

## **High School Students' Subjective Well-being: The Role of Life Purpose and Academic Identity**

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### **ABSTRACT**

*The aim of this study was to investigate the relationships among high school students' subjective well-being, academic identity, and sense of purpose in life. Two hundred and thirty-four students participated in the study. Main analysis was focused on testing structural relationships among the measured variables. Findings showed that students with altruistic purpose reported a more central role of academic identity in their sense of self and, in turn, reported greater satisfaction and joy of learning. Thereby, findings suggested the importance of implementing educational and wellness-oriented approaches that could strengthen high school students' general sense of purpose in addition to altruistic purpose to promote their academic identity and subjective well-being. We have discussed this study's limitations, practical implications, and future research directions.*

**Keywords:** Academic identity, Altruism, High School Students, Life purpose, Positive Development, Subjective Well-being, Wellness.

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### **INTRODUCTION**

**T**he concept of subjective well-being is interdisciplinary and reinforced by scholars and practitioners in various health, education, psychology, sociology, neuroscience, and developmental science professions (e.g., Ackerman et al., 2018; Diener et al., 1999; Ryan & Deci, 2001). Among high school students, subjective well-being contributes to their positive self-concept, academic achievement,

enthusiasm for educational endeavors, and physical and mental health (Renshaw et al., 2015). Research has further shown that students with moderate and high subjective well-being also report better attendance, academic grades, math skills, health-promoting behaviors, and positive school functioning within both academic and social domains (Bird & Markle, 2012; Smith et al., 2022; Suldo et al., 2011). According to Helliwell and Putnam (2004), well-being is in fact the ultimate dependent variable that impacts all other outcomes including educational and career success among people from diverse backgrounds and age groups.

However, despite the important role of well-being in influencing various other outcomes, educational institutions have traditionally only focused on fostering students' academic and career-oriented success and neglected their inner well-being (Addison, 2012). The recent rise in mental health concerns among school students due to COVID-19 pandemic have further strengthened the need to focus on exploring and strengthening the factors that could promote students' subjective well-being (Cachón-Zagalaz et al., 2020). The aim of this study was to investigate the relationships between high school students' subjective well-being, academic identity, and sense of purpose in life. We aspired to use the results of this study to also make practical recommendations on how school personnel including teachers and counselors could promote students' well-being within the context of their academic goals and life purpose amidst the current era's struggles when many students are dealing with academic and existential anxiety (Alter, 2020).

## **LITERATURE REVIEW**

### **Theoretical Framework on Subjective Well-being**

Well-being has been defined in numerous ways. The common foundation of these definitions is perceiving well-being as a positive mental health and psychological state instead of only absence of mental illness (Ackerman et al., 2018). According to Ryff (1989), to foster people's sense of well-being, it is important to cultivate their autonomy, environmental mastery, personal growth, positive relations with others, self-acceptance, and purpose in life. Further, Ryan and Deci (2001) conceptualized subjective well-being within the context of hedonic well-being and eudaimonic well-being. Hedonic well-being refers to people's pursuit of happiness in terms of pleasure attainment and pain avoidance. Whereas, eudaimonic well-being refers to people's pursuit of meaning and self-realization to live a purposeful life in which they can actualize their full potential.

Since the phenomena of subjective well-being encompass both global and domain-specific satisfactions (Diener et al. 1999), the literature on adolescents' well-being has often used Renshaw et al.'s (2015) multidimensional conceptualization of well-being. The present study is based on Renshaw et al.'s (2015) theoretical framework on students' subjective well-being. According to Renshaw et al. (2015), students' subjective well-being encompasses their school

connectedness, joy of learning, educational purpose, and academic efficacy. Here, school connectedness includes positive relationships, care, and respect that students experience within school settings. Joy of learning focuses on students feeling excited about learning new things. Educational purpose involves students' capacity to be effective in school and organize their academic goals. Finally, academic efficacy encompasses students' belief in their academic potential and value for school education (Renshaw et al., 2015).

The existing research on adolescents' subjective well-being has shown that even if a significant amount of effort is invested in examining the role of contextual variables (e.g., socio-demographic variables) in predicting subjective well-being, the intrapersonal variables (e.g., cognitive and affective variables) are the main predictors of subjective well-being (Galinha & Pais-Ribeiro, 2011). However, more studies are needed to examine the role of various intrapersonal variables in contributing to students' subjective well-being. Another limitation of existing research is its focus on either domain-general or domain-specific measures in relation to students' subjective well-being. For example, Joshanloo and Afshari (2011) focused on domain-general measure of life satisfaction and Logue et al. (2007) studied domain-specific measure of satisfaction with college majors.

Therefore, in the present study, we have investigated both – the role of domain-general variable, which is life purpose and domain-specific variable, which is academic identity in predicting high school students' subjective well-being. Both life purpose and academic identity are related to students' sense of self. Erikson (1968) expressed that students' sense of self is closely related to their personal identity, which during adolescence is largely decided by sense of purpose in life because adolescents often perceive who they are in the context of what they aspire to use their life for. Students' sense of self is also influenced by their academic identity, which Welch and Hodges (1997) conceptualized as a dimension of self-concept that is central to academic performance and achievement motivation.

