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## Mediating role of resilience on the link between gratitude and purpose in life among University undergraduates

Chisom E. Ogbonnaya<sup>1</sup> . Ronald C. N. Oginyi<sup>2</sup> . Izuchukwu L.G. Ndukaihe<sup>1</sup> . Nwadiogo C. Arinze<sup>1</sup> . Ikechukwu O. Ukeje<sup>3</sup>

<sup>1</sup> Department of Psychology, Alex Ekwueme Federal University, Ndufu-Alike

<sup>2</sup> Department of Psychology and Sociological Studies, Ebonyi State University, Abakaliki

<sup>3</sup> Department of Political Science, Alex Ekwueme Federal University, Ndufu-Alike

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### Abstract

The present study examined the mediating role of resilience on the link between gratitude and purpose in life. Three hundred and thirty-two (332) undergraduates comprising 144 males and 188 females (Mean age = 17.42,  $SD = 1.27$ ) selected from Alex Ekwueme Federal University, Ndufu-Alike, participated in the study. Three measures were used in the study: The Gratitude Resentment and Appreciation Test-Short Form (GRAT-SF), the Resilience Scale (RS), and the Purpose in Life-Short Form (PIL-SF). Hayes regression-based PROCESS macro results revealed that gratitude did not significantly predict purpose in life ( $B = .00, p > .05$ ). Resilience positively and significantly predicted purpose in life ( $B = .51, p < .001$ ). However, resilience significantly mediated the relationship between gratitude and purpose in life (95%  $CI = .04, .14$ ). The study discussed the implication of the findings for clinicians, school counselors, and psychologists at large.

**Keywords:** Resilience, Gratitude, Purpose in Life, Undergraduates, and Mediation.

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Chisom E. Ogbonnaya (*Corresponding author*)  
[ogbonnaya.chisom@yahoo.com](mailto:ogbonnaya.chisom@yahoo.com)

Department of Psychology,  
Alex Ekwueme Federal University Ndufu-Alike, Ebonyi State, Nigeria

## Introduction

University undergraduates in Nigeria today are faced with diverse challenges that prevent them from freely navigating through their academic demands. These challenges range from the aftermath of covid-19 pandemic through the drastic changes in the country's economy like the 'END SARS' saga, the cash crunch to long strike actions. They also face intense challenges in managing their assignments and pursuing good grades in examinations and dealing with tight deadlines (Hashem et al., 2014). However, these appear to have bred more challenges and have created more uncertainty in various aspects of life for this population than ever before. Hence, Nigerian undergraduates need a certain level of readjustments and a focused mindset to be able to fit into the changing and fast-paced academic system in Nigeria (Duckworth & Allred, 2012; Wilson, 2016). These include cultivating a positive approach towards their academic demands irrespective of the challenges they face. One example of such positive approach is having a purpose in life. This entails having a clear long-term direction to strive, which organizes one's behaviors and sense of self (McKnight & Kashdan, 2009; Ryff, 1989).

The value of having a purpose in life has been notable for centuries as a construct integral to positive health and wellbeing. Adults with a greater sense of purpose have been reported to enjoy better emotional well-being (Zika & Chamberlain, 1992) and physical health (Scheier et al., 2006), experience less risk for cognitive decline later in life (Boyle et al., 2010), and even enjoy greater longevity (Hill & Turiano, 2014). In the words of McKnight and Kashdan (2009), purpose in life has been defined as "a central, self-organizing life aim that organizes and stimulates goals, manages behaviors, and provides a sense of meaning" (p. 242). According to McKnight and Kashdan, purpose in life is central in the sense that it is a consistent and predominant part of one's personality, self-organizing in that it provides a framework for everyday behavioral patterns, and a life aim in the sense that it must be perpetually pursued or lived out. In simple terms, these scholars described purpose as a core part of one's identity that provides continual targets for one to aspire after. To describe something so abstract more concretely, McKnight and Kashdan (2009) described purpose in life as a compass—it provides direction to life, but one can choose whether to follow its instruction. Therefore, purpose, under this framing, requires a deliberate choice to follow one's vocation. Ryff (1989a) conceptualized purpose in life as the goals, intentions, and sense of directedness in life that combine to produce the feeling that one's life is meaningful, and act to integrate the various aspects of one's life into a comprehensive whole. Ryff (1989a, 1989b) includes purpose in life as one of six fundamental elements in her theory of psychological well-being, the others being self-acceptance, environmental mastery, positive relationships, personal growth, and autonomy.

