Life Purpose as a Predictor of Resilience and Persistence in College Students During the COVID-19 Pandemic

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Abstract
The aim of this study was to investigate the extent to which life purpose explained the variance in college students’ levels of resilience and persistence amidst COVID-19 pandemic. This study utilized a cross-sectional design and focused upon the three dimensions of life purpose: awareness of purpose, awakening to purpose, altruistic purpose. Structural equation modeling showed that both resilience and persistence were predicted positively by awakening to purpose when a traditional three-correlated factors model was used to specify the measure of life purpose. When a bifactor model was used, the general factor of purpose emerged as a positive predictor of both resilience and persistence. Additionally, awakening to purpose emerged as a positive predictor of resilience above and beyond the general factor of purpose. Practical implications of this study lie in supporting students to actively explore and fulfill their life’s purpose since doing so might strengthen their resilience and intent to persevere.

Keywords
life purpose, resilience, persistence, COVID-19, wellbeing

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The recent group of college students, whom Time magazine referred to as “generation pandemic” have reported a deep sense of existential anxiety due to the uncertainties and challenges caused by COVID-19 pandemic (Alter, 2020). Research has already shown that apart from decline in physical health, COVID-19 pandemic has caused a range of mental health concerns among college students that have further exacerbated student attrition concerns (e.g., Cao et al., 2020; Wang et al., 2020; Zimmermann et al., 2020). Informed by the previous research on positive role of purpose in predicting college students’ progress towards degree completion (Yukhymenko-Lescroart & Sharma, 2020b) and several philosophers assertion that college students often seek life purpose as their starting point to return back to and derive motivation from in order to keep persevering during the times of greatest anxiety and uncertainty (e.g., Frankl, 1959; Ikeda, 2010a), we conducted this study to examine the extent to which life purpose explained the variance in college students’ levels of resilience and persistence during the COVID-19 pandemic.

Times of chronic adversity require an intentional shift from focusing only on current areas of concern and pathology to promoting holistic wellbeing and healthy coping (Connor & Davidson, 2003). In spite of the adversity intensified by COVID-19 pandemic, many college students continued to persevere and demonstrate a great deal of resilience, which Connor and Davidson (2003) described as a “measure of successful stress-coping ability” (p. 77). Currently, there is a lack of literature on the factors that promote students’ resilience and persistence amidst a global pandemic (Bono et al., 2020). However, recent research has shown that the effect of COVID-19 pandemic on college students’ mental health, persistence, and wellbeing was strongly mediated by resilience (Yang et al., 2020), supporting the need to conduct more studies on the factors that promote students’ resilience.

Further, Tinto (1982, 2012) asserted that the efforts to promote college retention are hampered when institutes focus only on the causes behind college attrition and not student persistence. Tinto (2012) hence emphasized that apart from striving to understand the reasons behind students’ decision to leave college, it is also critical to examine why certain students continue to persevere despite many challenges. Tinto (1982) conceptualized college persistence as student-level attributes, values, commitments, and skills that support them to complete their college education. Research has highlighted several factors that promote college students’ persistence, including sense of purpose (e.g., Hill et al., 2016; Sharma et al., 2021a). The results of this study will help in supporting the higher educational community with the latest findings on the role of life purpose in contributing to college students’ resilience and persistence amidst the challenges posed by COVID-19 pandemic.

Conceptualizing Life Purpose

In his commencement message to the Soka University of America’s Class of 2020, the founder of the university, Ikeda (2020) expressed: “In coming together to confront the specter of an unseen pathogen, humanity today may be entering a truly
transformative time, one in which we return to and redraw sustenance from the great earth of life that lies within us all” (p.1). Ikeda (2020) further encouraged students to use the struggles of COVID-19 pandemic to bring forth their life’s limitless potential for good to overcome any ordeal and make a positive difference in the lives of others. We believe sense of purpose is an important characteristic of life’s limitless potential for good since it can inspire students to not only fulfill their personal goals but also strive for the greater good for humanity. Sharma and Yukhymenko-Lescroart (in-press) conceptualized purpose as people’s underlying intention to achieve their life’s most important goals that, when fulfilled, might not only actualize a positive change in their life through achieving self-growth, happiness, success, family harmony, and so on, but also advance a positive change in their communities.

A vast number of empirical studies have demonstrated the positive role of purpose in contributing to college students’ mental health (Bronk et al., 2009), wellbeing (Bronk et al., 2009), self-efficacy (DeWitz et al., 2009), academic identity (Yukhymenko-Lescroart & Sharma, 2020a), degree commitment (Sharma & Yukhymenko-Lescroart, 2018), college completion (Sharma et al., 2021a), career success (Kosine et al., 2008), persistence amidst hardships (Hill et al., 2016), and retention (Yukhymenko-Lescroart & Sharma, 2020a). Given the important role of sense of purpose, there have been several attempts to assess purpose among people from different age-groups and backgrounds (e.g., Crumbaugh & Maholick, 1964; Sharma et al., 2017).