### **The Role of Academic Identity in Student Subjective Well-Being**

Similar to students' subjective well-being, academic identity is an important construct that determines students' school experiences, success, and growth. As a dimension of students' global self-concept, academic identity focuses upon how central academic performance and achievement are for students (Welch & Hodges, 1997). Recently, Yukhymenko-Lescroart (2014) described academic identity as the extent to which students see their academic roles and commitments as central to their overall sense of self. The present study will use Yukhymenko-Lescroart's (2014) measure of academic identity that is based on social identity theory which posits that identity is formed, in part, through identification with various social groups.

Student subjective well-being is defined through school-related constructs of school connectedness, joy of learning, educational purpose, and academic efficacy (Renshaw et al., 2015). It is therefore very likely that students' subjective well-being will be predicted by students' sense of academic identity. Although there is a lack of research on the relationship between academic identity and subjective well-being, previous studies have shown that academic identity plays an important role in contributing to students' confidence in themselves (Graham & Anderson, 2008), self-esteem (Butler et al., 2022), academic performance (Graham & Anderson, 2008), and higher grades (Yukhymenko-Lescroart & Sharma, 2020b). The results of this study will further strengthen the knowledge base on the role of academic identity specifically in relation to high school students' subjective well-being and life purpose.

### **The Role of Life Purpose in Student Subjective Well-Being**

Sense of purpose in life is conceptually related with a eudaimonic view of well-being that focuses upon the importance of living a purposeful life in congruence with one's deeply held values and potential (Waterman, 1993). Research among school and university students has consistently demonstrated the positive role of purpose in contributing to adolescents' positive development, academic success, career development, and well-being (Chen & Cheng, 2020; Malin et al., 2019; Sharma et al., 2021). For instance, through conducting a longitudinal student to explore the reciprocal relationships among purpose in life, psychological flourishing, and gambling disorders, Zhang et al. (2020) demonstrated life purpose as a salient predictor and protective factor for promoting university students' mental well-being. Thereby, the authors concluded the importance of purpose-oriented interventions in preventing self-destructive behavior such as gambling as well as the importance of further strengthening students' psychological flourishing and mental health. Among adolescents, Chen and Cheng (2020) found that an increase in the development of identified purpose promotes life satisfaction and prevents depression.

Further on, qualitative and mixed-methods studies have also shown that people's well-being is significantly influenced by the extent to which they believe that they are living in line with their purpose (Jongbloed & Andres, 2015; Sharma & de Alba, 2018). A study by Jongbloed and Andres (2015) highlighted that participants' sense of well-being encompassed achieving their most valued life goals and further experiencing synchrony between different life domains due to a deeper sense of purpose and meaning in life. Similarly, Sharma and de Alba's (2018) study showed that having a strong sense of purpose in life motivated students to pursue their current and future goals and contributed to their overall sense of happiness and well-being.

Scholars have conceptualized purpose in the context of students' intention to accomplish their life's most important goals through fulfilling which, they might

advance a positive change in their own life and in society at large (Damon et al., 2003; Sharma & Yukhymenko-Lescroart, 2022a). Based on such conceptualizations, we perceive purpose to be a multidimensional construct that encompasses adolescents' current intentions, future goals, and altruistic aspirations. Since most of the previous research on purpose has used unidimensional measures to assess the role of life purpose in adolescents' lives, in the present study, we used the Revised Sense of Purpose Scale (SOPS-2) (Sharma & Yukhymenko-Lescroart, 2019; Yukhymenko-Lescroart & Sharma, 2020a) that was developed to assess three dimensions of purpose: awakening to purpose, awareness of purpose, and altruistic purpose.

In a recent study that used SOPS-2, Sharma and Yukhymenko-Lescroart (2022b) found that in addition to the general factor of sense of purpose, active engagement in the process of discovering life's purpose played a critical role in supporting students' resilience and persistence amidst chronic difficulties such as those exacerbated by COVID-19 pandemic. Previous research on life goals and motives, which are often influenced by people's general sense of purpose in life have further shown that intrinsic goals that encompass a desire to contribute to society are more predictive of subjective well-being than extrinsic goals (Sheldon et al., 2004). Further, students with others-growth purpose orientation have reported "greater disposition towards gratitude and, because of greater disposition towards gratitude, also felt more positively about schoolwork accomplishment" (Yukhymenko-Lescroart, 2022, p. 16). Likewise, research has shown that altruistic purpose is more predictive of students' life satisfaction, meaning, and well-being (Bronk & Finch, 2010; Hill, Burrow, O'Dell et al., 2010; Yeager & Bundick, 2009). The results of this study have the potential to further clarify the relationship between general sense of purpose and altruistic purpose in contributing to high school students' subjective well-being.

### **The Role of Academic Identity in the Relationship between Purpose and Well-Being**

In addition to the direct relationships between life purpose and student subjective well-being, academic identity may also play an important role in these relationships. Previous studies have indeed shown that some dimensions of life purpose were related to academic identity of students. Specifically, Yukhymenko-Lescroart and Sharma (2020b) showed that first-time full-time freshman college students with altruistic purpose reported a strong sense of academic identity at the beginning of college. Yet, awakening to purpose and awareness of purpose were unrelated to academic identity of freshman college students. Because altruistic purpose in life can strengthen academic identities of students, it is plausible that academic identity of high school students plays an important role in the relationships between sense of life purpose and student subjective well-being.

