

# Developmental assets and hedonic well-being among youths: In the perspective of students' characteristics

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## Abstract

This study examined the effect of gender and school types on developmental assets and hedonic well-being, encompassing positive affect, negative affect, and life satisfaction. The sample consisted of 614 randomly selected students from private, public, rural, and urban secondary schools. Data were collected using adapted items from life satisfaction, positive and negative affect, and developmental asset profile scales. The analysis employed Pearson correlation, two-way ANOVA, one-way ANCOVA, and two-way MANOVA. The results indicated no significant correlation between academic achievement and internal assets or life satisfaction. However, the interaction and main effect of gender and school type on internal asset experiences was significant. Additionally, the scores for internal and external asset profile scores varied significantly as a function of gender and private, public rural and public urban schools. The MANOVA result further revealed significant differences in positive affect, negative affect, and life satisfaction concerning gender and school type. It is concluded that students in the rural context have significantly better experience of internal and external asset profiles than students in private and public urban schools. This suggests the need for a thorough investigation of Context-based assets of rural areas, and their adaptation for application in urban settings.

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## Introduction

Recently, the conceptualization of youth development has shifted from a deficit to a strength-based perspective (Steinberg & Lerner, 2004). The study of strength-based youth development is not only an emerging research agenda, but also a critical issue concerning individual as well as societal development. This is because how the issue is viewed has enormous theoretical, practical, and even policy implications. The strength-based perspective assumes a developmental plasticity model, which focuses on individual strengths, and considers the importance of external and internal developmental assets as a determinant of

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positive development (Arnold, 2018; Bronfenbrenner, 1979, 2013; Catalano et al., 2004; Lerner et al., 2011).

Developmental assets are conceived as building blocks that relate to lowered risk behaviour patterns and increased patterns of thriving behaviour among adolescents (Scales, 1999). Reviews of literature suggest that cultivating the developmental asset profiles of youths focusing on securing physical and psychological safety, establishing appropriate structure, availing supportive relationships and opportunities to belong, creating positive social norms, presenting opportunities for skill building, and integrating family, school, and community would predict thriving outcomes among youths (Ben-Arieh et al., 2014; Benson et al., 2011).

Internal assets are intrapersonal skills, competencies, and self-perceptions characterised by exhibiting commitment to learning, possessing positive values, social competencies, and positive identity (Scales, 1999; Scales et al., 2011; Benson et al., 2011). On the other hand, external assets are positive features of developmental ecologies that young people receive through interacting with multiple socialization systems, including family, teachers, school, peers, the neighbourhood, and the community in general. External assets are perceived as experiences of support, empowerment, constructive use of time, boundaries, and expectations (Leffert et al., 2010; Roehlkepartain & Blyth, 2020; Scales et al., 2000, 2016; Wiium et al., 2018).

The basic assumption of the developmental asset profile-based model posits that an increased amount of positive experience among youth correlates with a heightened likelihood of successful development (Leffert et al., 2010; Scales, 1999; Scales et al., 2006). This implies that fruitful development is linked to the experience of both external and internal assets, and the more external and internal assets the youth reveal, the better the outcome they would exhibit. Similarly, evidence has shown that developmental assets predict life satisfaction, which is one of the constructs of hedonic well-being (Soares et al., 2019).

The construct hedonic refers to the pursuit of pleasure, which incorporates seeking happiness, life satisfaction, positive affect, and reduced negative affect (Huppert et al., 2013; Kesebir, 2018). Literature suggests that the term hedonic is also conceived as the pursuit of pleasure, gratification, and comfort, thus highlighting positive emotions (Browne, 2014). Literature further showed that hedonic is interchangeably used with 'happiness' referring to the levels of positive affect, low levels of negative affect, and a high degree of overall life satisfaction (Browne, 2014; Kesebir, 2018). Studies have shown that developmental asset predicts academic performance (Benson et al., 2011; Liga et al., 2018).