Keyes (2011) has clarified further that purpose in life is "an intention and a cognitive sense of one's life or as a determination to do or accomplish some end" (p. 281). Further, Keyes (2011) explains that purpose involves two elements: psychological purpose, or the sense of direction one has in life, and social contribution, or the collective benefit that one's life provides. From the combination of these two elements, four different classifications of purpose emerge: aimless but useful, aimless, and useless, directed but useless, and authentic purpose. Keyes (2011) claims that "authentic purpose" (p. 285), one that provides a strong sense of direction and is significantly useful to others, is the most worthwhile and most fulfilling form of purpose in life. Keyes (2011) equates living out one's authentic purpose with the realization of one's vocation: "a purpose for one's life that employs one's gifts brings a deep sense of worth or value and provides a significant contribution to the common good" (p. 286).

Interestingly, research has revealed that students' level of purpose is positively linked to their better adjustment to university; more effective study strategies; better class attendance; better time management; perseverance and study completion (Makola, 2014; Makola & Van

den Berg, 2010). In the long run, a sense of purpose is associated with students having a better understanding of the application potential for what they have learned; a higher level of exploring life directions; regard for education as a gateway to their independence and bringing about positive change in the world (Henderson-King & Mitchell, 2011). Having a sense of purpose in life is deemed a core component of mental health and is positively correlated to students' well-being, resiliency, and social attitudes and is thought to be advantageous to their overall growth and development (Kleftaras & Psarra, 2012; Steger, 2012). A lack or low level of purpose is related to a series of negative behaviors and mental health problems, such as alcohol and drug use, boredom proneness, depression, suicide ideation, disengagement, and risky behaviors (Kleftaras & Psarra, 2012; Schulenberg & Melton, 2010).

McKnight and Kashdan (2009) posited that, purpose offers direction for individuals when making decisions and formulating life goals. In their study, it was proposed that there are five roles that purpose in life fulfills, they include: stimulating behavioural consistency, generating target motivated behaviours, stimulating psychological flexibility, fostering efficient personal resources allocation, and applying higher-level cognitive processing. Living a purposeful life therefore requires enabling all these roles in varying degrees according to the individual's capacity for an actualized purpose in life (Yuen et al., 2015). McKnight and Kashdan (2009) also described purpose in life as having another three key aspects – scope, strength, and awareness – these are all interconnected by memories, emotions, and behaviours and characterize resilience.

#### *Literature Review and Hypotheses Development*

The Broaden and Build Theory by Fredrickson (2004) offers a strong theoretical explanation for understanding the relationship between resilience, gratitude, and purpose in life. The theory is associated with the field of positive psychology that explores the function of positive emotions in building resilience. This theory focuses on the fact that positive emotions (gratitude, purpose in life and resilience) offer a broadening of awareness and response to events effect as well as the build of resiliency and coping skills. This theory further asserts that a broadened mindset which has been achieved through building a sense of gratitude and having a sense of purpose are contrasted to a narrowed mindset that has been triggered by many negative emotions. The broaden and build theory argues that positive emotions should replace negative emotions, and its premise stands on the fact that both types of emotions must co-exist and that positive emotions build resources to cope with negative emotions. The broaden-and-build theory suggests that positive emotions broaden people's attention and thinking, undo lingering negative emotional arousal, fuel psychological resilience, build consequential personal resources, trigger upward spirals towards greater well-being in the future and seed human flourishing.