A recent study on academic identity and life purpose has further shown that life purpose is related to high school students' academic achievement via academic identity (Yukhymenko-Lescroart & Sharma, 2022). Specifically, high school students with a clearer sense of purpose in life reported stronger academic identity, which in turn contributed to higher academic grades. We can therefore assume that sense of purpose in life may also be related to student subjective well-being indirectly through academic identity.

### **Purpose of the Study**

Research has shown the positive role of academic identity and sense of life purpose in contributing to high school students' academic and well-being outcomes (Butler et al., 2022; Chen & Cheng, 2020; Graham & Anderson, 2008; Malin et al., 2019; Sharma et al., 2021). Scholars have also concluded that purpose in life and academic identity are related to one another as important aspects of sense of self among adolescents (Yukhymenko-Lescroart & Sharma, 2020b; Yukhymenko-Lescroart & Sharma, 2022). Given the relationships identified in the literature between sense of purpose in life, academic identity, and student subjective well-being, the purpose of this study was to examine the extent to which student subjective well-being can be predicted by sense of purpose in life directly and indirectly via academic identity. Specifically, the study examined the following research questions:

- To what extent is sense of purpose in life (awakening to purpose, awareness of purpose, altruistic purpose) related to academic identity?
- To what extent is academic identity related to student subjective well-being (connectedness, joy of learning, educational purpose, and academic efficacy)?
- To what extent is sense of purpose related to the students' subjective well-being directly and indirectly via academic identity?

## **RESEARCH METHOD**

### **Procedure and Participants**

After obtaining ethics approvals from the institution and the high school, students' parents were contacted for obtaining parental consents. The survey was administered online using Qualtrics during a class period by the teacher and at the beginning of the survey and students were asked to indicate whether they provided their assent for inclusion of their responses in the research study. In terms of the sampling procedure, this was a convenience sample recruited from one school. All students taught by the teacher, with whom the researchers had established a connection, were invited to participate in the study. The survey was confidential and students were offered an extra credit by their teacher for completing the survey, regardless of whether or not they provided an assent. Only responses from

students for whom both parental consents and student assents were obtained were included in the study, thus, reflecting a voluntary nature of participation in the survey for the research purposes.

Two hundred and thirty-four high school students agreed to participate in this study and provided their responses to the survey. Most students were sophomores (49.6%) and seniors (49.1%). Students were between 14 and 18 years of age, with most students being 17 years of age (43.2%) or 15 years of age (29.9%). Among those who reported their gender, 47.8% were male and 52.2% were female. The students who were included in this study generally represented the population of the students from which they were drawn.

## **Measures**

### ***Student Subjective Well-Being***

Students completed the Student Subjective Well-being Questionnaire (Renshaw, 2020; Renshaw et al., 2015) that was designed to assess youths' subjective well-being in a school environment. The questionnaire contains a total of 16 items, rated on the following 4-point scale: 1 (almost never), 2 (rarely), 3 (sometimes), and 4 (almost always). The questionnaire was divided into four sections: school connectedness (e.g., I feel like people at this school care about me), joy of learning (e.g., I get excited about learning new things in class), educational purpose (e.g., I think school matters and should be taken seriously), and academic efficacy (e.g., I am a successful student). This instrument has been found to have substantive validity, structural validity, and external validity, as well as adequate levels of construct reliability and internal consistency with estimates being reported between .72-.78 (Renshaw et al., 2015).

### ***Sense of Purpose in Life***

Students completed the Revised Sense of Purpose Scale (SOPS-2) (Sharma & Yukhymenko-Lescroart, 2019; Yukhymenko-Lescroart & Sharma, 2020a) that was developed for the use with young adults to measure three constructs of purpose: awakening to purpose (e.g., Recent activities are helping me to awaken to my life's purpose), awareness of purpose (e.g., I am certain of my life's purpose), and altruistic purpose (e.g., I seek to help others). The instrument contains a total of 14 items with a 1-7 response scale: 1 (strongly disagree), 2 (disagree), 3 (somewhat disagree), 4 (neutral), 5 (somewhat agree), 6 (agree), and 7 (strongly agree). The SOPS-2 has been shown to be a valid and reliable measure of the three dimensions of sense of purpose in life. Evidence of construct validity, factorial validity, and criterion validity has been provided, and reliability estimates were reported to be between .87 and .94 (Sharma & Yukhymenko-Lescroart, 2019).

### ***Academic Identity***

Students also completed the academic identity subscale from the Academic and Athletic Identity Scale (AAIS) (Yukhymenko-Lescroart, 2014),

which is a valid and reliable 5-item subscale that measures the centrality of academic identity to students' sense of self. The academic identity instrument use a 7-point response scale: 1 (not central), 2 (slightly central), 3 (somewhat central), 4 (central), 5 (very central), 6 (extremely central), and 7 (the central core). This subscale has been suggested as a reasonable measure of identity in students with a strong evidence of factorial validity and reliability estimates of .92-.93 (Yukhymenko-Lescroart, 2014).

