

THE RELATIONSHIP BETWEEN PURPOSE CLASSIFICATION, PURPOSE
ENGAGEMENT, AND PURPOSE COMMITMENT

By

SAMUEL JOSEPH NAYMAN

A thesis submitted to the

School of Graduate Studies

Rutgers, The State University of New Jersey

In partial fulfillment of the requirements

For the degree of

Master of Science

Graduate Program in Psychology

Written under the direction of

Maurice J. Elias

And approved by

New Brunswick, New Jersey

October 2018

ABSTRACT OF THE THESIS

The relationship between purpose classification, purpose engagement, and
purpose commitment

By SAMUEL JOSEPH NAYMAN

Thesis Director:

Maurice J. Elias

Empirical and theoretical research on adolescent purpose is limited. This study looked at several dimensions of purpose—classification, engagement, and commitment—that a sample of 124 7th and 8th grade students from an urban-based New Jersey middle school articulated in the form of written Purpose Essays. Students did not significantly differ on their Purpose Classification, Purpose Engagement, or Purpose Commitment, by grade, gender, or ethnicity. Additionally, their Purpose Commitment, as measured by the Modified Purpose Scale and Modified Short Grit Scale, did not differ by Purpose Classification (i.e., One Purpose, Parallel Purpose, Integrated Purpose, No Purpose). However, students who described themselves as engaging with their purpose scored higher on Purpose Commitment than students who did not indicate Purpose Engagement. Limitations and implications of this study, as well as suggestions for future research, are included in the discussion section.

Keywords: purpose in life; adolescence; positive youth development; well-being; meaning in life; grit; goals; identity; social-emotional learning; character education

Acknowledgements

I would like to thank my Master's committee members, including Eddie Selby, Dan Fishman, and Maurice Elias, for their sage advice and helpful support throughout this process. I would also like to thank the Rutgers Social-Emotional and Character Development Lab, including the research assistants, our lab coordinator, and the graduate students for their willingness to engage in generative dialogue as well as provide invaluable insights and contributions. I also want to acknowledge the students and schools who made this project possible. It has been an honor and a privilege to read about the hopes and dreams of the students we work with. Lastly, I would like to thank my family and friends for their interest and understanding. It truly takes a village...

Table of Contents

Abstract.....	ii
Acknowledgements.....	iii
List of Tables.....	v
Introduction.....	1
Method.....	10
Results.....	18
Discussion.....	22
References.....	28
List of Appendices.....	39

List of Tables

Table 1.	<i>Purpose Categories and Descriptions</i>	15
Table 2.	<i>Crosstabs of Purpose Engagement by Gender, Ethnicity, and Grade</i>	30
Table 3.	<i>Crosstabs of Purpose Classification by Gender, Ethnicity, and Grade</i>	31
Table 4.	<i>Purpose Commitment as Measured by Modified Short Grit Scale and Modified Purpose Scale for Gender, Ethnicity, and Grade: Means and Standard Deviations</i>	32
Table 5.	<i>Crosstabs of Purpose Classification, and Purpose Commitment, Grouped by Low, Medium, and High Modified Short Grit Scale Scores</i>	33
Table 6.	<i>Crosstabs of Purpose Classification, and Purpose Commitment, Grouped by Low, Medium, and High Modified Purpose Scale Scores</i>	34
Table 7.	<i>Purpose Commitment as Measured by Modified Short Grit Scale, Differentiated by Purpose Classification: ANOVA Results</i>	35
Table 8.	<i>Purpose Commitment as Measured by Modified Purpose Scale, Differentiated by Purpose Classification: ANOVA Results</i>	36
Table 9.	<i>Crosstabs of Purpose Commitment Groupings, Purpose Classification, and Purpose Engagement</i>	37
Table 10.	<i>Regression of Purpose Engagement and Integrated Purpose with Purpose Commitment as the Outcome, as Measured by Modified Purpose Scale</i>	38

Introduction

Martin Seligman, who is commonly referred to as the father of Positive Psychology, asks the roomful of teachers two simple and important questions: "In two words or fewer, what do you most want for your children in life?" Several audience members chime in: "Happiness;" "love;" "purpose." Seligman then asks, "In two words or fewer, what do schools teach?" A few more teachers rattle off: "compliance;" "facts;" "numeracy;" "literacy." And then Seligman delivers the punch line: "Notice, there is no overlap between the two lists" (Character Lab, 2016). Many adults would agree that while they want their children to have a purpose in life, our schools generally do a poor job of cultivating this virtue. Given the gap between the desire to educate for purpose and the present reality, it is worth examining what is meant by purpose, what makes a purpose in life worth having, what youth purpose currently looks like, and what allows for a strong commitment to purpose.

What exactly does it mean to have a purpose in life?

Bronk's (2014) review of the purpose literature concludes that the majority of definitions of purpose consist of three "irrefutable components" (p. 6): *commitment*, *goal-directedness*, and *personal meaningfulness*. For instance, McKnight and Kashdan (2009) conceptualize purpose as, "A central, self-organizing life aim that organizes and stimulates goals, manages behaviors, and provides a sense of meaning" (p. 242). Damon, Mennon, & Bronk (2003) define purpose as, "A stable and generalized intention to accomplish something that is at once meaningful to the self and of consequence to the world beyond the self" (p. 121). Taken together, these definitions and Bronk's (2014) review describe purpose as a personally meaningful aim that provides a sense of direction

in life beyond “low-level goals such as ‘to get to the movie on time’” (Damon et al., 2003, p. 121). Given this helpful starting point for thinking about purpose, this paper will define purpose as *a personally meaningful and enduring aim that provides an individual with a non-harmful direction in life*. While this definition can include a beyond-the-self dimension, as alluded to in the Damon et al. (2003) definition of purpose, this definition can also include self-oriented purposes that are not intentionally harmful to other people, such as a purpose to become a professional basketball player.

Why is it important to have a purpose in life?

The Holocaust survivor and psychiatrist, Viktor Frankl, made a compelling case for the importance of purpose in life with the publication of his influential book, “Man’s Search for Meaning” (1959/2006). Frankl believed that a purpose could propel someone to overcome dire circumstances, even as extreme as the Holocaust. He wrote:

A man who becomes conscious of the responsibility he bears toward a human being who affectionately waits for him, or to an unfinished work, will never be able to throw away his life. He knows the “why” for his existence, and will be able to bear almost any “how” (p. 80).

Frankl’s personal and powerful account of the benefits of purpose helped pave the way for much of the empirical research on purpose that has ensued (Damon et al., 2003).

The research on purpose demonstrates positive associations with mental health, including hope and life satisfaction (Bronk, Hill, Lapsley, Talib, & Finch, 2009; Burrow, O’Dell, & Hill, 2010), as well as serving as a protective factor against depression in adolescence (Brassai, Piko, & Steger, 2011). Purpose is also associated with better physical wellbeing, including longevity and reduced rates of mortality (Boyle, Barnes,

Buchman, & Bennett, 2009) and lower rates of Alzheimer's disease (Boyle, Barnes, Buchman, & Bennett, 2010). Studies with adolescents have demonstrated associations between purpose and academic and social outcomes. Specifically, an intervention designed to build students' purpose contributed to academic achievement, including increases in grade point averages (Pizzolato, Brown, & Kanny, 2011). Purpose has also been associated with lower rates of self-reported violence (Durant, Cadenhead, Pendergast, Slavens & Linder, 1994) and maladaptive coping behaviors like substance abuse (Minehan, Newcomb, & Galaif, 2000). Recent studies with college-aged students have also found positive associations between purpose and the psychologically adaptive constructs of grit (Hill, Burrow, & Bronk, 2016) and self-efficacy (DeWitz, Woolsey, & Walsh, 2009), both of which are associated with persistence.

