



# SENG Journal: Exploring the Psychology of Giftedness

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Volume 2 | Issue 2


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September 2023

## Full Issue

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### Recommended Citation

Cross, T. L. (2023). Full Issue. *SENG Journal: Exploring the Psychology of Giftedness*, 2(2), 1-62.  
<https://doi.org/https://doi.org/10.25774/w947-ma49>

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# SENG Journal

Exploring the Psychology of Giftedness



SENGJ

Volume 2

Issue 2

September 2023

Editor: Tracy L. Cross

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*SENG Journal: Exploring the Psychology of Giftedness (SENGJ)* publishes original research on the psychology of giftedness biannually, in March and September. Rigorous quantitative and qualitative methodologies used in studies of the cognitive, social, and emotional realms will enlighten readers about the inner world of a unique population and contribute to our understanding of the development of talent. The journal also publishes reviews of research, theoretical explorations and interviews with thought leaders and experts on the psychology of gifted individuals. Articles have applicability for families, educators, counselors, psychologists, and all those with an interest in giftedness.

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ISSN 2831-5693

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## About This Issue

Welcome to Volume 2, Issue 2 of *SENGJ: Exploring the Psychology of Giftedness*. Across the previous three issues, our journal has experienced rapid growth and exceptional support from readers, contributors, and scholars. As a nascent journal, we are pleased to see our readership expand to over 100 countries, and to receive such stalwart support from leaders in the field, many of whom have agreed to be interviewed for these and future issues. As the editor of eight journals in the past four decades, I would like to extend my deepest gratitude to them, to the professionals who volunteer their time to review submissions, and to William & Mary and bepress for their help in establishing our open access model.

In this issue, *SENGJ* brings to light numerous important questions of and observations about the psychology of gifted and high ability students. It opens with an interview with Dr. Frank Worrell. Dr. Worrell is a multitalented individual, who has served as the president of the American Psychological Association, as a distinguished professor at the University of California, Berkeley, as well as being an outstanding singer and storyteller. He has been a key figure in the field of gifted education and is an invaluable voice for future educators.

The first empirical article is "Basic Psychological Needs, Socioeconomic Status, and Well-Being of Undergraduate Honors and Non-Honors Students." The authors use Self-Determination Theory as a lens through which to consider the aforementioned factors, and propose predictors of these students' well-being.

The second article, by Dr. Mihyeon Kim, is entitled "Relationships Among Ethnic Identity, School Attitudes, General School Self-Concept, and Academic Achievement of African American and Hispanic High-Ability Students from Low-Income Families." In this study, Dr. Kim examines self-reported attitudes from these students in order to seek ways of reducing the achievement gap by better understanding their experiences and needs.

Dr. Sal Mendaglio contributes the third article, "Sternberg's Transformational and Transactional Giftedness: A Dąbrowskian Interpretation." The article examines Robert Sternberg's descriptions of "transactional" and "transformational" giftedness, and proposes an association with Kazimierz Dąbrowski's theory of Positive Disintegration.

The fourth piece is a review of the literature, titled "The Pursuit of Eriksonian Fidelity in Education for the Gifted: A Literature Review Exploring its Interpersonal and Intrapersonal Determinants." The article collects and analyzes literature on challenges facing students with gifts and talents, with a specific focus on the role of schools in assisting with identity development as described by Erik Erikson.

As is tradition, the issue also closes with another interview in the Counsellor's Corner series, wherein I speak with Dr. Salvatore "Sal" Mendaglio. Sal has been active for decades as a counselor, as well as fighting for fairness and integrity in gifted education.






Interview

## Frank Worrell: An Interview with a Multitalented Psychologist

Frank Worrell, Ph.D. 

Interviewed by Tracy L. Cross, Ph.D. 

Dr. Tracy Cross interviews Dr. Frank Worrell about his career, his take on several important topics of the day and ideas for making gifted education as beneficial it can be. A former president of the American Psychological Association, Dr. Worrell speaks about the role that talent development can play to more fully reach the goal of maximizing the potential of students, and how the APA thinks about talent development and its application to schools.



Dr. Frank Worrell

**Cross** • Please tell the *SENG* readership about yourself. How did you become interested in gifted students?

**Worrell** • I was born in the capital of Trinidad and Tobago into a low-SES family, although we moved into the middle class when I was about eight years old. My father was a policeman, and my mother was an

elementary school teacher. I am the third of four children—I have two older sisters and a younger brother—and was the first in the family to go to college. I was named after Sir Frank Worrell, knighted by Queen Elizabeth II for his contributions to cricket—but spent a lot of time avoiding sport, as expectations for my performance were too high to my mind.

I did quite well in elementary school, although I did not attend one of the selective schools. In Trinidad, we write a secondary school entrance examination in Year 7, and my parents had me move to a different elementary school in Year 6 where there was a teacher who gave after-school lessons in arithmetic, as I was not doing well in that subject. When I did write the secondary school entrance examination, I got into my first choice, which was one of the Tier 1 secondary schools. Trinidad and Tobago does not have gifted education, but I realized when I became more knowledgeable about the field that my secondary school could be considered a gifted program. Interestingly, the school used grade acceleration with some students from the second year to the fourth year, an acceleration that I did not qualify for.

In secondary school, I spent a lot of time involved in the choir and the drama club and read copiously, but was not the most diligent when it came to studying.

In a system where your performance on the final examination for the year was your grade for the year, I was not very successful academically, especially in the upper grades. I repeated O-Level examinations so that I could stay at the same school (because of the choir) and then completed Levels. I passed all of my A-Level subjects, but my grades were not great. I completed my Bachelor's (Psychology major, English minor) and Master's (Educational Psychology) degrees in at the University of Western Ontario and was a teacher and counselor, and then a principal of the equivalent of a continuation high school before pursuing my Ph.D. in School Psychology at UC Berkeley.

My interest in gifted education was sparked in my doctoral program at Berkeley, where I started to teach in the Academic Talent Development Program, which began as the UC Berkeley Gifted Program in the early 1980s using the Talent Search model. In early 1989, the program's name was changed to the Academic Talent Development Program (ATDP), and I began working for the program in the summer of 1989. I was intrigued by the differences and similarities in motivation and expectations of students who were at risk for dropping out and students who were academically talented. I worked for that program as an instructor and graduate research assistant throughout my time at Berkeley. My dissertation work included a subsample from ATDP as a comparison group of students who were not-at-risk for dropping out, and my first academic appointment was at Penn State. My connection with ATDP continues to the present day and I now serve as the faculty director of ATDP.

**Cross** • Recently you served as President of the American Psychological Association (APA). What does APA understand about gifted students that is not common among educators who work directly with them and what explains the difference?

**Worrell** • American Psychological Association has over 140,000 members and about 500 staff, so it is hard to speak for APA generally. Of course, there are members of APA whose research or clinical practice involves individuals who are classified as gifted. Division 47 of APA is the Society for Sport, Exercise, and Performance

DOI: 10.25774/9ath-rt23

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Psychology, which focuses on improving individual performance, although most specifically in the area of athletics.

APA's focus on gifted students was galvanized when Dr. Rena Subotnik was hired in the early 2000s to join the Education Director as the Director of the Center for Psychology in the Schools and Education (CPSE). Dr. Subotnik's long term commitment to research on gifted students continued during her tenure at APA. In addition to starting an APA listserv for psychologists interested in gifted education, Dr. Subotnik included gifted education in the programs of the Education Directorate and co-chaired with me for several years the APA Coalition for High Performance Psychology. This coalition included psychologists from Divisions 3 (Experimental), 7 (Developmental), 10 (Aesthetics, Creativity, and the Arts), 14 (Industrial/Organizational), 15 (Educational), 16 (School), 17 (Counseling), 19 (Military), and 47 (Sport, Exercise, and Performance), and several members of this coalition contributed to the 2020 book published by APA entitled *The Psychology of High Performance: Translating Human Potential into Domain-Specific Talent*.

Speaking generally, APA's conceptualization of gifted students aligns with the talent development framework. APA policy supports the use of multiple indicators for identification of talented individuals and the consideration of cultural and contextual factors, and also supports providing opportunities and effective teaching and coaching for individuals on the talent development pathway. APA has policies on psychology from high school to post-doctoral programs and also has recommendations for tenure and promotion of faculty.

**Cross** • *I know you to be a multitalented person. For example, in addition to your academic successes, you are also a talented singer. Has having multiple talents informed your thinking about gifted education?*

**Worrell** • I am not sure that I would describe myself as a talented singer, but I do think that familiarity with music as a domain has informed my thinking. For example, in gifted education, schools often focus on identification with IQ, which is not domain-specific, and follow-up with generic programming for the students identified. However, in a domain like music, even the process of identification needs to be specific: Is the individual's potential in voice or violin or trombone? And once identified, programming also has to be specific to the individual's talent subdomain, be that conducting or composing, or playing an instrument.

Additionally, once an individual has been identified in a domain like music, they begin the journey of not only developing the talent, but also sharing that talent. Often from the first year of taking music lessons, students are expected to perform in showcases at the end of the year

for their parents and families, and the expectations for public performances increase as the individual continues down the talent development path. As the individual becomes more skilled, they perform before juries or in competitions. In sum, the development of musical talent is specific and public from the beginning of the talent development journey in a way that it often is not in gifted education programs.

This public display of knowledge is an integral part of all classes in ATDP's Elementary Division, with an open house at the end of the summer. It is also a part of many of the classes in the Secondary Division (e.g., Public Speaking, Robotics). And the notion of development moving from potential to achievement enroute to expertise is also highlighted in the talent development megamodel that I co-authored with Rena Subotnik and Paula Olszewski-Kubilius.

Being involved in multiple domains forced me to think about the trajectories of domains and the nature of the domain-specific requirements which students need to make progress in a domain.

**Cross** • *What do you see as a couple of the biggest issues of our day pertaining to gifted education?*

**Worrell** • There are several issues facing gifted education, and some of them are intertwined. The first is the notion of the "gifted child." There is such a tremendous focus on identification of children for the label, gifted, that we often neglect the reason for identifying students in the first place, which is to provide talent development opportunities to help them progress. The second issue, due in part to the lack of a federal mandate and federal funding for gifted education, is that we offer talent development opportunities to too few individuals. Moreover, as gifted education slots are limited, parents with more social capital and resources actively lobby for their children to be enrolled in gifted programs.

Related to the two aforementioned issues is the fact that identification for gifted education placement is frequently based on students having well-developed academic skills, which necessarily favors youth from families with more resources. Given what we know about the association of socioeconomic status with achievement outcomes across domains, including sport, it is not surprising that the students in gifted programs tend to be from more affluent families, contributing to the idea that gifted education is only for individuals from elite programs.

My belief is that the concept of a free and appropriate education (i.e., the standard applied to students with special education needs) should apply to all students including those who are doing well, and we can address the aforementioned concerns by using a talent development approach. Ideally, all schools should have both schoolwide and targeted enrichment opportunities,

beginning in kindergarten. In this way, gifted education will serve a broader range of students, including children with high potential who have not yet had opportunities for their potential to be developed.

**Cross** • *As a school psychologist who has considerable training in using instruments to learn about individuals, I have heard you speak about some of the claims about underrepresentation that you have indicated may be somewhat off base. What is your take on the issue of the underrepresentation of differing groups of children receiving gifted services?*

**Worrell** • The United States has an achievement gap problem that is real. Children from some ethnic-racial groups (e.g., Black, Latine, Native American, and some Asian groups) and low-income backgrounds perform less well on average on academic achievement outcomes than their peers from other ethnic-racial groups (Whites, some Asian groups) and higher-income backgrounds. Although the causes of the disparities in performance are still being debated vigorously, the disparities in achievement outcomes are omni-present and long-standing. As identification for gifted education programs is frequently based on tests of cognitive abilities and tests of achievement, both of which manifest the achievement gap, underrepresentation is inevitable.

The response by many scholars has been to blame the tests, arguing that the tests are biased. The fact is that these tests have been examined for bias more than any other instruments that we use, and they are not psychometrically biased—the differences in scores reflect the very real achievement gap that exists. This fact is reflected in data indicating that the average differences in scores among demographic groups occur not only in tests of cognitive abilities or intelligence, but also in tests of achievement (reading, mathematics, science, history, civics) and in grade point average.

Moreover, it is on the basis of these test scores that we know that students from different groups are not doing as well as their peers, which has implications for preparation, as the disparities in scores increase from kindergarten to Grade 12. Again, it is on the basis of these test scores that we know that COVID-19 had a disproportionately negative impact on some demographic groups, resulting in greater learning loss for some groups of students. Thus, the scores on both standardized cognitive and achievement tests provide an ongoing reminder of the fact that the education system is not serving all groups of students equally well and a benchmark that we can use to gauge progress.

**Cross** • *In a recent paper with Jonathan Wai, you discussed the future of intelligence research and gifted education. Can you share the most important ideas that you and Jonathan conveyed in that piece?*

**Worrell** • Intelligence is a highly controversial topic in the United States, in large part because of the differences

in the distributions of these scores across ethnic-racial and socioeconomic groups as mentioned above. Given the frequent use of intelligence test scores to identify individuals for gifted programming, intelligence is often “blamed” for the underrepresentation in gifted education. However, defined as the capacity to learn quickly, there are few who can deny that intelligence is an important individual-difference variable that plays a role in every situation and domain that involves learning and reasoning.

In the paper that Jonathan and I wrote, we attempted to look at the perspectives of individuals in the fields of intelligence and gifted education. We argued that although giftedness is far broader than intelligence, researchers interested in gifted education should have some understanding of how intelligence—the capacity to learn quickly—affects gifted performance. We also noted that research on behavioral genetics and artificial intelligence both have implications for gifted education, and recent advances in ChatGPT and other AI technologies have made such considerations even more important. Finally, we argued that intelligence researchers would benefit from paying more attention to applications and the impact of situational, contextual, and chance factors, as at least one of the goals of the field should be translating intelligence or raw ability into gifted performance.

**Cross** • *What single change do you think schools might make to help students with gifts and talents?*

**Worrell** • I already mentioned that all schools should have gifted education programs, including whole school enrichment opportunities. As many formal gifted education programs do not begin until the middle elementary school years, I would suggest that the whole school enrichment activities begin in kindergarten and continue through K–12, and that these activities not be limited to academics, but also include extracurricular activities, which for some students serve as the touchstone which connects them to school and education.

**Cross** • *Whose work has been an influence on your career and research interests?*

**Worrell** • Three of my major areas of research include talent development, cultural identities, and time perspective. With regard to talent development, my perspective has been informed by several scholars, including W. E. B. Du Bois, Jean Piaget, Lewis Terman, and Lev Vygotsky. Terman’s work showed that intelligence is not sufficient in explaining outstanding performance, and the life story and writings of Du Bois, who was a contemporary of Terman, highlighted the importance of equitable opportunities being provided in the context of the United States. Piaget’s writings on the increasing complexity of thought and Vygotsky’s zone

of proximal development also played a major role in my understanding of students' academic development. I still think that gifted education in particular and education more generally do not do a good job of challenging individuals with high potential.

My work on cultural identities has been strongly influenced by William E. Cross, Jr., Erik Erikson, John Ogbu, Claude Steele, and Vygotsky. All of these theorists stressed the importance of the social and cultural contexts in their theoretical frameworks, helping to set the stage for much of my work. Erikson's psychosocial theory also included the importance of time constructs such as anticipation of achievement and hope, variables which I have used in my dissertation study and beyond. Phil Zimbardo's contention that we should pay attention to individuals' thoughts and feelings about the past and the present, in addition to the future, also influenced my work in this area.