### **Data Analysis**

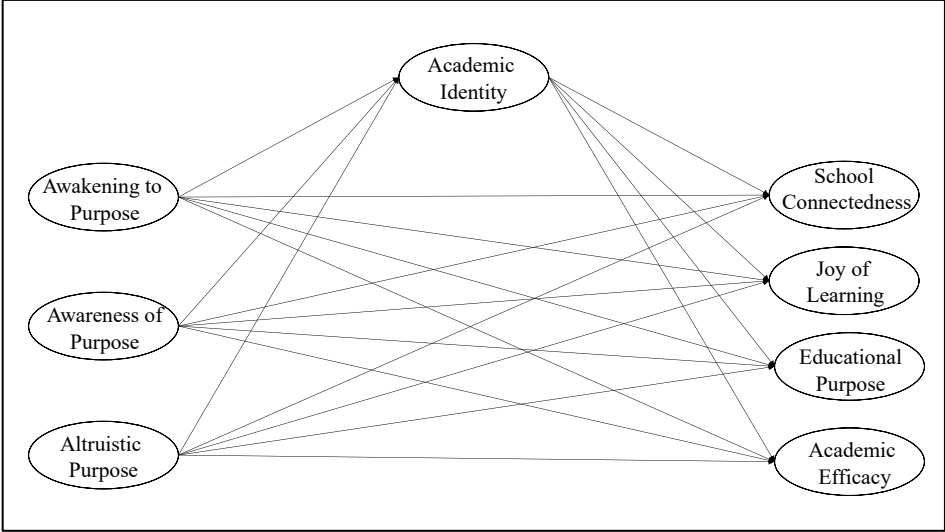
In the first step, which focused on preliminary analysis, a measurement model was specified, which was independent clusters confirmatory factor analysis (ICM-CFA) of all measured items, which were specified to represent their intended latent factors that all were all correlated. The measurement model was evaluated based on several fit indices: comparative fit index (CFI), Tucker Lewis Index (TLI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR). Consistent with guidelines summarized by Hair et al. (2019, p. 642) for samples of fewer than 250 participants and models with 30 or more observed items, the model was deemed as fitting good when the values of CFI and TLI were greater than .93, the value of RMSEA was below .08, and the value of SRMR was below .09. Construct reliability was also examined for each measured variable, with values of .70 or above indicating high internal consistency (Hair et al., 2019, p. 676). Average variance extracted was also reported, with values of .50 or greater generally indicating construct validity of latent measures (Hair et al., 2019, p. 676).

Main analysis was focused on testing structural relationships among the measured variables and are depicted in Figure 1. Specifically, the structural model was then specified by building on the measurement model and adding structural relationships from the three dimensions of life purpose to academic identity (the "a" paths), from academic identity to the four dimensions of subjective well-being (the "b" paths), and from the three dimensions of life purpose to the four dimensions of subjective well-being (the "c" paths). Additionally, indirect relationships between the three dimensions of life purpose to the four dimensions of subjective well-being via academic identity were examined using a bootstrapping procedure with 2,000 samples. Bootstrapping is a resampling procedure that allows to determine statistical significance of coefficients without applying distributional assumptions. Because indirect paths ( $a*b$ ) is not normally distributed, a bootstrapping procedure is recommended and necessary (Hair et al., 2019, p. 746). Indirect relationships via academic identity between sense of purpose and student subjective well-being were possible, but not guaranteed, when the relationships between the dimensions of sense of purpose and academic identity and between academic identity and the dimensions of student subjective well-being were significant. Analyses were performed in Mplus, version 8.7

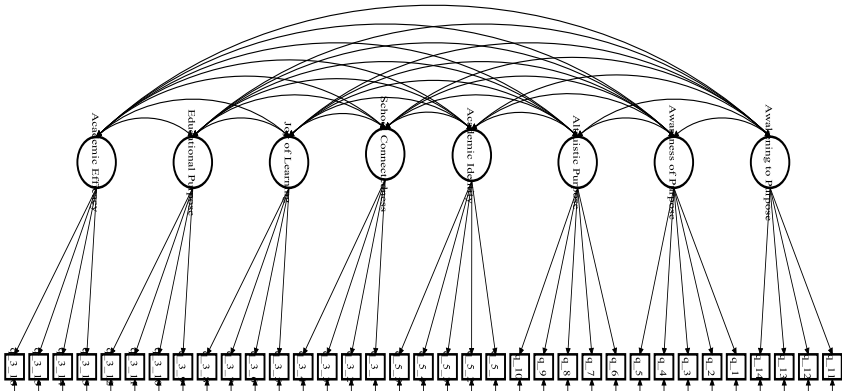


(Muthén & Muthén, 2021) using Maximum Likelihood estimation with robust standard errors. We presented results using standardized estimates ( $\beta$ ), accompanied by standard errors ( $SE$ ), 95% confidence intervals ( $CI$ ), and  $p$ -values.

**Figure 1: Tested Structural Model**



**Figure 2: Measurement Model**



## RESULTS

### Preliminary Analysis: Measurement Model

Missing data on measured items ranged from 0 to 1.28% with a total of nine missing values (0.1% of the total dataset), and were assumed to be missing at random. The measurement model was specified, in which all measured items were specified to represent their intended latent factors with all factors correlating with each other. Specifically, the measurement model included three latent factors of purpose in life (i.e., awakening to purpose with four items, awareness of purpose with five items, altruistic purpose with five items), one latent factor of academic identity (with five items), and four latent factors of student subjective well-being (i.e., school connectedness with four items, joy of learning with four items, educational purpose with four items, and academic efficacy with four items). The model showed a good fit to the data:  $\chi^2(532, N = 234) = 1001.28, p < .001$ , RMSEA = .061, [.056, .067], CFI = .930, TLI = .922, SRMR = .049. The final measurement model is shown in Figure 2.

