

# Adolescents' Academic Behaviors, Grit, and Apprehensions during the COVID-19 Pandemic: Implications for Educators and Parents

**Mathias R. Vairez Jr.<sup>1</sup>**

**Nora Gough Bradley<sup>2</sup>**

**Janeen Quiroz<sup>1</sup>**

**Olga Manzanero<sup>1</sup>**

**Wendy Flores<sup>1</sup>**

## Abstract

*This study investigated the levels of adolescents' academic behaviors, grit, and apprehensions during the COVID-19 pandemic in Belize and whether there was a significant relationship between adolescents' levels of academic behaviors and grit. A quantitative descriptive survey research design was employed. The data were collected from 676 adolescents enrolled in high schools, junior colleges and universities in Belize using an online survey with four sections: Demographics, Grit-S Scale, Academic behaviors, and Apprehensions about returning to face-to-face learning. Descriptive statistics revealed that adolescents' academic behaviors and grit were mostly at the medium level and their apprehensions about returning to face-to-face learning were high. Pearson's  $r$  correlation coefficients revealed a positive significant relationship between adolescents' levels of academic behaviors and grit. This research can provide educators and parents with insights on students' cognitive and noncognitive development to better prepare programs and support systems to foster students' success in school and life.*

**Keywords:** Adolescents, academic behaviors, Belize, COVID-19, grit, perseverance

---

<sup>1</sup> University of Belize, <sup>2</sup> Education Consultant

Corresponding Author: Mathias R. Vairez Jr., Faculty of Education & Arts, Hummingbird Ave, Belmopan, Belize. email: mvairez@ub.edu.bz

## Introduction

Under the restrictions required by the Covid-19 pandemic, most students in Belize as in many other countries, had limited, if any, in-school interactions with teachers and their peers, or with adults outside of their immediate home environments. Barrias (2020) reporting on conditions in Latin America, and Tomassini (2020), in a report on the situation in Belize, stated that although students express a desire to return to in-class schooling and the freedom to participate in social activities, they fear contracting the virus and taking it into their homes, schools, and communities. They also reported that for many students, life has been made worse by the insufficiency of financial resources for adequate provision of food, shelter, and schooling. All those factors simultaneously upheaving the living conditions of people have had negative impacts on the mental well-being of a significant portion of the Belizean population. Those negative factors have also had a great impact on 'how things are done' and have forced countries all over the world to rethink how children are being schooled.

Farrington et al. (2012) provide strong evidence that acquisition and development of positive academic behaviors, perseverance, a positive academic mindset, effective learning strategies, and social skills that support behaviors which improve interpersonal skills are 'strongly linked' to students' academic performance. These non-cognitive factors can be learnt and "can change and be changed over the life cycle, but through different mechanisms and with different ease at different ages" (Kautz et al., 2014, p.13).

The goal of this study is to begin the exploration of the extent to which the exigencies of the COVID-19 pandemic have impacted the acquisition and development of non-cognitive factors so critical to successful academic performance and future life of Belizean adolescents. Accordingly, the purpose of this quantitative descriptive study was to determine the levels of adolescents' academic behaviors, grit, and apprehensions during the COVID-19 pandemic in Belize. Additionally, the relationship between adolescents' levels of academic behaviors and grit was explored. To accomplish this purpose, the following four research questions were examined.

1. What was the level of adolescents' academic behaviors?
2. What was the level of adolescents' grit?
3. What was the level of adolescents' apprehensions to return to school?
4. Is there a relationship between adolescents' levels of academic behaviors and grit?

## Review of Related Literature

### *Academic Behaviors*

Academic behaviors are the observable, and thus measurable, behaviors associated with how students attend to their schoolwork. Positive academic behaviors are those behaviors demonstrated by students who are succeeding. They include attending class regularly, arriving ready to work, paying attention, participating in instructional activities and discussions, and committing time to studying and completing homework.