Finally, my career and work have been influenced by many advisors, professors, collaborators, colleagues, and former students, including Harry Murray, Nadine Lambert, Mark Wilson, Rhona Weinstein, Nina Gabelko, Pedro Noguera, Marley Watkins, Tracey Hall, Paul McDermott, Beverly Vandiver, Peony Fhagen, Barbara Schaefer, Zena Mello, Monika Buhl, Rena Subotnik, Paula Olszewski-Kubilius, Rodolfo Mendoza-Denton, Sandra Graham, Malcolm Woodland, Michael McKay,

James Andretta, Michael McKay, Christine Rubie-Davies, Penelope Watson, Melinda Webber, Mohamed Alansari, Jonathan Wai, Mercedes Zapata, and many others.

**Cross** • *What message or point would you like to leave with the readership?*


**Worrell** • The most important message for the field, from my perspective, is for individuals in the field of gifted education to be honest brokers, recognizing that we are all working toward the same goal. It is fine to disagree with each other—indeed, the knowledge base will stagnate if everyone agrees on every topic. However, disagreement is not the same as dismissal or contempt. Attacking individuals personally because they hold a different point of view is neither professional nor scientific, nor does it help us to advance the field. Being an honest broker means: (a) using the established quantitative qualitative, and mixed methods that we have for advancing knowledge, (b) being skeptical about what we think we know, (c) actively looking for disconfirming evidence for the hypotheses that we advance, (d) being honest in our interpretation of our findings, (e) acknowledging the limitations of our research, and (f) being open to the possibility that the views we hold are incorrect or incomplete.

**Frank Worrell, Ph.D.** is a Distinguished Professor at the University of California, Berkeley. His areas of expertise include at-risk youth, cultural identities, scale development, talent development, time perspective, and the translation of psychological research findings into practice. Author of over 300 scholarly works, Dr. Worrell is a Fellow of the Association for Psychological Science, the American Educational Research Association, and five divisions of the American Psychological Association (APA), and an elected member of the Society for the Study of School Psychology and the National Academy of Education. A former editor of *Review of Educational Research*, Dr. Worrell is a recipient of the Distinguished Scholar Award from the National Association for Gifted Children, the Distinguished Contributions to Research Award from Division 45 of APA, the Outstanding International Psychologist Award from Division 52 of APA, an Outstanding School Psychologist Award from the California Association of School Psychologists, and an Honorary Doctorate from Heidelberg University. He was the 2022 President of the American Psychological Association.



## Basic Psychological Needs, Socioeconomic Status, and Well-Being of Undergraduate Honors and Non-Honors Students

Rebecca M. Johnson, Ph.D.

Rachel U. Mun, Ph.D. Jaret Hodges, Ph.D. 

Anne N. Rinn, Ph.D.

### Abstract

Basic psychological needs, socioeconomic status and involvement in honors programs may impact well-being of undergraduate students. This exploratory study examines these factors and uses Self-Determination Theory as a lens to interpret the effect on well-being of undergraduate honors and non-honors students. Self-Determination Theory (SDT) is a macro theory of motivation and personality development that relates to individuals' need for autonomy, competence, and relatedness, and addresses the social-emotional and cognitive components needed to ensure individuals' well-being. In this study, researchers examined the relationship among basic psychological needs, socioeconomic status, honors participation, and well-being of 252 undergraduates. Results of a regression analysis indicated that well-being is primarily predicted by autonomy, competence, and relatedness. We discuss the implications of our findings for educators and researchers.

**Keywords:** *basic psychological needs • self-determination theory • well-being • gifted • honors • postsecondary • undergraduate • motivation*

Undergraduate students experience many social and academic stressors that can negatively impact their sense of well-being. Common stressors include the navigation of challenging courses, peer and family relationships, career planning related to an uncertain future, and financial obstacles (Hammond et al., 2007). Psychological distress due to these stressors can lead to anxiety disorders, depression, substance abuse, and suicide in student populations, which is cause for public health concern (Cross & Cross, 2015; Saylor et al., 2015). One study found that nearly half of college-aged individuals experience mental health disorders (Blanco et al., 2008). More recently, the World Health Organization (WHO) reported that 35% of full-time college students in 19 colleges across eight countries including the United States screened positive for at least one of six common mental health disorders (e.g., depression, anxiety) (Auerbach et al., 2018).

The prevalence of mental illness in undergraduate students indicates the importance of examining and supporting their well-being. Subjective well-being is defined as a multi-faceted concept derived from perceptions of happiness, health, and comfort relative to a given context (Cummins, 2010; Davern et al., 2007; Diener, 2000; Pollet & Schnell, 2017). This includes the self-reported impact of positive and/or negative experiences, judgment of overall life satisfaction, sense of purpose, sense of belonging, and the ability to be a contributing

member of a particular group. Considering this, and that a sense of well-being can be associated with positive social and academic experiences, "college represents a specialized educational intervention," in part, because of the quality of teachers who are specialized in their field, selected area of study, and opportunities to learn in different types of settings (Saylor et al., 2015, p. 238). Additionally, self-determination theory (SDT; Deci & Ryan, 2008), a macro theory of motivation, suggests that the three basic psychological needs of *autonomy*, *competence*, and *relatedness*, are essential for optimal well-being. Understanding these factors can help researchers better understand how fulfillment of these needs relates to a student's sense of well-being.

Furthermore, participation in undergraduate honors programs may help support student well-being by providing an environment of appropriate academic rigor and like-minded peers (Boazman et al., 2012; Rinn & Plucker, 2019). In a recent systematic review of research, Rinn and Plucker (2019) found that honors program participation was associated with generally positive academic and socioemotional outcomes. However, they also note that students in these programs already tend to be "high achievers, have positive academic self-perceptions, and are motivated for success" (p. 208), so the extent to which honors participation contributes is not clear and more research is needed. Plominski and Burns (2018) surveyed 1027 undergraduate students (641 enrolled in honors programs) and found higher levels of reported well-being in students who participated in honors programs compared to students who did not. The authors conjectured that the specialized educational context of honors programs was most likely responsible

DOI: 10.25774/wsy8-d929

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for the differences in psychological well-being in their study, although further research was recommended to substantiate their findings. For students who experience the additional challenge of financial constraints and the feeling of "differentness" due to lower socioeconomic status, the support found in honors programs may mitigate some of these barriers.

## Study Purpose

The purpose of the current study is to examine how socioeconomic status, basic psychological needs (Deci & Ryan, 2008), and honors program participation relate to well-being in undergraduate students. This is an exploratory study, within the context of general predictions about the well-being of undergraduate honors and non-honors students. We predict that well-being may be impacted directionally by the factors outlined.

This study is important because it examines the potential role of psychological needs, socioeconomic status, and honors college participation on the well-being of undergraduate students. Previous studies have examined undergraduate honors programs with regard to student well-being but minimally so in the context of basic psychological needs despite their potential role in supporting positive socioemotional development (see Plominski & Burns, 2018). Additionally, in a study of educational outcomes and well-being among 380 undergraduate students, El Ansari and Stock (2010) found there to be a "reciprocal relationship" between academic achievement and well-being variables (p. 13). Given the critical timing of undergraduate studies on the talent development trajectory for many gifted and talented individuals, the study of undergraduate experiences, and particularly the experiences of students enrolled in programs designed to facilitate the development of academic talent, such as an honors program, is important. The results of the current study may provide universities with the knowledge of how academic rigor, motivation fostered by fulfillment of basic psychological needs, and well-being are potentially connected in ways that may shape current and future mental health of students who participate in undergraduate honors programs. The findings from this study may also help undergraduate honors program administrators and counselors to better understand and serve students in their programs.

## Undergraduate Student Well-Being

Well-being is a multi-faceted concept derived from the evaluation of self in the context of purpose, life satisfaction, sense of belonging, belief about ability to contribute to society in meaningful ways or living up to one's potential within a given context (Cummins, 2010; Diener, 2000; Pollet & Schnell, 2017). Among undergraduates, in particular, research largely shows

that well-being is associated with opportunities to experience meaningful relationships with peers and faculty, to have support across academic areas (e.g., appropriately rigorous, meaningful work and agency to self-select courses of interest) and non-academic areas (e.g., extracurricular activities, resident life), to have opportunities to engage in areas of academic interest, and to feel connected via group membership (Morrow & Ackerman, 2012; Pollet & Schnell, 2017; Sayler et al., 2015). Ridner et al. (2016) suggested that pressure to maintain acceptable levels of academic performance as determined by external criteria experienced by college students may be related to well-being. Well-being among diverse samples of undergraduates has been examined according to their participation in different organizations on campus including honors programs (Boazman et al., 2012; Liu et al., 2019; Mammadov et al., 2018; Plominski & Burns, 2018; Rinn, 2005).

## Undergraduate Honors Programs and Well-Being

Undergraduate honors programs exist on many college and university campuses to serve academically talented undergraduates. These programs provide "opportunities for measurably broader, deeper, and more complex learning-centered and learner-directed experiences for its students than are available elsewhere in the institution" (The National Collegiate Honors Council, n.d.). Cross and Cross (2015) suggest social interactions with equally able peers impact an individual's development and experience. Additionally, in a review of the literature, Baumeister and Leary (1995) concluded that there are "multiple links between the need to belong and cognitive processes, emotional patterns, behavioral responses, and health and wellbeing" (p. 522). Being part of an undergraduate honors program may influence social interactions, sense of belonging, and ultimately well-being because of the opportunity for engagement with equally able and like-minded peers.

Rinn (2007) found that honors college participants had higher levels of self-concept than non-honors college participants unrelated to GPA and/or SAT scores, indicating that participation alone positively impacted one aspect of well-being. Plominski and Burns (2018) examined the status of well-being among 641 honors students and 386 non-honors students using students' self-reported responses on measurements of well-being. They found that among sophomores and juniors, honors students had higher levels of life satisfaction and academic self-efficacy; and among seniors, honors students had higher levels of life satisfaction, satisfaction with self, and academic self-efficacy, and lower levels of negative perfectionism, depressed affect, anxiety, and perceived stress as compared to non-honors students.

Feelings of belongingness and connections to the university contribute to self-concept, well-being, and

academic achievement in the context of an undergraduate honors program (Hébert & McBee, 2007; Morrow & Ackerman, 2012). Young et al. (2016) examined honors students' perspectives in the context of college honors program participation and found the following three emergent themes among college honors students: *connectedness*, *community*, and *opportunity*. Specifically, students expressed a sense of connectedness among their honors peers, feeling like they were part of a community, and the role of access to professors and other opportunities which contributed to their academic success and motivation. As feelings of *connectedness*, *community*, and *opportunity* promote healthy social-emotional outcomes, these findings suggest the importance of participation in honors programs in fostering a sense of belonging and well-being among academically talented undergraduates.

A number of researchers have examined the well-being of high ability and high achieving college students (Boazman & Sayler, 2011; Hertzog & Chung, 2015; Mun & Hertzog, 2019; Sayler et al., 2015). For example, Boazman and Sayler (2011) examined well-being as a measure of happiness among gifted students who entered college early. They found students who participated in early college programs had greater levels of well-being based on self-reported life satisfaction, safety, and security compared to same-age peers. Sayler et al. (2015) examined 533 participants, 415 of whom were early college students (current participants or completers of the program) and 118 of whom were college honors students. They found that high-ability college students' overall well-being was reported as positive with higher-than-expected rates in the areas of standard of living, achievement, and feelings of safety and lower than expected rates in the areas of relationships and connections to others. Comparatively, early college entrance students reported higher standard of living and relationships but lower sense of safety and security.

Pollet and Schnell (2017) examined predictors of well-being and meaningfulness in the context of goal pursuit as demonstrated by an active, involved lifestyle and self-acceptance as demonstrated by positive self-perceptions among gifted adults compared to the general population. Predictors of well-being included satisfaction with work as it relates to school experiences and self-compassion. Additionally, the authors considered the varied paths toward well-being of gifted adults compared to non-gifted adults. Participants were categorized as follows: intellectually gifted ( $n = 198$ ), high achievers ( $n = 141$ ), and non-gifted ( $n = 136$ ). They found that *generativity*, or consideration of the greater good, was the strongest predictor of meaningfulness among intellectually gifted participants, and joy of working was a strong predictor of well-being among all participants and to a greater extent for intellectually gifted participants. They also found that high achie-

vers reported more positive school experiences than the intellectually gifted. These findings suggest that paths toward meaningfulness and well-being not only differ among gifted and non-gifted adults but also indicate that meaningful work and school experiences are related to well-being among gifted adults. Based on these findings which showed "demotivating school experiences" and perceptions of less meaningful, less joyful work among highly intellectual participants, the authors recommended further research to address "diminished meaningfulness and subjective-wellbeing among Intellectually Gifted" (p. 1479). The authors' findings indicate the need for continued research on well-being and SDT, and specifically, in the context of SDT as a means to measure perceptions of meaningful, thus motivating, work.

### ***Influence of Socioeconomic Status***

Castillo-Lavergne and Destin (2019) examined the intersection of multiple identities including the ethnic and socioeconomic status of 98 college females who identified as Latinx and as from working-class families and found that the complexity of multiple identities of race and ethnicity along with socioeconomic status was related to experiences dependent on supportiveness of college environments. If participants had high stability in racial or ethnic identity but low sense of stability or certainty in socioeconomic status, the influence of the college environment was less significant. Whereas, when both ethnic and socioeconomic status factors were low, the influence of the college environment had greater significance. These findings indicate that the role of socioeconomic status needs to be understood and addressed in supportive ways by post-secondary institutions and programs as low socioeconomic status creates barriers to success for students experiencing intersectionality of identities.

The burden of helping low-income students overcome academic challenges may lie with teachers and experts who are empowered to address the academic and economic needs of these students (Boaler, 2003). "Gifted and talented students from underrepresented populations of ethnic minority and low-income students are too often oversimplified" which may conflict with the academic qualifications to participate in rigorous programs versus external support and internal feelings of self-doubt about ability to succeed in rigorous programs (Callahan, 2005, p. 99). Students from low socioeconomic status may not have access to affordable and appropriate social services (Bolland et al., 2018). Instability in daily life such as limited access to affordable health care may hinder a student's health and adversely affect academic performance and/or achievement (Bolland et al., 2018).

## Self-Determination Theory of Motivation and Psychological Need Fulfillment

SDT can be conceptualized as a macro theory of motivation that looks at positive individual functioning as a whole by investigation of basic needs and what Ryan and Deci (2000) call “inherent growth tendencies” (p. 68). The theory includes four interrelated sub-theories: basic needs theory, cognitive evaluation theory, organismic integration theory, and causality orientations theory. In the basic needs theory, Ryan and Deci (2000) argue that three fundamental psychological needs—*competence*, *autonomy*, and *relatedness*—are vital for promoting innate growth propensities that facilitate best functioning in an individual. Having a sense of autonomy is derived from having agency to make decisions; having a sense of competence is derived from feelings of effectiveness in a given context; and having a sense of relatedness is derived from feelings of connectedness to others in a meaningful capacity (Deci & Ryan, 2000, 2008).

Satisfaction of these basic needs leads to many positive effects including a positive sense of well-being whereas an obstacle to fulfilling one or more of these needs leads to various deleterious effects. Thus, one focus of SDT is to explore how factors in the environment affect the acquisition of the three needs and therefore promote or undermine “self-motivation, social functioning, and personal well-being” (Ryan & Deci, 2000, p. 69). SDT is used to examine the well-being of undergraduates through each of these components and a number of researchers have applied this theory in their study with high-ability undergraduate students (e.g., Almukhambetova & Hernandez-Torrano, 2020; Mammodov et al., 2018).

Mammodov et al. (2018) conducted a mixed-methods analysis through the SDT lens on 26 early college entrance alumni who were also honors program participants. They found that students who enrolled in an early college program did so to achieve autonomy in multiple ways which include seeking more rigorous academic challenge and having control over their academic choices. Interest and self-motivation were drivers of the competence component of SDT as participants sought to find intellectual experiences in which they were both interested and challenged. In the component of relatedness, the authors found that intrinsic motivation was relative to being surrounded by others with similar characteristics, such as high achievement.