In the present study, we used the Revised Sense of Purpose Scale (SOPS-2, Sharma and Yukhymenko-Lescroart, 2019; Yukhymenko-Lescroart and Sharma, 2020b), that was designed to assess the following three dimensions of life purpose: awareness of purpose, awakening to purpose, and altruistic purpose. Sharma et al. (2017) conceptualized awareness of purpose as the extent to which people feel clear and confident about their purpose in life. Given that many people including college students might still be in the process of exploring their life’s purpose, Sharma et al. (2017) added the dimension of awakening to purpose to assess people’s active engagement and efforts to awaken to their life’s purpose. Sharma et al. (2017) also included the dimension of altruistic purpose, defined as people’s resolve to make a positive difference in society at large. SOPS-2 was already validated as a 3-factor scale among emerging adults (Sharma & Yukhymenko-Lescroart, 2019) and adults (Yukhymenko-Lescroart & Sharma, 2020b). Additionally, Yukhymenko-Lescroart and Sharma (2020b) showed in their validation study that SOPS-2 can also be used to measure a general factor of purpose after accounting for the group factors.

So far, no other study exists that assessed the role of the general factor of purpose after accounting for the group factors. In the present study, we investigated the role of the general factor of purpose as well as the three dimensions of awareness of purpose, awakening to purpose, and altruistic purpose in predicting college students’ resilience and persistence. If the results from both measurement models converge, it would increase the validity of findings, adding to the study’s novelty.
Life Purpose and Resilience

The concept of resilience is rooted in the recognition that there is a huge variability in how people respond to and cope with life’s stressors (Rutter, 2012). Masten et al. (1990) defined resilience as “the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances” (p. 426). Research has consistently shown resilience to be positively related with people’s ability to cope and negatively related with their levels of anxiety, depression, negative affect, and physical health symptoms (Smith et al., 2008). Werner (1995) asserted that given the critical role that resilience plays, it is important to keep engaging in research that can shed light into the individual dispositions and strengths that can promote resilience in a variety of high-risk contexts and chronically adverse, stressful situations. Given, the growing range of concerns caused by COVID-19 pandemic, we decided to conduct this study to examine the role of purpose in contributing to college students’ resilience.

Resilience can be viewed as underlying belief in college students’ potential to achieve success through utilizing protective factors which predict positive academic and mental health outcomes amidst adverse conditions (e.g., Hartley, 2011; 2012; Masten, 2001). These protective factors encompass the intrapersonal resilience-promoting qualities and inherent strengths that enable people to thrive (Connor & Davidson, 2003; Hartley, 2011; Leary & DeRosier, 2012). One of these protective factors is having faith in one’s own actions to make a positive difference (Werner, 1995). Benard (1991) ascribed sense of purpose as a critical characteristic of resilient youth, which strengthens their several other attributes such as goal-directedness, motivation, aspirations, persistence, and hope. In a recent phenomenological study, college students from minority ethnic backgrounds shared that having a sense of purpose in life motivated them to keep persevering on the path of their short-term and long-term goals (Sharma & de Alba, 2018).

Life Purpose and Persistence

College students’ persistence has been the primary goal for higher education institutions for several decades (Reason, 2009). Presently, the concerns related to college students’ persistence have increased even more due to the unprecedented challenges caused by COVID-19 (e.g., Cao et al., 2020; Wang et al., 2020; Zimmermann et al., 2020). Based on review of literature, Robbins et al. (2004) identified students’ motivation as one of the strongest predictors of college persistence. According to the Self-Determination Theory (Deci & Ryan, 2008), there are two kinds of motivations: controlled and autonomous. The autonomous motivations encompass people’s desire to strive for a greater purpose or use their education and skills to contribute to others wellbeing. Research has shown that during challenging times, supporting people to awaken to their autonomous motivations promotes their ability to persevere (Pritchard & Wilson, 2003).
Likewise, Tinto (2012) emphasized that students’ goal-commitments and future expectations play an important role in influencing their decision to persist. According to Tinto (1993), the more strongly a student is committed to their goals, the more likely they are to persevere towards college completion. Research has indeed shown a strong relationship between college students’ sense of purpose and their degree commitment (Sharma & Yukhymenko-Lescroart, 2018), persistence (Hill et al., 2016), college completion (Sharma et al., 2021a), and retention (Yukhymenko-Lescroart & Sharma, 2020a).

**Purpose of the Present Study**

In sum, life purpose plays an important role in contributing to students’ mental health, wellness, positive development, academic persistence, and career success (e.g., Bronk et al., 2009, Hill et al., 2016; Kosine et al., 2008; Sharma and Yukhymenko-Lescroart, 2018; Yukhymenko-Lescroart and Sharma, 2020a). The purpose of this study was to investigate the extent to which the general factor of purpose as well as the three factors of awareness of purpose, awakening to purpose, and altruistic purpose, explained the variance in college students’ levels of resilience and persistence during the academic year 2020-2021 when students’ struggles might have been augmented by the COVID-19 pandemic.