Similarly, research findings have revealed that students perceived academic competence positively influences their autonomous academic motivation, which, in turn, has a positive impact on their school performance (Tian et al., 2014). As reported by Gentz et al. (2021), Johnes and Virmani (2020), and Onnela et al. (2021), the experience of developmental assets, nature of well-being, and thriving varies as a function of sociodemographic characteristics. Likewise, Tiruneh et al. (2021) found that learning outcomes vary across different regions, gender, and urban-rural settings. This suggests that exposure to developmental asset profiles is influenced by the socio-cultural context.

Inconsistent findings have highlighted the influence of geographical location and school type on students' competencies and their exposure to developmental assets. Sanfo and

Ogawa (2021) assert that pedagogical resources such as textbooks, multimedia materials, and digital learning tools, including video and audio resources are significantly correlated with students' achievement and satisfaction. Given that the provision of these pedagogical resources may be less adequate in rural areas compared to their urban counterparts, students in rural schools may face challenges in key school context assets, including achievement motivation, school engagement, and a supportive school climate (Sanfo & Ogawa, 2021).

Correspondingly, a study conducted by Johnson et al. (2021) found that rural students and communities face exceptional challenges that may deflate academic engagement. This study further showed that students in rural areas often travel considerable distances to attend school, which contributes to fatigue and reduced learning time. Furthermore, rural schools might lack the infrastructure for operation, maintenance facilities, and course materials (Johnson et al., 2021). However, the researchers argue that students who pass through such challenges might have a sense of worthiness, become resilient, develop hidden talents and acquire mastery goals, and in turn, they may display better thriving qualities (Ellis et al., 2022; Frankenhuis et al., 2020).

In contrast, private tutoring, prevalent in urban contexts within Ethiopia, emerges as an unintended consequence of high-stakes testing (Yung, 2021). This study further elucidates how high-stakes testing compromises the quality of teaching and learning by narrowing the curriculum. As a result, students often prioritize performance metrics over attaining a genuine understanding of the subject matter. Consequently, such practices tend to inflate test scores while fostering surface learning and rote memorization (Yung, 2021). This phenomenon may adversely affect the internal assets of students in private schools engaged in this practice, potentially positioning them with lower internal asset profiles compared to their counterparts in public urban and rural schools.

Research has also demonstrated a significant and positive relationship between students' family income, parental education, and academic motivation (Li et al., 2021). In Ethiopia, families of students in rural areas often rely on traditional farming methods and may have lower educational attainment compared to families in urban settings. In this context, a study by Miranda and Rodriguez (2022) found that students from rural schools generally exhibit slightly lower academic performance and college aspirations compared to their urban counterparts. Furthermore, their research indicated that social and emotional skills such as commitment to learning and the development of a positive identity are correlated with higher school performance and educational ambitions (Miranda & Rodriguez, 2022). Nonetheless, students in rural environments often face challenging circumstances that can cultivate what are referred to as 'hidden talents,' including enhanced social and cognitive problem-solving abilities (Ellis et al., 2022; Frankenhuis et al., 2020). Consequently, students from rural schools may possess greater internal asset profiles and experience higher levels of life satisfaction.

According to Arslan and Allen (2021), school victimisation is intricately associated with emotional complexities and diminished well-being outcomes. Congruently, adolescents who experience victimisation are more likely to exhibit a declining sense of belonging in the school environment, which adversely affects their sense of competence (Arslan & Allen, 2021). It is noteworthy that bullying tends to be more prevalent in public schools than in private institutions; thus, students attending public schools may experience lower academic

and social competence, which, in turn, has implications for their overall life satisfaction. Additionally, research has revealed that the disparities in academic achievement between rural and urban students can be explained, in part, by individual background characteristics. Findings indicate that students' academic performance correlates moderately ( $r = 0.24$ ) with their parents' socioeconomic status (SES) (Liu et al., 2020). Given that students in private schools might come from more privileged socioeconomic backgrounds compared to their public-school counterparts, it is reasonable to infer that their academic engagement, life satisfaction, and developmental asset profiles could be significantly enhanced.