The importance of teachers and parents in guiding, supervising, and setting boundaries for students as they develop many noncognitive skills, such as self-discipline and organizational skills, is highlighted by studies undertaken at various points during the COVID-19 pandemic thus far. A study in Nigeria found that "parental involvement accounted for the highest positive and significant predictor" (Lawrence & Fakuade, 2021, p.11) to online learning commitment by adolescent learners during the COVID-19 lockdown. Pozzoli et al. (2021) ascertained that distance learning becomes more challenging for students who come from homes that are not peaceful and are disorganized. In listing the challenges currently faced due to the pandemic by students at a high school in Belize, the school's principal spoke of students whose homes consisted of "tentative living arrangements" moving from home to home of multiple relatives (personal communication, December 13, 2021). Those students are having difficulties keeping up with schoolwork and show poor levels of academic performance. There is also a higher number of incidents of male students finding shelter with neighborhood gangs while female students enter "sugar-daddy" arrangements to meet their needs. Editor et al. (2020) indicate that the academic procrastination behaviors of all students increased according to the frequency and duration of Internet connection and was higher for students in the first years of high school. Additionally, Editor et al. (2020) found that male students had significantly higher problematic Internet usage and academic procrastination behaviors than female students. These findings suggest that younger adolescents living with insufficient supervision and guidance have higher

risks of not developing strong self-discipline and self-management needed for the continuous practice of positive academic behaviors.

Situational risks faced by students include low family income, low self-esteem, depression, discouragement, feeling numb, loss of motivation. De la Torre (2004) found that for higher academic functioning students, risks encountered due to their parent's low level of education or language ability are not perceived as lessening their ability to succeed academically. Instead, higher academic functioning students perceive those issues as situational differences to be overcome by them focusing on their work, ignoring the threat(s), and working harder. Notwithstanding, Holzer et al., (2021) support the idea that a strong belief in the power of education may need to come from previous successful and rewarding school experience.

At the beginning of the pandemic period, the Belize Ministry of Education (MOE) prioritized the provision of data packages, laptops, and tablets for students at the secondary and tertiary levels with the expectation that the institutions would provide online remote learning (Chadwick et al., 2020). While the MoECST (2021) reports that all tertiary institutions were able to offer online instruction, the same was not true for secondary level institutions. Within a short time, it became apparent that in many situations across the country that expectation was not being achieved given that "Belize does not have a culture of online learning and access to internet is limited in rural areas" (Inter-American Development Bank, 2020, Belize). At many secondary schools, distance education during the 2020 to early 2022 COVID-19 pandemic period consisted primarily of packages of printed materials provided on a weekly or bi-weekly schedule for students to complete the assigned work at home; some secondary schools offered synchronous and asynchronous teaching sessions. In a study of the issue at the primary school level, Chadwick et al. (2020) reported that the decision to rely primarily on the packages of printed materials was due to students' limited access to devices with which to connect to the Internet, and/or the resources (finances to purchase data or install Wi-Fi) to connect to the Internet. In another study at the primary school level, Groen et al. (2021) reported that Belizean educators and parents estimate that around 60 percent of students do not complete schoolwork assigned via those packages and that at best "only 60% of students are attending distance learning 25 – 50% of the time in a given day" (Results section, para. 3). The findings of both those studies most likely reflect the circumstances of secondary and tertiary level students and are not unique to Belize. Scarpellini et al. (2021) reported that parents in Italy described the distance education provision as neither useful nor effectively replacing in-person schooling. The parents state that because of inadequate access to the Internet in homes, online learning was ineffective and the subsequent continued failure of students to keep learning may have severe repercussions on the students' cognitive, emotional, and relational capacities. Collectively, the inadequacies and gaps in learning highlighted during the COVID-19 pandemic make it difficult for students to develop the positive academic behaviors they need to ensure future success.

### ***Academic Perseverance***

Farrington et al. (2012) define academic perseverance as "a student's tenacity to complete school assignments in a timely and thorough manner, to the best of their ability, despite distractions, obstacles, or level of challenge" (p. 9). To persevere in the face of obstacles, distractions, and challenges requires resilience—the ability to overcome negative circumstances or adversity while handling emotions and remaining healthy and competent. Dvorsky et al. (2020) state that resilience is an outcome of everyday experiences for children and adolescents who live and learn in schools and communities that are effective, have "close relationships with competent and caring adults and peers" (p. 1), get opportunities to succeed, and believe in themselves. Those everyday experiences, lived in nurturing environments, present opportunities for learning self-regulation, problem-solving, persistence, and how to cope and adapt to changes (Masten, 2001, as cited in Dvorsky et al., 2020). Along with resilience, grit plays a critical role in academic perseverance and success.