What does adolescent purpose look like?

The few studies that have documented the types of purposes and meanings people maintain, based on free response (Ebersole & De Vogler, 1981; Hill, Burrow, O'Dell, & Thornton, 2010) and semi-structured interview formats (Damon, 2008), have demonstrated that it is common for students to have multiple purposes. Hill et al. (2010) observed that among a sample of adolescents (N = 229) from one Catholic high school and one suburban public high school, the majority endorsed more than one purpose. Several of the purpose categories in this study included "Happiness," "Religion," and "Occupational and Financial." Specifically, 43 percent of the sample endorsed two categories, 21 percent endorsed three categories, 4 percent endorsed four categories, and only 30 percent endorsed one category. When Ebersole and De Vogler (1981) asked college students (N = 112) to elaborate on and categorize their strongest meaning in life,

21 percent categorized their meanings as “miscellaneous” because they tried to “jam several meanings into their single essay” (p. 293).

Damon (2008) also speaks to this point of multiple purposes, observed during his long and storied career interviewing and studying adolescents. But he goes a step farther to distinguish between “parallel” (p. 69) purposes, “purposes across several . . . fronts” (p. 69) (which will be referred to as *integrated* purposes from this point forward), and “one burning purpose” (p. 69). To clarify, people who maintain Parallel Purposes have multiple long-term intentions that do not reinforce each other and can lead to conflict between purposes, whereas people with Integrated Purposes have long-term intentions that intersect and reinforce each other. Bronk (2014) essentially describes an Integrated Purpose and support for categorizing purposes in this way when she writes the following:

An emerging adult who plans to become a teacher and work in rural areas because this is where she feels she can do the most good and because a career in teaching will allow her to support her family, could be said to have career, familial, and service-oriented purposes all at once. Classifying purposes into just one category can be difficult (p. 168).

An Integrated Purpose is clearly a phenomenon that has been observed in the field, yet its frequency and clinical implications have not been clearly documented.

Engagement with purpose appears to be fairly common and seems to increase with age. Among a representative sample of American youth (N = 270), 50 percent expressed engagement with either a self-oriented or beyond-the-self purpose (Moran, 2009). In this cross-sectional dataset, engagement increased with age in that 25 percent of the 6th graders, 34 percent of the 9th graders, 56 percent of the 12th graders, and 84 percent

of the college students expressed engagement with either a self-oriented or beyond-the-self purpose (Moran, 2009). A follow-up study that consisted of interviewing 146 students from the original study two years later (Quinn, 2016), generally showed a similar upward trend in engagement. The exceptions included the 11th graders, who remained stagnant between the two time points, such that 37.5 percent reported engagement with a self- or other-oriented purpose in 9th grade as well as in 11th grade; and the college students, who dropped several percentage points in level of engagement, from 83.3 percent to 81 percent. 21.7 percent of 6th graders engaged with their purpose, whereas two years later as 8th graders, 34.8 percent indicated engagement with their purpose. 55.6 percent of 12th graders engaged with their purpose, whereas two years later, 88.9 percent indicated engagement with their purpose. The fairly consistent trend supports the notion that engagement with purpose generally seems to increase with age. In a sample (Mariano, 2011) of 6th, 7th, and 8th grade adolescent girls across six middle schools in an urban area in the southeastern United States (N = 46), 24 percent expressed engagement with either a self-oriented or beyond-the-self purpose, which is fairly consistent with Moran's (2009) study. These numbers seem to indicate that roughly one quarter of middle school students in the United States would state that they act on their purpose.

The number of students who express any kind of purpose, regardless of level of engagement or classification of purpose, has been documented by Quinn (2016) in her sample of 146 students in 6th grade, 9th grade, 12th grade, and college who were interviewed at two time points over the course of two-years. She looked at the number of students with an "intention," which she defines as, "what the individual desires to

accomplish through his or her life purpose” (p. 2). Similar to level of engagement, the upward trend in purpose tends to increase across cohorts. Most pertinent to the present study is Quinn’s (2016) finding that 41.3 percent of 6th graders expressed an intention, and this increased two years later to 52.2 percent when the students were 8th graders (Quinn, 2016). Mariano’s (2011) study of middle school girls (N = 46) again lends support to the numbers by demonstrating that 39.2 percent of her sample had an intention, which roughly resembles Quinn’s (2016) findings. Unfortunately, Mariano (2011) does not distinguish intention rates between grade levels and so a more granular comparison cannot be made.

What might allow for a strong commitment to purpose?

There is reason to believe that having One Purpose would be associated with a stronger commitment to purpose than having Parallel Purposes. Theoretical research on purpose preferences One Purpose over Parallel Purposes, as the latter can lead to potential conflicts (Duckworth & Gross, 2014) and decreased effort (McKnight & Kashdan, 2009). In support of this argument, research on the related goal-oriented constructs of goal-differentiation and goal-integration (Sheldon & Emmons, 1995), as well as grit (defined as perseverance and passion for long-term goals) (Duckworth, Peterson, Matthews, Kelly, & Dennis, 2007), suggest that purposes or goals that are connected with lower level goals and not hindered by conflicting or unrelated goals, help to explain greater goal commitment and success (Duckworth & Gross, 2014; Sheldon & Emmons, 1995).

Beyond the distinction between One Purpose and Parallel Purposes, integrated purposes that touch on and reinforce multiple life areas and domains of purpose, might

allow for a stronger sense of identity and in turn, a stronger commitment to purpose than a singular purpose that is narrowly focused. In a longitudinal and in-depth multiple case study of adolescent purpose exemplars (N = 8), Bronk (2011) found that “purpose led to identity development, and identity development reinforced commitments to purpose” (p. 38). So, a key question is, what characteristics of purpose are critical for a strong sense of identity that will then reinforce purpose commitment? Bronk (2014) suggests an answer to this question in her review of the purpose literature when she hints that a purpose that intersects with multiple life areas (or domains of purpose) may be more indicative of a purpose that is central to identity, which can then reinforce one’s commitment to his or her purpose. She writes that purpose is “diffuse and influences many aspects of life, likely including career, hobby, and familial choices. In fact, a purpose can be so broad that it composes a central component of one’s sense of identity” (p. 109). In other words, the broader the purpose, the more it can influence identity, and the more it influences identity, the more it can increase commitment to purpose.

Commitment to purpose is also likely to be influenced by engagement with purpose. That is, if a student indicates present engagement with their stated purpose by describing a “behavioral manifestation of the purpose” (Moran, 2009, p. 145), it would be reasonable to predict that the student would have a stronger commitment to his or her purpose than a student who did not indicate present engagement. A study on purpose exemplars (N = 9) suggests that the exemplars “would not have discovered noble purposes in the areas they did had they not been involved in those areas early on, often as children. . . . Without exposure, noble purpose seems doubtful” (Bronk, 2012, p. 105). Similarly, a large-scale and representative sample of American youth living in suburban,

rural, and urban areas, and ranging in age from 12 to 22 (N = 270) demonstrated that “lack of engagement [with their purpose] in the present is associated with vague statements for most of our sample; young people don’t talk as well about things that haven’t happened and may need exposure to concrete events” (Moran, 2009, p. 155). In short, engagement seems to be an essential step towards commitment. The aforementioned observations suggest that students who engage with a purpose that integrates multiple life areas (or domains of purpose) will likely indicate a stronger commitment to purpose than students who either do not act on their purpose or engage with a narrowly focused purpose or multiple and potentially conflicting purposes.

