365>

## Availability of supporting data

Supporting data are available from the corresponding author on reasonable request.

## References

- Aikins, J., Bierman, K., & Parker, J. (2005). Navigating the transition to junior high school: The influence of pre-transition friendship and self-system characteristics. *Social Development, 14*(1), 42–60. <https://doi.org/10.1111/j.1467-9507.2005.00290.x>
- Akos, P., & Galassi, J. (2014). Middle and high school transitions as viewed by students, parents and teachers. *Professional School Counselling, 7*(4), 213–221.
- Akos, P., Rose, R. A., & Orthner, D. (2015). Sociodemographic moderators of middle school transition effects on academic achievement. *The Journal of Early Adolescence, 35*(2), 170–198. <https://doi.org/10.1177/0272431614529367>
- Arnold, D. H., & Doctoroff, G. L. (2003). The early education of socioeconomically disadvantaged children. *Annual Review of Psychology, 54*(1), 517–545.
- Banatao, E. J. (2011). *Educational resilience: The relationship between school protective factors and student achievement* [Dissertation]. San Diego State University.
- Barber, B., & Olsen, J. (2004). Assessing the transitions to middle and high school. *Journal of Adolescent Research, 19* (1), 3–30. <https://doi.org/10.1177/0743558403258113>
- Berry, J. W., Poortinga, Y. H., Breugelmans, S. M., Chasiotis, A., & Sam, D. L. (2011). *Cross-Cultural psychology: Research and applications*. Cambridge University Press.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–1. <https://doi.org/10.1191/1478088706qp063oa>
- Cem, A. G., & Gul, A. (2018). Protective factors contributing to the academic resilience of students living in poverty in Turkey. *Professional School Counselling, 3*(1), 38–49.
- Charmaz, K. (2019). Constructivist grounded theory. *The Journal of Positive Psychology, 12*(3), 299–300.
- Coelho, V. A., & Romão, A. M. (2016). Stress in Portuguese middle school transition: A multilevel analysis. *The Spanish Journal of Psychology, 19*(61). <https://doi.org/10.1017/sjp.2016.61>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Routledge.
- De Choudhury, M., Sharma, S. S., Logar, T., Eekhout, W., & Nielsen, R. C. (2017). Gender and cross cultural differences