In a similar vein, a study by Mohammed and Abera (2022) demonstrated that parents of private school students possess significantly greater cultural, economic, and social capital compared to those of government school students. Furthermore, the positive correlation between subjective income and self-esteem is more pronounced in urban schools than in rural counterparts (Li et al., 2021). These findings indicate that students across rural and urban, as well as private and public-school settings, exhibit notable differences in their asset profiles, affective states, and overall life satisfaction.

In terms of gender differences, Sanfo and Ogawa (2021) found that boys outperform girls in academic achievement. Similarly, Tiruneh et al. (2021) showed that girls in rural schools scored significantly lower than boys in these same schools, as well as lower than both girls and boys in urban schools. Additionally, Abitew (2019) highlighted that female students exhibit lower academic performance compared to their male counterparts. Evidence indicates that males derive greater benefits from attendance at higher-quality schools than females (Holmlund et al., 2023). However, a study conducted with public secondary school students in Addis Ababa revealed that being male was associated with unfavourable experiences related to developmental assets (Desie, 2020). Collectively, these findings suggest significant disparities between male and female students in terms of their exposure to developmental asset profiles, which may consequently impact their well-being in different ways.

Despite existing evidence regarding the influence of socio-demographic variables on developmental assets, affect, and life satisfaction, empirical studies conducted within the African context that employ rigorous methodologies are limited (Dejenie et al., 2023). Moreover, given the distinct socio-cultural context of Ethiopia, it is plausible that youths' experiences with developmental assets may differ significantly from those observed in Western countries (Dejenie et al., 2024). Additionally, there is a notable paucity of research examining the variations in developmental asset experiences among youths in rural versus urban settings. Therefore, this study aims to investigate the contributions of gender, school type, and school location to the developmental asset profiles and hedonic well-being encompassing positive affect, negative affect, and life satisfaction of secondary school students.

To achieve this objective, we formulated and tested the following hypotheses: (H1) academic achievement is positively and significantly connected with students' experience with developmental assets and life satisfaction; (H2) female students in rural schools have significantly better internal asset profile than male and female students in private and public urban schools; (H3) students at public rural schools have significantly better internal asset profiles than students in private and public urban schools (controlling for external assets); (H4) private school students have significantly better external asset profiles than students in

rural and urban public schools (controlling for internal assets); (H5) there is a significant mean difference between males and females, across the three school groups in terms of their scores on internal and external asset profiles; and (H6) there is a significant mean difference between males and females across the three school groups in terms of their hedonic well-being scores (positive affect, negative affect, and life satisfaction).

## Methods

### Design and Participants

This study employed a quantitative approach and descriptive research design. A quantitative approach was used because the purpose of this study was to explore, describe, and make inferences about the population based on the data from the sample. Likewise, a cross-sectional survey was employed because the nature of the variable demands collecting big data from large participants to generalize the findings.

The participants in this study were grade ten, eleven, and twelve students attending their education in Bahir Dar City (urban) and nearby schools located in rural settings, apart from Bahir Dar City. In Bahir Dar City, participants were drawn from both private and public schools, while participants from rural settings were drawn solely from public schools. All participants from the three groups were selected if and only if they had stayed at that school for at least two consecutive years.

In addition, participants from rural schools were included based on their living situation, such as those attending their education living with their families (leading their life through farming) and living in a rented house in that small town. Given that the participants' background characteristics in the rural context need to be visibly different from those in the urban context, youths whose families are merchants, government employees or any other organization were excluded. In general, participants were selected from 12 schools, four schools from each group. The proportion of participants in each group and the female-to-male ratio were roughly equal. In addition, youths attending their education sponsored by NGOs, institutions, or individuals other than parents and close relatives were excluded.