**Method**

**Participants**

Two hundred and ninety-five college students, 95 male and 200 female, participated in this study. This was a diverse sample of participants in terms of their academic plans and majors, who represented a variety of departments and schools from one college campus that has a designation of Hispanic- and Asian American and Native American Pacific Islander-Serving Institution by The U.S. Department of Education. The majority of participants were Hispanic (n = 166), followed by Asian (n = 54), White (n = 44), two or more race/ethnic categories (n = 13), Black (n = 8), Unknown (n = 8), American Indian (n = 1), and Pacific Islander (n = 1). All four academic levels were represented in the sample: 64 were freshman, 58 were sophomore, 85 were junior, and 88 were senior.

**Instruments**

**Life Purpose.** Life purpose was assessed using the Revised Sense of Purpose Scale (SOPS-2, Sharma and Yukhymenko-Lescroart, 2019; Yukhymenko-Lescroart and Sharma, 2020b), which has been validated for the use with college students. This scale is designed to assess the dimensions of awakening to purpose (four items, e.g., *I am awakening to my life’s ultimate goal*), awareness of purpose (five
items, e.g., *My purpose in life is clear*), and altruistic purpose (five items, e.g., *I aspire to make a positive difference in my community*) on a 7-point scale ranging from 1 = strongly disagree to 7 = strongly agree. In samples with college students, reliability estimates were reported to be .87-.93 for awakening to purpose, .94-.97 for awareness of purpose, and .88-.90 for altruistic purpose (Sharma & Yukhymenko-Lescroart, 2019; Yukhymenko-Lescroart & Sharma, 2020b, Study 2). Criterion validity has been evidenced by positive correlations of the SOPS-2 subscales with measures of compassion, humility, positivity, self-esteem, and moral identity (Sharma & Yukhymenko-Lescroart, 2019; Yukhymenko-Lescroart & Sharma, 2020b, Study 2). Apart from being validated for the use with students and adults as a 3-factor measure, SOPS-2 was also validated as a scale to measure a general factor of purpose along with the three group factors of awareness of purpose, awakening to purpose, and altruistic purpose (Yukhymenko-Lescroart & Sharma, 2020b).

**Resilience.** Resilience was measured with the Brief Resilience Scale developed by Smith et al. (2008). It consists of six statements, three positive and three negative (e.g., *I tend to bounce back quickly after hard times*) and participants are asked to indicate their agreement on a 5-point scale ranging from 1 = strongly disagree to 5 = strongly agree. This scale was tested with diverse participants, including undergraduate students, showing reliability estimates between .84-.87 with college students (Smith et al., 2008, Studies 1 and 2). Discriminant predictive validity in college student samples (Smith et al., 2008, Studies 1 and 2) was demonstrated by correlations with a number of relevant constructs measuring personal characteristics (e.g., optimism, pessimism, purpose in life), social relationships (i.e., negative interactions, social support), coping (e.g., acceptance, active coping, denial, humor, positive reframing, self-blame), and health-related outcomes (e.g., anxiety, depression, negative affect, perceived stress, physical symptoms).

**Persistence.** Intent to persist was assessed by the Institutional and Goal Commitments Scale (Pascarella & Terenzini, 1980). This scale consists of five statements (e.g., *It is important for me to graduate from college*), which use a 5-point agreement scale ranging from 1 = strongly disagree to 5 = strongly agree. Pascarella and Terenzini (1980) reported reliability estimate for this scale of .71 in a sample of freshman college students. The results of their study with a calibration sample showed significant differences on this scale between students who intended to persist and voluntary dropouts.

**Procedure.** After obtaining approvals for research with human participants, which were obtained according to the University’s policy and procedures, student participants were recruited via email in March-April 2021. Specifically, emails were sent to 4,000 students with an invitation to complete a survey, which was hosted in Qualtrics.
Three follow up emails were sent to those students who have not provided responses, with the first reminder sent one week after the initial invitation and the last two reminders sent approximately two weeks later each. No incentives were provided to students for participation.

**Data Analysis.** Research purpose related to what extent life purpose could explain the variance in students’ resilience and persistence was addressed by utilizing structural equation modeling using Mplus, version 8.6 (Muthén & Muthén, 1998-2021), using maximum likelihood estimation method with robust standard errors. Structural equation modeling is a powerful technique, which combines factor analyses with regression analyses. The advantage of structural equation modeling over a regression analysis is that it allows for testing of theoretical propositions of data while taking into account measurement error (e.g., see Hair et al., 2019). Structural equation modeling is a two-step analysis, consisted of (a) testing a measurement model (i.e., factor analysis) and (b) testing a structural model by adding structural relationships to the measurement model.