The Present Study

Despite the presence of Integrated Purposes among adolescents (Bronk, 2014; Damon, 2008) and research indicating that integrated higher-order goals are associated with greater goal commitment and grit than differentiated or conflicting aims (Duckworth & Gross, 2014; Sheldon & Emmons, 1995), the literature does not seem to provide insight into whether adolescents with Integrated Purposes are also more committed to their purposes than adolescents with One Purpose or adolescents with Parallel Purposes. Furthermore, the literature does not indicate if these purpose classifications interact with level of Purpose Engagement to influence Purpose Commitment. As such, this study attempted to answer the following research questions:

- Developmentally, how did 8th grade students compare to 7th grade students in terms of Purpose Classification, Purpose Engagement, and Purpose Commitment?
- Did strength of Purpose Commitment differ across Purpose Classifications (i.e., One Purpose, Integrated Purpose, Parallel Purpose, No Purpose)?

- Was there an interaction effect between Purpose Engagement and Purpose Classification on strength of Purpose Commitment?

It was hypothesized that while the majority of 7th and 8th grade students would have some form of purpose classification, a plurality would have One Purpose. Furthermore, 8th graders would be more likely than 7th graders to have Integrated Purposes, as well as more likely to have One Purpose. 7th graders would be more likely than 8th graders to have Parallel Purposes, as well as more likely to have No Purpose. 8th graders would also be more likely than 7th graders to be engaging with their purpose and to be more committed to their purpose. The null hypothesis states that 7th and 8th graders would look no different in these areas.

It was hypothesized that students with an Integrated Purpose would have the greatest commitment to purpose on average, followed by students with One Purpose, which would be followed by students with Parallel Purposes, and lastly followed by students with No Purpose. The null hypothesis states that students with each of these purpose classifications would look no different in their commitment to purpose.

Lastly, it was hypothesized that there would be an interaction between Purpose Engagement and the Integrated Purpose classification, as well as with the One Purpose classification, whereas there would be an additive effect between Purpose Engagement and the Parallel Purpose classification. The null hypothesis states that Purpose Engagement would produce an additive effect on Purpose Commitment when Engagement was combined with One Purpose, an Integrated Purpose, or a Parallel Purpose.

Method

Setting and Participants

The sample included 124 students in a public urban middle school in the mid-Atlantic region of the United States. The sample was nearly evenly split between females (49.2 percent) and males (50.8 percent), as well as between 7th (49.2 percent) and 8th (50.8 percent) grade students. The majority (79 percent) of students qualified for free or reduced price lunch. A plurality of the students was Hispanic (44.4 percent), although white (24.2 percent), black (21 percent), and Asian (10.5 percent) students were also represented.

Procedures

Data Collection and Qualitative Coding. Throughout the 2015-2016 school year, students were exposed to a social-emotional and character development (SECD) curriculum. The students' advisory teachers taught the curriculum for 15 minutes per day. Students in this sample completed a Purpose Essay prompt in their advisory class in March of 2016. Several months later, towards the end of the school year, the students were administered self-report surveys, measuring various social and emotional skills as well as character strengths and purpose.

A set of codes was developed for the Purpose Essays based on Purpose Category, Purpose Classification, and Purpose Engagement. The author, who was the designated master coder, initially trained four undergraduate research assistants to code for these areas. When reliability proved insufficient, the author made revisions to the codes and retrained one of the original research assistants. Subsequently, the author coded all 124

essays and aimed to reach 80 percent agreement with the newly trained research assistant, on 20 percent of the essays ($n = 25$) that were randomly selected.

Measures

Purpose Commitment Measure 1: Modified Purpose Scale. Items from two adolescent purpose scales were combined and used to assess for strength of Purpose Commitment in the present study's sample. A primary rationale for reducing the length of the commitment measure was to reduce the likelihood of testing fatigue among students. Furthermore, modifications made to the scales were based on theoretically- and psychometrically-informed decisions. The first of the two scales is widely used in research (Lippman et al., 2014) and consists of three items (1. My life has no meaning; 2. My life will make a difference in the world; and 3. I am doing things now that will help me to achieve my purpose in life) responded to via a 5-point Likert scale ranging from "Strongly disagree" to "Strongly agree." In the present study, the first item was removed from this measure due to school-level concerns about the grim nature of the question. The scale was supplemented by a subset of items (1. My life has a clear sense of purpose; 2. I am always working towards accomplishing my most important goals in life; and 3. I have a purpose in my life that says a lot about who I am) from the *Revised Youth Purpose Survey's* (Bundick et al., 2006) *purpose identification* subscale, which is closely aligned with *commitment to purpose* and has been labeled as such in a previous study (Burrow et al., 2010). The complete and finalized purpose measure used in this study that will be referred to as the Modified Purpose Scale, included items from the Lippman et al. (2014) and Bundick et al. (2006) purpose scales, consisted of a 5-item 5-point Likert scale ranging from "Disagree A LOT!" to "Agree A LOT!" and can be found in Appendix A.

The scale demonstrates relatively strong psychometric properties such that all items load onto one factor, Pearson inter-item correlations ranged from 0.54 to 0.67, and the scale had a Cronbach's alpha of 0.88.

Purpose Commitment Measure 2: Modified Short Grit Scale. A modified subscale of the short grit scale (Grit-S) (Duckworth & Quinn, 2009), which is an 8-item 5-point Likert scale ranging from "Not at all like me" to "Very much like me" and measures perseverance and passion for long-term goals, was used as a supplement to the purpose scale to assess strength of purpose commitment. The Grit-S has two subscales focused on *consistency of interest* and *perseverance of effort*. A modified version of the *perseverance of effort* subscale was used for the present study. The subscale consists of four items, has reliability alphas ranging from 0.60 to 0.78 across four samples, and better predicted GPA among 7th to 11th grade students over a one year period than the *consistency of interest* subscale and the full Grit-S measure (Duckworth & Quinn, 2009). The *perseverance of effort* subscale was used in the present study because of its demonstrable psychometric strengths among a 7th to 11th grade sample (Duckworth & Quinn, 2009) as well as with a sample of 7th and 8th grade students who were predominantly low income and Latino (Hatchimonji, 2016) and more closely resembled the current study's population. This latter study (Hatchimonji, 2016), which also revealed that the *consistency of interest* subscale had a low reliability alpha of 0.52 as well as showing that one of the *perseverance of effort* items ("setbacks don't discourage me") loaded on the wrong factor, influenced the decision to remove the *consistency of interest* subscale as well as the reverse-worded "setbacks don't discourage me" item. With these modifications, the present study's finalized *perseverance of effort* subscale, which will be

referred to as the Modified Short Grit Scale, consists of three items (1. I finish whatever I begin; 2. I am a hard worker; and 3. I am diligent. Diligent means I am careful and responsible in the things I do) and can be found in Appendix B. A definition of “diligent” was provided for students based on their confusion around its meaning, in prior studies. The present study’s modified grit scale demonstrated relatively strong psychometric properties such that all items load onto one factor, inter-item Pearson correlations ranged from 0.55 to 0.60, and the scale had a Cronbach’s Alpha of 0.81, which exceeds the reliability alphas of five previous studies (Duckworth & Quinn, 2009; Hatchimonji, 2016).

Purpose Classification. A variety of measures have been developed to assess for purpose. Damon et al. (2003) and Bronk (2014) provide helpful reviews of a range of measures, which include diary entries, self-report surveys, meaning essays, and semi-structured interviews. Hill et al. (2010) have also published results from a free-response Purpose Essay. There are advantages and drawbacks to using each of these measures.

There are several advantages of using a Purpose Essay to assess for presence of purpose, Purpose Classification, and Purpose Engagement. First, a Purpose Essay prompts students to write about purpose rather than waiting for the subject to spontaneously arise, as would be the case with diary entries. Relatedly, reading diary entries without prior permission is an ethically questionable practice. Second, a Purpose Essay provides room for elaboration about purpose and engagement, while not confining students to describing particular categories of purpose or a limited number of purposes.