Duckworth et al. (2007) define grit as "passion and perseverance for very long-term goals" (p. 1087). Their studies reveal that grit is a stronger predictor of the level of achievement than any other single characteristic. While talent and/or intelligence play a role in the level of achievement, grit, demonstrated as the effort (the intensity and amount of time spent working) made to achieve the goal, is more telling. In other words, less talented or intelligent persons who work harder - whether by studying or practicing - and do so longer, can achieve higher performance levels. Being 'gritty' means being resilient in the face of challenges, being conscientious about tasks and goals, having self-discipline, and persevering to achieve a goal even when progress toward it may be slow (Bashant, 2014).

Research to investigate the impact of the COVID-19 Pandemic on resilience and perseverance has yielded mixed findings. An important finding is that the level of resilience present at the start of the pandemic plays

an important role in how well individuals have been able to respond and maintain focus during the pandemic. Lenzo et al. (2020) found that approximately one-third of the participants (aged 18 to 81) experienced moderate to extremely severe symptoms of depression, anxiety, and stress. The differences in severity of the symptoms partly depended on individual resilience based on age, sex, and level of education. These three factors, along with others, are proving to be critical. A study by Casanova et al. (2018) identified age, sex, previous academic achievement, level of parent's education (particularly that of mothers), parental engagement in the education process, the teaching/learning methods being used, and the student's educational goals as factors that influence academic perseverance of university students. Also identified was the socio-economic background of parents. Research conducted during the pandemic periods 2020 and 2021 shows that those factors continue to influence academic perseverance. Research by Antoniou (2021) reports that resilience is higher in females than in males, in children living with both parents, and in students with higher academic performance. Additionally, they find that responses from primary school students indicate higher levels of resilience than those given by junior high and high school students. These authors concluded that younger children are better able to cope with challenges and stress.

In a multi-country study, Holzer et al. (2021) found that despite some differences among the students of eight countries, students who have previously experienced academic competence are better able to have a positive outlook and be intrinsically motivated to learn, engage in active learning behavior, and remain persistent in learning. Lawrence & Fakuade (2021) report that Nigerian adolescents who are highly committed to online learning are intrinsically motivated by the technological nature of the learning environment and activities. In the United States of America (USA), Walton (2020) found that COVID-19-related challenges spurred adolescents to develop various coping skills, particularly the ability to be more composed. Also, in the USA, an online survey of high school students indicated that nearly half of them "are determined to find a way to go to college and are already thinking about changes they may need to make to realize that goal" (Howland et al., 2021, p.1). Research findings like those indicate that adolescents can persevere academically with the right support and guidance.

Unfortunately, education officials and media reports indicate that many students face educational obstacles, some of which have existed before the pandemic. Barrías (2020) reports that among the effects of the COVID-19 pandemic on education in Latin America are: the significant disadvantage faced by students who lack basic skills in reading, writing, and mathematics, the high percentage of parents who lack the knowledge and skills to support their children's learning, inequalities in Internet access, and the significant number of students who have dropped out of school and will not return. In Belize, the actual number of students who have not been engaged in schooling is not currently known. However, Tomassini (2020) reports and anecdotal evidence from school officials and teachers indicate that the number of students engaged in formal educational activities has declined.

### ***Apprehensions***

Swift, et al. (2014) reported that apprehension plays an important role in our ability to survive and move forward; its role can be both positive and negative. On the positive side, apprehension-causing persons, things, or events motivate us to engage in necessary tasks and even to step out of our comfort zone and take on challenges. They also alert us to harm or danger by producing feelings of anxiety or fear. Not everyone perceives those feelings of anxiety or fear in the same way. In some people, anxiety propels them to accomplish things. For others, anxiety acts as a barrier preventing them from moving forward.

For people across the world, the COVID-19 pandemic has brought apprehension-causing circumstances. Many are living with a constant worry about what the future holds. For students, the likelihood of suffering from any of those effects of anxiety resulting from apprehension-causing circumstances of the COVID-19 pandemic is cause for concern.

The effects on educational services and economies of most countries have been very similar worldwide. As such, the apprehensions experienced by educators, students, and parents are also very similar. Howland et al. (2021) further identified adolescents worrying about their preparation for postsecondary education and struggling to adapt to the changes in their lives as growing concerns. Across Latin America, in addition to the challenges of increases in school dropouts and inequalities in access to digital classes, Barrías (2020) reports that an increase in domestic violence, premature pregnancies, and forced marriages are faced by girls who, in the absence of school, are often relegated to housework. Belizean parents are also struggling and, as reported by Groen et al. (2021), express concern about their children's learning and achievement, the lack of peer interaction, and their struggles to provide financially for their families.