**Testing Measurement Models: General Information.** First, measurement models were specified to assess psychometrical properties of the measured constructs by conducting confirmatory factor analyses on the observe items of the scales. These analyses help ensuring that the items measuring the studied variables are valid and reliable (Hair et al., 2019).

Notably, the SOPS-2 was proposed as a valid and reliable scale that can be specified as three correlated factors of awakening to purpose, awareness or purpose, and altruistic purpose (e.g., Sharma and Yukhymenko, 2019; Yukhymenko-Lescroart and Sharma, 2020b) and as a bifactor model which is designed to measure a general factor of *overall sense of purpose in life* after accounting for the three specific factors (for details on validity of the SOPS-2 measurement models, see in Yukhymenko-Lescroart and Sharma, 2020b); therefore, we tested both specifications of the SOPS-2 because it can provide additional insights and additional validity to study findings. A bifactor model assumes that for a given set of items, correlations among items can be accounted for by (a) a general factor (*sense of purpose*), which represents shared variance among all 14 items, and (b) a set of group factors (awakening or purpose, awareness of purpose, and altruistic purpose), which represent shared variance among the 14 items over and above the general factor. In a bifactor model, the general and group factors are assumed to be orthogonal (i.e., non-correlated). A bifactor model can be advantageous when a scale is believed to measure both general and group sources of variance or when a scale is believed to measure a strong enough general factor but there is a need to account for multidimensionality (Rodriquez et al., 2016).

Following guidelines of Hair et al. (2019) for models with 12 to 30 observed variables and with samples of over 250 participants, the fits of the measurement models were deemed to be good based on the following criteria: comparative fit index (CFI)
and Tucker Lewis Index (TLI) of above .92, root mean square error of approximation (RMSEA) of less than .07, and standardized root mean square residual (SRMR) of .08 or less. Internal consistency of each measured construct was assessed based on estimates of construct reliability, with values of .70 or higher indicating good internal consistency (Hair et al., 2019).

**Testing Structural Models: General Information.** After testing the measurement models and ensuring validity and reliability of the scales, structural models were specified to test structural relationships among the studied variables and address the study purpose. The structural models built on the measurement models. In the structural models, the latent factors of purpose were specified as predictors (i.e., exogenous latent factors) of resilience and persistence (i.e., endogenous latent factors). Statistical results are presented using standardized estimates, which correspond to effect sizes because they are displayed in standard deviation units, as well as 95% confidence intervals and \( p \)-values.

**Specific Models Tested in The Study. Correlated Three-Factor CFA Specification of the SOPS-2.** The first measurement model was tested in which: (a) the six items of the Brief Resilience Scale were specified as indicators of their intended latent factor of resilience; (b) the five items of the Institutional and Goal Commitments Scale were specified as indicators of their intended latent factor of persistence; (c) the 14 items of the SOPS-2 were specified as indicators of their intended latent factors of awakening to purpose, awareness of purpose, altruistic purpose (i.e., three correlated factors). Figure 1 shows the tested structural model that was built on this measurement model.

**Bifactor Specification of the SOPS-2.** The second measurement model was tested in which: (a) the six items of the Brief Resilience Scale were specified as indicators of their intended latent factor of resilience (the same as in the first model); (b) the five items of the Institutional and Goal Commitments Scale were specified as indicators of their intended latent factor of persistence (the same as in the first model); (c) the 14 items of the SOPS-2 were specified as indicators of the general factor of sense of purpose in life and three specific factors of awakening to purpose, awareness of purpose, altruistic purpose, all of which were uncorrelated with each other (i.e., bifactor model). Figure 2 shows the tested structural model that was built on this measurement model.

**Results**

Missing data on observed items ranged from 0 to 1.0% and were missing completely at random (MCAR) as indicated by a non-significant value of the Little’s MCAR test, \( \chi^2(33, N = 295) = 30.79, p = .577 \).
Correlated Three-Factor CFA Specification of the SOPS-2

Measurement Model. Measurement model was tested in which items were specified to measure their intended constructs of resilience, persistence, and three correlated factors of SOPS-2 (awakening to purpose, awareness of purpose, altruistic purpose). This

Figure 1. Standardized results for tested model with the correlated three-factor specification of the SOPS-2. Note. SOPS-2 was specified as a three-correlated factors model. The correlations were as follows: .88 between awakening to purpose and awareness of purpose, .52 between awakening to purpose and altruistic purpose, .51 between awareness of purpose and altruistic purpose, and .16 between resilience and persistence. *p < .05.

Figure 2. Standardized results for tested model with the bifactor specification of the SOPS-2. Note. SOPS-2 was specified as a bifactor model. The correlations were as follows: 0 between awakening to purpose and awareness of purpose, 0 between awakening to purpose and altruistic purpose, 0 between awareness of purpose and altruistic purpose, and .17 between resilience and persistence. *p < .05, ***p < .001.