While a semi-structured interview similarly allows for students to elaborate on their purposes and level of engagement, interviews are also very resource intensive,

requiring either many skilled interviewers or a few interviewers spending a significant amount of time interviewing. An essay can be administered to an unlimited number of students simultaneously. A drawback of an essay is that it does not allow for follow-up questions. However, every measure has drawbacks and the essay format is preferred over a semi-structured interview when accounting for resource constraints.

The Purpose Essay prompt that was administered to this study's sample is included in Appendix C. The prompt asked students to define purpose, to describe their own purpose and motivation for their purpose if they feel they have one, and to discuss how they might be engaging with their purpose. The prompt encourages students to write their essays in a five-paragraph format, with an introduction, three body paragraphs, and a conclusion. This essay format was decided on in collaboration with the middle school's learning specialists, who reported that students would be expected to write essays in this format as part of their usual Language Arts curriculum, and that asking students to write such an essay could be requested and not associated with the intervention program the students received.

To determine how each essay should be classified, the coders first determined the purpose category (or categories) that was being described in each essay. The purpose categories are listed in Table 1 and are based primarily on categories developed by De Vogler and Ebersole (1980, 1983), Ebersole and De Vogler (1981), and Bundick et al. (2006), as well as on an initial review of approximately 15 students' purpose essays. Several of the categories include *family-oriented*, *religiously- or spiritually-oriented*, and *activity-oriented*.

Table 1

Purpose Categories and Descriptions

	Category	Description
1.	Vocation- or career-oriented	Student describes their purpose as a vocation or career of interest e.g. "My purpose is to be a doctor"
2.	Financially-oriented	Student describes their purpose as a desire for being wealthy or having financial security
3.	Friend- or socially-oriented	Student describes their purpose as a concern for their connection with their friends, peers, or mentors (e.g. "want to make my friends proud"); the welfare/wellbeing of their friends, peers, and mentors; or desire to make friends
4.	Family-oriented	Student describes their purpose as a concern for their connection with their family (e.g. "want to make my parents proud"); the welfare/wellbeing of their family; or desire to start a family
5.	Service-oriented (in context of community)	Student describes their purpose as an aim to contribute to their community or as an interest in service, civic life, political life, or social activism, such as immigration, healthcare, or politics
		<i>Note: if someone says, "I want to inspire others" this is service-oriented and not identity-oriented, because he/she is describing what they aim "to do" instead of who they want "to be".</i>
6.	Academic- and knowledge-oriented	Student describes their purpose with phrases such as "successful student," "college-bound," "gain more knowledge and learn all there is to know about the topic that interests me."
		<i>Note: This can be related to the school environment or learning outside this context.</i>
7.	Religiously- or spiritually-oriented	Student describes their purpose as a commitment to religion, faith, or spirituality
8.	Activity-oriented	Student describes their purpose as a hobby, recreation, or sport, but not in a professional capacity (e.g. "My purpose is to play sports" as opposed to "My purpose is to be a professional soccer player").
		<i>Note that hobbies can extend beyond sports (e.g. knitting)</i>
9.	Health-oriented	Student describes their purpose in terms of health (e.g. "My purpose is to live

- a healthy and fit life")
10. Creatively-, generatively-, or artistically-oriented
Student describes their purpose in terms of making a novel contribution (e.g. "My purpose is to create a new art form" or "My purpose is to develop a new scientific theory")
 11. Nature- and environmentally-oriented
Student describes their purpose as a(n) commitment to/interest in organic entities beyond just humans (e.g. nature, animals, or the environment)
 12. Materialistically-oriented
Student describes their purpose in terms of material possessions (e.g. "My purpose is to have a nice home and car")
 13. Status-oriented
Student describes their purpose in terms of gaining status, recognition, or attention, such as becoming "famous," and can include the desire for status symbols and awards, such as an Olympic medal or Oscar
- Note: If a student says they want to be "famous" in their respective purpose domain (e.g. "My purpose is to be a famous scientist"), this could be coded as an integrated purpose, involving career and status*
14. Identity-oriented
Student describes their purpose in terms of identity, which refers to who one hopes to "be" (e.g., "My purpose is to become a role model or inspiration") as opposed to what they want to "do" and may include values (e.g., "My purpose is to be an honest and kind person"). As a result, the purpose will typically be expressed as a noun or an adjective.
- Note: If student writes "My purpose is to live a happy life" that would be coded as "Way of life"*
15. Meaning-oriented
Student describes their purpose in terms of finding meaning or making sense out of the world and events around him/her (e.g., "My purpose is to find the silver lining in bad situations" or "My purpose is to find meaning in life").
- Note: If student writes "My purpose is to live a happy life" that would be coded as "Way of life"*
16. Way of life
Student describes their purpose as a way of life (e.g. "My purpose is to lead a happy [or adventurous] life")
 17. No purpose articulated BUT a stated desire to find a purpose
Student expresses that they do not have a purpose but they have a desire to develop or find a purpose, and can include phrases that indicate such a desire without articulating a clear vision, such as, "achieve the goals I set for myself" (without articulating the goals), "make something of myself," and "develop my potentials"

18.	No purpose articulated and no stated desire to find a purpose	Student expresses that they do not have a purpose and provide no indication that they are looking to develop or find a purpose
19.	Uncategorized purpose	Student describes their purpose in a way that does not fit into one of the other categories listed
20.	Nonsensical or confusing purpose	Student describes their purpose in a way that does not make sense or the student writes a free association essay that lacks direction

While deciding on the Purpose Categories, the coders classified the essays as having One Purpose, No Purpose, Parallel Purposes, or an Integrated Purpose. Students who wrote about One Purpose category would be classified as “One Purpose.” Students who wrote that they did not have a purpose would be classified as “No Purpose.” Students who wrote about multiple categories of purpose (e.g. family-oriented and activity-oriented) or multiple types of purpose within a single category (e.g. doctor and professional basketball player) and drew no link between the categories or types of purposes would be classified as “Parallel Purposes.” Lastly, students who included multiple purpose categories and described the categories as overlapping and reinforcing would be classified as “Integrated Purpose.” Examples of these classifications are included in Appendix D.

Purpose Engagement. The coders also coded the purpose essays for Purpose Engagement. Purpose Engagement was based on a rating of students’ behavioral involvement with their purpose. Purpose Engagement is a binary variable that gauges the presence (“Student reports engaging in activities aligned with their purpose”) and absence (“No indication of any action taken related to their purpose”) of engagement. Examples of the presence and absence of engagement are included in Appendix E.

Results

Reliability of Coding

The first step towards analyzing this study's relevant data involved coding the students' Purpose Essays for Purpose Classification and Purpose Engagement. Reliability was based on the percent agreement of the coding between the author of this paper, who was the designated master coder, and a research assistant who had been trained on the coding system. The master coder coded all 124 essays while the research assistant coded 20 percent of the essays ($n = 25$) that were randomly selected. The percent agreement between the two coders on purpose engagement reached 84 percent while the percent agreement on purpose classification was 60 percent. The master coder reconciled any coding discrepancies by defaulting to his rating.

Preliminary Analyses

The Modified Purpose Scale and the Modified Short Grit Scale demonstrated a correlation of $r = .62$, suggesting these scales shared meaningful variance that could be labeled as Purpose Commitment but also contained distinct elements that supported their separate analysis. In order to see more clearly the nature of the convergence and divergence of Purpose Commitment as assessed by these two scales, the scales were divided into low, medium, and high groups. Approximately one third of the sample population was accounted for in each group. All analyses also were conducted with these scales being cut into a low and high group, where the medium group was combined with the high group to increase the cell count for chi-square analyses, as well as a low and high group that excluded the medium group, in order to accentuate the group differences.