In addition to adapting to changes in schooling and the challenges posed by parents' financial losses, many Belizean adolescents are also struggling with increased violence in their homes and neighborhoods and the loss of parents to provide sustenance, support, and guidance for them. Tomassini (2020) reports that during 2020 minors under the age of 16 made up 51% of sexual assault victims documented by the police in Belize. While adolescent females make up the majority of victims of sexual violence, the same analysis indicates that more males (7) than females (1) under 18 were murder victims.

Many Belizean adolescents are struggling with the loss of the sustenance, support, and guidance parents, particularly fathers, can provide. In a country where 51.8% of households are classified as extended family households, there is a high likelihood that the loss of one member will impact many. The Belize Crime Observatory (2021) reports that males make up 98% of persons incarcerated and 94% of homicides. Their data indicate that most suicides are males. More males than females have died due to COVID-19. The principal of a high school in Belize City reports that of the students enrolled for the school year 2021 - 2022, approximately 33% have parental support and less than 10% live with both parents (personal communication, December 13, 2021). In the face of all these circumstances, it is expected that Belizean adolescents are justifiably apprehensive about their present and future lives.

## Method

A quantitative method with a descriptive survey research design was applied to explore adolescents' academic behaviors, grit, and apprehensions during the COVID-19 pandemic in Belize. The target population was adolescents enrolled in high schools, junior colleges and universities in Belize ( $N \cong 28,000$  adolescents – ages 12-20 years).

### *Instrumentation*

To collect the requisite data for this study, an online survey was developed and administered to adolescents across the country of Belize in the first quarter of 2021. The instrument consisted of four sections. The first section consisted of items that captured adolescents' demographic profile including age, gender, location, and ethnicity. The second section included the Grit-S Scale, which is an efficient measure of grit – perseverance and passion for long-term goals (Duckworth & Quinn, 2009). The Grit-S Scale has strong psychometric properties with evidence for predictive validity, consensual validity, and test–retest stability and acceptable internal consistency with Cronbach's alphas between .73 to .83 (Duckworth & Quinn, 2009). The third section consisted of items related to academic behaviors which were developed based on Farrington and colleagues' (2012) framework of Noncognitive factors. The last section of the instrument consisted of three items that captured adolescents' apprehensions to return to school for face-to-face learning. These items were measured using a 5-point Likert-type scale (1= Not at all Worried to 5 = Extremely Worried). The focus of the three items were adolescents' levels of apprehensions about returning to school for face-to-face learning and contracting the Corona virus and infecting their families or teachers.

### *Participants*

The sample resulted in 676 adolescents, which yielded a 95 % confidence level with a 3.7% margin of error. Of the 676 adolescents who participated in the study, 33.28% were males, and 66.72% were females. The age range of the adolescents was from 12 (1.0.4%) to 20 (7.10%), with the majority being 16 (21.89%) years old. Regarding location, 407 (60.21%) adolescents reported being from urban areas and 269 (39.79%) were from rural areas in Belize. In terms of location by district, the majority of the adolescents reported being from the Belize (42.31%) and Stann Creek districts (27.51%). Few adolescents were from the Cayo (10.80%), Corozal (7.40%), Toledo (6.21%), and Orange Walk (5.77%) districts. Majority of adolescents in the sample self-identified as Mestizo (29.59%) and Creole (27.51%). Only a few adolescents self-identified as East Indian (2.51%), Mennonite (2.07%), and others (0.15%).