The number of participants was determined using the formula suggested by Cochran (1977), ( $no = \frac{z^2 pq}{e^2} * d$ ), where  $no$  = the sample size,  $z$  = selected critical value of desired confidence level,  $p$  = estimated proportion of an attribute which is present in the population,  $q = 1 - p$ ,  $e$  = the desired level of precision, and  $d$  = is the design effect, which is 3. Since there were no previous findings that could be used as a reference, a 50% proportion was considered. Correspondingly, a 5% confidence level and a 6.5% level of precision were considered. Hence, using the above formula, the participants were 682; however, only 625 questionnaires were properly completed and returned, but again eleven cases violated multivariate normality and were thus discarded. Hence, the analysis was performed based on the data collected only from 614 participants. In selecting the target participants from each group, school, grade level, and section, a multistage sampling technique was applied.

Therefore, from the total of 614 students, 297 of them are females. In terms of grade level, 204, 203, and 207 students were from grade ten, eleven, and twelve respectively. Concerning the participants' residents, 404 were from urban contexts, and the rest 210 were

from schools located in rural areas. Regarding the school type, 208, 209, and 197 were from private, public rural and public urban schools respectively.

### Instrument

To measure the construct of hedonic well-being, selected and contextualized items from the positive and negative affect (PANAS) and general satisfaction with life scale were used (Watson et al., 1988). Based on the pilot data, the reliability of the scales was .76, .84, and .81 for positive affect, negative affect, and satisfaction with life, respectively. In addition, the youth's experience of developmental assets was assessed using a developmental asset profile (DAP) scale developed by the Search Institute in 2005 (Scale et al., 2011). Based on the factor analysis results of the pilot data, 18 items were selected and used to measure youths' experience of developmental assets. The internal consistency of the scale is .78 and .72 for internal (11 items) and external (7 items) respectively.

### Data Collection Procedure and Ethical Considerations

The researchers have followed rigorous ethical procedures. First, a letter of collaboration was obtained from the Postgraduate, Research and Community Service Office, College of Education, Bahir Dar University. The purpose of the study was explained to the participants and how they were selected. Participation was solely voluntary; the participants were asked for their consent (verbally). The data collectors were given training on how to handle the participants and the data to be collected. Participants were also informed that the information they would provide be kept confidential and used for study purposes only. The privacy of the participants and data confidentiality have never been violated at any stage of this study.

### Data Analysis

Data analysis was done in line with the research questions. The first research question was designed to assess the linear relationships between the variables of interest and therefore was analysed using the Pearson correlation coefficient. The second research question was focused on assessing the interaction effects of gender and school type on the internal asset profiles and thus was analysed using two-way between-groups ANOVA. The third and fourth research questions were intended to control the effect of covariances and hence were analysed using one-way ANCOVA. The fifth and sixth research questions were designed to address multiple continuous dependent variables and therefore, were analysed using two-way MANOVA.

## Results

**Table 1**

*Relationship between Academic Achievement and Developmental Asset Profile and Life Satisfaction*

Variables	Mean	SD	R	Sig.	Variance shared (%)
Academic Achievement	74.19	10.19	.01	.82	.01
Developmental Asset profile	67.85	11.06			

Variables	Mean	SD	R	Sig.	Variance shared (%)
Academic Achievement	74.19	10.19	.05	.20	.25
Life Satisfaction	18.99	5.87			

Note. Statistically Significant at .05

The relationships between academic achievement, developmental asset profile, and life satisfaction were computed using the Pearson correlation coefficient. The results revealed that academic achievement was positively, but non-significantly correlated with developmental asset profiles and life satisfaction. At 0.05 significance level,  $r=.01$ ,  $P>.05$ , and  $r=.05$ ,  $P>.05$ , with developmental asset profile and life satisfaction respectively. This implies that the developmental asset profile of students does not meaningfully contribute to their academic performance. In addition, academic performance is not significantly linked to life satisfaction. This finding might be true, given the existing lack of employment opportunities, conflict, war, poverty, and other unbearable situations in the country. Congruently, due to the above details, students' perception of the value of education might decline.