However, all analyses yielded non-significant results. As a result, the data are presented using low, medium, and high grouping for heuristic clarity.

First Research Question Investigating Grade-Level Differences on Purpose Engagement, Purpose Classification, and Purpose Commitment, and Additional Demographic Comparisons

Demographic (gender, grade level, and ethnicity) differences on Purpose Engagement, Purpose Classification, and Purpose Commitment (as measured by the Modified Short Grit Scale and the Modified Purpose Scale), were analyzed using parametric and non-parametric tests. The crosstabs of Purpose Engagement by all three demographic variables appear in Table 2. The crosstabs of Purpose Classification by all three demographic variables appear in Table 3. The means and standard deviations on the Modified Short Grit Scale and the Modified Purpose Scale by all three demographic variables appear in Table 4.

Regarding gender, males and females did not demonstrate a significant difference on Purpose Engagement, Purpose Classification, or Purpose Commitment. A chi-square analysis was conducted for Purpose Engagement, which is a binary variable. Similarly, a chi-square analysis was conducted for purpose classification, which is a categorical variable. Lastly, a t-test was run for purpose commitment, on both the Modified Purpose Scale and the Modified Short Grit Scale.

In terms of grade level, 7th and 8th graders did not show a significant difference on Purpose Engagement, Purpose Classification, or Purpose Commitment. Chi-square analyses were used for Purpose Engagement as well as for Purpose Classification. T-tests were run for both Purpose Commitment measures.

Lastly, the four ethnicities in the sample did not show a significant difference on Purpose Engagement, Purpose Classification, or Purpose Commitment. Chi-square analyses were conducted for Purpose Engagement as well as for Purpose Classification. Analysis of variance (ANOVA) was run for each of the two measures of Purpose Commitment.

These analyses revealed no statistically significant differences in Purpose Engagement, Purpose Classification, or Purpose Commitment between genders, grade levels, or ethnicities. Therefore, these demographic variables were not controlled for in later analyses.

Second Research Question Investigating Associations Between Purpose Classification and Purpose Commitment

In order to explore the relationship of Purpose Classification and Purpose Commitment, two sets of analyses were done. Chi-square tests helped depict whether the students' Purpose Commitment scores tended to vary as a function of their Purpose Classifications and specifically if students with Integrated Purposes tended to have higher commitment scores than students with One Purpose, and if students with One Purpose tended to have higher commitment scores than students with Parallel Purposes, and finally if students with Parallel Purposes tended to have higher commitment scores than students with No Purpose. The respective crosstabs are displayed in Table 5, where Purpose Commitment is represented by the Modified Short Grit Scale, and in Table 6, where Purpose Commitment is represented by the Modified Purpose Scale. ANOVAs were also run with Purpose Commitment as a continuous variable in order to provide additional support for the presence or absence of a significant finding. Table 7 displays

the ANOVA results with Modified Short Grit Scale as the measure of Purpose Commitment, and Table 8 displays the ANOVA results with the Modified Purpose Scale as the measure of Purpose Commitment. Purpose Classification was not significantly associated with Purpose Commitment on the Modified Purpose Scale or the Modified Short Grit Scale.

Third Research Question Investigating an Interaction Between Purpose Engagement and Purpose Classification on Purpose Commitment

In order to explore whether there was an interaction between Purpose Engagement and Purpose Classification, two additional sets of analyses were done. Chi-square tests were performed to more clearly illustrate whether the students who had either Integrated or One Purpose classifications and were engaged with their purpose tended to have higher Purpose Commitment scores than students who were not engaged with their purposes or maintained Parallel Purposes. Notably, the 12 students in the No Purpose group were removed from the sample for this set of analyses because students without a purpose would not and did not show engagement with a purpose, indicating that there could not logically be an interaction between the two terms. Removing these students reduced the sample size to 112. The crosstabs depicting the students in the groupings appear as Table 9. The chi-square tests were supplemented by hierarchical linear regressions, which provided additional information regarding the presence or absence of an interaction. Hierarchical linear regressions were run separately for three of the purpose classifications (One Purpose, Parallel Purpose, and Integrated Purpose). Purpose Engagement was multiplied by each of the three Purpose Classifications to create three interaction terms. Purpose Engagement was entered first (first step), followed by Purpose

Classification (second step), which was then followed by the interaction of Purpose Engagement and Classification (third step).

These analyses revealed that Purpose Engagement did not interact with Purpose Classification. Specifically, results showed that the third step, which included the interaction term was not significant for each of the three classifications. However, purpose engagement, as a main effect, was significantly associated with purpose commitment, as measured by the Modified Purpose Scale, not the Modified Short Grit Scale ($B = .35, p < .05$). Importantly, the model that included the main effects of Purpose Engagement and the Integrated Purpose classification was significant ($F(2,109) = 3.09, R^2 = .05, p < .05$). These results are included in Table 10.

Discussion

Review of Results

This sample of 124 7th and 8th grade urban-based middle school students did not differ significantly on their Purpose Engagement, Purpose Classifications, or Purpose Commitment by grade, gender, or ethnicity. Additionally, Purpose Classification was not associated with different levels of Purpose Commitment. Finally, despite there being no interaction between Purpose Classification and Purpose Engagement, students who reported engaging with their purpose scored significantly higher on a Purpose Commitment measure than students who reported no engagement with their purpose.

Although it was hypothesized that Integrated Purposes would be associated with higher Purpose Commitment scores than One Purpose; One Purpose higher than Parallel Purposes; and Parallel Purposes higher than the No Purpose classification, and that 8th grade students would be more likely than 7th graders to have Integrated and One Purpose classifications as well as to be engaging with their purposes, reflecting a seemingly more

mature developmental stage, these predictions did not bear out in the results.

Additionally, while it was hypothesized that Purpose Engagement would interact with the Integrated and One Purpose classifications, no interaction took place. However, the significant finding of Purpose Engagement being associated with higher Purpose Commitment scores than lack of engagement aligns with the initial predictions.

Explanation of Results

The finding that purpose engagement was associated with higher Purpose Commitment scores is reasonable given research showing that a lack of engagement is associated with “vague” descriptions of purpose (Moran, 2009, p. 155). It is hard to imagine that a student who has no experience with and limited knowledge of his or her purpose, which is likely to be vaguely stated, would be strongly committed to it. In contrast, it is quite easy to imagine that a student who has experience with and first-hand knowledge of his or her purpose, which would conceivably be clearly stated, would be strongly committed to it.

Yet the question remains why these results were significant on the Modified Purpose Scale and not on the Modified Short Grit Scale. The content of the questions on the two scales may help explain this outcome. The Modified Short Grit Scale included questions that related to students’ overall perseverance (e.g. “I finish whatever I begin”), while the Modified Purpose Scale included questions that spoke to students’ current engagement with and commitment to their purpose (e.g. “I am always working toward accomplishing my most important goals in life”). The Modified Purpose Scale appears to tap directly into purpose engagement whereas the Modified Short Grit Scale does not. In

other words, purpose engagement does not necessarily connect to perseverance, but it does connect to a genuine purpose.

The lack of grade level differences in Purpose Classifications, Purpose Engagement, and Purpose Commitment is not too surprising. The developmental gap between students can vary greatly within and across grades, and a one year difference in grade-level could mean that many 7th grade students are operating at an 8th grade level, while many 8th grade students are functioning at a 7th grade level. In a school as socioeconomically, ethnically, and developmentally diverse as the one this sample is drawn from, students who sit in the same classroom can be at vastly different developmental and academic levels, thereby cancelling out any grade-level related variance.