### *Data Analysis*

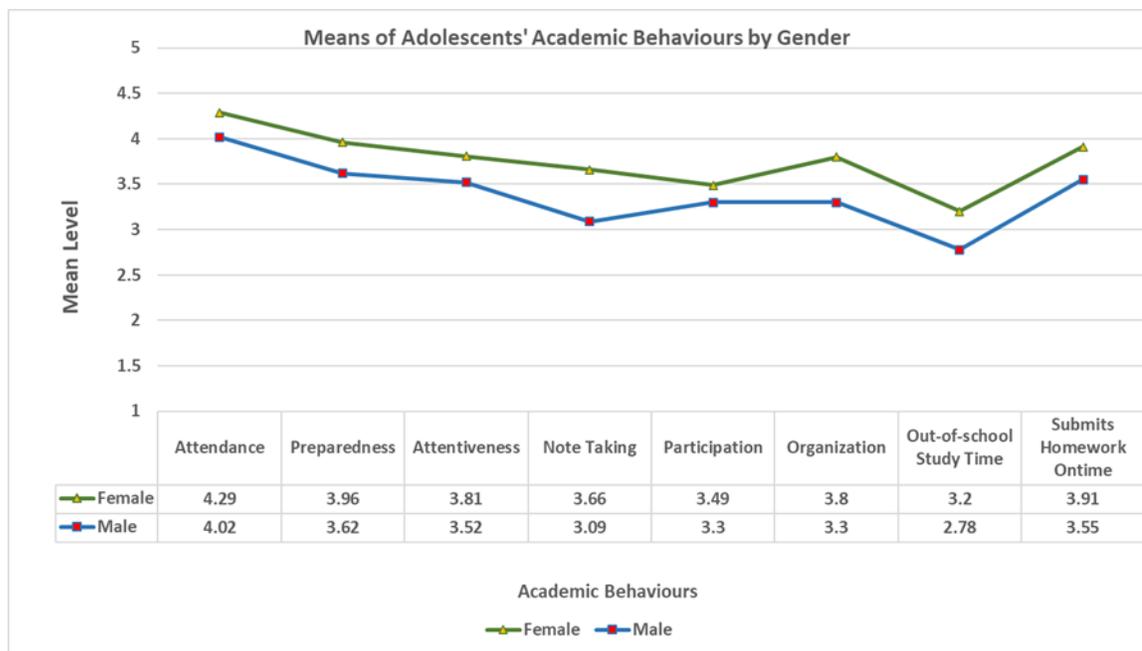
To determine the levels of adolescents' academic behaviors, grit, and apprehensions during the COVID-19 pandemic in Belize, we analyzed the data by computing descriptive statistics using IBM SPSS version 23 statistical software. First, we computed measures of central tendency and dispersion and frequencies of the

distribution. Subsequently, we computed Pearson's  $r$  correlation coefficients to examine the relationship between adolescents' levels of academic behaviors and grit.

## Results

The first research question sought to determine the level of adolescents' academic behaviors. To answer this research question, adolescents were asked to rate their performance using a 6-point Likert type scale on eight academic behaviors: attendance, preparedness, attentiveness, note-taking, participation, organization, out-of-school study time, and homework submission on time. Descriptive statistics were computed to determine adolescents' level of academic behaviors. Based on the results, of the eight academic behaviors investigated, only attendance had a high level ( $M = 4.20$ ,  $SD = 1.25$ ). Four academic behaviors were rated as low by more than forty percent of adolescents. These academic behaviors included note-taking ( $M = 3.47$ ,  $SD = 1.33$ ), participation ( $M = 3.42$ ,  $SD = 1.28$ ), organization ( $M = 3.64$ ,  $SD = 1.32$ ), and out-of-school study time ( $M = 3.06$ ,  $SD = 1.24$ ) which had the lowest level.

Subsequently, we explored adolescents' level of academic behaviors by gender. As illustrated in Figure 1, female adolescents had higher levels of the eight academic behaviors than male adolescents.



**Figure 1. Means Adolescents' Academic Behaviors by Gender**

The aim of research question two was to determine the level of adolescents' grit. To accomplish this goal, we computed adolescents' grit scores and used descriptive statistics to determine adolescents' level of grit. On average, adolescents' level of grit was medium ( $M = 3.3$ ,  $SD = .637$ ). Based on adolescents' age, at age twelve on average, their grit score was at 3.50, then it decreased at age eighteen ( $M = 3.182$ ) and nineteen ( $M = 3.182$ ) and increased at age twenty (3.297). Thus, younger adolescents had higher levels of grit than older adolescents. Nonetheless, 84.1% of adolescents had a grit score of less than 4.0 on the 6-point grit scale.

The goal of research question three was to determine adolescents' levels of apprehensions to return to school for face-to-face learning after engaging in remote learning due to the COVID-19 pandemic. To answer this question, adolescents were asked to rate how worried they were about going back to school for face-to-face instruction. Overall, adolescents reported high levels of apprehensions about returning to school for face-to-face learning. Majority of the adolescents (71.2%) reported being very worried about returning to school for face-to-face learning and contracting the Corona virus and infecting their families with COVID-19. Majority of adolescents (55.2%) were also very worried about their teachers getting infected due to returning to school for face-to-face learning. Last, 47.5% of adolescents were very worried about

returning to school for face-to-face learning and getting infected with COVID-19. Thus, adolescents' level of apprehension to return to school for face-to-face learning was higher due to their concern for their families and teachers getting infected with COVID-19.