#### *Gratitude and Purpose in Life*

As put forward by McCullough et al. (2002), gratitude refers to “a general tendency to recognize and respond with grateful emotion to the roles of other people's benevolence in the positive experiences and outcomes that one obtains” (p. 112). As a *dispositional trait*, gratitude is viewed as an enduring characteristic of thankfulness that is sustained across situations and over time (Chan, 2013). It has been conceptualized in several ways viz: *as a positive emotion, as a state-trait, or as a dispositional trait*. Gratitude as a positive emotion has been defined as a key or basic human virtue that one needs to live a ‘good life’ (Tudge et al., 2015). It is also an important aspect of well-being and life satisfaction (Lasota et al., 2020). Therefore, grateful individuals would be more likely to experience and express thankfulness while responding to benefits or gifts from others. As a state, the occurrence of gratitude is typically associated with

the perception of receiving an undeserved personal benefit due to the good intentions of another person (Emmons & McCullough, 2003; cited in Arıcıoğlu, 2016).

The feeling of gratitude has been associated with subjective, psychological, and social well-being (Lambert et al., 2009). Gratitude predisposes individuals to be more orientated toward social interaction by showing prosocial behaviors, such as empathy, forgiveness, being helpful, and being supportive to others alongside seeking less materialistic achievements (McCullough et al., 2002). Grateful thinking fosters the savoring of positive life experiences and situations so that individuals can extract the maximum possible satisfaction and enjoyment from their circumstances (Sheldon & Lyubomirsky, 2006). It has also been found to play a positive role in academic engagement and achievement (Clarkson, 2020; Wood et al., 2010; Wood & Newman 2017; Zhen et al., 2021).

Gratitude and purpose in life are conceptually connected as pro-social, for instance, expressing gratitude increases positive emotion and well-being (Lyubomirsky, 2007; Emmons & McCullough, 2003), which are related to better academic performance (Keyes et al., 2012); In addition, connecting course material to one's purpose and values benefits interest, motivation, and engagement (Harackiewicz & Priniski, 2018). A recent study also showed that students who had a sense of purpose and gratitude during the covid-19 pandemic performed better academically (Yukhymenko, 2022); this could be conceptualized as resilience.

#### *Resilience as a Mediator*

The link between gratitude, purpose in life and resilience follow a linear progression of positive mental state that powers determination in the face of adversities. Resilience as a concept is the ability to cope mentally or emotionally with a crisis or to return to pre-crisis status quickly (Windle, 2011); a trait that helps an individual to come out from a traumatic situation (Klohn, 1996; Bonanno, 2004). Resilience is a vital factor for good mental health. It is a trait that helps an individual deal with the negative event of life (e.g., Covid-19 Pandemic, and economic recession). Individuals with good resiliency power always deal effectively with stressors of life like; health issues, academic stress, economic issues, or delays in goal achievement due to unforeseen circumstances (as can be seen in the long University strike action Nigeria). Resilient individuals keep themselves away from responding to adverse circumstances with negative consequences, such as drug abuse, violent behavior (Cutuli & Herbers, 2018; Shumba, 2010), or dropping out of school (Szlyk, 2021). These persons are more prone to a positive approach to taking negative events as opportunities for growth. Wald et al. 2006 described resilience as a positive adaptation, or the ability to sustain mental health, regardless of experiencing adversity. In the educational context, resilience is the skill to succeed academically despite tricky situations (Surtherland, 2005; Windle, 2011).