**Table 2**

*Two-way ANOVA Results Concerning Gender and School Type Interaction Effects on Internal Asset Profile*

DV	IV	DF	MS	F	Sig.	$\eta^2$
Internal Asset Profile	Gender	1	378.19	8.87	.003	.05
	School Type	2	963.10	22.58	.000	.07
	Interaction	2	147.95	3.47	.032	.01

Note. Statistically Significant at .05

A two-way between-groups analysis of variance was conducted to examine the influence of gender and school type on the experience of internal asset profiles as measured by the developmental asset profile (DAP) scale. The participants were drawn from three school types, namely private, public rural, and public urban. Preliminary analysis was carried out to check violations of the assumptions, including normality, homogeneity, and independent observation; and the researchers ensured that the data met all the assumptions. As demonstrated in the table above, the interaction effect between gender and school type was statistically significant,  $F(2, 608) = 3.47$ ,  $P<.05$  with a small effect size ( $\eta^2=.01$ ). Similarly, there was a statistically significant main effect for gender and school type,  $F(1, 608) = 8.87$ ,  $P<.05$  with a small effect size ( $\eta^2=.05$ ) and  $F(2,608) = 22.58$ ,  $P<.05$  with a medium effect size ( $\eta^2=.07$ ) for gender and school type respectively.

Post-hoc comparisons using the Tukey test indicated that the mean score for public rural was significantly different from that of private and public urban schools, in which the internal asset profile of public rural students was found to be meaningfully better than the other two groups. Public urban and private students did not differ significantly; however, the mean difference indicated that students at public urban schools tend to have better internal asset profiles than private students. This might be true because students of public rural areas

might experience different challenges that help them develop hidden talents and, in turn, enhance their internal asset profile. It is also sound to propose that students of the public urban might face more challenges than the private, whose needs might be well fulfilled by their parents and might be in a 'comfort zone'. Regarding the effect of gender, the mean difference indicates that females have better experiences of internal asset profiles than males. Female students in rural school contexts have significantly better internal asset experiences than those in private schools. Correspondingly, males in the rural context have significantly better internal assets than those in public urban and private schools.

**Table 3**

*One-way ANCOVA Results about the Effect of School Type on Developmental Asset Profiles*

DV	IV	DF	MS	F	Sig.	$\eta^2$
Internal Asset	External Asset Profile (Covariate)	1	8420.45	282.28	.000	.32
	School Type	2	421.67	14.16	.000	.05
External Assets	Internal Asset Profile (Covariate)	1	5627.59	282.96	.000	.32
	School Type	2	377.79	18.96	.000	.06

*Note.* Statistically significant at .05; error DF=610

A one-way between-groups analysis of covariance was conducted to compare the asset profile experiences of private, public, rural, and public urban schools. Preliminary tests were conducted to ensure that there was no violation of the assumptions of normality, linearity, independent observation, homogeneity of variances, or reliable measurement of the covariate. The researchers found no serious violations of the above assumptions.

As presented in Table 3, after controlling the external asset profile scores, there was a statistically significant difference between the school types on the internal asset profile score,  $F(2, 610) = 14.16, P < .05$ , with small effect size ( $\eta^2 = .05$ ). Additionally, a strong correlation is observed between the external and internal asset profile scores, as indicated by a partial eta-squared value of .32. Regarding the school type differences in the external asset profile while controlling for the internal asset profile, there was a statistically significant difference,  $F(2, 610) = 18.96, P < .05$ , with a medium effect size ( $\eta^2 = .06$ ).

Congruently, the pairwise comparison shows that in the internal asset profile, the difference is associated with private and public schools, in which participants of private schools have scarce internal asset experiences; however, no significant difference is observed between the public rural and public urban contexts. Regarding external assets, the pairwise comparison also shows that the difference relates to public urban schools, which further uncovered that participants of public urban schools have impoverished external asset experiences. There was no significant difference between the public rural and private contexts.