- in social media disclosures of mental illness. *Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing* (pp. 353–369). Portland Oregon USA.
- Downey, D. B., Ainsworth, J. W., & Qian, Z. (2009). Rethinking the attitude achievement paradox among blacks. *Sociology of Education*, 82(1), 1–19. <https://doi.org/10.1177/003804070908200101>
- Duncan, S. C., Duncan, T. E., & Strycker, L. A. (2000). Risk and protective factors influencing adolescent problem behavior: A multivariate latent growth curve analysis. *Annual Behavioral Medicine*, 22(103–9), 36. <https://doi.org/10.1007/BF02895772>
- Eccles, J. (1983). Expectancies, values, and academic behaviors. In J. T. Spence (Ed.), *Achievement and achievement motives. Psychological and sociological approaches* (pp. 75–146). Freeman & Co.
- Ekstrom, R. B., Goertz, M. E., Pollack, J. M., & Rock, D. A. (1986). Who drops out of high school and why? Findings from a national study. *Teachers College Record*, 87(3), 356–373. <https://doi.org/10.1177/016146818608700308>
- Elfers, L. (2011). The transition to post-secondary vocational education: Students' entrance, experiences, and attainment. Enschede: Ipskamp drukkers.
- Ferguson, R. F. (2003). Teachers' perceptions and expectations and the Black-White test score gap. *Urban Education*, 38(4), 460–507.
- Frydenberg, E., & Lewis, R. (1993). Boys play sports and girls turn to others: age, gender and ethnicity as determinants of coping. *Journal of Adolescence*, 16(3), 253–266. <https://doi.org/10.1006/jado.1993.1024>
- Greenman, E. (2013). Educational attitudes, school peer context, and the “immigrant paradox” in education. *Social Science Research*, 42(3), 698–714. <https://doi.org/10.1016/j.ssresearch.2012.12.014>
- Hampel, P., & Peterman, F. (2005). Age and gender effects on coping in children and adolescents. *Journal of Youth and Adolescence*, 34(2), 73–83. <https://doi.org/10.1007/s10964-005-3207-9>
- Hausmann, L. R. M., Schofield, J. W., & Woods, R. L. (2007). Sense of belonging as a predictor of intentions to persist among African American and white first-year college students. *Research in Higher Education*, 48(7), 803–839. <https://doi.org/10.1007/s11162-007-9052-9>
- Henderson, N. (2007). Resiliency building “hidden” predictors of academic success. *Resilience in action*, 39–43.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Kayongo, E., Kawooya, I., & Mijumbi Deve, R. (2019). *The causes of school drop rate at the transition between primary to secondary school and possible control measures. A rapid response Brief*. New Vision.
- Keith, T. Z. (2015). *Multiple regression and beyond; an introduction to multiple regression and structural equation modeling* (2nd ed.). Taylor and Francis.
- Kemple, K. M., & Hartle, L. (1997). Getting along: How teachers can support children's peer relationships. *Early Childhood Education Journal*, 24, 139–146.
- Kumpfer, K. L. (1999). Factors and processes contributing to resilience: The resilience framework. In M. D. Glantz & J. L. Johnson (Eds.), *resilience, and development: positive life adaptations* (pp. 179–224). Kluwer.
- Kwarikunda, D., Schiefele, U., Ssenyonga, J., & Muwonge, C. M. (2021). Secondary school students' motivation profiles for physics learning: Relations with cognitive learning strategies, gender, attitudes, and individual interest. *African Journal of Research in Mathematics, Science and Technology Education*, 25(2), 197–210. <https://doi.org/10.1080/18117295.2021.1956720>
- Kyndt, E., Raes, E., Lismont, B., Timmers, F., Cascallar, E., & Dochy, F. (2013). A Meta analysis of the effects of face-to-face cooperative learning. Do recent studies falsify or verify earlier findings? *Educational Research Review*, 10, 133–149. <https://doi.org/10.1016/j.edurev.2013.02.002>
- Langenkamp, A. G. (2010). Academic vulnerability and resilience during the transition to high school: The role of social relationships and district context. *Sociology of Education*, 83(1), 1–19. <https://doi.org/10.1177/0038040709356563>
- Liebenberg, L., Ungar, M., & LeBlanc, J. C. (2013). The CYRM-12: A brief measure of resilience. *Canadian Journal of Public Health*, 104(2), 131–135. <https://doi.org/10.1007/BF03405676>
- Masten, A. S. (2014). Global perspectives on resilience in children and youth. *Child Development*, 85(1), 6–20. <https://doi.org/10.1111/cdev.12205>
- Masten, A. S., Best, K. J., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology*, 2(4), 425–444. <https://doi.org/10.1017/S0954579400005812>
- McGrath, H., & Nobel, T. (2011). *Bounce back! A wellbeing and resilience program. Lower primary K-2; middle primary years 3-4; Upper primary/secondary years 5-8*. Pearson Education.
- McInnis, C. (2001). Researching the first year experience: Where to from here? *Higher Education Research & Development*, 20(2), 105–114. <https://doi.org/10.1080/07294360125188>
- Mickelson, R. A. (1990). The attitude-achievement paradox among black adolescents. *Sociology of Education*, 63(1), 44–61. <https://doi.org/10.2307/2112896>
- Ming-Tak, H. (2008). Promoting positive peer relationships. In H. Ming-Tak & L. Waishing (Eds.), *Classroom management: Creating a positive learning environment* (pp. 129–148). Hong Kong University Press.
- Ministry of Education. (2019). Report on education status. Kampala. <http://ministryofeducationandsports/en/education>
- Mizelle, N. B., & Irvin, J. (2000). Transition from middle school into high school. *Middle School Journal*, 31(5), 57–61.
- Muthén, L. K., & Muthén, B. O. (2017). *Mplus statistical analysis with latent variables: User's guide*. Muthén & Muthén.
- Mwingirwa, N. T. (2016). *The factors influencing high dropout rates in Kenyan secondary schools: A case study of secondary schools in Igembe north; Meru County* [Thesis, University of Nairobi].
- Nobel, T., & McGrath, H. (2015). Prosper: A new framework for positive education. *Psychology of Wellbeing*, 5(2). <https://doi.org/10.1186/s13612-015-0030-2>
- Obrovic, J., Shaffer, A., & Masten, A. S. (2012). Risk and adversity in developmental psychopathology: Progress and