Table 1 shows correlations, means and standard deviations, and estimates of reliability and average variance extracted for the measured variables. Construct reliability estimates ranged from .78 to .95. Estimates of average variance extracted ranged from .47 to .82 and, except for school connectedness, were all above .50, indicating construct validity of the latent measures. Correlations between the four measures of student subjective well-being and the measures of sense of purpose were all positive and significant and ranged from .21 to .41. Correlations between the four measures of student subjective well-being and the measure of academic identity were also all positive and significant and ranged from .29 to .79.

### Main Analysis: Structural Model

In the next step, the structural model was specified by adding structural paths to the measurement model as depicted in Figure 1. Specifically, academic identity was specified to be predicted by the three measures of life purpose (the “a” paths) and the four measures of student subjective well-being were specified to be predicted by academic identity (the “b” paths) and by the three measures of life purpose (the “c” paths). This model allowed for examining relationships, both direct and indirect via academic identity, between life purpose and student subjective well-being. The fit of the structural model was identical to the fit of the measurement model. The model explained significant amount of variance in academic identity,  $R^2 = 21.5\%, p = .001$ . The model also explained significant amount of variance in school connectedness,  $R^2 = 12.6\%, p = .019$ , joy of learning,  $R^2 = 33.6\%, p < .001$ , educational purpose,  $R^2 = 26.5\%, p < .001$ , and academic efficacy,  $R^2 = 63.1\%, p < .001$ , by academic identity and the three measures of sense of purpose in life. Table 2 and Figure 3 show the results for the direct and indirect relationships examined in this study.

**Table 1: Correlation and Reliability Estimates for Measured Variables ( $N=234$ )**

Variable	1	2	3	4	5	6	7	8
1. School connectedness	-							
2. Joy of learning	.57*** [.44, .71]	-						
3. Educational purpose	.47*** [.33, .60]	.73*** [.64, .81]	-					
4. Academic efficacy	.42*** [.28, .56]	.53*** [.42, .65]	.50*** [.38, .62]	-				
5. Academic identity	.29*** [.13, .45]	.52*** [.41, .64]	.45*** [.34, .57]	.79*** [.73, .85]	-			
6. Awakening to purpose	.25*** [.09, .41]	.41*** [.29, .54]	.36*** [.21, .51]	.40*** [.28, .52]	.43*** [.30, .57]	-		
7. Awareness of purpose	.30*** [.14, .45]	.32*** [.20, .45]	.33*** [.20, .46]	.33*** [.21, .45]	.41*** [.29, .53]	.83*** [.77, .89]	-	
8. Altruistic purpose	.21** [.03, .39]	.38*** [.21, .54]	.37*** [.21, .54]	.30*** [.14, .46]	.35*** [.21, .50]	.53*** [.41, .65]	.45*** [.34, .57]	-
<i>M</i>	2.88	2.66	3.21	3.04	4.13	4.69	4.38	5.44
<i>SD</i>	0.67	0.75	0.66	0.77	1.43	1.38	1.51	1.05
Construct reliability	.78	.85	.81	.93	.94	.95	.93	.92
Average variance extracted	.47	.58	.52	.75	.75	.76	.82	.65

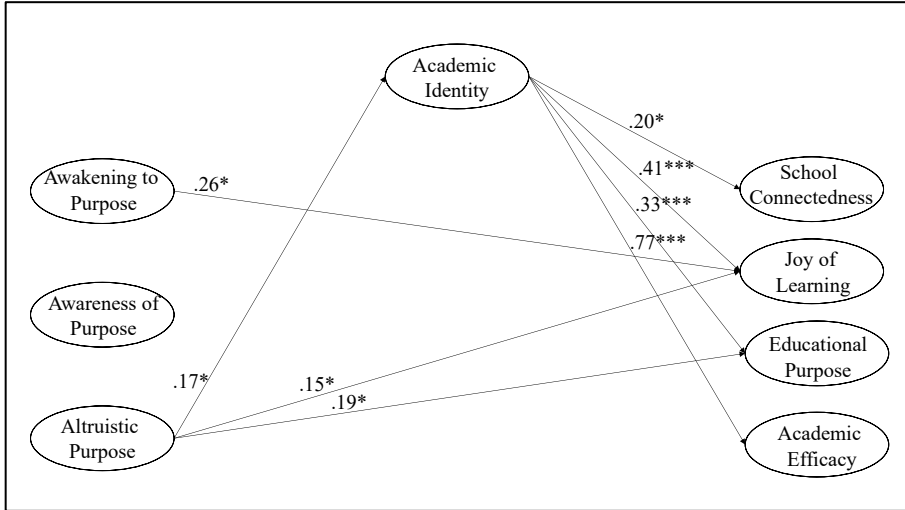
*Note:* In brackets are 95% confidence intervals for correlations among the latent factors representing the measured variables. All correlations were significant, \*\* $p < .01$ , \*\*\* $p < .001$