Correlated Three-Factor CFA Specification of the SOPS-2
model showed a good fit to the data: $\chi^2(265, N = 295) = 423.95, p < .001$, CFI = .961, TLI = .956, RMSEA = .045, 90% CI [.037, .053], SRMR = .057. All loadings were significant and are shown in Table 1 (see Model 1).

Table 2 shows correlations among the measured constructs and estimates of construct reliability. Reliability estimates were above .70 for all but one measure, indicating good internal consistency of these measures. Reliability estimate for the persistence scale was .60, suggesting less than optimal internal consistency of this

Table 1. Factor Loadings for the Two Measurement Models Tested in This Study.

| Indicator                        | Model 1 | Model 2 | Specific Factors | General Factor |
|----------------------------------|---------|---------|------------------|----------------|
| **Resilience**                   |         |         |                  |                |
| Item 1 (awakening to purpose)    | .88     | .41     | .78              |                |
| Item 2 (awakening to purpose)    | .95     | .42     | .84              |                |
| Item 3 (awakening to purpose)    | .89     | .45     | .77              |                |
| Item 4 (awakening to purpose)    | .77     | .49     | .63              |                |
| Item 5 (awareness of purpose)    | .90     | .41     | .91              |                |
| Item 6 (awareness of purpose)    | .94     | .09     | .93              |                |
| Item 7 (awareness of purpose)    | .92     | -.04    | .92              |                |
| Item 8 (awareness of purpose)    | .93     | -.08    | .94              |                |
| Item 9 (awareness of purpose)    | .94     | -.08    | .94              |                |
| Item 10 (altruistic purpose)     | .74     | .57     | .47              |                |
| Item 11 (altruistic purpose)     | .82     | .71     | .40              |                |
| Item 12 (altruistic purpose)     | .87     | .73     | .47              |                |
| Item 13 (altruistic purpose)     | .78     | .76     | .29              |                |
| Item 14 (altruistic purpose)     | .74     | .64     | .37              |                |

Note. Model 1 was a correlated three-factor specification of the SOPS-2. Model 2 was a bifactor specification of the SOPS-2.
measure. As shown in Table 2, correlations between the latent factor of resilience and the three latent factors of sense of purpose were all positive and significant and ranged from .24 to .39. Likewise, correlations between the latent factor of persistence and the three latent factors of sense of purpose were all positive and significant and ranged from .33 to .55 (see Table 2).

**Structural Model.** Structural model was specified, which built on the measurement model by adding structural relationships among the latent factors. Specifically, the three latent factors of purpose (awakening to purpose, awareness of purpose, altruistic purpose) were specified as predictors of the latent factors of resilience and persistence. Because correlations among the exogenous latent factors and among the endogenous latent factors were freely estimated, the fit of the structural model was identical to the fit of the measurement model. The results are shown in Figure 1. The structural model explained 15.7% of the variance in resilience and 31.7% of the variance in persistence. Awakening of purpose was the only significant predictor of resilience (β = .27, SE = .14, 90% CI [0, .54], p = .047); whereas awareness of purpose (β = .11, SE = .14, 90% CI [-.16, .38], p = .425) and altruistic purpose (β = .05, SE = .07, 90% CI [-.10, .19], p = .539) were not significant predictors of resilience. Likewise, awakening of purpose was the only significant predictor of persistence (β = .30, SE = .15, 90% CI [.01, .60], p = .046); whereas awareness of purpose (β = .25, SE = .15, 90% CI [-.04, .54], p = .085) and altruistic purpose (β = .05, SE = .09, 90% CI [-.12, .22], p = .560) were not significant predictors of persistence.

**Bifactor Specification of the SOPS-2**

**Measurement Model.** Because a validation study with SOPS-2 by Yukhymenko-Lescroart and Sharma (2020b) suggested that a bifactor specification of SOPS-2 is

| Construct                        | 1   | 2          | 3          | 4          | 5          |
|----------------------------------|-----|------------|------------|------------|------------|
| 1. Resilience                    |     |            |            |            |            |
| 2. Persistence                   |     | .34 [.21, .48] |            |            |            |
| 3. Awakening to purpose          |     | .39 [.27, .51] | .55 [.42, .68] |            |            |
| 4. Awareness of purpose          |     | .37 [.24, .50] | .54 [.41, .67] | .88 [.82, .94] |            |
| 5. Altruistic purpose            |     | .24 [.12, .36] | .33 [.20, .46] | .52 [.41, .62] | .51 [.41, .60] |
| Coefficient Omega                | .81 | .60        | .93        | .97        | .89        |