This finding might be true because the three groups might have meaningfully different experiences. For example, participants in the public-school context are prone to different challenges which might help them develop strength and possess resilient qualities and then

improve their internal assets. However, students in the private school context might not have faced challenges that would serve as a springboard to enhance their adversity quotient. On the other hand, students in public urban might be from low-SES families and might receive negligible support.

**Table 4**

*Two-way MANOVA Results Concerning Gender and School Type Interaction Effects on Internal and External Asset Profiles*

IVs	Wilks's Lambda ( $\lambda$ )	F	Hypoth. DF	Error DF.	Sig.	$\eta^2$
Gender	.98	4.77	2	607	.009	.02
School Type	.88	21.00	4	1214	.000	.07
Gender*School Type	.98	2.44	4	1214	.045	.01
<b>Between Subject Effect</b>						
Source	Dependent Variable	Df	Mean Square	F	Sig.	$\eta^2$
Gender	Internal Asset Profile	1	378.19	8.87	.003	.014
	External Asset Profile	1	28.50	.98	.323	.002
School Type	Internal Asset Profile	2	963.10	22.58	.000	.069
	External Asset Profile	2	783.93	26.94	.000	.081
Gender * School Type	Internal Asset Profile	2	147.95	3.47	.032	.011
	External Asset Profile	2	30.08	1.03	.356	.003

*Note.* Statistically Significant at .05; error DF=608

A two-way between-groups multivariate analysis of variance was performed to investigate the effects of gender and school-type differences in internal and external asset profiles. The independent variables were gender and school type. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity; no serious violations were noted. The interaction effect was significant: Wilk's  $\lambda = .98$ ,  $F(4, 1214) = 2.44$ ,  $P = .045$ , with a small effect size ( $\eta^2 = .01$ ). The main effect of gender was also significant (Wilk's  $\lambda = .98$ ,  $F(2, 607) = 4.77$ ,  $P < .05$ , with a small multivariate effect size ( $\eta^2 = .02$ ). Similarly, the main effect of school type was significant (Wilk's  $\lambda = .88$ ,  $F(4, 1214) = 21.00$ ,  $P < .05$ , with medium multivariate effect size ( $\eta^2 = .07$ ). This indicates that the linear composite of internal and external asset profile scores differs as a function of gender and private, public rural, and public urban schools.

Regarding the internal asset profile, the tests of between-subjects effects indicate a significant interaction and main effect for both independent variables. At .05 level of significance,  $f(2, 608) = 3.47$ ,  $P < .05$ ,  $f(2, 608) = 22.58$ , and  $f(1, 608) = 8.87$ ,  $P < .05$  for

interaction, school type, and gender, respectively. However, regarding the external asset profile, the test between subjects indicated that there was no significant interaction effect. The only significant result for external assets is found with school type differences,  $f(2,608) = 26.94, p < .05$ .

Furthermore, the Tukey post hoc test indicated that in the internal asset profile, students from public rural schools had significantly better experiences; however, there was no significant difference between public urban and private students. Regarding the external asset profile, there was a significant difference across all the school types. Correspondingly, the mean difference showed that students in public rural areas had better external asset profiles, followed by those in private schools. Given that students in the rural context have passed through lots of challenges might help them to develop hidden talents and become resilient enough. In addition, compared with the urban situation, the community in the rural context is more homogeneous and might have a culture of support and empowerment.