**Table 2: Standardized Path Coefficients for Direct and Indirect Paths, N = 234**

Path	Direct		Indirect	
	Coefficient (SE)	95% CI	Coefficient (SE)	95% CI
Awakening to purpose → academic identity	.22 (.13)	[-.03, .48]	n/a	
Awareness of purpose → academic identity	.15 (.12)	[-.09, .38]	n/a	
Altruistic purpose → academic identity	.17* (.08)	[.02, .32]	n/a	
Awakening to purpose → school connectedness	-.07 (.15)	[-.37, .23]	.05 (.04)	[-.03, .12]
Awareness of purpose → school connectedness	.24 (.14)	[-.04, .52]	.03 (.03)	[-.03, .09]
Altruistic purpose → school connectedness	.07 (.09)	[-.11, .25]	.03 (.02)	[-.01, .08]
Academic identity → school connectedness	.20* (.08)	[.04, .36]	n/a	
Awakening to purpose → joy of learning	.26* (.13)	[0, .52]	.09 (.06)	[-.03, .21]
Awareness of purpose → joy of learning	-.13 (.12)	[-.37, .11]	.06 (.05)	[-.05, .17]
Altruistic purpose → joy of learning	.15* (.08)	[0, .30]	.07* (.03)	[-.001, .14]
Academic identity → joy of learning	.41*** (.07)	[.28, .54]	n/a	
Awakening to purpose → educational purpose	.09 (.14)	[-.19, .36]	.07 (.05)	[-.03, .18]
Awareness of purpose → educational purpose	.03 (.13)	[-.22, .29]	.05 (.04)	[-.04, .13]
Altruistic purpose → educational purpose	.19* (.08)	[.03, .36]	.06 (.03)	[-.004, .12]
Academic identity → educational purpose	.33*** (.07)	[.19, .48]	n/a	
Awakening to purpose → academic efficacy	.15 (.1)	[-.04, .35]	.17 (.11)	[-.04, .39]
Awareness of purpose → academic efficacy	-.11 (.09)	[-.29, .07]	.11 (.09)	[-.07, .30]
Altruistic purpose → academic efficacy	0 (.06)	[-.11, .12]	.13 (.07)	[-.001, .26]
Academic identity → academic efficacy	.77*** (.04)	[.69, .85]	n/a	

Note. SE = standard error, CI = confidence interval, \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

**Figure 3: Standardized Results for Tested Model with Non-Significant Paths Not Shown**



***Relationship between Sense of Purpose and Academic Identity***

Academic identity was significantly predicted by altruistic purpose only,  $\beta = .17$ ,  $SE = .08$ , 95%  $CI [.02, .32]$ ,  $p = .027$ . Therefore, indirect relationships were possible through academic identity, but not guaranteed, from altruistic purpose to those dimensions of student subjective well-being, which were significantly predicted by academic identity.

***Relationship between Academic Identity and Student Subjective Well-Being***

Academic identity emerged as a significant and positive predictor of all four dimensions of student subjective well-being: school connection,  $\beta = .20$ ,  $SE = .08$ , 95%  $CI [.04, .36]$ ,  $p = .014$ , joy of learning,  $\beta = .41$ ,  $SE = .07$ , 95%  $CI [.28, .54]$ ,  $p < .001$ , educational purpose,  $\beta = .33$ ,  $SE = .07$ , 95%  $CI [.19, .48]$ ,  $p < .001$ , and academic efficacy,  $\beta = .77$ ,  $SE = .04$ , 95%  $CI [.69, .85]$ ,  $p < .001$ .

***Relationship between Sense of Purpose and Student Subjective Well-Being***

In terms of the relationships between sense of purpose in life and student subjective well-being, school connectedness was not predicted by any dimensions of sense of purpose in life. For joy of learning, two dimensions of sense of purpose emerged as significant predictors of joy of learning: awakening to purpose,  $\beta = .26$ ,  $SE = .13$ , 95%  $CI [.0, .52]$ ,  $p = .046$ , and altruistic purpose,  $\beta = .15$ ,  $SE = .08$ , 95%  $CI [.0, .30]$ ,  $p = .048$ . Testing of indirect relationship between altruistic purpose and joy of learning through academic identity showed that altruistic purpose was also an indirect predictor of joy of learning via academic identity,  $\beta = .07$ ,  $SE = .03$ , 95%  $CI [0, .14]$ ,  $p = .048$ , suggesting that students with a clear altruistic purpose tends to have a stronger academic identity, and, in turn, a high joy of learning.

For educational purpose, altruistic purpose emerged as a direct predictor only,  $\beta = .19$ ,  $SE = .08$ ,  $95\% CI [.03, .36]$ ,  $p = .020$ ; whereas an indirect relationship via academic identity between altruistic purpose and educational purpose was not significant. Finally, the fourth dimension of student subjective well-being, academic efficacy, was also not predicted by any dimensions of sense of purpose in life.

## DISCUSSION

Several studies have demonstrated subjective well-being as a critical factor that impacts students' various educational and health outcomes including better school attendance, academic achievement, self-concept, and stronger physical and mental health (Helliwell & Putnam, 2004; Suldo et al., 2011; Renshaw et al., 2015). However, in contrast to contextual factors that promote school students' subjective well-being, there is a lack of research on intrapersonal factors that could promote students' subjective well-being (Galinha & Pais-Ribeiro, 2011).