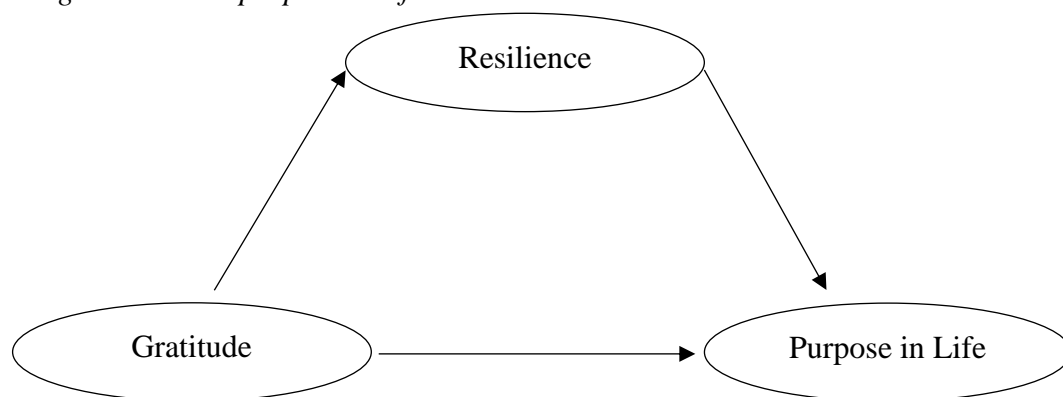
Research on resilience highlights strengths or potentials such as cognitive functioning and intellectual power that help an individual to survive in worst circumstances. Pioneering research focused on adversities of childhood, these adversities were broadened over time to include lifetime negative events statistically linked with adjustment problems and mental disorders. Negative events include physical illness, significant trauma, unhealthy parenting, childhood abuse, the loss of a loved one, etc. Listiyandini (2018) purports that resilience lets students cope with various stresses and problems ahead of study life and eventually avoid the psychological distress that may affect their mental and physical health in negative ways. It is further supported by another study conducted at Georgia Southern University, demonstrating that gratitude enhances psychological resilience, and the ability to thrive under challenging situations (Teh, 2019).

Individuals who express gratitude perceive their hardship as a steppingstone toward their goal. Hence, it will lead them in a positive direction as gratitude can improve their coping skills with a growth mindset of resilience (Duckworth et al., 2007). Gratitude is also associated

with a higher level of learned focused resilience and a lower risk of academic stress (Wilson, 2016). However, studies that examined the links between these variables are scarce and to the best of our knowledge, no studies have explored them altogether in addition with a mediating link. It is therefore, hypothesized in this study that; Gratitude will be positively related to purpose in life. Gratitude will be positively related to resilience. Resilience will be positively related to purpose in life. Resilience will also mediate the relationship between gratitude and purpose in life. Thus, the study will be guided by the model below:

**Figure 1.**

*Conceptual model of the present study showing the mediating role of resilience on the link between gratitude and purpose in life*



**Method**

**Participants**

A total of three hundred and thirty-two (332) undergraduates drawn from Alex Ekwueme Federal University, Ndufu-Alike, participated in the study. Of the total sampling, 43.4% (n = 144) were males and 56.6% (n = 188) were females. The participants were selected using a purposive sampling method. The average respondent age of the sample was 17.42 (SD = 1.27, ranging from 16 to 22 years). Participation was voluntary. Concerning participants' ethnicity, the majority 66.6% (N = 221) of the participants were Igbo, 24.1% (n = 80) were Yoruba, while the Hausa group was represented by 9.3% (n = 31).

**Measures**

**Gratitude:** Gratitude was measured with the help of an individual's dispositional gratitude scale – Gratitude Resentment and Appreciation Test (Short Form; GRAT-SF) developed by Watkins et al. (2003). It comprised 16 statements rated on a 9-point scale ranging from 1 (strongly disagree) to 9 (strongly agree). Five items were reverse scored on this scale. The 16 items included “I really don't think that I've gotten all the good things that I deserve in life,” “Every Fall I really enjoy watching the leaves change colors,” and “Although I'm basically in control of my life, I can't help but think about all those who have supported me and helped me along the way.” Internal consistency of the GRAT-SF is superb ( $\alpha = .92$ ) and has shown good convergent and discriminate validity (Thomas & Watkins, 2003).