The findings supported that needs and characteristics associated with SDT are foundational to well-being (Mammodov et al., 2018). The experience of gifted undergraduate students in academic and social-emotional areas includes the need for meaningful coursework and quality personal relationships respectively; both of these areas may influence psychological well-being (Almukhambetova & Hernandez-Torrano, 2020).

Using the SDT lens, Almukhambetova and Hernandez-Torrano (2020) examined the experience of students who are gifted in university settings. Specifically, SDT was used to examine influences on college students’ intrinsic (autonomous) and extrinsic (reward-based) motivation as it relates to adjustment and achievement in post-secondary settings. They found that the following factors were considered influential on well-being of high-ability students: quality of pre-college gifted programs; ability of the university to provide appropriately matched academic and social opportunities; the support of parent and others’ expectations aligning with self-concept; students’ ability to rise to the challenge of unstructured, impersonal environment; overcoming the fear of failure and negative self-image; growth and acceptance of evolving identities. The experience of gifted undergraduate students in academic and social-emotional areas includes the need for meaningful coursework and quality personal relationships respectively, both of which may influence psychological well-being (Almukhambetova & Hernandez-Torrano, 2020).

## Research Questions

The following research questions guided this study:

1. How do the three basic psychological needs (competency, relatedness, and autonomy), socioeconomic status, and honors college membership relate to well-being in undergraduates?
2. To what extent does socioeconomic status affect the relationship among competency, relatedness, autonomy, and honors college membership in undergraduates?

## Hypotheses

Interest-driven programs such as college honors programs may provide the goodness-of-fit needed for high-ability and high-achieving undergraduates. Furthermore, SDT outlines how fulfillment of basic psychological needs is vital for students’ sense of well-being. Therefore, we hypothesize that participation in an honors program will be related to higher levels of well-being since the student’s sense of competence, autonomy, and relatedness could potentially be met by access to meaningful, self-selected coursework and access to equally able and like-minded peers. We also hypothesize that the level of socioeconomic status will directly correspond to the level of well-being (e.g., higher level of SES will correspond to higher level of well-being).

## Methods

This study examines the well-being of undergraduate students who elected to participate in a larger study examining an array of psychosocial constructs of under-

graduates including perfectionism, imposter phenomenon, personality, motivation, and well-being. Only the data needed to answer our research questions for the current study—the self-reported responses to the 21-item Basic Psychological Needs Satisfaction questionnaire, the 5-item well-being assessment, and relevant demographic characteristics—are reported. Recruitment of participants was facilitated by faculty members and graduate student research assistants. Participation was voluntary and no incentives or compensation for participation were offered. Age requirement for participation was a minimum of 18 years old. An online survey was used to anonymously collect participants' responses following receipt of an informed consent document. Participants had the option of discontinuing the survey at any point. Participants' responses were collected anonymously.

### Participants

The sample consisted of 252 undergraduate students. In the sample, 37.5% ( $n = 95$ ) of students were members of an honors college and 62.5% ( $n = 157$ ) were not members of an honors college at a Southwest university in the United States. Eligibility for honors college participation is based on nationally standardized SAT/ACT tests representing minimum scores—a minimum of 1200 combined on both the verbal and mathematics sections on the SAT or a minimum of 27 on the ACT, high school grade point average  $> 3.75$ , and rank in the top 20% of their high school graduating class. Additionally, the honors admissions process considers the following: a written component, an optional addendum, and high school academic record.

The honors students in this study are participants of the honors program at a university located in the southwest region of the United States. The program offers incentives for high-achieving students who are earning first-time bachelor's degrees. The program incentives include specialized residence halls, smaller class sizes designed to facilitate a broad range of interests and to stimulate intellectual curiosity, and a choice of culminating honors assignments leading to honors distinction upon graduating.

The average age of participants was 21.34 years ( $SD = 5.06$ ). Additional demographics of the sample included the following: 21.5% identified as male, 76.9% identified as female, and 1.6% identified as non-binary. Participants reported their ethnic/racial background as White (53.0%), Hispanic or Latinx (23.9%), African American or Black (8.4%), Multiracial (7.2%), Asian American or Asian (6.0%), American Indian or Alaska Native (.8%), and other (.8%). The sample was 21.9% freshmen, 29.9% sophomores, 25.1% juniors, and 22.3% seniors. When compared to the general university demographics, this sample included a greater percentage of

students identified as female (76.9% compared to 53%), some differences in ethnic/racial representation (notably 53% White as compared to 41% and 8.4% Black as compared to 14%), and fair distribution of grade levels from freshman to senior with slightly more sophomores represented overall.

### Variables and Measures

In our analysis, we included one dependent variable and five independent variables. Well-being is our dependent variable. The independent variables are autonomy, relatedness, competence, socioeconomic status, and honors college membership. Autonomy, relatedness, and competence are noted as the three basic psychological needs according to the Self-determination Theory—a macro theory of motivation.

**Well-being.** The World Health Organization-Five Well-Being Index (WHO, 1998; Topp et al., 2015) measure of well-being is a five-question assessment used for children and young people aged 9 years and older. It is administered as a self-report survey with a six-point Likert scale ranging from 0 (*at no time*) to 5 (*all of the time*). The WHO-5 is considered a valid assessment (Topp et al., 2015) used to screen for depression and measure subjective well-being in children and young people. For example, in a review of the literature, Topp et al. (2015) found that among 213 articles published in clinical and medical journals, the WHO-5 held its clinical validity and is useful across multiple fields. In a study of 2,099 participants, Naor et al. (2022) assessed the well-being of participants using the WHO-5 to determine the effectiveness of implementing an intervention. In the study, participants' well-being significantly improved following the intervention and using the results of the WHO-5 pre and post-intervention as a baseline. The study is an example of the prevalent use of the WHO-5 due to its long-established validity (Autin et al., 2022; Blom et al., 2012; Uzman, 2014). The WHO-5 uses responses about mood and vitality to measure quality of life. Questions about mood include, "I have felt cheerful and in good spirits," and questions about vitality include, "I woke up restful and refreshed." The WHO-5 measure of well-being has been used in other studies of gifted and non-gifted adults (Pollet & Schnell, 2017; Saylor et al., 2015; Topp et al., 2015). In a systematic review of the literature, Topp et al. (2015) examined multiple studies across a variety of disciplines to assess the validity of the WHO-5. They found that research consistently supports the use of the WHO-5 across multiple fields as an informative and integral tool to assess levels of well-being including the detection of depression and suicidality among other medical conditions.

In our study, well-being is a composite variable. It is the summation of the WHO-5 Likert scale



scores; as such, an individual can score from 0 to 25, with higher scores indicating higher levels of well-being.

**Basic Psychological Needs Satisfaction.** Psychological needs satisfaction in general in one's life was measured using the Basic Psychological Needs Satisfaction questionnaire (Deci & Ryan, 2000; Gagné, 2003), which is a 21-item questionnaire and self-report measure to which participants respond to questions on a seven-point Likert scale ranging from 1 (*not at all true*) to 7 (*very true*). The Basic Psychological Needs Satisfaction questionnaire measures satisfaction of three intrinsic needs of participants in one's life which are associated with motivation—autonomy, competence, and relatedness. Of the 21 questions, 7 are related to autonomy, 6 to competence, and 8 to relatedness.

**Socioeconomic Status.** Socioeconomic status is defined as perceived household income prior to entering college. Participants self-reported socioeconomic status by answering a single question about perceived socioeconomic status based on parents or individuals with whom one resided prior to entering college. Participants were asked to respond to the question, "Think about your parents, or the individuals you lived with for most of your life prior to college. How you would describe their income level?" on the following scale: 1 = *poverty or close to it*, 2 = *low/middle*, 3 = *middle (average)*, 4 = *middle/high*, and 5 = *wealthy or close to it*. Responses were recoded as 1 and 0, where 1 and 2 were recoded as 1 and 3, 4, 5 were recoded as 0 (1 = *poverty*, 0 = *not poverty*). Doing this allows us to treat our categorical scale as a binary variable. We did this because there were small areas (i.e., categories with few observations) that would make any inference on those categories likely misleading (Manor et al., 2000). As such, we chose to limit our inference on socioeconomic status rather than misrepresent participants' SES.

**Honors college participation.** Honors college participation was defined as being a member of the university honors program. Honors college participation is signified within our model by a binary variable, such that 1 = *honors college participation* and 0 = *non-honors college participation*.

## Analysis

We conducted our regression analysis using R 4.0.5 (R Core Team, 2021) in conjunction with the following packages: *mice* (van Buuren & Groothuis-Oudshoorn, 2011), and *ggplot2* (Wickham, 2011).

## Model

In our analysis, we used the following model:

$$\text{Well-Being} = \text{Honors College Participation} + \text{Autonomy} + \text{Competence} + \text{Relatedness} + \text{SES}$$

**Table 1:** Descriptives of undergraduate honors and non-honors students

Variables	<i>n</i>	<i>M</i>	<i>SD</i>
Well-being	252	16.4	4.8
Autonomy	252	4.02	0.6
Competency	252	3.76	0.6
Relatedness	252	4.42	0.51

This model states that an undergraduate's reported sense of well-being (*Well-Being*) is predicted by their membership within the honors college program (*Honors College Participation*), their self-reported feelings of autonomy (*Autonomy*), their self-reported feelings of competence (*Competence*), their self-reported feelings of relatedness (*Relatedness*), and their self-reported socioeconomic status (*SES*). Finally, model effect size was calculated using the method described by Gelman et al. (2013).

## Missing Data

In total, there were 17 respondents with missing data (6.78% of cases). Of those 17, 2 had missing data across multiple variables representing an overall rate of missing of 1.26% across the dataset. To address missing data, we used a strategy of multiple imputations following von Hippel's (2020) guidelines. Under von Hippel's guidelines, the number of imputations is calculated based on the overall missingness of the data coupled with a researcher-determined coefficient of variation (where a smaller coefficient of variation yields a greater number of total imputations). Using this formula, and a coefficient of variation of .005, we calculated needing four imputations. To conduct these imputations, we used the *mice* package for R (van Buuren & Groothuis-Oudshoorn, 2011).

## Results

### Descriptives

Descriptive statistics were calculated for all variables. The mean of our dependent variable, well-being, was 16.4 (*SD* = 4.80). For our three Basic Psychological Needs variables, the mean of autonomy was 4.02 (*SD* = 0.60), competence was 3.76 (*SD* = 0.60), and relatedness was 4.42 (*SD* = 0.51). For our demographic variables, 37.5% of respondents indicated they participated in honors. Of all respondents, 26.69% self-identified as being from low socioeconomic status backgrounds. Table 1 contains complete descriptive statistics.

### Model Estimates

The full results can be found in Table 2. Model estimates should be interpreted such that a one-unit change in the estimate corresponds to a one-unit change in the

**Table 2:** Results from the regression with multiple imputations

Variable	Estimate	Error	CI Lower	CI Upper	Rhat
Intercept	-0.782	0.557	-1.874	0.313	1.023
Relatedness	0.194	0.119	-0.041	0.429	1.003
Autonomy	0.534	0.104	0.329	0.739	1.001
Competence	0.26	0.103	0.062	0.465	1.06
SES	0.017	0.064	-0.108	0.143	1.001
Honors	0.085	0.114	-0.137	0.306	1.001

Note: CI=confidence interval

composite score of a participant's reported sense of well-being (0 to 25 scale). Honors college membership, autonomy, competence, relatedness, and SES were used in a standard regression analysis to predict well-being of college undergraduates. The honors college membership, autonomy, competence, and relatedness variables were statistically significant, but the SES variable was negligible. The model accounted for 24% of the variance explained in well-being. Well-being was related to autonomy, competence, and relatedness (all of which are components of the SDT assessment measuring basic psychological needs). Table 4 shows the structure coefficients and standardized beta coefficients. Structure coefficients provide insight into the variance which is uniquely explained by the independent variables (Henson, 2002). In our study, autonomy was strongly related to well-being ( $\beta = .340, p < .001$ ) making it the strongest predictor of well-being followed by competence and relatedness. Relatedness was also related to well-being ( $\beta = .097, p < .001$ ). Competence was also related to well-being ( $\beta = .173, p = .001$ ) This provides evidence that respondents reported competence is related to their reported well-being. In comparison, this suggests that the relationship between autonomy and well-being is likely meaningfully different from the relationship between relatedness or competence and well-being. This can be interpreted as each reported unit increase in a respondent's self-reported feeling of autonomy translated to a 0.55 increase in the composite well-being score on a 0 to 25 scale.

Socioeconomic status was not related to well-being in our study ( $\beta = .014, p = .75$ ). This provides strong evidence that the relationship between respondents'

reported well-being and their reported socioeconomic status is non-existent to negligible. Additionally, the relationship between whether a respondent participated in the honors college was not strongly related to their reported well-being ( $\beta = .048, p = .04$ ).

### Diagnostics

An analysis of the residual plots provided no evidence for a violation of homogeneity. An analysis of the correlation plot (see Figure 1) provided evidence of multicollinearity between the three variables of interest (*autonomy, relatedness, and competence*). Given the theoretical background related to these constructs (Deci & Ryan, 2000), multicollinearity between them was not surprising. It is likely that the confidence intervals associated with these three variables are overly wide (i.e., the standard errors of the coefficients are larger than they would otherwise be if there was not multicollinearity). Figures 2 and 3 contain raincloud plots of well-being and honors college membership and SES, respectively. Figure 2 shows the distribution and centrality of well-being based on honors college membership. Figure 3 shows the distribution and centrality of well-being based on SES.