Our final research question sought to determine if there is a significant relationship between adolescents' levels of academic behaviors and grit. To address this question, we computed Pearson's  $r$  correlation coefficient for each pair of academic behavior and grit scores. The results confirmed positive statistically significant relationships between adolescents' grit and academic behaviors for all pairs of academic behaviors and grit scores ( $r = .296 - .392, p < .01$  – See Table 1). Thus, adolescents with higher levels of grit had higher levels of academic behaviors, which would result in higher achievement.

Adolescents' Academic Behaviors and Grit Correlations Matrix									
		A	P	ATT	NT	PA	O	OSS	SH
Grit	$r$	.302	.385	.391	.376	.317	.341	.296	.392
	$p$	.000	.000	.000	.000	.000	.000	.000	.000
	$n$	609	609	609	609	609	609	609	609

A = Attendance, P = Preparedness, ATT = Attentiveness, NT = Notes Taking, PA = Participation, O = Organization, OSS = Out-of-school Studying, & SH = Submit Homework on Time

**Table 1. Adolescents' Academic Behaviors and Grit Correlations Matrix**

## Conclusions and Recommendations

The purpose of this quantitative descriptive study was to determine the levels of adolescents' academic behaviors, grit, and apprehensions during the COVID-19 pandemic in Belize. Additionally, the relationship between adolescents' levels of academic behaviors and grit was explored. The results revealed that adolescent academic behaviors were mostly at the medium level. Of the eight academic behaviors investigated, only attendance had a high level. Four academic behaviors (Note taking, Participation, Organization and Out-of-School Studying) were at the low level for more than 40% of adolescents. On average, adolescents' level of grit was medium. Only 15.9% of adolescents had a high level of grit ( $\geq 4.0$ ). Majority of adolescents had high levels of apprehensions about returning to school for Face-to-face learning. Majority of adolescents were more worried about their teachers (55.2%) and families (71.2%) getting infected with COVID-19 as a result of them returning to school for Face-to-face learning. Finally, the results confirmed that adolescents' grit and academic behaviors were positively related ( $p < .01$ ). So, the higher adolescents' grit the higher their levels of academic behaviors -- thus, the higher their achievement. The results from this study provide empirical evidence to propel educators, parents, and policy makers to be intentional and systematic about ensuring that adolescents' grit, academic behaviors, and apprehensions are addressed upon return to school for Face-to-face learning. It is imperative that educators are formally qualified to support students' cognitive and noncognitive development for success in school and life (Farrington et al., 2012). Educators need to be prepared to support adolescents who have experienced trauma during the COVID-19 pandemic to overcome their apprehensions and be more ready to learn. This responsibility needs to be shared among educators, parents, community and policy makers. As such, parents need to do their best to provide support and structure at home to nurture adolescents' noncognitive development. Parents can seek professional support for adolescents who have experienced trauma during the COVID-19 pandemic to help them overcome their apprehensions.

Policy makers need to invest in education to provide a school system that better meets the cognitive and noncognitive needs of all students and provide more ways to support schools and families to foster students' development (Scarpellini et al., 2021).

These include improved living environments that take into consideration the Life history (LH) hypotheses: Adults should not judge adolescents and children exhibiting deviant behaviors and jump to conclusions about the reasons for those behaviors. Adults should closely examine the living circumstances of the adolescents and the environmental conditions associated with the deviant behaviors to determine what may

be influencing or causing the children to behave in those ways. In relation to educational efforts, such as parenting approaches, instructional methods or teachers, educational policies or systems, are not producing the desired outcomes, the environmental conditions in which the children are living may be the underlying cause. Efforts should be made to eliminate or reduce elements resulting from natural and man-made disasters that cause unstable / unpredictable living environments, and which trigger fast LH strategies. In the short term, efforts should be directed at improving adolescents' immediate living environments in which they have stable families, safe neighborhoods, and safe schools (Chang et al., 2019). The school personnel and parents can improve the school system by implementing various activities such as listening to students' perceptions of their environments and what risks they face. They can monitor and reach out to students while they are still engaged, trying to do the work and are more receptive to getting help. In addition, they can identify risks to students' academic performance and address them to prevent negative impacts from being realized. These risks include parents' (and students') language proficiency, safe movement in and around the students' neighborhood and the school, bus transportation, ... (de la Torre, 2004). Digital learning platforms can be used to support interactive work among students in order to promote feelings of relatedness, of learning together and provide opportunities for students, in groups, to reflect on learning (Holzer, et.al, 2021).