**Table 5**

*Two-way MANOVA Results Concerning Gender and School-type Interaction Effects on Hedonic Well-being (positive and negative affect, and satisfaction with life)*

IVs	Wilks's Lambda ( $\lambda$ )	F	Hypoth. DF	Error DF.	Sig.	$\eta^2$
Gender	.979	4.30	3	606	.005	.021
School Type	.895	11.48	6	1212	.000	.054
Gender * School Type	.978	2.25	6	1212	.036	.011

  

Between Subject Effect						
Source	Dependent Variable	Df	Mean Square	F	Sig.	$\eta^2$
Gender	Positive Affect	1	.038	.004	.950	.000
	Negative Affect	1	184.23	12.12	.001	.02
	Life Satisfaction	1	.062	.002	.966	.000
School Type	Positive Affect	2	239.29	25.22	.000	.08
	Negative Affect	2	14.72	.97	.380	.003
	Life Satisfaction	2	368.78	11.08	.000	.04
Gender * School Type	Positive Affect	2	2.23	.26	.77	.001
	Negative Affect	2	88.74	5.84	.003	.02
	Life Satisfaction	2	51.49	1.55	.214	.005

*Note.* Statistically Significant at .05; error DF=610

A two-way between-groups multivariate analysis of variance was performed to investigate the effect of gender and school type differences on hedonic well-being constructs (positive affect, negative affect, and life satisfaction). Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity; no violations were noted. The interaction was significant, Wilk's  $\lambda = .98$ ,  $F(6, 1212) = 2.254$ ,  $P \leq .05$ , with a small effect size ( $\eta^2 = .01$ ). The main effect of gender was also significant (Wilk's  $\lambda = .98$ ,  $F(3, 606) = 4.30$ ,  $P < .05$ , with a small effect size ( $\eta^2 = .02$ ). Similarly, the main effect of school type was significant (Wilk's  $\lambda = .89$ ,  $F(6, 1212) = 11.48$ ,  $P < .05$ , with a small multivariate effect size ( $\eta^2 = .05$ ). This indicates that the linear composite of positive affect, negative affect, and life satisfaction differ as a function of gender in private, public rural, and public urban schools.

Regarding the positive affect, the tests of between-subjects indicated that there was no significant interaction effect; however, the main effect was significant only for school types,  $f(2, 608) = 25.22$ ,  $P < .05$ . Tukey's post hoc test indicated that students in public rural areas had significantly better scores on the positive affect scale than public urban and private students; however, students in the public urban group were not significantly different from the private students. In terms of negative affect, the interaction was significant ( $f(2, 608) = 5.84$ ,  $P < .05$ ). In addition, there was a significant difference in gender,  $f(1, 608) = 12.12$ ,  $P < .05$ . However, the main effect of the school type was not significant. Concerning life satisfaction, the interaction effect was not significant; however, there was a significant result for school type,  $f(2, 608) = 11.08$ ,  $P < .05$ , with multivariate effect size ( $\eta^2 = .04$ ). Furthermore, Tukey's post hoc test showed that students in public rural areas had significantly better satisfaction with life than public urban and private students, but there was no significant difference between students in public urban and private schools. This finding might be true because the challenges that students in the rural context have passed through might help them develop better qualities of resilience.

## Discussion

The Pearson correlation analysis indicated that, unlike our hypothesis, academic achievement is not significantly linked with experiences of developmental asset profiles and satisfaction with life. This finding contradicts the previous studies. For instance, this result challenges a study indicating that developmental assets predict academic performance (Benson et al., 2011; Liga et al., 2018). This finding also contradicts the study conducted by Tian et al. (2014), which indicated that students perceived academic competence positively influenced their autonomous academic motivation, and in turn, had a positive impact on their school performance. Furthermore, this finding contradicts a study by Soares et al. (2019), which revealed that experience with developmental assets predicts life satisfaction. However, this finding might be true, given that those with better developmental asset profiles are engaged in mastery rather than performance goals. In addition, given that there is a limited job opportunities in the country, students with better external asset profile might not perform well in their studies because they might not give a priority to it.

Regarding the effect of gender and school type on the internal asset profile of participants, a two-way between-group analysis of variance indicated that both the interaction

and main effects were significant. This finding is in line with our hypothesis that female students in rural schools have better internal asset profiles. However, this finding contradicts previous results. For example, considering the resource availability, infrastructure, and location of the school, Sanfo and Ogawa (2021) and Johnson et al. (2021) showed that students in rural schools, particularly females, have poor exposure to external assets, which in turn affects their internal asset profile. However, the current finding might be true because internal assets are more related to the ability to overcome challenges, which might be more common among students in rural contexts.