### Discussion

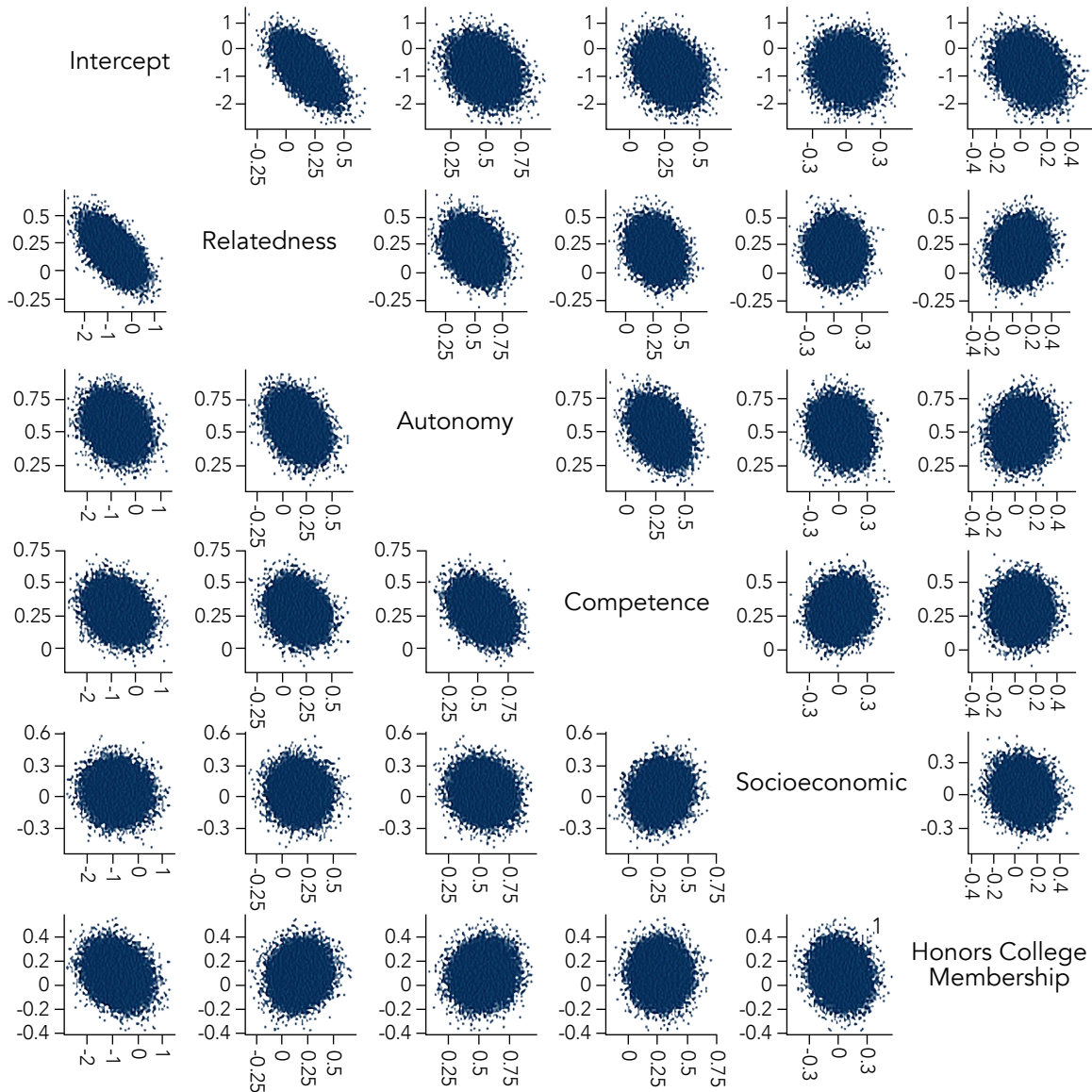
This study examined the relationship among socioeconomic status, psychological need fulfillment, honors program participation, and well-being of undergraduate students. We found that *autonomy, competence, and relatedness* had the strongest relationships with well-being,

**Table 3:** Beta weights and structure coefficients

Variable	B	$\beta$	r	$r_s$	$r_s^2$
Honors College Member	0.95	0.48	.044	.089613	.008*
Autonomy	.544	.340	.450	.91496	.83996**
Competence	.278	.173	.351	.714867	.51104**
Relatedness	.181	.097	.298	.606924	.36836**
SES	.016	.014	.068	.138492	.01918

Note: \*p = <.05, \*\*p = <.001

**Figure 1:** Correlation plot



respectively, indicating that these components of basic psychological needs play the largest roles in predicting well-being. This aligns with previous findings which indicate that subjective well-being among undergraduate students is related to relatedness, competence, and autonomy (see Reis et al., 2000). Additionally, gifted students from low socioeconomic status may not have the opportunity to focus on their academic needs if their most basic needs are not met thus inhibiting the motivation needed for goal achievement (Peterson, 2015).

### Basic Psychological Needs and Well-being

Our findings are consistent with prior research on SDT and well-being (Ryan & Deci, 2006). While fulfillment of all three basic psychological needs is important to

well-being, autonomy may be particularly important for its role in whether individuals feel they are living authentically. Autonomy, or self-regulation according to SDT theorists (Ryan & Deci, 2006), involves an individual who is ruled "by the self" (p. 1562) and not by outer forces. Motivation is fostered by meaningful work and meaningful connections and is associated with positive self-perceptions when engaging in social comparison, ability to have choice and voice in pursuing academic interests, perceptions of living up to one's potential, and maintaining a sense of belonging (Baumeister & Leary, 1995; Pollet & Schnell, 2017; Siegle et al., 2010). Additionally, Gagné (2003) described agency, ability to choose or self-select, as foundational to establishing intrinsic motivation and finding enjoyment in a particular activity of choice. In a study that examined prosocial behaviors via SDT, Gagné found that autonomy orien-

tation and support for autonomy in a given context were most related to individuals' prosocial behavior. Considering this and our own findings that autonomy was the primary predictor of well-being, having choice and voice is essential in promoting well-being among undergraduates.

### Honors Participation and Well-being

The findings of our analysis indicate that small differences exist between those undergraduates who participated in honors and those who did not. While our hypothesis that honors program participation would be related to higher levels of well-being was not strongly supported, there is insight to be gleaned from these results. As previous research has examined year in school, it is possible that students' year in school is a potential moderator of the relationship among honors participation, motivation, socioeconomic status, and well-being (Plominski & Burns, 2018; Rinn, 2005). Additionally, Saylor et al. (2015) suggest that while differences among honors and non-honors students are negligible, this may be a result of having different paths to and/or perceptions of life satisfaction or well-being. If goal attainment or achievement is perceived differently among students with varied academic abilities, this may account for similarities in honors versus non-honors participation results, however, for different reasons. It is recommended that future studies examine these differences so that university administrators and counselors can best address the needs of honors program participants through their undergraduate journey. Additionally, future studies should examine honors and non-honors separately to check for any potential differences in patterns of relationships regarding predictors and outcomes.

### Socioeconomic Status and Well-being

While socioeconomic status was used as a predictor in this study, limitations include that socioeconomic status in isolation from race/ethnicity was examined. As our findings are counter to the literature which supports an intersectionality of race and socioeconomic status with a disparity among minority populations having low socioeconomic status as compared to the majority population, different possibilities may explain our findings. First, considering the known disparity between socioeconomic status between minority and majority race membership, future research is needed to examine this intersection to gain a more holistic view of how socioeconomic status and race/ethnicity together are related to well-being in undergraduate students in honors programs. Secondly, there is the possibility of pure statistical chance by viewing socioeconomic status in isolation from other known intersectionalities. In which case, we caution against accepting the current results regarding socioeconomic status without further

analysis to include other variables. Those variables may directly correlate to socioeconomic status and provide a clearer picture of its relationship to the well-being of undergraduate students who belong to minority racial/ethnic groups. Additionally, the homogeneous socioeconomic demographic of the campus may have skewed students' perceptions if students are assessing their own socioeconomic status by engaging in social comparison with others with similar socioeconomic status backgrounds. In other words, if campus-wide socioeconomic status is similar, students may be less likely to perceive differences by social comparison.

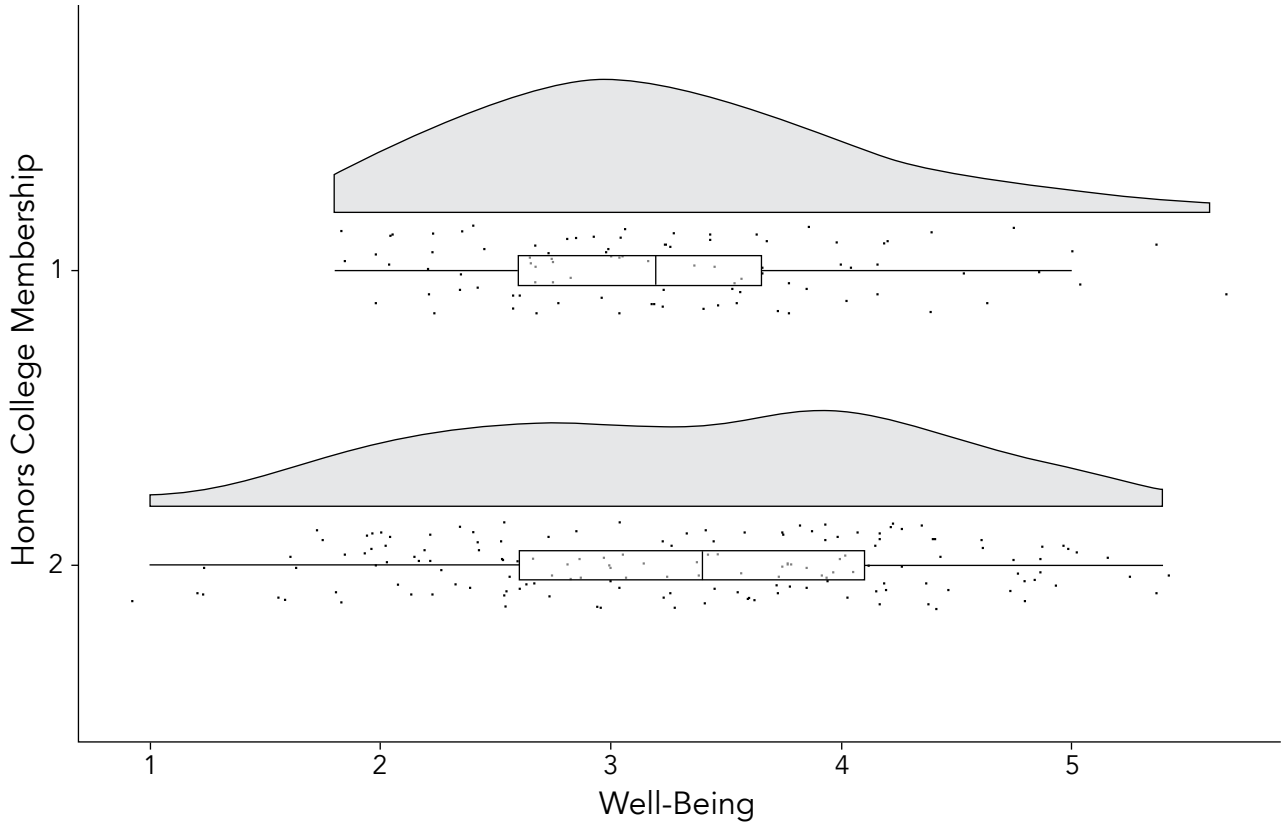
### Practical Implications

Honors programs can foster student interest and motivation by providing appropriate rigor, variation in course offerings, and differentiated instruction. Participation alone, however, does not facilitate motivation. Honors students can increase levels of autonomy, competence, and relatedness if they find meaning, purpose, and a sense of belonging within the context of an academically rigorous program with like-minded peers, facilitating meaningful interactions such as content-themed, high-level questioning, and discussions (Bowman & Culver, 2018).

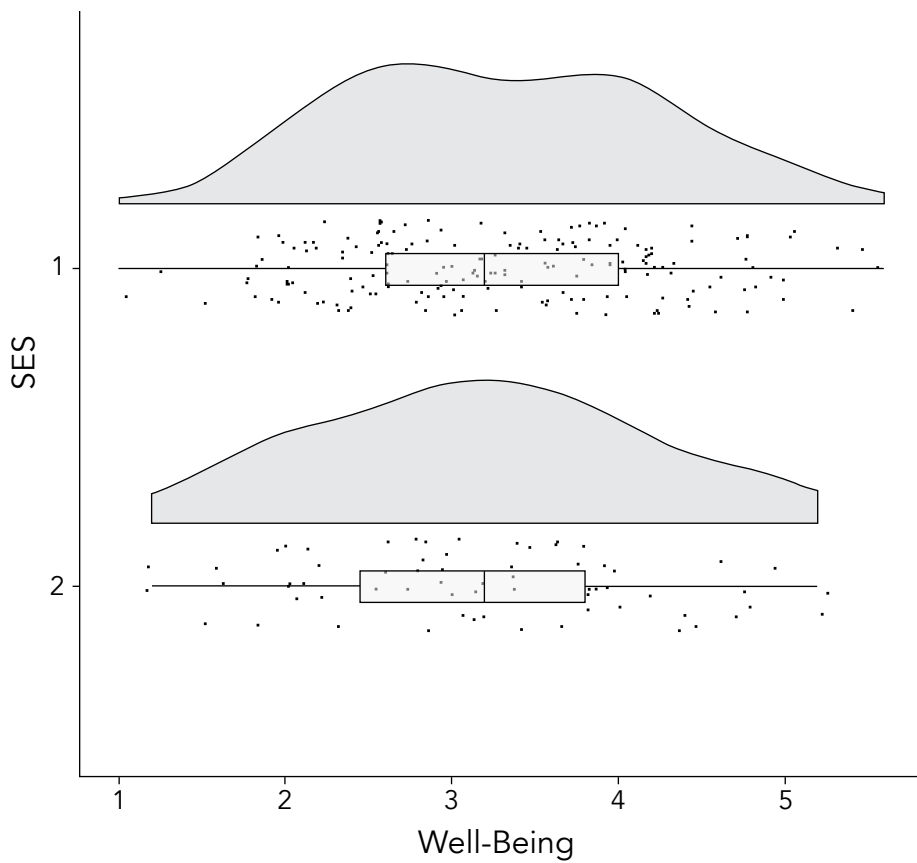
College and university administrators can be more intentional about targeting areas that promote well-being by addressing basic psychological needs to foster motivation by monitoring highly selected courses, viewing attendance patterns in courses, and by facilitating interventions for students who may exhibit early signs of underachievement such as not feeling a sense of belonging in the community of learners. Sensitivity to early signs of loss of interest, decreased attendance, and change in grade point average may help universities address factors related to motivation that are limiting to basic psychological needs of autonomy, feelings of competence, and relatedness. Facilitating student interest will likely foster motivation as students seek intellectual experiences in which they are interested, feel appropriately challenged, and find their place among peers (Mammadov et al., 2018; Rinn & Plucker, 2019).

If honors programs are focused on what is deemed best by a university without considering student input, this may lead to decreased motivation due to lack of meaning in work-related areas such as academic environments (Wirthwein & Rost, 2011). Colleges and universities may need to periodically evaluate the students' motivation to maintain relevance to students' sense of purpose and belonging in the honors program. Rigor for the sake of rigor may fall short in retaining students in honors programs (Pollet & Schnell, 2017). Student-driven topics may help to foster a sense of agency, and therefore feelings of competence in directing one's educational experience and academic/life goals.

**Figure 2:** Raincloud plot of Honors College Membership and Well-Being



**Figure 3:** Raincloud plot of Honors Socioeconomic Status (SES) and Well-Being



## Limitations and Future Research

A limitation of the current study includes the reliance on self-reported levels of income based on participants' perceived family income. Also, examining socioeconomic status in isolation from potential intersectionalities, such as race/ethnicity may skew the impact of SES by not fully capturing the potential influence. Future research is needed to examine such intersectionalities to potentially make the outcomes more meaningful regarding the influence of socioeconomic status on well-being. Another limitation of the current study is that it is a correlational rather than a causal design. More time to collect data would allow for additional information about participants' responses regarding well-being and motivation thus providing further insight into the long-term perceptions in these areas. Additionally, the sample used in this study was collected from a large public institution within a specific region. Future studies could broaden the sample by including participants from different regions and both public and private institutions for a more comprehensive understanding of participants' responses.

Future research is also needed to understand the relationship between participation in specialized programming and well-being of undergraduate students. In examining effects of well-being on gifted students who participated in early college entrance programs or honors college programs, Sayler et al. (2015) questioned whether or not quality of programming impacted the permanence of personal well-being for participants. They found that a more refined assessment of well-being is needed to capture the influences on the well-being of gifted and talented students and the role of educational interventions, specifically for this group. Additionally, our sample did not account for students who met eligibility requirements but opted not to participate in the honors program thus making the effect of honors versus non-honors participation more difficult to detect or interpret.

We also recommend studying how students' identity as gifted relates to well-being in a follow-up study. Understanding the pre-college academic background of undergraduate students may provide insight into perceived well-being for students dependent on prior academic experience. Including pre-college identification for gifted services may help administrators, counselors, and researchers better understand well-being of undergraduate students participating in college honors programs. Furthermore, these investigations may provide insights into how to support students who have earned a spot in a college honors program based on aptitude, but who may have gaps in background knowledge and/or rigor to maintain success in the program.

## Conclusion

In this study, the strongest predictor variable was autonomy followed by competence and relatedness, respectively. While honors membership did not have a large effect size, honors programs are designed to provide opportunities for students to self-select courses. The impact of autonomy, competency, and relatedness on well-being of undergraduate students suggests the importance of students being able to make their own academic choices. Finding ways to improve basic psychological needs, particularly autonomy or self-regulation (Ryan & Deci, 2006), may improve the overall well-being of undergraduate students. Focusing attention beyond academic rigor to include addressing social and emotional characteristics of undergraduate students may increase present and future well-being of students. Administrators may consider incorporating an affective curriculum into their undergraduate honors program to facilitate ways to improve student motivation by addressing basic psychological needs and ultimately well-being.