Secondary schools should continue to adopt and remain current on online learning practices. They should maintain resources and skills acquired thus far and supplement traditional instruction with online instruction so that whenever it is needed, transitioning to online instruction is easily done. Parents should make every effort to become conversant with and adept at the digital world into which their children have been born. They should learn how to assist their children with the use of digital devices, use of online resources and instruction (Lawrence & Fakuade, 2021). The schools can offer programs that support students' social and emotional development to help them deal with stress and anxiety in healthy ways (Walton, 2020).

Teachers, counselors, and parents can support high school seniors to feel adequately prepared to perform well in coursework, assessments, and admissions tests. Students can be provided with assistance in making informed decisions about postsecondary plans (Howland et al., 2021). Of course, there is need for more research on the impact of natural disasters and health crises on students' cognitive and noncognitive factors so that educators can use empirical evidence to design relevant interventions to foster students' cognitive and noncognitive development. Thus, enhancing students' success in school and life.

## References

- Antoniou, A.-S., Palivakou, E., & Polychroni, F. (2021.). *Resilience in Children and Adolescents during the COVID-19 pandemic*: <https://doi.org/10.54088/065hm>. *Developmental and Adolescent Health*, 1(4), 34-41. <https://dah-journal.com/index.php/dah/article/view/29>
- Barrías, C. (2020, September 14). Coronavirus: 6 efectos de la “catástrofe generacional” en la educación en América Latina provocada por el coronavirus (y 3 planes de emergencia para ayudar a mitigar la crisis). *BBC News Mundo*. <https://www.bbc.com/mundo/noticias-america-latina-54097136>
- Bashant, J. (2014). *Developing Grit In Our Students: Why Grit is Such a Desirable Trait, and Practical Strategies for Teachers and Schools*. <https://files.eric.ed.gov/fulltext/EJ1081394.pdf>
- Belize Crime Observatory. (2021). *Monthly Crime Analysis August 2021*. [https://bco.wimp.bz/file\\_directory/files/monthly\\_analysis/202109MajorCrimeAnalysis202108.pdf](https://bco.wimp.bz/file_directory/files/monthly_analysis/202109MajorCrimeAnalysis202108.pdf)
- Casanova, J. R., Cervero, A., Núñez, J. C., Almeida, L. S., and Bernardo, A. (2018). *Factors that determine the persistence and dropout of university students*. *Psicothema*. 2018, Vol. 30, No. 4, 408-414. <http://www.psicothema.com>
- Chadwick, C., Fingerle, E., Kenyon, C., & Nagel, M. (2020). *Education Policy Analysis and Research Utilization in Comparative Perspectives [Review of Education Policy Analysis and Research Utilization in Comparative Perspectives]*.
- Chang, L., Lu, H. J., Lansford, J. E., Skinner, A. T., Bornstein, M. H., Steinberg, L., Dodge, K. A., Chen, B. B., Tian, Q., Bacchini, D., Deater-Deckard, K., Pastorelli, C., Alampay, L. P., Sorbring, E., Al-Hassan, S. M., Oburu, P., Malone, P. S., Di Giunta, L., Tirado, L. M. U., & Tapanya, S. (2019). Environmental harshness and unpredictability, life history, and social and academic behavior of adolescents in nine countries. *Developmental Psychology*, 55(4), 890–903. <https://doi.org/10.1037/dev0000655>
- Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, 92(6), 1087–1101. <https://doi.org/10.1037/0022-3514.92.6.1087>