Regarding the absence of a relationship between Purpose Classification and Purpose Commitment, this could be a function of several factors. First, the low reliability among coders on the variable of Purpose Classification indicates that these results must be interpreted with some hesitancy. Second, the lack of precision of the Purpose Commitment scales might have led to these null results. Self-report Purpose Commitment scales lend themselves to exaggerated scores, particularly when administered to adolescents, who as Inhelder and Piaget (1958) observed, articulate unrealistic future plans that resemble “fantasies and fabrications” that are “soon abandoned” (p. 344). Accordingly, the purpose commitment scores tended toward the higher end of the scales and made it difficult to distinguish students’ true level of commitment. These findings support the case for longitudinal data that could portray the duration and consistency of student purpose rather than inflated self-report scores. Short of having longitudinal data,

the results must be taken lightly. Notably, these reliability and measurement issues might also help explain the lack of an interaction between Purpose Classification and Purpose Engagement.

Implications for Practice

There is empirical and philosophical support for the importance of purpose in life. Purpose in life has been associated with many positive outcomes, ranging from mental health to longevity. These observations beg the questions of how to cultivate and strengthen purpose? This study demonstrated that current engagement with a purpose was associated with higher Purpose Commitment scores. While the directionality of Purpose Engagement and Purpose Commitment is unclear (i.e., engagement may lead to stronger commitment; stronger commitment may lead to engagement; or there may be a third variable that causes both of these outcomes), it seems reasonable for educators, parents, and professionals to provide youth with opportunities to explore and engage with potential purposes.

Limitations

Several limitations of this study have already been alluded to, including low reliability of the purpose classifications, and the absence of a longitudinal and behavioral measure of Purpose Commitment. Challenges with reliability were partly due to the students' academic and developmental levels. Grammar and clarity in the essays greatly varied, which created too much room for inference and interpretation on the part of the coders. Additional limitations concern internal and external validity. First, causal conclusions cannot be drawn from this study given the lack of both random assignment and the manipulation of the independent variable. In addition, the findings from this

study may not generalize to other grade levels or populations that are more affluent or have different ethnicities than this sample.

Suggestions for Future Research

In planning future studies, the inclusion of longitudinal and behavioral measures of Purpose Commitment would be most critical in the advancement of the study of purpose and the questions the current research has explored. The introduction of such measures would allow this study and similar studies to hew more closely to a more accurate and objective conceptualization and operationalization of Purpose Commitment. Perhaps purpose classifications would in fact demonstrate significant associations with Purpose Commitment if longitudinal and behavioral measures of commitment were used. These questions could be addressed in stages, following students during each major educational and occupational transition, from high school, to college, as well as to and through career.

To address coding reliability issues, semi-structured interviews could be conducted with middle school-aged students who struggle with writing, and computerized text analysis could be used to create systematic and generalizable coding processes. While semi-structured interviews can be resource-intensive, they can also make it easier for students who struggle with writing, to communicate their thoughts. Furthermore, interviews can allow for follow-up and clarifying questions. These features of interviews can help improve coding reliability. Computerized text analysis programs such as Linguistic Inquiry and Word Count (LIWC) program contains content dictionaries that can be harnessed to analyze texts, such as the Purpose Essays. Programs

like LIWC could increase coding reliability and create systems that schools could conceivably use.

Future studies relevant to the questions this paper explores, could provide clinical insights as well, by investigating associations between the various purpose classifications and depression. Perhaps the absence of purpose, the loss and derailment of purpose due to environmental constraints and blockades, or even the presence of parallel and potentially conflicting purposes might be related to feelings of hopelessness and despair.

Longitudinal case studies employing semi-structured interviews could provide a nuanced and in-depth look into these questions.

Conclusion

Parents, educators, researchers, and policymakers are all looking for ways to help students build resilience and thrive. While there does not appear to be a simple solution to this great task, research and reasoning suggest that people who have a purpose in life tend to flourish. Although this paper has raised potentially more questions than it has answered, it lends support for the case of encouraging students to explore and engage with their purpose, and has raised further awareness of the purpose construct, as well as urgency for additional research in this area.

References

- Boyle, P. A., Barnes, L. L., Buchman, A. S., & Bennett, D. A. (2009). Purpose in life is associated with mortality among community-dwelling older persons. *Psychosomatic medicine*, *71*(5), 574-579.
- Boyle, P. A., Buchman, A. S., Barnes, L. L., & Bennett, D. A. (2010). Effect of a purpose in life on risk of incident Alzheimer disease and mild cognitive impairment in community-dwelling older persons. *Archives of general psychiatry*, *67*(3), 304-310.
- Brassai, L., Piko, B. F., & Steger, M. F. (2011). Meaning in life: Is it a protective factor for adolescents' psychological health?. *International journal of behavioral medicine*, *18*(1), 44-51.
- Bronk, K. C. (2011). Portraits of purpose: The role of purpose in identity formation. *New Directions for Youth Development*, *132*, 31-44.
- Bronk, K. C. (2012). A grounded theory of the development of noble youth purpose. *Journal of Adolescent Research*, *27*(1), 78-109.
- Bronk, K. C. (2014). *Purpose in life: A critical component of optimal youth development*. New York, NY: Springer Science & Business Media.
- Bronk, K. C., Hill, P. L., Lapsley, D. K., Talib, T. L., & Finch, H. (2009). Purpose, hope, and life satisfaction in three age groups. *The Journal of Positive Psychology*, *4*(6), 500-510.
- Bundick, M., Andrews, M., Jones, A., Mariano, J.M., Bronk, K.C., & Damon, W. (2006). *Revised youth purpose survey*. Unpublished instrument, Stanford Center on Adolescence, Stanford, CA.
- Burrow, A. L., O'Dell, A. C., & Hill, P. L. (2010). Profiles of a developmental asset: Youth purpose as a context for hope and well-being. *Journal of Youth and Adolescence*, *39*(11), 1265-1273.
- Damon, W. (2008). *The path to purpose: How young people find their calling in life*. New York, NY: Free Press.
- Damon, W., Menon, J., & Cotton Bronk, K. (2003). The development of purpose during adolescence. *Applied developmental science*, *7*(3), 119-128.
- De Vogler, K. L., & Ebersole, P. (1980). Categorization of college students' meaning of life. *Psychological Reports*, *46*(2), 387-390.
- De Vogler, K. L., & Ebersole, P. (1983). Young adolescents' meaning in life. *Psychological Reports*, *52*(2), 427-431.
- DeWitz, S. J., Woolsey, M. L., & Walsh, W. B. (2009). College student retention: An exploration of the relationship between self-efficacy beliefs and purpose in life among college students. *Journal of College Student Development*, *50*(1), 19-34.
- Character Lab (Producer). (2016). Grit + imagination: An educator summit [Video file]. Retrieved from <https://characterlab.org/ed-summit>
- Duckworth, A., & Gross, J. J. (2014). Self-control and grit: Related but separable determinants of success. *Current Directions in Psychological Science*, *23*(5), 319-325.
- 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.
- DuRant, R. H., Cadenhead, C., Pendergrast, R. A., Slavens, G., & Linder, C. W. (1994).