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# Relationships Among Ethnic Identity, School Attitudes, General School Self-Concept, and Academic Achievement of African American and Hispanic High-Ability Students from Low-Income Families

Mihyeon Kim, Ph.D., Ed.D.

## Abstract

Ethnic identity is a reflection of an individual's own ethnic group membership and interaction with members of other groups. This study examined the relationship between students' ethnicity, general school self-concept, school attitudes, and academic performance measured by self-reported responses. The sample was made of low-income, high-ability African American and Hispanic 7th and 8th grade students,  $N = 186$ , that participated in a residential summer academic program. A path model was proposed with four components to measure academic achievement: ethnic identity, school attitudes, general school self-concept, and self-reported GPA. The path analysis model explained 11% of the variance in GPA and revealed one direct effect on GPA: school attitudes. Ethnic identity was indirectly linked with GPA through school attitudes. The effect of ethnic identity on GPA was indirectly associated with school attitudes ( $p < .01$ ). Understanding students' backgrounds and increasing their ethnic identity may contribute to providing a positive school experience to low-income ethnically diverse student groups and reducing the achievement gap.

**Keywords:** *ethnic identity • school attitudes • academic performance • self-concept*

The academic achievement gap between low-income and high-income students has been a well-documented problem in the last few decades (Lacour & Tissington, 2011; Reardon, 2013). A notable issue to address in addition to the achievement gap between low-income and high-income students is the poverty rate for African Americans and Hispanic populations (Creamer, 2020). Families with incomes below 200% of the federal poverty guideline are often classified as "low-income," and families with incomes below 50% of the poverty guideline are classified as in "deep poverty" (Office of the Assistant Secretary for Planning and Evaluation, 2015). The National Assessment of Educational Progress (NAEP) found that very few low-income students scored at the advanced level on any national test with achievement gaps in math and reading being more significant than in any other subject areas (Plucker & Peters, 2018). Data from the US Census Bureau provided evidence that African American and Hispanic individuals "continue to over-represent in the population in poverty relative to their representation in the overall population" (Creamer, 2020, para. 13). The achievement gap and the underrepresentation of low-income and students of color in advanced enrichment programs also continue to be a concern in gifted education (Olszewski-Kubilius & Thomson, 2010). As Ford et al. (2021) addressed, African American and Hispanic students from low-income backgrounds have been underrepresented

in school gifted programs for decades, leading them to have inequitable educational opportunities. However, regardless of the achievement gap between low-income and high-income gifted students, many gifted students from low-income families still achieve academic success (Joseph et al., 2016). To support the academic success of high-ability African American and Hispanic students from low-income backgrounds, many studies have explored various psychological factors, such as ethnic identity, that influence their academic achievement. Adolescent ethnic identity may be an important variable to consider in order to understand their behaviors and performance in school. A study by Whiting (2009) suggested that identity and self-perception are achievement barriers for Black male students. When Black students face messages that they are less capable than their White classmates, they may not feel confident about their academic capability. Although Whiting's study is focused on Black males, it is notable to address the importance of positive identity development for the academic achievement of African American students.

The social identity theory believes that:

the dynamics of prejudice and intergroup conflict were best understood as group phenomena generated by basic human motivations and cognitive processes impacted by people's beliefs about themselves, and about the society, social context, and immediate situations people find themselves and their groups in. (Hogg, 2016, p. 4)

The developmental theory examines nature and sources of human beings' growth and the issues around their growth (Lerner, 1998). Both the social identity theory

DOI: 10.25774/k0em-yj32

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and the developmental theory indicate that a stronger or more committed ethnic identity would be associated positively with one's psychological well-being (Iturbide et al., 2009; Yasui et al., 2004). Smith and Silva (2011) synthesized research examining the relationship between the constructs of ethnic identity and personal well-being among people of color in North America. They consistently found that ethnic identity is positively related to measures of well-being and that students' well-being is associated with their academic success (Amholt et al., 2020; Simovska et al., 2016).

In addition to ethnic identity, many other factors have been considered important to the achievement of high academic performance, such as academic self-concept (Bonilla, 2018) and school attitudes (McCoach & Siegle, 2003; Ritchotte, 2016; Siegle et al., 2020). The present study explored the relationships among ethnic identity, academic self-concept, school attitudes, and academic achievement of low-income, high-ability middle school students enrolled in a residential academic summer enrichment program. These socio-emotional and school-related factors have been examined as predictors of academic achievement in previous studies (Grindal & Nieri, 2015; Guzman, 2002; Ivory, 2002; Oyserman, 2008) examining each factor separately to predict academic achievement. However, this study seeks to examine relationships among ethnic identity, general school self-concept, school attitudes, and academic achievement of low-income, high-ability students in a single model through path analysis. Path analysis allows us to estimate all proposed relationships among multiple variables simultaneously rather than analyzing one dependent variable at a time. In addition, path analysis is used to examine the comparative strength of direct and indirect relationships among variables, providing a better understanding of the causal relationship among different variables (Crossman, 2019; Lleras, 2005).

## Ethnic Identity and Academic Achievement

Adolescence is a developmental stage where an individual often faces an identity crisis (Erikson, 1968). According to Erikson (1968), adolescents are actively engaged in identity exploration, yielding confusion about themselves and fluctuations in ego strength. This development is characterized as an identity crisis. Therefore, understanding the impact of identity formation on students' learning and development is an important factor for consideration, (Bonilla, 2017) and school is a crucial environment for such identity development. Students who are in ethnically diverse schools learn how ethnicity may matter in their lives based on interactions with students, teachers, and others in their schools. French et al.'s (2006) study showed that the ethnic identity of African American students increased for both early and middle adolescents.

Identity development, including ethnicity develop-

ment for youths (approximate age of 12–18), is important in developing a sense of self through social interaction (Erikson, 1968). Although race and ethnicity are often used interchangeably, the dictionary by Merriam-Webster (n.d.) defines race as "any one of the groups that humans are often divided into based on physical traits regarded as common among people of shared ancestry," while ethnicity is defined as an "affiliation of large groups of people classed according to common racial, national, tribal, religious, linguistic, or cultural origin or background." Race in the United States has been related to one's political rights. Racial identity refers to "an individual's sense of group identity which results from being socialized to believe that she or he [sic] has a common racial heritage, shared history, and is part of a racial group," (Cokley & Chapman, 2008, p. 350) and is a popular construct in African American samples such as Black racial identity (Cross, 1971). This started as a developmental model and expanded to an attitudinal model of the nigrescence model (Cross & Vandiver, 2001; Worrell et al., 2020). Meanwhile, ethnicity has more socially constructed meanings, as ethnic identity refers to a person's social identity within a larger context of descent-based attributes such as culture, religion, geography, language, and practices (Chandra, 2006; Evans et al., 2010; Phinney, 1996). Ethnic identity has social meanings in terms of the stereotypical characteristics, norms, and behaviors of social groups (Camacho et al., 2016; Fuligni et al., 2005). Among different race-ethnicity groups, more African American and Hispanic families were found to be under lower income categories compared to White (non-Hispanic) and Asian families according to 2019 income data, continuing what had been a historical trend (Semega et al., 2020).

High-ability students from low-income ethnic groups may have faced challenges such as discrimination, prejudice, and biased or inappropriate assessments toward them during school (Baldwin, 2005). Although research examining academic outcomes has found that a strong ethnic identity contributed to increased positive attitudes toward school (Grindal & Nieri, 2015; Guzman, 2002; Ivory, 2002; Oyserman, 2008), there has been a mixture of results concerning the association of ethnic identity with academic performance. While some of the findings support a positive association of ethnic identity with academic performance (Graham & Anderson, 2008; Grindal & Nieri, 2015), many studies did not find any such associations (Guzman et al., 2005; Ivory, 2002; Shermack, 1996; Sobansky, 2003; Velez-Yelin, 2002). However, a sense of belonging in an educational setting for African American and Hispanic students from low-income backgrounds may interact with their academic self-concept and influence their school attitudes and academic achievement. Therefore, the ethnic identity of African American and Hispanic students from low-income backgrounds may be an

important variable to consider in understanding their behaviors associated with other school-related variables and their performance in school.

### Academic Self-concept and academic achievement

Self-concept is the perception every individual has about the self, developed from one's interpretations of their own experiences and reflected appraisals (Rayner, 2001). According to Shavelson et al.'s (1976) multifaceted, hierarchical structure of self-concept, the self-concept structure is divided into academic and nonacademic components. General self-concept is considered an overarching self-concept, tending to be more consistent with less situational variability. This overarching construct encompasses both academic and non-academic components of self-concept (Snyder, 2016). Academic self-concept is generally considered to be more stable across time intervals compared to different types of self-concepts (Jansen et al., 2020). Regarding the structure of academic self-concept, Shavelson et al. (1976) described general-school self-concept (e.g., "I'm good at most school subjects") as the top of the hierarchy and domain-specific academic self-concept (e.g., "I am good at mathematics") at the next lower level. In terms of the stability of different levels of self-concepts, the higher-level general-school self-concept is considered to be more independent in specific situations than the lower-level of domain-specific academic self-concept.

In terms of the relationship between academic self-concept and achievement, literature on self-concept suggests that the academic self-concept has a higher correlation with academic achievement than the non-academic self-concept (Fin & Ishak, 2014). A meta-analysis study on the relationship between academic self-concept and achievement by Wu et al. (2021) demonstrated that academic self-concept predicted achievement significantly and vice versa. However, Esnaola et al. (2018) suggested that the domain-specific self-concept can be studied independently from the general school self-concept because the domain-specific self-concept would provide a better effect estimation of domain-specific intervention. Since this study does not examine domain-specific achievement, it used general school self-concept which is a component of academic self-concept relating to perceptions of their general academic performance.

### School Attitude and Academic Achievement

As mentioned previously, many gifted individuals achieve at the level of their expected academic potential. Although school attitude can be described as students' perceptions of the effectiveness of school (Lee, 2016), some researchers in gifted education (McCoach & Siegle, 2003; Suldo et al., 2008) defined school attitudes as "interest in and affect toward school" (McCoach &

Siegle, 2003, p. 417). Among many factors that have been studied in relation to academic achievement, students' attitude towards school is a factor explored to encourage the academic performance of gifted students. Literature studying the relationship between attitudes in school and academic performance suggests that high achievers tend to have more positive attitudes toward teachers and schools than underachievers (Çakır, 2014; Lee, 2016; McCoach & Siegle, 2003). However, Lee's (2016) study suggested that a strong relationship between attitude and achievement is only seen in students coming from higher-income families (2 standard deviations above the mean) indicating the synergy effects of the income level of the family and school attitude on achievement. Therefore, exploring several socio-emotional and school-related factors associated with academic performance in a single model may provide more information in understanding how to encourage low-income, high-ability students' academic performance. The purpose of this study is to explore the relationship among factors contributing to academic achievement of low-income high-ability students, specifically ethnic identity, general school self-concept, and school attitudes of high-ability African American and Hispanic students from low-income families.

## Method

### Participants

The participants were students in a 2-week residential summer academic enrichment program. The program was developed and implemented specifically to support low-income, high-ability 7th and 8th grade students from school districts within 75 miles of the hosting university. All participants were from school districts within one state where the housing university is located. It was designed to address the need for enhanced and expanded STEM education in the region. Staff members contacted gifted coordinators in the districts and informed them about the purpose of the program, the responsibilities of the districts, and guidelines on how to identify students. Participants were 7th grade students that were nominated by school districts as low-income, high-ability students based on the following selection criteria:

- Family income level below \$45,000 and
- Any standardized test scores at the 90th percentile or better in at least any one of the test subscales, or
- Recommendation accompanied by evidence of performance (a recommendation letter with a rationale for the student's potential capability along with submitted evidence of performance).

After the first year, participants were invited back for a second year as 8th graders, along with a new 7th grade

cohort. Data were collected for 4 years from 2016 to 2019. Both 7th and 8th grade students were included in the study during the first year; however, only 7th grade students participated in the study afterward because the 8th grade students had participated in the study as 7th graders in the previous year. Almost all 7th and 8th grade students (about 250 students) in the program received parental permission and assented to participate in the study. They were from four different ethnic groups as stated in an application form (open entry): 24.42% ( $n=53$ ) identified as Hispanic, 61.29% ( $n=133$ ) identified as African American, 9.22% ( $n=20$ ) identified as having mixed ethnicity, and 5.07% ( $n=11$ ) identified as White. Data was available from 217 students who completed all three surveys. Thirty-three students who completed only one or two surveys were removed from the data used in this study. Students identifying as White and having mixed ethnicity were also not used in the study because the number of students from these ethnic groups was not large enough to be included in the statistical analysis. A total of 186 African American and Hispanic students from the 217 valid surveys were thus included in this study. Of the 186 7th and 8th grade high-ability students from low-income backgrounds included in this study, 71.5% ( $n=133$ ) were African American and 28.5% ( $n=53$ ) were Hispanic.

## Measures

### Ethnic Identity

Ethnic identity was measured using Phinney and Ong's (2007) Multigroup Ethnic Identity Measure Revised (MEIM-R). This measure, developed for use with ethnically diverse samples, includes six closed-ended items followed by two open-ended questions about their ethnicity. The MEIM-R includes two subscales: exploration of one's ethnic identity (e.g., "I have often talked to other people in order to learn more about my ethnic group"), and commitment to one's ethnic identity (e.g., "I feel a strong attachment towards my own ethnic group"). Responses are scored on a 5-point Likert-type scale with endpoints 1 (strongly disagree) and 5 (strongly agree). Phinney and Ong (2007) performed a confirmatory factor analysis to provide evidence for scale validity which supported the two-factor structure along with a subsequent study by Chakawa et al. (2015). Herrington et al. (2016) performed a Reliability Generalization (RG) study using 46 previous studies (age range from 13-52) reporting Cronbach's alpha reliability coefficients for the MEIM-R. Although lower reliability than the original MEIM was reported for the MEIM-R (Herrington et al., 2016), the reliability of the MEIM-R was in an acceptable range: .81 for the total scale, .76 for the Exploration subscale, and .78 for the Commitment subscale. Prior research with adolescents

reported adequate internal consistency of item scores, with Cronbach's  $\alpha$  ranging from .70 to .92 (Homma et al., 2014; Musso et al., 2018). In the current study, Cronbach's alphas were .80 and .84.

### Students' Attitudes in School

Students' attitudes in school were measured using the School Attitudes Assessment Survey-Revised (SAAS-R; McCoach & Siegle, 2003) which consists of 35 items. This assessment measures academic self-perceptions (e.g., "I am intelligent"), attitude toward school (e.g., "This school is a good match for me"), motivation/self-regulation (e.g., "I check my assignments before I turn them in"), goal valuation (e.g., "I want to get good grades in school"), and attitudes toward teachers (e.g., "My teachers make learning interesting"). Response options included 1 = "Strongly Disagree", 2 = "Disagree", 3 = "Slightly Disagree", 4 = "Neither Agree Nor Disagree", 5 = "Slightly Agree", 6 = "Agree", and 7 = "Strongly Agree". Students reported their own GPA. SAAS-R measures the presence or absence of achievement-oriented attitudes with high scores indicating positive achievement-oriented attitudes. McCoach and Siegle's (2003) study provided evidence of the construct validity of the scale, demonstrating acceptable reliability with an internal consistency for each scale above .85. Pérez et al. (2016) performed confirmatory factor analysis procedures with 1,398 students ranging between 11 and 15 years of age reporting reliability for the total scale of .94. In the current study, coefficient alphas for the SAAS-R subscales ranged from .86 to .94.