Another limitation of existing research is its focus only on either domain-general or domain-specific factors that are related to subjective well-being even if the construct of subjective well-being encompasses both global and domain-specific satisfactions (Diener et al., 1999). The aim of this study was to examine the extent to which sense of purpose, which is a domain-general factor and academic identity, which is a domain-specific factor contribute to high school students' subjective well-being that encompasses their school connectedness, joy of learning, educational purpose, and academic efficacy (Renshaw et al., 2015).

### **Student Subjective Well-Being and Academic Identity**

The results of this study showed that all four dimensions of students' subjective well-being were predicted by academic identity, suggesting that high school students with a strong academic identity report positive well-being and academic oriented outcomes. Based on Renshaw et al.'s (2015) multi-dimensional model of subjective well-being that we used in this study, these outcomes include school connectedness, joy of learning, educational purpose, and academic efficacy.

Specifically, this study showed that academic identity was strongly associated with academic efficacy of high school students. High school students for whom academic identity is central to their sense of self reported that they were a successful student and did well at school work in general. Results further showed that academic identity was moderately associated with joy of learning and with educational purpose. High school students with a strong academic identity reported feeling happy and excited about learning at school as well as believing that school matters and the things that they learn in school will help them in their lives. Finally, the results showed a small positive association with school connectedness. Therefore, high school students with a strong sense of academic identity also felt like they belonged and could be themselves at school. Overall, these findings have

expanded the literature on role of academic identity in not only contributing to students' self-confidence, self-esteem, and academic performance (Butler et al., 2022; Graham & Anderson, 2008; Yukhymenko-Lescroart & Sharma, 2020b) but also their subjective well-being and positive psychological and academic functioning at school.

### **Student Subjective Well-Being and Sense of Life Purpose**

Previous research has shown sense of purpose as a positive developmental asset (Benson, 1997) that contributes to adolescents' wellness, hope for future, motivation to learn, academic commitment, persistence, and life satisfaction (Bronk & Finch, 2010; Chen & Cheng, 2020; Damon et al., 2003; Malin et al., 2019; Yeager & Bundick, 2009). One of the limitations of most of these studies has been reliance on instruments that are unidimensional and only assess people's current awareness about their purpose in life even if the construct of purpose is multi-dimensional (Scheier et al., 2006). Therefore, in this study, we used the Revised Sense of Purpose Scale (SOPS-2) (Sharma & Yukhymenko-Lescroart, 2019; Yukhymenko-Lescroart & Sharma, 2020a) that was developed to assess three dimensions of purpose: awakening to purpose, awareness of purpose, and altruistic purpose.

The results of this study showed that even more than the current awareness of purpose, the two dimensions of awakening to purpose and altruistic purpose were most relevant to students' subjective well-being. The results further suggested that altruistic purpose played a relatively more important role than awakening to purpose in especially contributing to two aspects of students' subjective well-being: educational purpose and joy of learning.

In essence, this study demonstrated that high school students who are actively engaged in gaining understanding about the deeper purpose of their life reported that they experienced a greater joy of learning and sense of well-being. Adolescence is a critical time period of identity exploration, which includes searching for a deeper purpose in life (Erikson, 1968). Awakening to purpose involves setting goals that resonate with one's personal identity and future aspirations. Research has shown goal-setting as an important contributor of subjective well-being among high school students (Bird & Markle, 2012). It is therefore possible that students who feel engaged in the process of clarifying and fulfilling their personal and academic goals within the overarching framework of their life's purpose, experience greater subjective well-being.

High school students with a strong altruistic purpose also experienced stronger educational purpose and joy of learning. Thus, high school students who have an altruistic purpose in life, believed that it was important to pursue school education as a means to actualize their aspiration to advance a positive change in their local communities and society at large. In addition, students with altruistic purpose get excited about learning and enjoy working on class projects and assignments. These results align with several scholars' conclusions on the positive

role of altruistic purpose in motivating adolescents to work hard, persevere, and experience greater meaning behind their educational pursuits (Bronk & Holmes Finch, 2010; Yeager & Bundick, 2009). Research has also shown that beyond adolescence, altruistic purpose strengthens college students' degree commitment (Sharma & Yuhymenko-Lescroart, 2018) and academic commitments, leading to higher GPA and stronger likelihood of degree completion (Yuhymenko-Lescroart & Sharma, 2020b). In relation to well-being, Hill, Burrow, Brandenberger et al.'s (2010) study showed that college students with stronger prosocial purpose in life experienced greater personal growth and integrity. Together these studies have highlighted the importance of forging a deeper sense of altruistic purpose in life to advance a positive change in the world beyond-the-self and thereby, experiencing a greater sense of well-being.

A unique contribution of this study is that altruistic purpose was also related to joy of learning indirectly via academic identity. This finding suggests that students who want to make a positive difference in their communities and contribute to other people's well-being view that they can make this difference through their education. Therefore, students with altruistic purpose report a more central role of academic identity to their sense of self and, in turn, report greater satisfaction and joy of learning. This finding reaffirms the value of purpose as a central life-aim that helps in organizing, prioritizing, and striving to fulfill current goals with deeper sense of motivation and meaning (McKnight & Kashdan, 2009).