*Note. p < .001 for all correlations.*
also appropriate and valid, we also tested this alternative specification to further examine the study findings. In the bifactor specification, a general sense of purpose factor is specified in addition to the three group factors of awakening to purpose, awareness of purpose, and altruistic purpose. Testing a bifactor specification of the SOPS-14 in this study was important because it can provide additional insights as well as further validate study findings. Thus, the measurement model was specified, which included single-factor specifications for resilience and persistence items and a bifactor specification of the SOPS-2 (i.e., general factor of sense of purpose, and three specific factors of awakening or purpose, awareness of purpose, and altruistic purpose). This model showed a slightly better fit to the data than the model, in which SOPS-2 was specified as three correlated factors: \( \chi^2(252, N = 295) = 364.09, p < .001, \text{CFI} = .973, \text{TLI} = .968, \text{RMSEA} = .039, 90\% \text{CI } [.030, .047], \text{SRMR} = .054 \). As shown in Table 1 (see Model 2), factor loadings for the general factor as well as for two group factors of awakening to purpose and altruistic purpose were all significant, whereas factor loadings for the group factor of awareness of purpose were non-significant. Additionally, compared to loadings on the general factor, loadings on the group factors were higher for altruistic purpose but lower for awakening to purpose and awareness of purpose (see Model 2 in Table 1).

Table 3 shows correlations among the latent factors in the measurement model and estimates of reliability. Omega reliability, which represents the proportion of variance in the observed total score attributable to all modeled sources of common variance and reflects all sources of common variance – both of the general factor and the group factors (Rodriguez et al., 2016), for the general factor sense of purpose was .97, suggesting excellent internal consistency. Additionally, omega hierarchical, which estimates the proportion of variance in the total score that can be attributed to a single

| Construct                          | 1   | 2  | 3   | 4   | 5   | 6   |
|-----------------------------------|-----|----|-----|-----|-----|-----|
| 1. Resilience                     |     |    |     |     |     |     |
| 2. Persistence                    |    .34*** [.20, .48] |    |     |     |     |     |
| 3. Sense of Purpose – General     | .37*** [.25, .50]    | .54*** [.41, .67] |    |     |     |     |
| 4. Awakening to Purpose – Specific| .14* [.01, .27]      | .12 [-.05, .29]  |    |     |     |     |
| 5. Awareness of Purpose – Specific| -.07 [-.22, .08]     | .13 [-.04, .30]  |    |     |     |     |
| 6. Altruistic Purpose – Specific  | .03 [-.10, .15]      | .06 [-.08, .21]  |    |     |     |     |
| Coefficient Omega                 |    .81               | .60          | .97 | .93 | .98 | .89 |
| Omega Hierarchical                | n/a               | n/a         | .84 | n/a | n/a | n/a |
| Omega Hierarchical Subscale       | n/a               | n/a         |    | n/a |    | .24 |

Note. For formulas for different reliability estimates that are used in bifactor models, see Rodrigues et al. (2015). *p < .05, ***p < .001.
general factor and treats the variability in scores due to group factors as measurement error (Rodriguez et al., 2016), was .84. These results suggested that 86.3% of the reliable variance in total scores can be attributed to the general factor, which reflects individual differences on life purpose (i.e., .84/.97). Further, 13.3% of the reliable variance in total scores can be attributed to the multidimensionality caused by the group factors of awakening to purpose, awareness of purpose, and altruistic purpose (i.e., .97-.84). Finally, only 2.9% of the reliable variance was estimated to be due to random error (i.e., 1.00-.97). Thus, raw total scores can be interpreted as largely unidimensional reflection of purpose, despite the presence of clear multidimensionality of the data. Yet, accounting for multidimensionality is also important. Estimates of omega hierarchical subscale, which reflects the reliability of a subscale score after controlling for the variance due to the general factor (Rodrigues et al., 2016), were .24 for awakening to purpose, 0 for awareness of purpose, and .67 for altruistic purpose. Compared to estimates of coefficient omega, the lower values of omega hierarchical subscale are not surprising given that the group factors are residualized factors, which represent covariances among items after partitioning out the variance for the general factor, and that item loadings were generally higher for the general sense of purpose factor than for awakening to purpose and awareness of purpose group factors. In other words, subscale reliability diminishes because little common variance among the items within each subscale remains. Overall, this signals that the general factor of sense of purpose is reliable.

As shown in Table 3, resilience was positively and significantly correlated with the general sense of purpose factor (r = .37). Over and above the general sense of purpose factor, resilience was also positively and significantly correlated with awakening to purpose (r = .14). Persistence, on the other hand, was significantly and positively correlated with the general sense of purpose factor only (r = .54).