### Academic Achievement.

Self-reported GPA was obtained from the SAAS-R (McCoach & Siegle, 2003) instrument for academic achievement. Response options are included as shown in Table 1. Based on the measurement, higher values of the variable would represent lower academic performance.

### Self-Concept

The Self-Description Questionnaire-I (SDQ-I; Marsh, 1992) is a 76-item survey with three dimensions represented by eight subscales: Academic Self-Concept (General School, Reading, Math); Non-Academic Self-Concept (Physical Appearance, Physical Ability, Parent Relations, Peer Relations); and General Self-Concept. The SDQ-I is designed for children from ages 8–12. From the eight subscales, only the General School Self-Concept (e.g., "I am good at all school subjects") was used in this study. General School Self-Concept encompasses the perception of the self related to their academic activities (DeVries et al., 2021). Response options included 1 = "False", 2 = "Mostly False", 3 = "Sometimes False, Sometimes True", 4 = "Mostly True",

**Table 1:** Academic achievement scale value

Values	Options
1	4.0 or higher (All A's")
2	3.75 to 3.99 (Mostly A's)
3	3.5 to 3.74 (More A's than B's)
4	3.25 to 3.49 (More B's than A's)
5	3.0 to 3.24 (Mostly B's some A's and C's)
6	2.5 to 2.99 (More B's than C's)
7	2.0 to 2.49 (More B's than C's)
8	1.5 to 1.99 (More C's than D's)
9	1.0 to 1.49 (More D's than C's)
10	less than 1.0 (Mostly D's and F's)

and 5 = "True". The SDQ-I has been used in self-concept-related research over the years (e.g., Cross et al., 2015; Hoge & Renzulli, 1993; Marsh, 1990, 1993; Möller et al., 2009) and is considered the most psychometrically validated self-concept measure for late childhood and early adolescence (Byrne, 1996; Guerin et al., 2019). The coefficient alpha for general school self-concept in the current study was .87.

## Results

Table 2 presents the basic descriptive statistics and correlations for the study's variables to provide basic information about them (Hancock & Mueller, 2010). Correlations among the studied variables indicated that there is no statistically significant relationship between ethnic identity and academic achievement measured by GPA. Preliminary data screening confirmed a normal distribution. The residual plots confirmed normality and skewness. Univariate normality was assessed via examination of the kurtosis and skewness values. The kurtosis values ranged from -1.13 to 2.47 which may be reasonably considered as normally distributed (Hancock & Mueller, 2010). Descriptive statistics, Pearson  $r$  correlations, and path analysis were used to explore the relationship among the variables (Field, 2018). Path analysis is a type of structural equation modeling (SEM)

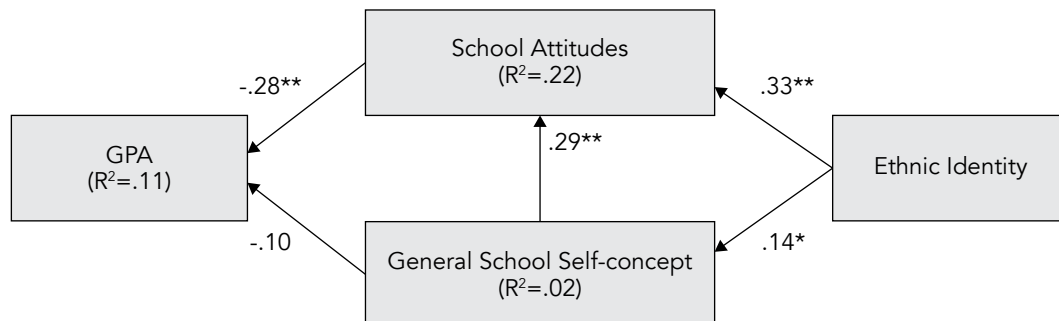
**Table 2:** Means, Standard Deviations, and Correlations among the study variables ( $n=186$ )

	1	2	3	4
1. Ethnic Identity	-			
2. School Attitudes	.37**	-		
3. GPA	-.07	.31**	-	
4. General School Self-concept	.14*	.34**	-.19**	-
M	3.79	5.86	2.79	3.13
SD	.80	.83	1.43	.48

**Note:** \* $p < .05$ , \*\* $p < .01$

without latent variables (Hancock & Mueller, 2006). Path analysis, an extension of multiple regression, represents relationships among variables with a visualized path diagram. As such, path analysis is bound by the same set of assumptions as linear regression (Norman & Streiner, 2003). The variables are either exogenous (independent variable) or endogenous (dependent variable).

A path analysis was performed using SPSS AMOS 27 to investigate model fitness and parameter estimates. Fit indices such as the Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), Normed Fit Index (NFI), and Goodness of Fit (GFI) were examined to assess the fitness of the model to the data, as recommended by Hancock and Muller (2010). For the original path model, model fit was not assessed, and fit indices were not reported since it was a saturated model. Its degrees of freedom were zero and there was no measurement error. Most models examined in empirical research focus on models that are not saturated to ensure that a researcher's interpretation of estimates is carried out only for models that are reasonable approximations of the analyzed data (Raykov & Marcoulides, 2006). The correlation analysis indicated that only the relationship between ethnic identity and academic achievement as measured by GPA was not statistically significant (see Table 2). Most of the previous studies on the relationship between GPA and scores on the MEIM-R have indicated no relationship between these variables (e.g., Guzman, 2002; Ivory, 2003; Meyer, 2004; Shermack, 1996; Sobansky, 2004; Velez-Yelin, 2002). Therefore, a path

**Figure 1:** A Path Model for Both African American and Hispanic students ( $n=186$ )

**Note:** \* $p < .05$ , \*\* $p < .01$

**Table 3:** Estimates of the Path Model for African American and Hispanic Students as a Whole ( $n=186$ )

Endogenous Variables	Exploratory Variables	Standardized Estimate	Standardized Error
GPA	School Attitudes	-.28**	.14
GPA	General School Self-concept	-.10	.20
School Attitudes	Ethnic Identity	.33**	.06
School Attitudes	General School Self-concept	.29**	.10
General School Self-concept	Ethnic Identity	.14*	.04

**Note:** \* $p < .05$ , \*\* $p < .01$

model examining relationships among the variables without a direct path between ethnic identity and GPA was tested (See Figure 1).

Overall fit index values indicated that the model provided a good fit to the data with a CFI value of 0.99, a RMSEA value of 0.01, a GFI value of 0.99, and a NFI value of 0.98. Marcoulides and Yuan (2017) have proposed a set of descriptors with a range of adjectives associated with certain values of the RMSEA (.01 = "excellent", .05 = "close", .08 = "fair" and .10 = "poor") and the CFI (.99 = "excellent", .95 = "close", .92 = "fair" and .90 = "poor"). Kline (2015) also provided recommended values for the different fit indicators as CFI (>0.90), GFI (>0.90), RMSEA (<0.08), and NFI (>0.90) to show a good model fit. Of the five paths tested, four yielded statistically significant path coefficients. A path that was not statistically significant was a path between general school self-concept and GPA. Overall, the model accounted for 11% of the variance in GPA, 22% of the variance in school attitudes, and 2% of the variance in general school self-concept. The proportion of variances shows the strength of the relationship between exogenous (independent variable) and endogenous (dependent variable) variables. From the results, general school self-concept had the weakest relationship with academic achievement among all variables in the model. Although the results of the subgroups' data analysis would be interesting, separate data analyses for each subgroup (African American students and Hispanic students) were not performed due to the smaller sample sizes for each subgroup. Based on Kline's (2016) sample size guidelines for analyzing data using SEM, any sample size below 100 was not recommended for any type of SEM technique. Although Kline considered a sample size of 100 to 200 as acceptable, having more than 200 cases is strongly recommended. The sample size of this study did not have enough to reach the acceptable sample size for each subgroup of African American and Hispanic students. Future research should further examine each subgroup intensively with acceptable sample sizes. Table 3 presents the main results of the measurement model with standardized estimates. To test if ethnic identity was indirectly related to GPA through school attitudes or general school self-concept, the indirect effects were analyzed. Table 4 presents the standardized estimates of

the indirect effects in parentheses along with the size of the effects. Through school attitudes, ethnic identity had a significant indirect link with GPA ( $p < .01$ ). Also, the general school self-concept had a significant indirect link with GPA through school attitudes ( $p < .01$ ).

## Discussion

Contrary to the results of several previous studies (Oyserman et al., 2003; Pizzolato et al., 2008; Worrell, 2007; Yasui et al., 2004), the results of this study indicate that ethnic identity is not related to self-reported GPA for low-income Hispanic and African American students. A conflicting result between some of the previous research and current research may be due to the different types of samples, since previous studies' samples of students did not necessarily include gifted students (Oyserman et al., 2003) or examined moderately high-income gifted (Worrell, 2007) and high-achieving students who were not low-income specifically (Pizzolato et al., 2008; Yasui et al., 2004). Unlike previous studies, participants of this study were high-ability students from low-income families. Regardless, the result of non-association between ethnic identity and self-reported GPA among low-income high-ability students is notable and should be examined further. Although there was no relationship between ethnic identity and self-reported GPA, this study found that the strong ethnic identity of students was related to positive school attitudes among Hispanic and African American students. There was a significant indirect effect of ethnic identity on GPA through school attitudes. The general school self-concept also had a significant indirect link with GPA through school attitudes.

These results are consistent with previous research indicating that cultural perception is associated with academic attitudes and achievement (Caldwell & Obasi, 2010; Cooper & Sánchez, 2016). The findings of this study suggest that heightened ethnic identity may help low-income high-ability Hispanic and African American students develop or maintain positive school attitudes, which may contribute to academic performance in school (Geddes et al., 2010).

The findings of ethnic identity in relation to academic self-concept showed that ethnic identity was associated with the general-school self-concept among

**Table 4:** Indirect effects of the model

Endogenous Variables	Exploratory Variables	Indirect Effects
GPA	General School Self-concept	-.49 (-.08)**
	Ethnic Identity	-.45 (-.10)**

**Note:** \* $p < .05$ , \*\* $p < .01$ ; values in parentheses are standardized estimates.

African American and Hispanic students. However, the result demonstrated in this study should be considered cautiously because this study did not analyze any differences in the two subgroups with path analysis due to the small sample size of each subgroup. Future research is strongly suggested with an appropriate sample size of each subgroup student population.

The lives and educational experiences of Hispanic and African American high-ability students need more research. High-ability students have the same needs for positive personal interactions as other students. In school contexts, many culturally diverse gifted students experience a tension between ethnic identity and academic success (Brulles et al., 2011). Researchers have argued that many African American students are forced to choose between a positive ethnic identity and a strong academic identity (Davidson, 1996; Ferguson, 2000; Fordham, 1996; Ogbu, 1987). Robinson and Biran (2006) examined 96 African American adolescents to understand the connections between African identity, study habits, and academic achievement. Although their study did not specifically examine ethnic identity, the results of the study demonstrated that Black students' feeling responsible for the entire Black community was positively related to the amount of effort applied to performing well academically. In terms of Hispanic students, McHatton et al. (2007) found that Hispanic students in both general education and gifted education described experiences of discrimination in school, with a majority of their experiences being related to ethnicity, academic ability, English language, or a combination of those (McHatton et al., 2007). Grindal and Nieri (2015) examined the role of ethnic identity with 193 Latino adolescents and found that ethnic identity was significantly associated with better academic performance measured by self-reported grades; however, students in that study were not specifically from low-income nor identified as gifted or high-achieving.

High-ability students from low-income ethnic groups may have faced challenges such as discrimination and prejudice, the use of biased or inappropriate assessments, and lack of parental knowledge about their academic abilities (Baldwin, 2005). However, some low-income Hispanic and African American students perform well in academics. Strong ethnic identity may help students to maintain their personal values and have a positive attitude toward school even when their interactions with others within the school make them feel that they should have different values and behaviors

(Webber, 2017). The results of this study indicated that the development of a strong ethnic identity may be one of those factors supporting positive school attitudes and positive self-concepts among culturally diverse low-income gifted students within the school context, leading them to perform well in academics. The value of encouraging the ethnic identity of high-ability students from low-income families should not be undermined to support their academic performance.

### Limitations

This was a study of high-ability African American and Hispanic students from low-income households, using a test score or performance entrance criteria. Because there were not enough students from other ethnic groups to statistically analyze in the study, our sample consisted of African American and Hispanic students. Future research on students of other ethnic groups would provide a more comprehensive understanding of the relationship between ethnic identity and academic achievement. GPAs of participants were generally high (Mostly A's or More A's than B's range), requiring caution about the generalizability of the results to all gifted and talented students. Even though students were not required to have high GPAs to participate in the program, school districts might nominate high-achieving students as a convenient way of identifying qualified students; providing students' performance portfolios or appropriate work samples with recommendation letters could be an extra burden for many school staff members. Additionally, this study collected self-reported GPAs, which may not reflect the actual GPAs of students. Since getting official GPAs required additional processes from school administrators of 13 different school districts/divisions, it was not possible to coordinate and receive all participating students' official GPAs by the registration deadline. Considering that a self-reported GPA could be obtained from the SAAS-R (McCoach & Siegle, 2003), it was used instead of an official GPA for this study; however, additional future research with students' actual GPAs will provide more accurate information.

The self-reported GPAs were ordinal data processed as continuous data throughout data analysis. There is debate among researchers about the legitimacy of such analysis; however, many researchers need to make informed decisions about how to analyze such data. Many data sets in social sciences and medical sciences, strictly speaking, are at the ordinal level, such as data sets



from Likert-type scales, but are analyzed as intervals in practice (Cohen, 2001). Some researchers suggest that if ordinal data has many categories, analyzing ordinal data with continuous data does not produce severely biased results (Cohen, 2001, Mîndrilă, 2010; Lorton & Rethman, 1990; Robitzsch, 2020; Rhemtulla et. al., 2012). Several researchers suggest meeting certain conditions such as enough sample sizes of more than 30 or a skewness and kurtosis value of less than an absolute value of 2.0 (Cohen, 2001, Heidel, 2023; Lorton & Rethman, 1990) for this practice. However, cautious interpretation of results is required and future research with the actual GPA obtained from school records is strongly recommended. Additional research on supporting or impeding factors influencing the academic achievement of high-ability students from low-income households will be a valuable addition to the field.

The participants were from geographically limited areas within one state, requiring caution about the generalizability of the results to all Hispanic and African American students. Despite the presence of different educational opportunities related to ethnicity in educational settings in the United States, there is a lack of research on the impact of students' ethnic background on their education and educational experiences (Henfield et al., 2008; Tate, 1997). Researchers in the gifted education field have examined diverse socio-emotional aspects and academic achievement of African American gifted students and Hispanic gifted students; however, there is still insufficient research on their educational experiences and ethnic identity development (Worrell, 2007). This area of research could advance our under-

standing of the role ethnic identity development plays in improving the academic performance of low-income gifted students. This study did not explore each subgroup intensively due to the small number of participants in each subgroup, but more extensive research on each subgroup would be beneficial.

## Conclusion

Adolescence is a period when identity formation occurs (Brown et al., 2008). At this point in their developmental process, students have the cognitive skills to reflect on how society evaluates their ethnic group. Therefore, low-income African American and Hispanic gifted students should gain a sense of who they are and understand their background to prevent becoming discouraged by obstacles in the school system (Robinson & Biran, 2006). Understanding students' backgrounds and increasing their ethnic identity exploration may encourage positive school experiences for low-income ethnically diverse students, potentially reducing the achievement gap. Previous literature has documented inconsistent findings regarding the extent to which ethnic identity contributes to psychological well-being and academic performance among adolescents (Caldwell & Obasi, 2010; Cokley & Chapman, 2008; Cooper & Sánchez, 2016; Worrell, 2007). The current study adds to an emerging literature focused on ethnic identity, academic self-concept, school attitudes, and academic outcomes among ethnically diverse low-income high-ability students.