- Factors associated with the use of violence among urban black adolescents. *American journal of public health*, 84(4), 612-617.
- Ebersole, P., & De Vogler, K. L. (1981). Meaning in life: Category self-ratings. *The Journal of Psychology*, 107(2), 289-293.
- Frankl, V. (2006). *Man's search for meaning*. Boston, MA: Beacon Press. (Original work published in 1959).
- Hatchimonji, D. R. (2016). *Grit in latino middle school students: Construct validity and psychometric properties of the short grit scale* (Master's thesis). Retrieved from <https://dx.doi.org/doi:10.7282/T3FJ2JTS>
- Hill, P. L., Burrow, A. L., & Bronk, K. C. (2016). Persevering with positivity and purpose: An examination of purpose commitment and positive affect as predictors of grit. *Journal of Happiness Studies*, 17(1), 257-269.
- Hill, P. L., Burrow, A. L., O'Dell, A. C., & Thornton, M. A. (2010). Classifying adolescents' conceptions of purpose in life. *The Journal of Positive Psychology*, 5(6), 466-473.
- Inhelder, B., & Piaget, J. (1958). *The growth of logical thinking from childhood to adolescence*. New York: Basic Books.
- Lippman, L.H., Moore, K.A., Guzman, L., Ryberg, R., McIntosh, H., Ramos, M.F., ...Kuhfeld, M. (2014) Pilot study and psychometric analyses. In *Flourishing Children: Defining and Testing Indicators of Positive Development*. (pp. 45-105). Springer US.
- Moran, S. (2009). Purpose: Giftedness in intrapersonal intelligence. *High Ability Studies*, 20(2), 143-159.
- Mariano, J. M., Going, J., Schrock, K., & Sweeting, K. (2011). Youth purpose and the perception of social supports among African-American girls. *Journal of Youth Studies*, 14(8), 921-937.
- McKnight, P. E., & Kashdan, T. B. (2009). Purpose in life as a system that creates and sustains health and well-being: an integrative, testable theory. *Review of General Psychology*, 13(3), 242.
- Minehan, J. A., Newcomb, M. D., & Galaif, E. R. (2000). Predictors of adolescent drug use: Cognitive abilities, coping strategies, and purpose in life. *Journal of Child & Adolescent Substance Abuse*, 10(2), 33-52.
- Quinn, B. P. (2016). The beyond-the-self dimension of adolescent purpose: Absence and change. *The Journal of Positive Psychology*, 1-13.
- Sheldon, K. M., & Emmons, R. A. (1995). Comparing differentiation and integration within personal goal systems. *Personality and individual differences*, 18(1), 39-46.

Table 2

Crosstabs of Purpose Engagement by Gender, Ethnicity, and Grade

		Purpose Engagement	
		Yes	No
Student Gender			
	Female	24 (19.35%)	37 (29.84%)
	Male	23 (18.55%)	40 (32.26%)
Ethnicity			
	White	9 (7.26%)	21 (16.94%)
	Black	14 (11.29%)	12 (9.68%)
	Hispanic	21 (16.94%)	34 (27.42%)
	Asian	3 (2.42%)	10 (8.06%)
Grade Level			
	7 th	24 (19.35%)	37 (29.84%)
	8 th	23 (18.55%)	40 (32.26%)

Note. Crosstabs of Student Gender and Purpose Engagement: $X^2 = .73$; crosstabs of Ethnicity and Purpose Engagement: $X^2 = .20$; crosstabs of Grade Level and Purpose Engagement: $X^2 = .85$

Table 3

Crosstabs of Purpose Classification by Gender, Ethnicity, and Grade

		Purpose Classifications			
		No	One	Parallel	Integrated
Student Gender					
	Female	6 (4.84%)	8 (6.45%)	15 (12.10%)	32 (25.81%)
	Male	6 (4.84%)	12 (9.68%)	19 (15.32%)	26 (20.97%)
Ethnicity					
	White	4 (3.23%)	5 (4.03%)	9 (7.26%)	12 (9.68%)
	Black	2 (1.61%)	4 (3.23%)	8 (6.45%)	12 (9.68%)
	Hispanic	5 (4.03%)	10 (8.06%)	13 (10.48%)	27 (21.78%)
	Asian	1 (.81%)	1 (.81%)	4 (3.23%)	7 (5.65%)
Grade Level					
	7 th	5 (4.03%)	9 (7.26%)	21 (16.94%)	26 (20.97%)
	8 th	7 (5.65%)	11 (8.87%)	13 (10.48%)	32 (25.81%)

Note. Crosstabs of Student Gender and Purpose Classification: $X^2 = .60$; crosstabs of Ethnicity and Purpose Classification: $X^2 = .99$; crosstabs of Grade Level and Purpose Classification: $X^2 = .39$

Table 4

Purpose Commitment as Measured by Modified Short Grit Scale and Modified Purpose Scale for Gender, Ethnicity, and Grade: Means and Standard Deviations

		Modified Short Grit Scale^a	Modified Purpose Scale^b
		M (SD)	M (SD)
Student Gender			
	Female	4.03 (.91)	4.26 (.82)
	Male	3.97 (.74)	4.12 (.66)
Ethnicity			
	White	3.97 (.83)	4.17 (.85)
	Black	3.82 (.93)	4.23 (.66)
	Hispanic	4.03 (.83)	4.20 (.77)
	Asian	4.31 (.42)	4.12 (.55)
Grade Level			
	7 th	3.89 (.85)	4.13 (.83)
	8 th	4.11 (.79)	4.24 (.65)

^aModified Short Grit Scale is a 3-item 5-point Likert scale ranging from “Not at all like me” to “Always like me” and can be found in Appendix B

^b Modified Purpose Scale is a 5-item 5-point Likert scale ranging from “Disagree A LOT!” to “Agree A LOT!” and can be found in Appendix A

Table 5

Crosstabs of Purpose Classification, and Purpose Commitment, Grouped by Low, Medium, and High Modified Short Grit Scale Scores

Purpose Classification	Modified Short Grit Scale^a Groupings^b			Total
	Low	Medium	High	
No Purpose	4 (3.23%)	5 (4.03%)	3 (2.42%)	12 (9.68%)
One Purpose	8 (6.45%)	5 (4.03%)	7 (5.65%)	20 (16.13%)
Parallel Purpose	15 (12.10%)	8 (6.45%)	11 (8.87%)	34 (27.42%)
Integrated Purpose	16 (12.90%)	20 (16.13%)	22 (17.74%)	58 (46.77%)
Total	43 (34.68%)	38 (30.65%)	43 (34.68%)	124 (100.00%)

Note. Crosstabs of Purpose Classification and Purpose Commitment: $\chi^2 = .68$

^aModified Short Grit Scale is a 3-item 5-point Likert scale ranging from “Not at all like me” to “Always like me” and can be found in Appendix B.

^bLow group is less than or equal to 3.66 ; Medium group is greater than 3.66 and less than or equal to 4.60; High group is greater than 4.60 and less than or equal to 5.00

Table 6

Crosstabs of Purpose Classification, and Purpose Commitment, Grouped by Low, Medium, and High Modified Purpose Scale Scores

Purpose Classification	Modified Purpose Scale^a Groupings^b			Total
	Low	Medium	High	
No Purpose	7 (5.65%)	1 (.81%)	4 (3.23%)	12 (9.68%)
One Purpose	8 (6.45%)	5 (4.03%)	7 (5.65%)	20 (16.13%)
Parallel Purpose	12 (9.68%)	15 (12.10%)	7 (5.65%)	34 (27.42%)
Integrated Purpose	19 (15.32%)	20 (16.13%)	19 (15.32%)	58 (46.77%)
Total	46 (37.10%)	41 (33.06%)	37 (29.84%)	124 (100.00%)

Note. Crosstabs of Purpose Classification and Purpose Commitment: $\chi^2 = .31$

^aModified Purpose Scale is a 5-item 5-point Likert scale ranging from “Disagree A LOT!” to “Agree A LOT!” and can be found in Appendix A