Structural Model. In the structural model, the general sense of purpose factor as well as the three specific factors of awakening to purpose, awareness of purpose, and altruistic purpose, which were all assumed to be orthogonal, were specified as predictors (i.e., exogenous latent factors) of resilience and persistence (i.e., endogenous latent factors). Figure 2 shows the results, which are also discussed below. The structural model explained 16.4% of the variance in resilience and 32.6% of the variance in persistence. Resilience was positively and significantly predicted by the general factor of sense of purpose (β = .37, SE = .07, 90% CI [.25, .50], p < .001). Over and above the general sense of purpose factor, awakening to purpose emerged as a significant and positive predictor of resilience (β = .14, SE = .07, 90% CI [.01, .27], p = .035), but neither awareness of purpose (β = -.07, SE = .08, 90% CI [-.22, .08], p = .368) nor altruistic purpose (β = .03, SE = .06, 90% CI [-.10, .15], p = .659) were significant predictors of resilience. Likewise, persistence was positively and significantly predicted by the general factor of sense of purpose (β = .54, SE = .07, 90% CI [.41, .67], p < .001). However, over and above the general sense of purpose factor, the group factors of awakening to purpose (β = .12, SE = .09, 90% CI [-.05, .29],
awareness of purpose ($\beta = .13, SE = .09, 90\% CI [-.04, .30], p = .125$), and altruistic purpose ($\beta = .06, SE = .07, 90\% CI [-.08, .21], p = .374$) were not significant predictors of persistence.

**Discussion**

In the present study, we assessed the role of life purpose in predicting college students’ resilience and persistence amidst the COVID-19 global pandemic using the Revised Sense of Purpose Scale (SOPS-2, Sharma and Yukhymenko-Lescroart, 2019; Yukhymenko-Lescroart and Sharma, 2020b). SOPS-2 was validated as a 3-factor measure of awareness of purpose, awakening to purpose, and altruistic purpose among emerging adults (Sharma & Yukhymenko-Lescroart, 2019) and adults (Yukhymenko-Lescroart & Sharma, 2020b). SOPS-2 was also validated as the measure of a general factor of purpose after accounting for the group factors (Yukhymenko-Lescroart & Sharma, 2020b).

Overall, the results of this study showed that both resilience and persistence were positively and significantly predicted by the general factor of purpose. In addition, awakening to purpose emerged as the most important predictor for both outcomes, and especially for resilience, for which it emerged significant even over and above the general factor of purpose. Sharma et al. (2017) conceptualized awakening to purpose as people’s efforts to discover their life’s purpose. Given the developmental nature of purpose in life, Sharma et al. (2017) asserted the importance of assessing people’s active engagement in the process of awakening to their purpose instead of evaluating only the extent to which they are currently aware of their purpose in life. The present study has reaffirmed that apart from a general sense of purpose, college students’ active engagement in the process of discovering their life’s purpose in itself can contribute to their resilience and intent to persevere amidst difficulties.

With regard to resilience, the results of this study support Benard’s (1991) theory on sense of purpose being a critical characteristic of resilient youth. These results are also in line with previous studies that have demonstrated the positive role of purpose in contributing to students’ resilience (e.g., Hill et al., 2016; Sharma and de Alba, 2018). Since resilience represents students’ capacity to successfully adapt amidst various stressors (Connor & Davidson, 2003), it is possible that students with strong sense of purpose are able to muster the inherent strengths and external resources they need to cope and keep moving forward. Humanistic philosophers such as Ikeda (2017) have expressed that unlimited wisdom, hope and resolve to not give up arise from a strong sense of purpose in life. When students feel confident that their life has a purpose that they can fulfill, they can bring forth the confidence to prevail over any adversity (Ikeda, 2010b). This study further showed the important role of awakening to purpose over and above the general factor of purpose in predicting students’ resilience. Hence, a unique contribution of this study lies in the insight that even if students are not yet aware of their purpose in life, as long as they are actively
engaging with the process of discovering their life’s purpose and deepening their confidence in living a purposeful life, they can expand their resilience.

The results of this study have also advanced the literature on factors that contribute to students’ persistence by specifically showing the significant role of the general factor of purpose in predicting students’ intent to persist amidst global pandemic. Previous studies have similarly shown a strong relationship between college students’ sense of purpose and their college outcomes of degree commitment and retention (e.g., Sharma and Yukhymenko-Lescroart, 2018; Yukhymenko-Lescroart and Sharma, 2020a). One way to explain these findings can be in the context of persistence theories (e.g., Tinto, 1993) that have asserted the critical role of students’ own motivations, intentions, and goal-commitments in deciding to persevere towards college completion. These findings can also be discussed in the context of the Self-Determination Theory (Deci & Ryan, 2008), which highlights the important role of autonomous motivations or students’ drive to fulfill a greater purpose in contributing to their persistence (Pritchard & Wilson, 2003). Sense of purpose is often defined in the context of generalized intention to accomplish a far-reaching goal that can inspire people to fulfill their various short-term goals (e.g., Damon et al., 2003). It is possible that when college students feel motivated to fulfill their life purpose, they are more likely to persevere on the path of their current educational goals (Damon et al., 2003).