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## Sternberg's Transformational and Transactional Giftedness: A Dąbrowskian Interpretation

Sal Mendaglio, Ph.D.

### Abstract

Sternberg's (2020) transformational and transactional giftedness are based on a theory of leadership. Transformational leaders are highly moral, make changes that benefit members and society. They are concerned with members' well-being and development. Transactional leaders are motivated by self-interest, concerned with members' compliance with expectations and standards. Qualities of these forms are applied to giftedness, yielding transformational and transactional giftedness. Sternberg's presentation and a review of leadership literature were examined from the perspective of Dąbrowski's theory of positive disintegration. It is concluded that they resonate well with Dąbrowski's theory. The current article suggests that Sternberg's transactional and transformational giftedness resemble Dąbrowski's conception of development and intelligence. The author proposes that Dąbrowski's positive disintegration, rather than leadership theory, is a more suitable theory on which to base Sternberg's new conception of giftedness.

**Keywords:** *Transformational leadership • transactional leadership • positive disintegration*

Reading the title of Sternberg's (2020) article, "Transformational Giftedness: Re-thinking the paradigm for gifted education", I immediately thought of Dąbrowski's theory (Dąbrowski, 1964; 1996). Why? Because, as a student of the theory of positive disintegration (Mendaglio, 2008, 2022), I am aware that the process of transformation, specifically personal transformation, is at the core of Dąbrowski's theory of positive disintegration. In fact, the term "transformation" occurs countless times, accompanied by a myriad of related comments, in Dąbrowski's English-language books. For example:

Throughout the course of life of those who mature to a rich and creative personality their primitive instincts and impulses with which they entered life undergo a transformation. For instance, when the instinct of self preservation changes, its primitive expression dis-integrates, and it is instead transformed into the behavior of a human being with moral values. (Dąbrowski, 1970, p. 28).

An indication that the idea of transformation is central to the theory of positive disintegration is that it is elevated to a dynamism (a force of development), namely, inner psychic transformation defined as: "The process which carries out the work of developmental change in man's personality structure, of which the changes in the emotional structure are by far the most crucial." (Dąbrowski, 1996, p. 39). Further, inner psychic transformation "acts in close cooperation with all other dynamisms" (Dąbrowski, 1996, p. 49) that are responsible for advanced development.

With the Dąbrowskian notion of "transformational" in mind, I was curious to see whether Sternberg (2020) was proposing a Dąbrowskian view of giftedness. I soon learned that Sternberg's latest conception of giftedness was not based on Dąbrowski's theory but rather on Burns's (1978) leadership theory, which differentiates between transformational and transactional leadership. These two forms of leadership represent starkly different approaches to leadership illustrated, in part, by how leaders approach their followers. Transformational leaders encourage innovation and creativity among followers through a spirit of collaboration. On the other hand, transactional leaders encourage compliance in their followers through dispensing rewards and punishment. Sternberg acknowledges that the application of the two forms of leadership is not new to the field of gifted education. He cites, for example, Karnes and Bean (2017) who note that leadership, a category in federal and state definitions of giftedness, is neglected in the identification of gifted youth for special programs. They argue that, given the challenges emerging in society today, there is a growing need for more attention to identification of support for young, gifted leaders. What is novel about Sternberg's application of the ideas underlying transformational and transactional forms of leadership is concern with the construct of giftedness itself. Like Karnes and Bean's focus on leadership in gifted education, Sternberg suggests that a different perspective on giftedness is needed because, among other issues, the established IQ-based approach underlying gifted education is inadequate to confront the societal challenges we currently face.

Sternberg's application of leadership theory to gift-

edness begins with a brief overview of transformational and transactional leadership theory. He then applies aspects of the two forms of leadership to giftedness. Qualities describing transformational leadership are attributed to transformational giftedness; qualities describing transactional leadership are attributed to transactional giftedness. Surprisingly, an examination of the descriptions of transformational and transactional leadership indicates to me that they, and therefore their giftedness counterparts, resonate quite well with fundamental aspects of Dąbrowski's theory. Specifically, the dual leadership formulation resembles the conception of development and intelligence in the theory of positive disintegration. The purpose of this article is to provide support for my contention.

To achieve my purpose, I first examine Sternberg's rationale for the application of transformational and transactional leadership to giftedness, followed by my detailed Dąbrowskian interpretation of his proposal. While Sternberg has elaborated upon transformational and transactional giftedness in recent publications (e.g., Sternberg, 2021, 2022; Sternberg et al., 2021), the most detailed explanation of his rationale for his application of the two leadership concepts to giftedness appears in Sternberg (2020). Harper (2022), in her application of Dąbrowski's theory to the two types of giftedness traces their development differently, namely, to Sternberg's own theory of leadership, in which wisdom is foundational:

Underpinning the ACCEL [active, concerned citizens and ethical leaders] model is the construct of wisdom, where an individual's knowledge and skills are specifically used in transformational ways, through the inclusion of positive ethical values. From this foundation stems the conceptions of "transactional giftedness" and "transformational giftedness" that were introduced into the gifted education literature. (Harper, 2022, p. 202)

Harper anchors Sternberg's two forms of giftedness to his overall theorizing about leadership, while, as I noted above, the academic origin is outlined in his 2020 article. This difference reflects our different purposes. Harper applies Dąbrowski's theory to support and, perhaps, to enhance the application of the concepts of transformational and transactional as indicated in her statement of purpose: "The intricacies of Dąbrowski's theory provide an additional way of understanding the behaviors and experiences of our gifted learners, and with this understanding comes the capacity to nurture and support their developmental process" (Harper, 2022, p. 203). As a result, her focus tends to be transformational giftedness. For example, Harper proposes the use of Dąbrowskian concepts of overexcitability and dynamisms to assist in identifying "learners with the potential to become transformationally gifted" (p. 216). In contrast, my purpose is to present a Dąbrowskian interpretation of transformational and transactional giftedness.

Therefore, for the purpose of this article, it is necessary to examine in detail Sternberg (2020) before presenting an interpretation of transformational and transactional giftedness from a Dąbrowskian theoretical perspective.

## Transformational and Transactional Leadership

In this section, I reproduce in full Sternberg's definitions of the forms of leadership upon which he bases his conception of giftedness. Each definition is followed by my review of a sample of literature related to it.

### Transformational Leadership.

Sternberg defines transformational leadership as follows:

*Transformational leadership* is a style of leadership in which leaders inspire, encourage, and motivate followers to innovate and create positive change and also to shape the positive future for the organization or entity for which the leader is responsible. Transformational leadership is very much a team effort, where, by motivating employees, the leader succeeds in attaining both organizational and personal growth for followers. The transformational leader is a positive role model and leads by example (Sternberg 2020, p. 231).

While Sternberg's description of the qualities of transformational leadership is rather positive, it does not include some other notable positive qualities presented by authors in the field of leadership. In a classic study of political leadership, Burns (1978), the first to propose the two forms of leadership (Díaz-Sáenz, 2011), emphasized the moral character of transformational leaders. In his view, the transformational leader strives to "raise the level of human conduct and *ethical aspiration of both the leader and led*, and thus it has a transforming effect on both" (italics added, Burns, 1978, p.20). In a similar vein, Bass (1999) notes that mature moral development is a characteristic of transformational leaders. Germain (2017) emphasizes how transformational leaders go beyond self-interest:

They consistently do the right thing and put the needs of the mission and their followers above their own needs. They act as catalysts for creating shared visions of a positive future. They bring to bear the full talent of their followers in making progress on difficult problems (Germain, 2017, p. 170).

Bass (1999) explains the beneficial effects of transformational leadership on those they lead: "It elevates the follower's level of maturity and ideals as well as concerns for achievement, self actualization, and the well-being of others, the organization, and society" (Bass, 1999, p. 11).

Transformational leaders, then, are moral, ethical, empathic, collaborative individuals who share power with

followers. Such leadership is said to have significant beneficial effects on both followers, and leaders.

### Transactional leadership.

This form of leadership is described by Sternberg as follows:

Transactional leadership is a system of leadership that achieves results by rewards and punishments. It is a kind of tit-for-tat: "You do this for me, and I'll do this for you." The leader operates a complex system of reinforcements to reward those who help attain the goals he or she sets and to punish those who do not help to attain those goals. (Sternberg, 2020, p. 231).

Burns (1978) describes transactional leadership in terms of an exchange relationship and notes that it is the most common form of leadership:

The relations of most leaders and followers are transactional—leaders approach followers with an eye to exchanging one thing for another: jobs for votes, or subsidies for campaign contributions. Such transactions comprise the bulk of the relationships among leaders and followers... (Burns, 1978, p. 4).

In the transactional form of leadership, the relationship serves both a leader's and a follower's self-interests. In such an exchange relationship, however, it is clear where power resides as indicated in the actions of the leader:

Transactional leadership is based on economic exchanges between leaders and followers, whereby leaders establish goals and objectives, structure, organize, and resource work, and establish rewards for followers who meet assigned task standards (Hannah et al., 2020, p. 226).

In contrast to the transformational form, in transactional leadership both parties pursue their respective interests, not bound by a commonly agreed upon purpose (Burgess, 2016). Transactional leadership and its focus on an exchange relationship has been maligned by Bass (1999) and by Germain (2017) who termed it as perpetuating an outdated form of quid pro quo relationship.

Reading Sternberg's description of transactional leadership and reflecting upon my perusal of a sample of publications on leadership, it is difficult not to view the transformational-transactional view of leadership as value-laden. Transformational leadership is moral and empathic, replete with concern for others, and their self-actualization, that is, clearly associated with lofty values. Transactional leadership is associated with self-interest, rewards, and punishment. One might conclude that transformational leadership is the form that leaders should always use. However, that conclusion is not borne out in the general literature on Burns' theory.

Transactional leadership is part of the Full Range Model of Leadership developed by Avolio and Bass (1991) which

includes three forms: Laissez Faire—Transactional—Transformational. While the model proposes that transformational is, in general, the most effective style, it is not the only style that effective leaders consistently use. As Burgess (2016) points out:

[A] key, often overlooked point is that the most effective leaders use all of the styles to some extent, the style that's most appropriate to the situation. *Transformational leadership is not always the "right" style for every context* (italics added, Burgess, 2016, p. 4).

It stands to reason that some aspects of transactional leadership are fundamental to effective leadership in general. For example, members of organizations need and want to know what is expected of them, and the standards by which they are assessed. Furthermore, transformational leaders may use transactional mode to benefit followers, for example: "Through transactional means leaders can design appropriate jobs and tasks that provide followers opportunities to develop self-acceptance and boost self-esteem" (Hannah et al., 2020, p. 228).

### Pseudo-Transformational Leadership

Although Sternberg does not address it in his discussion of leadership, he applies a third type of leadership to his novel conception of giftedness: *pseudo-transformational* leadership. Bass's early description was concerned with the ethics of charismatic leaders: "The immature, self-aggrandizing charismatic is pseudotransformational. He or she may seem uplifting and responsible but on closer examination is found to be a false Messiah" (Bass, 1999, p. 11). More recently, the concept has been elaborated upon. For example, Christie et al. (2011) defines pseudo-transformational leadership as "self-serving, yet highly inspirational leadership behaviors, unwillingness to encourage independent thought in subordinates, and little caring for one's subordinates more generally" (p. 2944). According to Christie et al, these leaders create visions defined by self-interest, excluding the best interests of followers, influence followers by deception, discourage opposing viewpoints, and use followers as means to leaders' ends. Pseudo-transformational leadership has been termed negative leadership, a manifestation of the dark side of leadership (Cote, 2017).

This conception of leadership—transformational, transactional, pseudo-transformational—complete with its value differential, is viewed by Sternberg as applicable to the construct of giftedness.

### Sternberg's Application of Burns' Theory to Giftedness

To provide an accurate account of Sternberg's application of the leadership concept to giftedness, it is wise to



provide direct quotations, rather than my paraphrasing them. To begin, I present Sternberg's definition of transformational giftedness:

I [Sternberg] will define *transformational giftedness* as giftedness that is transformative—that by its nature seeks positively to change the world at some level—to make the world a better place....Transformational giftedness focuses on positive and meaningful change (Sternberg, 2020, p. 231).

Sternberg's transformationally gifted individuals do not seek change for its own sake, or change that would benefit themselves, but rather aim to enact changes for the betterment of society. As with transformational leadership, this form of giftedness is characterized by altruism, not self-interest. For Sternberg, transformational giftedness refers to the employment of gifts to effect positive changes. These changes include a range of domains from micro to macro systems.

Transformational giftedness is not about inborn or developed "gifts," per se, but about how those gifts are utilized to make the world a better place by seeking a common good at some level, whether within the family, with the state, within the nation, or within the world. The transformationally gifted individual literally seeks transformation—to use their gifts to effect some kind of change—in how people hear music, or how they see art, or how they perceive the role of government, or in how they view or benefit from the legal system, in how they benefit from scientific findings, or whatever (Sternberg, 2020, pp. 233–234).

Sternberg defines transactional giftedness as follows:

*Transactional giftedness* is giftedness that is tit-for-tat in nature—an individual is identified as gifted and then is expected to do something in return, usually, to perform well in academic coursework, perhaps coursework specifically targeted at the gifted. There may also be an expectation that the individual later in life will continue to show high educational achievement, such as by going to a prestigious university and doing well there, and then getting a high-prestige job, which duly can be recorded as showing the success of the system for identifying the gifted. (p. 231)

Sternberg's transactionally gifted individuals have no apparent interest in making changes; their interest lies in learning societal expectations and behaving in ways that comply with them. Their utilization of their gifts, far from being motivated to improve society, is directed strictly at their own material success in life.

Transactionally gifted individuals are consummate adapters. They figure out the rules of the game they are supposed to be playing and then play it to the utmost, whether in taking standardized tests or in getting good grades in school or in getting into good colleges or whatever. They mold themselves into whatever they are supposed

to be to merit being labeled as "gifted." Transactionally gifted individuals fit the societal prototype of "gifted"—they have deeply internalized societal norms, are consummately able to learn what society expects of them, and then strive to fulfill their part of the bargain. (p. 232)

Sternberg further differentiates between the two types of giftedness using the concept of motivation. Transformationally gifted individuals are intrinsically motivated; transactionally gifted are extrinsically motivated. The intrinsic motivation of transformationally gifted is of a particular quality: motivation to apply gifts toward positive ends. Meanwhile, transactionally gifted are motivated by external demands and rewards received when successful at meeting the demands.

In addition to applying transformational and transactional leadership to giftedness, Sternberg also applies a third type of leadership, noted earlier in this article: pseudo-transformational. Sternberg describes his application of it to giftedness:

Gifted individuals, like gifted leaders, can be pseudo-transformational. On the surface, they appear to be transformational, but deep down, they are transactional and view the appearance of being transformational as a way to conduct a transaction that benefits them.... Pseudo-transformational gifted individuals often have gotten to where they are because they are *skilled at deception*. Individuals who are weak in critical thinking or who choose not to exercise their critical-thinking capacity to any meaningful extent thus may be fooled by them. Many of the "gurus" of popular culture get to where they are because they appear to be transformationally gifted when in fact they have little that is both new and useful to offer. (italics added, p. 234)

## Summary

Drawing upon leadership theory, Sternberg applies the dichotomy of transactional and transformative leadership initially proposed by Burns (1978) to the construct of giftedness. Sternberg explicitly proposes two types of giftedness, transformational, transactional, and alludes to a third type, pseudo-transformational. Transformational giftedness is a desire to transform society in positive ways; in effect, to use gifts for the betterment of the world. Transactional giftedness is defined as a form of exchange relationship in which self-interest prevails. Opportunism and compliance characterize transactional giftedness. Motivation differentiates the two forms of giftedness; transformational giftedness is equated with intrinsic motivation, transactional, with extrinsic. Pseudo-transformational giftedness is defined as transactional giftedness masquerading as transformational. Sternberg's examples, though, speak of a form of giftedness that is more sinister than transactional because, a core element of the pseudo-transformational giftedness is deception.