^bLow group is less than or equal to 4.00; Medium group is greater than 4.00 and less than or equal to 4.60; High group is greater than 4.60 and less than or equal to 5.00

Table 7

Purpose Commitment as Measured by Modified Short Grit Scale, Differentiated by Purpose Classification: ANOVA Results

Classifications	M (SD)		SS	df	MS	F	Sig.
No Purpose	3.97 (.70)	Between Groups	1.47	3	.49	.72	.54
One Purpose	4.03 (.79)	Within Groups	81.87	120	.68		
Parallel Purpose	3.83 (.99)	Total	83.33	123			
Integrated Purpose	4.09 (.75)						

Table 8

Purpose Commitment as Measured by Modified Purpose Scale, Differentiated by Purpose Classification: ANOVA Results

Classifications	M (SD)		SS	df	MS	F	Sig.
No Purpose	4.15 (.56)	Between Groups	.52	3	.17	.31	.82
One Purpose	4.22 (.71)	Within Groups	67.11	120	.56		
Parallel Purpose	4.09 (.93)	Total	67.63	123			
Integrated Purpose	4.24 (.67)						

Table 9

Crosstabs of Purpose Commitment Groupings, Purpose Classification, and Purpose Engagement

	Modified Purpose Scale Grouping			Total
	Low	Medium	High	
Purpose Classification with No Engagement				
One Purpose	3 (2.68%)	0 (0.00%)	3 (2.68%)	6 (5.36%)
Parallel Purpose	9 (8.04%)	8 (7.14%)	4 (3.57%)	21 (18.75%)
Integrated Purpose	15 (13.39%)	13 (11.61%)	10 (8.93%)	38 (33.93%)
Total	27 (24.12%)	21 (18.75%)	17 (15.18%)	65 (58.04%)
Purpose Classification with Engagement				
One Purpose	5 (4.46%)	5 (4.46%)	4 (3.57%)	14 (12.50%)
Parallel Purpose	3 (2.68%)	7 (6.25%)	3 (2.68%)	13 (11.61%)
Integrated Purpose	4 (3.57%)	7 (6.25%)	9 (8.04%)	20 (17.86%)
Total	12 (10.71%)	19 (16.96%)	16 (14.29%)	47 (41.96%)

Note. Crosstabs of Purpose Classification, Purpose Commitment, and Purpose Engagement: $X^2 = .57$; Crosstabs of Purpose Classification, Purpose Commitment, and No Purpose Engagement: $X^2 = .40$

Table 10

Regression of Purpose Engagement and Integrated Purpose with Purpose Commitment as the Outcome, as Measured by Modified Purpose Scale

Model	Standardized	Coefficient	Model F/Model Significance	<i>R</i> (<i>R</i> ²)
	coefficients Beta	Significance <i>t</i>		
1. (Constant)		43.84***	5.37*	.22 (.05)
Purpose Engagement	.22	2.32*		
2. (Constant)		31.95***	3.09*	.23 (.05)
Purpose Engagement	.23	2.42*		
Integrated Purpose	.09	.91		
3. (Constant)		28.51***	2.10	.24 (.06)
Purpose Engagement	.19	1.50		
Integrated Purpose	.05	.46		
IntegratedPurposeXPurposeEngagement	.06	.43		

Note. * $p \leq .05$. *** $p \leq .001$

List of Appendices

Appendix A.	<i>Modified Purpose Scale</i>	40
Appendix B.	<i>Modified Short Grit Scale</i>	41
Appendix C.	<i>Purpose Essay Prompt</i>	42
Appendix D.	<i>Purpose Classification Examples</i>	43
Appendix E.	<i>Examples of Purpose Engagement and No Engagement</i>	45

Appendix A

Modified Purpose Scale (Bundick et al., 2006; Lippman et al., 2014)

<p>Please decide how much you AGREE or DISAGREE with each sentence.</p> <p>To “Disagree” means that you DON’T think the sentence is true for you.</p> <p>To “Agree” means that you DO think the sentence is true for you.</p>					
	Disagree A LOT!	Disagree a little	Neither Agree Nor Disagree	Agree a little	Agree A LOT!
1. My life will make a difference in the world.	A	B	C	D	E
2. I am doing things now that will help me to achieve my purpose in life.	A	B	C	D	E
3. My life has a clear sense of purpose.	A	B	C	D	E
4. I am always working toward accomplishing my most important goals in life.	A	B	C	D	E
5. I have a purpose in my life that says a lot about who I am.	A	B	C	D	E

Appendix B

Modified Short Grit Scale (Duckworth & Quinn, 2009)

Please say how much these sentences describe you.

	Not at all like me	A little like me	Half the time like me	Usually like me	Always like me
1. I finish whatever I begin.	A	B	C	D	E
2. I am a hard worker.	A	B	C	D	E
3. I am diligent. "Diligent" means I am careful and responsible in the things I do.	A	B	C	D	E

Appendix C

Purpose Essay Prompt

In your classes and in your life you may have learned about and encountered people with a strong sense of purpose. Similarly, you might feel your own sense of purpose. In a five-paragraph essay, that includes an introduction, three body paragraphs, and a conclusion, please respond to the following:

- *What is your definition of purpose?*
- *What might be your purpose? Why?*
- *How would someone know that is your purpose in life?*

Appendix D

Purpose Classification Examples

No Purpose Example:

My purpose is still unknown to me. I am still deciding what I want to be, what I want to pursue, what my career is going to be and so on. I still do not know why I am here. Numerous things are still unknown to me and my purpose is included in that list. One day I think that I want to be a roboticist, the next I want to be a surgeon. I still have not made up my mind on what I want to be. I don't know if I want to create things or own a company or even save people. I still don't know what I love doing, maybe it's working with technology, maybe it's robotics, or even just solving problems. Hopefully I will know what I am passionate about and be able to pursue a career in that field.

One Purpose Example:

My purpose in life isn't really my goal, it's something that I've already achieved and is my intention in life. Helping others (5). Helping people is one of the best feelings, because making someone else happy makes you happy and it make you feel like a very good person...Giving advice, comforting people, community service...etc. Little things like that is a part of my Life that I Just naturally do.

Parallel Purpose Example:

My purpose would be to get good grades because I want to go to a good high school and a good college. I want to excel with A's and B's in school (6). Another purpose would be that I would help people more often (5). I could donate books, clothing, food or find someone a shelter to stay at...My purpose would be to get good grades.

Another purpose would be to help people more often. I could help them carry their groceries to their house.

Integrated Purpose Example:

I think my purpose in this world is to save lives (5). The lives being of people, animals, and whatever else is a living thing (5 and 11). I want to graduate high school and go to college or medical school (6) and study to become a doctor (1). I wish to be able to go work in a hospital or travel all over the world to save sick or injured people's lives. I also yearn to learn a lot about chemicals and medicine to help create a cure (10) for some of the world's most deadliest illnesses, such as Cancer, HIV, Ebola, Asthma, Diabetes, Polio, AIDS, and Lupus. Having some people in my family pass away from some of these diseases makes me want to strive even harder to create cures and prevent any other families from similar experiences.

Appendix E

Examples of Purpose Engagement and No Engagement

Purpose Engagement Example:

My parents would know that engineering is my purpose in life because I take baby steps by joining clubs. I work in the Lego Team. We build robots to perform challenges, dances, etc. The robot works from a brick. NXT brick. We program the brick while the brick scans the moves. Then the brick performs them.

No Engagement Example:

My purpose would be to get good grades because I want to go to a good high school and a good college. I want to excel with A's and B's in school. Another purpose would be that I would help people more often. I could donate books, clothing, food or find someone a shelter to stay at... My purpose would be to get good grades. Another purpose would be to help people more often. I could help them carry their groceries to their house.