**Resilience:** The resilience scale was developed by Wagnild and Young (1993). It is a 14-item scale designed to measure the extent to which an individual deal with situations. Each participant responded on a 7-point scale (1 - strongly disagree, 2 - moderately disagree, 3 -

slightly disagree, 4 - undecided, 5 - slightly agree, 6 - moderately agree, 7 - strongly agree). Some of the items on the scale include: “my life has a meaning”, “when I am in a difficult situation, I can usually find my way out of it”, and “In an emergency, I am someone people can generally rely on”. Abiola and Udofia (2011) reported Cronbach’s alpha reliability coefficient of .83 and split-half reliability of .67 and .80 (after correction with the Spearman-Brown formula) from a validity study in Nigeria.

*Purpose in Life:* The Purpose in Life – Short Form (PIL-SF; Schulenberg et al., 2011) includes four items from the original PIL 20 items (Crumbaugh, & Maholick 1964) that according to confirmatory factor analysis fit well together. These four items (3, 4, 8, and 20) focus primarily on goal attainment. It employs a 7-point Likert-type response format ranging from Not at all (1) to Very well (7). Scores on the PIL-SF correlated positively with the scores on the measures of psychological wellbeing (Ryff et al., 2007), and negatively correlated with the scores on the measures of psychological distress (Outcome Questionnaire; Schulenberg, 2004). An internal consistency reliability coefficient of the four items scale was 0.84, suggesting that the short version is as a reliable instrument as the 20-item version (Schulenberg et al., 2011).

### ***Procedure***

The researchers introduced themselves to the participants in their different classrooms to seek their permission to fill out the questionnaires. Those who gave their consent were given the questionnaires to fill out and return to any of the researchers. The researchers explained the nature of the study to the participants and what they were required to do. Participants were informed that they were free to withdraw at any point without any punishment and that their personal information would remain confidential. They were also encouraged to answer the questions as honestly as possible. The researchers encouraged the participants to respond to all the items to obtain complete data. In total, three hundred and fifty (350) copies of the questionnaire containing the three instruments were distributed to the undergraduates. Of this number three hundred and thirty-two (332) were returned to the researchers and were properly completed.

### ***Design/Statistics***

This study adopted a cross-sectional design. Pearson’s correlation ( $r$ ) analysis was conducted among the study variables while Hayes’ PROCESS macro for SPSS was used to test the study’s hypotheses. Pearson’s correlation analysis was used to examine the relationship between the demographic factors and major factors (gratitude, resilience, and purpose in life). Model 4 of the Hayes (2018) PROCESS macro was used to explore the indirect effect of gratitude on purpose in life through resilience. The Hayes process macro is a bootstrapping statistical analytical tool that may be used to investigate the impact of one or more mediating or moderating variables on the relationship between the independent and dependent variables (Abu-Bader & Jones, 2021).

### **Results**

The results of findings of this study are presented here. The correlations of the demographic variables and main variables of the study are shown in Table 1, while findings of the Hayes PROCESS macro for hypotheses testing were presented in Table 2.

***Table 1: Correlations of demographic variables, and study variables***

Variables	M	SD	1	2	3	4	5	6
1 Age	17.42	1.27	-					
2 Gender	1.57	.50	-.16*	-				
3 Ethnicity	1.43	.66	.06	-.08	-			
4 Gratitude	76.33	3.60	-.09	-.08	.04	-		
5 Resilience	24.25	1.92	.02	-.03	-.03	.22**	-	
6 Purpose in Life	34.80	2.44	.04	.10	-.08	.08	.40**	-

Note: \*  $p < .05$ ; \*\*  $p < .001$ . Gender was coded as: 1 = male, 2 = female; Ethnicity was coded as: 1 = Igbo, 2 = Yoruba, 3 = Hausa.