- future directions. In L. C. Mayes & M. Lewis (Eds.), *The Cambridge handbook of environment in human development* (pp. 35–57). Cambridge University Press.
- O'brennan, L., & Furlong, M. (2010). *Relations Between students' Perceptions of Schoolconnectedness and Peer Victimization*. *Journal of School Violence*, 9(4), 375–391. <https://doi.org/10.1080/15388220.2010.509009>
- Okot, M. (2001). *Attitudes and resilience in secondary school students* [Unpublished masters thesis]. Makerere university.
- Pellegrini, A. (2002). Bullying, victimization, and sexual harassment during the transition to middle school. *Educational Psychologist*, 37(3), 151–163. [https://doi.org/10.1207/S15326985EP3703\\_2](https://doi.org/10.1207/S15326985EP3703_2)
- Pereira, A., & Pooley, J. (2017). A qualitative exploration of the transition experience of students from a high school to a senior high school in rural Western Australia. *Australian Journal of Education*, 51(2), 162–177. <https://doi.org/10.1177/000494410705100205>
- Potvin, P., & Hasni, A. (2014). Interest, motivation, and attitude towards science and technology at K-12 levels: A systematic review of 12 years of educational research. *Studies in Science Education*, 50(1), 85–129. <https://doi.org/10.1080/03057267.2014.881626>
- Ross, M. (2022). *Peer group connection- middle school*. Center for supportive schools. <https://www.supportiveschools.org/peer-group-connection>.
- Rueger, S. Y., Malecki, C. K., & Demaray, M. K. (2008). Gender differences in the relationship between perceived social support and student adjustment during early adolescence. *School Psychology Quarterly*, 23(4), 496. <https://doi.org/10.1037/1045-3830.23.4.496>
- Rutter, M. (1990). Psychosocial resilience and protective mechanisms. In J. Rolf, A. S. Masten, D. Cicchetti, K. H. Nuechterlein, & S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology* (pp. 181–214). Cambridge University Press.
- Rutter, M. (2006). The promotion of resilience in the face of adversity. In A. Clarke-Stewart & J. Dunn (Eds.), *Families count: Effects of child and adolescent development* (pp. 26–52). Cambridge University Press.
- Samel, A. N., Sondergeld, T. A., Fischer, J. M., & Patterson, N. C. (2011). The secondary school pipeline: Longitudinal indicators of resilience and resistance in urban schools under reform. *The High School Journal*, 94(3), 95–118. <https://doi.org/10.1353/hsj.2011.0005>
- Schiefele, U. (1991). Interest, learning, and motivation. *Educational Psychologist*, 26(3&4), 299–323. <https://doi.org/10.1080/00461520.1991.9653136>
- Seligman, M. E. P., Ernst, R. M., Gillham, J., Reivich, K., & Linkins, M. (2009). Positive education: Positive psychology and classroom interventions. *Oxford Review of Education*, 35(3), 293–311. <https://doi.org/10.1080/03054980902934563>
- Shortt, A., Toumbourou, J., Chapman, R., & Power, E. (2006). The resilient family's program: Promoting health and wellbeing in adolescents and their parents during the transition to secondary school. *Youth Studies Australia*, 25(2), 33–40.
- Shreiber, J. B., Nora, A. S., Stage, F. K., Barlow, E. A., & King, J. (2006). Reporting structural equation modelling and confirmatory factor analysis results: A review. *The Journal of Educational Research*, 99(6), 323–338. <https://doi.org/10.3200/JOER.99.6.323-338>
- Suldo, S. M., Gelley, C. D., Roth, R. A., & Bateman, L. P. (2015). Influence of peer social experiences on positive and negative indicators of mental health among high school students. *Psychology in the Schools*, 52, 431–446. <https://doi.org/10.1002/pits.21834>
- Sun, J., & Stewart, D. (2007). Age and gender effects on resilience in children and adolescents. *International Journal of Health Promotion*, 9(4), 16–25. <https://doi.org/10.1080/14623730.2007.9721845>
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). University of Chicago Press.
- Towns, S. (2010). Measuring up: An examination of the expectations and realities of students during the primary to secondary transition [PhD thesis, southern Cross University Lismore].
- UNESCO. (2019). *Education*. <http://Unesco.org/en/country/uganda>
- Unger, M. (2005). *Handbook for working with children and youth*. Sage Publications.
- Wang, J., & Wang, X. (2012). *Structural equation modelling: Applications using Mplus*. John Wiley & Sons incorporations.
- Whitson, S. (2013). *Why kids choose not to intervene during bullying situation*. Psychology Today. Online <https://www.psychologytoday.com/blog/passiveaggressivediaries/201310/why-kidschoose-not-intervene-during-bullying-situations>