Concerning the effect of school type on the internal and external asset profile, one-way ANCOVA indicated that in the internal asset perspective, participants of private schools have significantly deprived experience, whereas, in the external asset, participants of public urban schools have significantly underprivileged experiences. This finding is consistent with our hypothesis; however, it contradicts previous findings. For instance, studies suggest that students in private schools have significantly better economic and social capital, which may enhance their external and internal asset profiles (Mandell et al., 2022; Whitlock, 2006). This finding further contradicts the assumption of the developmental asset profile-based model, which postulates that the greater the amount of positive experience the youth reveal, the greater the likelihood of successful development (Leffert et al., 2010; Scales, 1999; Scales et al., 2006). Despite its contradiction with previous studies, the current finding might be true because positive experiences may not necessarily enrich hidden talents which result from passing through challenging circumstances.

Regarding the effect of gender and school type differences, the findings showed that for the internal asset profile, both the main and interaction effects were significant; however, for the external asset, only the main effect was significant. This finding contradicts previous studies. For example, in this study, female students in rural schools were found to have better exposure to asset profiles. However, regarding gender differences, a study conducted by Sanfo and Ogawa (2021) showed that boys perform better than girls, and Tiruneh et al. (2021) revealed that girls in rural schools scored significantly lower than boys in the same rural schools, and girls in rural schools scored significantly lower than both girls and boys in urban schools. Congruently, Abitew (2019) found that female students had lower academic performance than their male counterparts. The current finding might be true, given the ups and downs of students, particularly females, in the rural context. The challenges related to the distance from the school, supporting family members, and engaging in other tasks requested by the family might help them develop a 'hidden talent' and have the motive to escape from such challenges, which might in turn help them to work on their personal development.

## Conclusion and Implications

Given the current educational practice in the study context, students' developmental asset profiles have inadequate contributions to learners' life satisfaction and academic performance. However, students in the rural context have better personal asset profiles than students in private and public urban schools. Being male is associated with deficient experiences of assets. Accordingly, students in the rural context exhibit better positive affect and life satisfaction. Consequently, schools in the rural context were found to contribute more

to enriching the assets of students. Hence, it is concluded that the socio-cultural context of the rural schools shall be well explored and adapted to the urban context.

Parents' involvement in students' learning and handling mechanisms of teachers in the rural context shall be thoroughly investigated and accustomed to being applied in urban contexts. In addition, the school environment and teaching-learning practices shall be re-evaluated and designed to enrich the internal and external assets of learners beyond delivering the subject matter. Besides, parents, teachers, and school administrators shall pay due attention to cultivating the assets of learners rather than merely being preoccupied with their academic performance.

Interventions targeting students shall give due attention to the trajectories of how the burden students face in the family, school, and community are related to their academic and social competence, as well as their positive development. As publicised in the current finding, youths passing through nasty conditions might develop a better adversity quotient and become more resilient which in turn enhances thriving. Additionally, the contribution of private schools to enhancing internal asset profiles, including positive value, positive identity, social competence, and commitment to learning shall be further examined. Furthermore, research with an experimental design shall be conducted to further investigate and understand how interventions in internal and external assets contribute to positive youth development outcomes.

### **Limitations**

Despite its contribution in demonstrating the interplay of sociodemographic factors on the exposure to developmental assets and hedonic well-being, this study has some limitations. First, in this study, cross-sectional survey data were collected which did not show age-related changes in the participants. Additionally, this study is based on self-report data which might create a social desirability bias. Furthermore, this study utilized only quantitative data and hence it did not show the participants' unique experiences.

### **Declaration of Interest Statement**

The authors declare that this paper is original work; all sources used in this study are properly acknowledged, and there is no competing interest.

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