In Table 1, none of the control variables in the study correlated with the study variables (gratitude, resilience, and purpose in life). Gratitude was positively correlated with resilience ( $r = .22, p < .001$ ), but was not correlated with purpose in life ( $r = .08, p > .05$ ). Finally, resilience was positively correlated with purpose in life ( $r = .40, p < .001$ ).

Table 2: Mediating effect of resilience on the link between gratitude and purpose in life

Variables	B	SE	t	p	95%CI	R <sup>2</sup>	F
Gratitude (GS)	.00	.04	-.12	.908	[-.07, .07]	.16	30.57 (2, 329)**
Resilience (RS)	.51	.07	7.65	.000	[.38, .64]		
GS→RS→PIL	.09	.03			[.04, .14]		

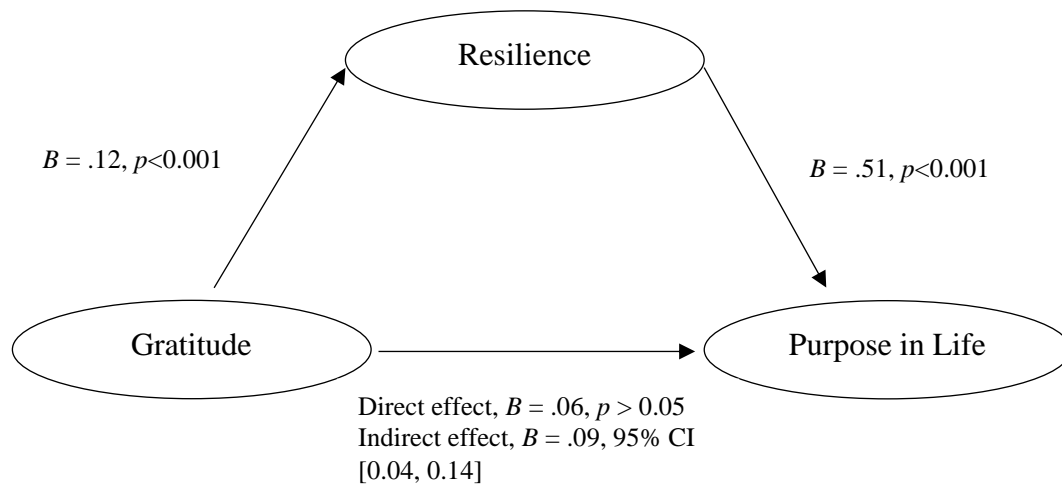
Note: B = Regression coefficients; SE = Standard Error; t = Population t value; p = Probability level; CI = Upper & Lower Confidence Interval; PIL = Purpose in Life

In table 2 of the mediation model, gratitude was not a significant predictor of purpose in life ( $B = .00, p > .05$ ), but significantly predicted resilience as shown in Figure 2 ( $B = .12, p < .001$ ). Resilience positively and significantly predicted purpose in life ( $B = .51, p < .001$ ), indicating that for every one unit rises in resilience, purpose in life increases by .51. The  $R^2$  showed that the predictors accounted for 16% of the variance in purpose in life, and the  $F$  statistics were significant,  $F(2, 329) = 30.57, p < .001$ . The table further showed that resilience significantly mediated the relationship between gratitude and purpose in life, as the 95% bias-corrected bootstrap CI did not contain zero when the indirect effect of gratitude on purpose in life via resilience was tested ( $B = .09; 95\% CI = .04, .14$ ).



**Figure 2.**

*Significant values of the mediation model adopted*



**Discussion**

Findings in this study have shown that purpose in life, resilience and gratitude are super tools that help individuals navigate through life effectively. Previous studies further expanded on the fact that purpose of life positively predicted gratitude (Lin, 2015). The results of this study showed that gratitude indirectly relates to purpose in life. It may be observed that people who show more gratitude in life situation define their purpose in life. Zhang et al. (2021) also observed that highly grateful individuals pay more attention to positive experiences and positive emotions that contribute to the generation of meaning which enhances their already defined purpose in life. They further suggested that educators should therefore promote the creation and meaning seeking through positive gratitude teaching, to make individual life more purposeful.