**Implications for Practice**

The practical implications of this study lie in supporting college students to strengthen their sense of purpose, which the present study and previous research has shown can contribute to students’ resilience (Sharma & de Alba, 2018), persistence (Sharma & Yukhymenko-Lescroart, 2018), and retention (Yukhymenko-Lescroart & Sharma, 2020a). The present study has specifically shown that despite students’ current level of awareness of purpose, what matters the most is their active engagement in the process of exploring and striving to fulfill their purpose. In this study the scale which assessed students’ active engagement in the process of awakening to their life included items such as “Recent activities are helping me to awaken to my life’s purpose” (SOPS-2, Sharma and Yukhymenko-Lescroart, 2019; Yukhymenko-Lescroart and Sharma, 2020b). The findings of this study therefore imply the importance of providing students opportunities to gain clarity about their life’s purpose.

One direction that institutions of higher education can take is through engaging students in self-exploration and goal-setting activities that can help them in identifying and pursuing their life purpose (Shin & Steger, 2016). Informed by previous research on purpose development (e.g., Sharma et al., 2021b; Sharma and de Alba, 2018; Vaccaro et al., 2018), Sharma and Yukhymenko-Lescroart (in-press) exemplified purpose-focused pedagogical practices and learning activities that can support students to actively engage in the process of exploring, engaging with, reflecting upon, articulating, and actualizing their purpose in life. For example, Sharma and Yukhymenko-Lescroart (in-press) suggested the importance of supporting students
to actively engage in altruistic activities that might resonate with their life’s purpose and further write weekly journals reflecting upon the value of those activities in actualizing their vision for their personal life, family, community, and/or society at large.

Given the importance of narration of life stories and future visions as important construction tools for students to strengthen their sense of purpose (Savickas, 2012; Sharma and Yukhymenko-Lescroart (in-press) also suggested activities such as creating a vision board or writing a narrative that could express students’ life goals and hopes for future. To promote students’ resilience, college personnel and educators can also encourage students to reflect upon the underlying meaning of their present struggles and how they can transform the times of hardships into deeper purpose. Further on, supporting students to set clear educational and career goals that resonate with their life’s purpose and further identify self-care strategies and resources students might need to actualize those goals, can strengthen their ability to persevere. In addition, it is critical for educators and college personnel to advocate for students’ needs, remove systemic barriers that students might encounter on the path of their goals, and access resources that can help them to persevere.

**Limitations and Future Directions**

First, the cross-sectional nature of the data in this study does not allow drawing causal inferences based on the current results. Future studies should test the identified in this study relationships using designs and approaches that allow for causal inferences. Second, response bias is a likely limitation in this study, because in the current sample female students were overrepresented and male students were underrepresented relative to the target population. Therefore, conclusions should be drawn cautiously. Third, although internal consistency for most measures was good to excellent, construct reliability for persistence was below the recommended norms. Therefore, interpretations related to this measure should be made with caution.

Yet, this study has several strengths. This study was conducted amidst COVID-19 global pandemic and has significantly advanced the literature on role of purpose in contributing to college students’ resilience and persistence. Most of the previous studies on purpose have used measures that could only assess the extent to which people are currently aware of their life’s purpose (e.g., Crumbaugh & Maholick, 1964; Reker & Peacock, 1981; Ryff, 1989). In this study we used the Revised Sense of Purpose Scale (SOPS-2; Sharma and Yukhymenko-Lescroart, 2019; Yukhymenko-Lescroart and Sharma, 2020b), which acknowledges purpose as a developmental construct that evolves over-time and might require active engagement with the process of discovering one’s purpose in life.

The three factors of the Revised Sense of Purpose Scale (SOPS-2), which are awareness of purpose, awakening to purpose, and altruistic purpose were validated among emerging adults (Sharma & Yukhymenko-Lescroart, 2019) and adults (Yukhymenko-Lescroart & Sharma, 2020b). In their validation study, Yukhymenko-Lescroart and Sharma (2020b) further showed that SOPS-2 can be
also used to measure a general factor of purpose after accounting for the group factors. This study incorporated both – the most commonly used 3-factor specification (awareness of purpose, awakening to purpose, altruistic purpose) and the alternative bifactor specification to assess the role of general factor of purpose. Since the results of both these measurement models converged, it has further strengthened the validity of this study, which in essence has shown the importance of providing college students opportunities to explore their life’s purpose and actively engage in the process of strengthening their sense of purpose.

Conclusion

The aim of the present study was to examine the role of general factor of purpose and the three dimensions of awareness of purpose, awakening to purpose, and altruistic purpose in predicting college students’ resilience and college persistence amidst global pandemic. The findings of this study showed that general factor of purpose emerged as a positive predictor of both resilience and persistence. In addition, awakening to purpose emerged as the most important predictor for both outcomes and for resilience, it emerged significant even over and above the general factor of purpose. Based on these findings, we conclude that it is critical to support college students in the process of actively exploring, reflecting upon, and striving to fulfill their life’s purpose since doing so might strengthen their resilience and intent to persevere.

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