## **PRACTICAL IMPLICATIONS**

The present study has provided evidence for the importance of academic identity and sense of life purpose in supporting high school students' well-being. This study has specifically highlighted the role of altruistic purpose in contributing to high school students' educational purpose and joy of learning. Previous research has similarly highlighted the importance of helping adolescents to awaken to their life's purpose through which they might not only advance a positive change in their own life but also contribute to others' lives (Yeager & Bundick, 2009). However, despite such evidence, the traditional education system does not provide enough support for adolescents to explore their life's purpose and identify the value of school education in fulfilling that purpose (Damon et al., 2003). The practical implications of this study lie in encouraging school personnel, including teachers, counselors, administrators, and policy makers to promote pedagogical and wellness approaches that might strengthen students' sense of purpose in relation to their academic identity, and thereby increase their subjective well-being.

According to Morse et al. (2019), although, school personnel might face several systemic barriers in implementing interventions that could promote



students' positive development with regard to their sense of purpose and meaning in life, schools abound with abundant intellectual, social, and structural resources that can help youth to live meaningful and purposeful lives. Several scholars have already written extensively on easy to implement school-based interventions that could strengthen students' sense of purpose (Damon, 2008; Morse et al., 2019; Sharma & Yukhymenko-Lescroart, 2022a). For example, in relation to purpose-focused pedagogy of care, Sharma and Yukhymenko-Lescroart (2022a) illustrated several activities that could help students in articulating the relationship between their current academic pursuits and life purpose along with developing self-care plans that can help them overcome internal and external barriers towards actualizing their purpose.

School personnel could also promote purpose-centered wellness and counseling approaches such as positive affirmations, journaling, reflective exercises, deep breathing and guided imagery techniques that could help in deepening their sense of purpose and thereby, their subjective well-being. According to Kosine et al. (2008) such purpose-oriented school counseling interventions can specifically focus on strengthening students' identity, belief in their own abilities, meta-cognition, cultural understanding, and resolve to benefit their communities.

## **LIMITATIONS AND FUTURE DIRECTIONS**

One of the main limitations of this study is the cross-sectional design and, thus, findings need to be interpreted cautiously without suggesting causal effects. Nevertheless, the proposed relationships in the tested model and findings are consistent with current theories and empirical studies. To address this limitation, future studies can examine true mediation effects through a longitudinal design. For example, researchers can measure sense of purpose in life, academic identity, and student subjective well-being at the beginning, the midpoint, and at the end of a school year. Such design will allow examining the causal relationships among these constructs. Future studies could also use mixed-methods approaches to explore the process through which adolescents develop a strong sense of purpose, academic identity, and subjective well-being in relation to each other. In future, it would also be important to replicate this study in other educational settings to examine the role of life purpose in contributing to diverse groups of students' subjective well-being.

Given the existential anxiety and mental health concerns that many students have been reporting (Alter, 2020) and the importance of positive psychological interventions in supporting students to flourish even in the midst of hardships (Morse et al., 2019), future research must also focus on implementing and evaluating the effectiveness of school-based purpose interventions (Morse et al., 2019; Sharma & Yukhymenko-Lescroart, 2022a). Such studies could also use

recently developed measures of purpose such as the Revised Sense of Purpose Scale (SOPS-2) (Sharma & Yukhymenko-Lescroart, 2019; Yukhymenko-Lescroart & Sharma, 2020a) to assess not only the extent to which youth feel aware of their life's purpose but also the altruistic nature of their purpose and the process through which they awaken to life's purpose. Based on the results of this study, we can conclude that supporting youth to awaken to their life's purpose and fulfill their altruistic aspirations might serve as important initiatives to promote their educational purpose, joy of learning and overall subjective well-being.

## CONCLUSIONS

Abundant research has shown the importance of subjective well-being in promoting high school students' academic, career, and wellness outcomes. Given the lack of initiatives in promoting high school students' well-being and the recent rise in students' mental health and existential concerns (Alter, 2020), we conducted this study to explore the role of life purpose and academic identity in predicting their subjective well-being. In addition to assessing the role of both domain-general factor (life purpose) and domain-specific factor (academic identity) in contributing to high school students' subjective well-being, another unique contribution of this study lied in using multidimensional measures of both subjective well-being (Renshaw et al., 2015) and life purpose (Sharma & Yukhymenko-Lescroart, 2019; Yukhymenko-Lescroart & Sharma, 2020a). This study specifically assessed the role of students' sense of purpose as assessed by awareness of purpose, awakening to purpose, and altruistic purpose in predicting their subjective well-being (school connectedness, joy of learning, educational purpose, and academic efficacy) directly and indirectly via academic identity.

The study showed that high school students with a strong academic identity reported higher scores on all four dimensions of students' subjective well-being. The study further showed that even more than the current awareness of purpose, the two dimensions of awakening to purpose and altruistic purpose were most relevant to students' subjective well-being. Moreover, altruistic purpose played a relatively more important role in contributing to the two dimensions of students' subjective well-being: educational purpose and joy of learning.

It is therefore important to engage in school-based interventions that could strengthen students' sense of purpose in relation to their altruistic aspirations, academic identity, and subjective well-being. Several scholars (Damon, 2008; Kosine et al., 2008; Sharma & Yukhymenko-Lescroart, 2022a) have illustrated the key components of purpose-focused pedagogical and school counseling interventions. However, more practical efforts and research is needed to implement and evaluate the effectiveness of proposed purpose interventions. Such practical and scholarly efforts could support high school students in experiencing greater

subjective well-being through strengthening their sense of purpose and academic identity.

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