In this study, the mediating role of resilience on the link between gratitude and purpose in life among undergraduates was examined. However, it has been noted that some students come to school with expectations, and a clear long-term direction to strive, which sets the pace for their behaviors and sense of self (McKnight & Kashdan, 2009). Moreover, they are met with several stressors and academic workloads, intense challenges in managing their assignments while demanding good grades in examinations, and dealing with tight deadlines (Hashem et al., 2014), these, have a way of redefining their purpose. Resilience has been shown to develop positive emotions like gratitude and purpose in life which can help students navigate through their academic demands and feel more accomplished (Yukhymenko, 2022) despite the inherent challenges posed by their environment (Szlyk, 2020).

**Implications of the Study**

The theoretical implication of this study demonstrates that the Science of happiness has clearly indicated that whenever a person demonstrates or writes down what they are grateful for, their resilience and purpose in life are visibly improved. Moreover, resilience has been shown to mediate between gratitude and purpose in life. Hence, gratitude becomes a vital predictor of purpose in life because this variable seems relevant to students in the sense that when they see the rewards of their resilience, they become grateful and in turn their purpose in life is accomplished. The findings of this study strengthen previous findings and have added to the existing literature on the area of study which has boosted the theoretical underpinning of

the present study. Since gratitude and resilience are important factors that influence purpose in life, it will be of essence to create programs like free counselling sessions or youth seminars, where the youths can access counselling in any case of doubt for life and existence.

The practical implication, since possessing a sense of purpose in life is considered an important element of mental health, students' well-being, resiliency, and social attitudes, it will be vital to build curriculum that will incorporate these elements to ensure that every student access information that expresses the importance of maintaining a grateful heart, positive emotions and resilience. This entails that an intervention program toward building and maintaining resilience among university students be inculcated in the university management program. This course can be handled by university psychologists or lecturers from the department of psychology who are skilled in resilience practices and coaching. Implanting resilience practices can be done by allowing individuals to identify their strengths and weaknesses, building on their strengths, and learning to appreciate their strengths in difficult situations. This will make them grateful for what they can do and motivate them to forge ahead in achieving their purpose in life. Moreover, since purpose in life is thought to be advantageous to their overall growth and development (Kleftaras & Psarra, 2012; Steger, 2012), this will prompt clinicians, school counselors, and psychologists not to neglect these constructs and their contributing factors during clinical sessions that involves psychological assessment and therapy among young people.

### ***Limitations of the Study and Recommendations for Future Research***

Despite the theoretical and practical contributions of the present study, there are some limitations to note. In terms of method, this study was a cross-sectional study which is a barrier in establishing causality among study variables. This can be improved upon through a longitudinal study as several factors might be interfering. For instance, the present economic situation of the country, high level of unemployment and insecurity can be confounding variables that influences directly or indirectly, the mindset of our sample. Also, this study focused on the student population but there could be middle-aged people who have concern about their purpose in life. Future study on this subject matter can involve other categories of individual as many personal or environmental factors can be contributing factors to gratitude, resilience, and purpose in life. Further studies can consider a larger population to improve generalization of the results.

### **Conclusion**

This study has successfully demonstrated that students who possess resilience in difficult situations are more likely to develop positive emotions such as gratitude and a purpose in life. In essence, resilience, purpose in life, and gratitude help students face the reality of their situation, deal with various challenges they encounter, and cope with any problem that might hinder them from being successful in their academic performances. In conclusion, this study revealed that resilience can mediate the effect of gratitude on the purpose of life. This aspect of our findings makes it clearer to understand that these three constructs are important elements that can be considered in maintain mental health and wellbeing of students.

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