- Duckworth, A.L., & Quinn, P.D. (2009). Development and Validation of the Short Grit Scale (Grit-S). *Journal of Personality Assessment*, 91 (2), 166-174. <https://doi.org/10.1080/00223890802634290>
- Dvorsky, M. R., Breaux, R., & Becker, S. P. (2020). Finding ordinary magic in extraordinary times: child and adolescent resilience during the COVID-19 pandemic. *European Child & Adolescent Psychiatry*. <https://doi.org/10.1007/s00787-020-01583-8>
- Editor, A., Ulgener, P., Minalay, H., Ture, A., Tugutlu, U., & Harper, M. G. (2020). Examining the relationship between academic procrastination behaviours and problematic Internet usage of high school students during the COVID-19 pandemic period. *Global Journal of Guidance and Counseling in Schools: Current Perspectives*, 10(3), 142-156. <https://doi.org/10.18844/gjgc.v10i3.5549>
- Farrington, C.A., Roderick, M., Allensworth, E., Nagaoka, J., Keyes, T.S., Johnson, D.W., & Beechum, N.O. (2012). Teaching adolescents to become learners. The role of noncognitive factors in shaping school performance: A critical literature review. *University of Chicago Consortium on Chicago School Research*
- Groen, A., Houlihan, D., & Wessels, J. (2021). *Belize student success and well-being during the COVID-19 pandemic: Study report 2020-2021*. The Center for Excellence in Scholarship and Research.
- Holzer, J., Korlat, S., Haider, C., Mayerhofer, M., Pelikan, E., Schober, B., Spiel, C., Toumazi, T., Salmela-Aro, K., Käser, U., Schultze-Krumbholz, A., Wachs, S., Dabas, M., Verma, S., Iliev, D., Andonovska-Trajkovska, D., Plichta, P., Pyżalski, J., Walter, N., & Michałek-Kwiecień, J. (2021). Adolescent well-being and learning in times of COVID-19—A multi-country study of basic psychological need satisfaction, learning behavior, and the mediating roles of positive emotion and intrinsic motivation. *PLOS ONE*, 16(5), e0251352. <https://doi.org/10.1371/journal.pone.0251352>
- Howland, S., Moore, R., & Sanchez, E. (2021). *Impacts of the Coronavirus Pandemic on Incoming High School Seniors' Postsecondary Plans. Insights in Education and Work, ACT Research & ACT's Center for Equity in Learning January 2021*. [https://eric.ed.gov/?q=Impact+of+covid+pandemic+on+academic+behaviors+of+adolescents+&ff1=dtydySi\\_2020&ff2=subStudent+Attitudes&pg=2&id=ED613530](https://eric.ed.gov/?q=Impact+of+covid+pandemic+on+academic+behaviors+of+adolescents+&ff1=dtydySi_2020&ff2=subStudent+Attitudes&pg=2&id=ED613530)

- Inter-American Development Bank. (2020). Belize's response to school closure: Challenges of educational continuity during school closings. <https://socialdigital.iadb.org/en/edu/covid-19/regional-response/6077>
- Kautz, T., Heckman, J., Diris, R., Bas Weel, L Borghans, & Al,E. (2014). *Fostering and Measuring Skills: Improving Cognitive and Non-cognitive Skills to Promote Lifetime Success*. Oecd Publishing.
- Lawrence, K. C., & Fakuade, O. V. (2021). Parental involvement, learning participation and online learning commitment of adolescent learners during the COVID-19 lockdown. *Research in Learning Technology*, 29. <https://doi.org/10.25304/rlt.v29.2544>
- Lenzo, V., Quattropiani, M. C., Musetti, A., Zenesini, C., Freda, M. F., Lemmo, D., Vegni, E., Borghi, L., Plazzi, G., Castelnuovo, G., Cattivelli, R., Saita, E., & Franceschini, C. (2020). Resilience Contributes to Low Emotional Impact of the COVID-19 Outbreak Among the General Population in Italy. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.576485>
- Pozzoli, T., Gini, G., & Scrimin, S. (2021). Distance learning during the COVID-19 lockdown in Italy: The role of family, school, and individual factors. *School Psychology*. <https://doi.org/10.1037/spq0000437>
- Scarpellini, F., Segre, G., Cartabia, M., Zanetti, M., Campi, R., Clavenna, A., & Bonati, M. (2021). Distance learning in Italian primary and middle school children during the COVID-19 pandemic: a national survey. *BMC Public Health*, 21(1). <https://doi.org/10.1186/s12889-021-11026-x>
- Swift, P., Cyhlarova, E., Goldie, I. & O'Sullivan, C. (2014). *Living with Anxiety Understanding the role and impact of anxiety in our lives. Mental Health Awareness Week 2014 report*. <https://www.mentalhealth.org.uk/sites/default/files/living-with-anxiety-report.pdf>
- Tomassini. (2020). 5 ways COVID-19 is affecting children in Belize and how UNICEF is helping: From education to health, UNICEF is working around the clock to support children and families. <https://www.unicef.org/belize/stories/5-ways-covid-19-affecting-children-belize>.
- de la Torre, A. (2004). *Academic resilience and perception of risks* (Order No. 3155399). ProQuest Dissertations & Theses Global.
- Walton, K. (2020). *What COVID-19 Can Teach Us About Social and Emotional Skill Development*. ACT Center for Social, Emotional, and Academic Learning.