## Sternberg's Three Types of Giftedness and Dąbrowski's Theory of Positive Disintegration

After presenting his descriptions of the three types of giftedness, Sternberg contrasts his latest conception of giftedness to two other perspectives of giftedness that he believes are closely related: Renzulli's distinction between schoolhouse and creative-productive gifted and Sternberg's analytical and creative giftedness. He does not include Dąbrowski's theory, which is understandable in a way because the theory of positive disintegration is not a theory of giftedness. However, the theory is accepted in the field of giftedness/gifted education as having applications to and implications for gifted individuals as manifested in both prescriptive and research literature. Further, given the value-laden nature of the transformational-transactional-pseudo-transformational giftedness triad, it is surprising that Dąbrowski's theory is not even mentioned. The theory of positive disintegration addresses, in detail, concepts—transformation, morality, selfishness, altruism, compliance, and extreme self-interest—inherent in the proposed types of giftedness. Stating that Dąbrowski's theory is not mentioned in his 2020 article is not meant to imply that Sternberg is unaware of the theory of positive disintegration. As a matter of fact, Harper (2022, discussed earlier in this article) is a chapter in the handbook of transformational giftedness that Sternberg co-edited (Sternberg, Ambrose, & Kairi, 2022).

As in Burns' (1978) theory, "transformation" is a fundamental concept in Dąbrowski's theory. In the theory of positive disintegration, transformation is associated with neither leadership nor giftedness, but rather with a process of human development. Upon close examination, there is similarity among Burns' transformational leadership, Sternberg's transformational giftedness, and Dąbrowskian development. In the theory of positive disintegration, development is conceived as a movement from an egocentric to an altruistic mode of functioning, from a drive-satisfaction to a positive values-driven mode of living. Additionally, development includes the progression from being prisoner of primitive instincts and drives and mindless compliance with the demands of the social environment to self-control, creativity, and autonomy. In the theory of positive disintegration, such progression is termed *autonomous* development (Dąbrowski, 1970). Dąbrowski (1996) also termed it accelerated or universal development. Autonomous development is permeated with self-awareness, empathy, and responsibility for self and others. Descriptors of transformational leadership and transformational giftedness resemble Dąbrowski's autonomous development to such a degree that the latter may be appropriately termed *transformational development*. Though Dąbrowski does not use the phrase transformational development, "transform" and "transformational" occur

countless times in his various detailed descriptions of the process of development (e.g., see Dąbrowski, 1970, 1973, 1996). A significant difference, of course, between transformational leadership, transformational giftedness and autonomous development is that autonomous development is part of a conceptual framework that not only describes this form of development, but also explains how it occurs: namely, through positive disintegration. Positive disintegration is the destruction of the lower, primitive forms of human functioning and replacing them with higher, advanced forms including responsibility for self and others, authenticity, and autonomy. The detailed account of how Dąbrowskian development occurs is beyond the scope of this article, though the details can be found elsewhere (e.g., Mendaglio, 2022; Tillier, 2018).

The similarity between Sternberg's descriptions of giftedness and Dąbrowski's autonomous (also known as "accelerated") development is not limited to transformational giftedness and autonomous development. Sternberg's transactional and pseudo-transformational giftedness have their counterparts in Dąbrowski's (1970) two other types of development: *normal* and *one-sided* development respectively. Transactional giftedness, with its characteristics of self-interest, extrinsic motivation, compliance, and absence of critical thought, bears a striking resemblance to Dąbrowski's normal development:

**Normal development.** By this we [Dąbrowski] mean a type of development which is most common and which entails the least amount of inner conflict and of psychological transformation. Development is limited to the maturational stages of human life and to the innate psychological type of the individual (Boldface in original, Dąbrowski, 1996, p. 20).

In normal development (also termed biologically determined type of development, see Dąbrowski, 1970, p. 29) individuals are influenced by biological drives/needs and the demands of the social environment. Normal development is characterized by self-interest, while conforming with societal mores and expectations, with little questioning and reflection. Normal development may typically include behaviors that go beyond self-interest, but such altruism is often the product of learned values through socialization; that is, behaviors beyond self-interest represent a form of compliance to social norms. In Dąbrowski's theory, normal is the most common form of development. It is reasonable to assume that transactional giftedness is the most prevalent form of giftedness since it is based on Burns' transactional (most commonly occurring) leadership.

Pseudo-transformational giftedness is like Dąbrowski's one-sided development. Descriptions of one-sided development are found in both Dąbrowski (1970) and Dąbrowski (1996). Dąbrowski's (1970) description is exclusively negative in nature:

**One sided Development.** Apart from the two kinds of mental development there is a third kind of mental development. It is manifested in psychopathy and paranoia, that is to say, in mental processes and structures integrated in an asocial or antisocial, sometimes even criminal character (Bolded font in original, Dąbrowski, 1970, p. 29).

Dąbrowski (1996) adds socially acceptable manifestations of one-sided development, while retaining the potentially socially harmful nature. On the socially favorable side, one-sided development is manifested, for example, in creative contributions to science and fine arts, while other functions such as empathy remain undeveloped. As Dąbrowski (1996, p. 21) states: "Only some emotional and intellectual potentials develop very well while the rest remains undeveloped, in fact, it appears lacking." This form of development may have a sinister dimension, as described by Dąbrowski (1996, p. 21):

One-sided development may also take a totally negative turn. This occurs in psychopathy and paranoia. In this case mental processes and structures are strongly "integrated" and resistant to environmental influence. Intelligence serves to manipulate objects in the environment, including, and foremost, other human beings.

I use the term "psychopathic development" to encapsulate the combination of Dąbrowski's (1970) description of one-sided development as well as its negative form, described by Dąbrowski (1996). Psychopathic development epitomizes self-interest, in which satisfaction of drives/needs, and impulses predominates, with little regard to societal expectations and prescriptions. It is equated with a psychopathic approach to life. Like the third form of giftedness, psychopathic development is characterized by deception: concern for others, empathy, and altruistic behavior are simply ploys used to serve one's selfish ends. Sternberg's conception of pseudo-transformational giftedness includes the notion that such individuals are the transactionally gifted pretending to be transformational. Psychopaths are not normal pretending to be psychopathic, they are simply psychopathic. While normal development is not as negatively toned as transactional giftedness, pseudo-transformational giftedness is more positively toned than psychopathic development. Despite the dissimilarities between Sternberg's types of giftedness and Dąbrowski's forms of development, I believe that there is sufficient "face validity" apparent in their descriptions to consider Sternberg's typology as an approximation of Dąbrowskian development.

Additional support for a Dąbrowskian interpretation of Sternberg's types of giftedness is visible in the role of intelligence in the theory of positive disintegration. Dąbrowski's English language books are replete with references to the construct of "intelligence" which Dąbrowski clearly distinguishes from intellectual over-

excitability (Mendaglio, 2008). A theme evident in Dąbrowski's descriptions of intelligence is that the role of intelligence is determined by an individual's level of development (Mendaglio, 2012, 2014). In Dąbrowski's own words:

At a very low level of development primitive urges direct the individual towards certain aims while his intelligence is used exclusively as an instrument completely subservient to those primitive urges. At a higher level, when higher emotions appear, intellectual functions serve on the one hand, as the provider of means toward emotionally determined goals, and on the other hand, in the shaping and growth of emotions (Dąbrowski, 1970, p. 112).

Psychopathic (one-sided), normal, and autonomous development represent development from lowest to highest levels. The role intelligence plays, then, is a function of a particular type of development.

Beginning with the highest form of development, autonomous, intelligence is used for personal growth through transformation and for the betterment of society; that is, it serves as a tool for the implementation of positive values. In normal development, intelligence is employed for the learning of societal values, with the aim of behaving in compliance with them. With respect to biological drives/needs satisfaction, intelligence is used to accomplish this while avoiding societal disapproval. Intelligence is not generally used to question societal expectations nor for the purpose of self-reflection. In psychopathic development, intelligence is utilized to satisfy drives and needs by using whatever means including finding ways to manipulate and take advantage of other people in the process. Though Sternberg, in his application of leadership to giftedness, does not explicitly refer to intelligence, the construct is common in his previous works respecting giftedness (Sternberg, 1986, 2005). In Sternberg (2020) intelligence is implicit in his contrasting transformational and transactional giftedness to his ideas of analytical and creative giftedness:

Certainly, the distinction between analytical and creative giftedness is related to that between transactional and transformational giftedness....But a transactionally gifted person can be creative as well as analytical if it serves his or her personal interest and a transformationally gifted person needs to be analytical in ascertaining whether the transformations he or she proposes are sound and actually have a reasonable chance of success. (Sternberg, 2020, p. 235)

It is impossible to consider *analytical* and *creative* as separate from intelligence, their substrate. Like Dąbrowski's role of intelligence in autonomous development, Sternberg's transformationally gifted individuals use analysis and creativity (intelligence) for assessing and refining potential positive changes; transactionally gifted individuals use analysis and creativity (intelligence) for

personal self-interest. While Sternberg does not include pseudo-transformational giftedness in his discussion, its connection to his two concepts is easily inferred. Pseudo-transformational individuals use analysis and creativity (intelligence) for achieving their exclusively selfish goals.

## Conclusion

Sternberg has had a long-term interest in exploring the related constructs of intelligence and giftedness. Regarding giftedness, his contributions appear to have a common aim: to move the field beyond an IQ-based approach. His recent work is the application of leadership theory to propose another novel approach to giftedness. Transformational, transactional, and pseudo-transformational represent a value-laden conceptualization of giftedness. It is Sternberg's infusion of morality into the core of giftedness that coincides with the foundations of the theory of positive disintegration. The three forms of giftedness, with their moral differences, are analogous to Dąbrowskian dif-

ferentiated moral development. Further, the three types of giftedness resonate with Dąbrowski's three types of development: autonomous, normal, and one-sided (psychopathic development). Assuming that intelligence is the substrate of giftedness, regardless of definition, the giftedness that Sternberg proposes is equivalent to the use of intelligence in Dąbrowski's development. Having examined closely Sternberg's rationale for applying leadership theory to propose a novel conception of giftedness and contrasting the ideas inherent in the labels transformational, transactional, and quasi-transactional with Dąbrowski's theory, I conclude that the theory of positive disintegration may be a better anchor for Sternberg's three types of giftedness than leadership theory.

As I said at the beginning of this article, when I first encountered Sternberg (2020), I wondered whether I would find a Dąbrowskian view of giftedness in it. While writing this article, I believe that I did find it—in Sternberg's latest conception of giftedness, the labels are Burnsonian; the ideas are Dąbrowskian.

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# The Pursuit of Eriksonian Fidelity in Education for the Gifted: A Literature Review Exploring its Interpersonal and Intrapersonal Determinants

Anyesha Mishra 

## Abstract

This review of literature introduces Erikson's psychosocial theory in relation to identity development and fidelity. It explores the intrapersonal and interpersonal determinants of fidelity and identity development as described by Erikson, with a specific focus on the role of schools and the challenges faced by students with gifts and talents (SWGT). It investigates the unique challenges faced by SWGT in their identity development journey, such as boredom, underachievement, and social isolation. The social aspects of identity construction and the influence of educational institutions on students' identity development have been highlighted. The paper emphasizes the significance of creating a supportive learning environment that fosters students' psychosocial needs, including positive peer relationships, mentorship, and academic challenge. It also explores some of the intrapersonal determinants of fidelity and identity development, such as hope, willpower, purpose, and curiosity. These factors have been found to be essential in guiding individuals towards Eriksonian fidelity and play a crucial role in their pursuit of goals and success. The interplay between the interpersonal and the intrapersonal factors is discussed, emphasizing their dynamic nature and their impact on an individual's sense of agency and pathways. Finally, based on the reviewed literature a conceptual framework has been proposed to understand the holistic development and application in educational settings.

**Keywords:** Erikson's psychosocial theory • identity development • fidelity • education • interpersonal factors • intrapersonal factors

Education plays a vital role in shaping not only individuals' lives but also society. By exploring the role of Eriksonian fidelity in education, this literature review aims to provide researchers and educators with valuable insights into how to create learning environments that promote optimal development and growth, especially for the students with gifts and talents (SWGT). The review tries to shed light into both the interpersonal and intrapersonal determinants through the lens of Erikson's psychosocial theory that play a crucial role in educational settings. Erikson's (1950) theory of psychosocial development puts forth the idea that human personality develops in stages, and at each of these stages a psychosocial crisis unfolds, and the goal is the successful development of the ego strength.

Successively, with the help of the literature base, this article also aims to propose a conceptual framework that delves into the intricate process of identity formation among SWGT. In the realm of gifted education, SWGT often navigate unique challenges stemming from their advanced intellectual abilities (Webb, 1993). The proposed conceptual framework will shed light on some of the multifaceted factors that contribute to the

development of identity and fidelity among SWGT. By exploring the interplay between intrapersonal and interpersonal dimensions, this framework will try to uncover how SWGT construct their sense of self and their commitment to the values and goals that define them. Understanding this process is crucial not only for educators and parents who seek to support these students but also for the broader field of gifted education. The model rooted in Erikson's psychosocial theory integrates some of the key constructs such as hope, willpower, waypower, purpose, curiosity, exploration, and the perception of person-environment fit.

Through this conceptual framework, it is aspired to provide a comprehensive understanding of how SWGT can overcome the challenges they face, foster their talents, and ultimately reach their maximum potential. This investigation of the dynamics of identity formation among SWGT can provide insights that can inform the development of tailored educational programs and interventions, ultimately enriching the lives of SWGT. While understanding the interpersonal determinants can guide educators in creating nurturing environments that foster optimal psychosocial development, understanding the intrapersonal determinants can help educators in tailoring instructional strategies and interventions to meet students' unique needs, fostering their holistic growth and well-being and eventually having a successful identity formation.

DOI: 10.25774/b34m-jq42

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## Erikson's Theory of Psychosocial Development

Erikson (1950) proposed the theory of psychosocial development stating that development occurs according to the epigenetic principle of development (Erikson, 1950, 1968). He focused on the importance of the development of certain aspects at critical times, focusing on the increasing awareness of the surrounding world and ethics (Côté & Levine, 1988). Through this theory Erikson proposed the relationship between the individual and society, thus greatly emphasizing the importance of social relationships in shaping personality. He believed that the ego is present in the potential form at birth, but its development depends on the cultural environment. The child-rearing practices of different societies influence the formation of personalities that align with the cultural values and demands of that society.

Erikson believed that personality develops in eight stages, from infancy to old age. Each stage is characterized by a psychosocial crisis, which is a conflict between two opposing forces—the conflict between the syntonic (harmonic) and dystonic (disruptive) elements. The successful resolution of each crisis leads to a favorable ratio (Erikson, 1963) which leads to the development of an ego strength or virtue (Erikson, 1961). For the present review, the focus will be on the development of identity and fidelity and hence we will try to take a deeper dive into it.

Within the theory, Erikson proposed that identity development is a central task of adolescence. Adolescents face a psychosocial crisis of identity versus role confusion. During this time, adolescents are trying to figure out who they are and what they want to do with their lives. They are exploring different roles and possibilities and trying to find their place in the world. Erikson believed that the successful resolution of this crisis leads to the development of the psychosocial strength of fidelity, which is the ability to commit to others and to oneself. Adolescents who achieve fidelity are more likely to be successful in their personal and professional lives (Côté, 2009; Markstrom et al., 1998). They are also more likely to be happy and healthy. This task involves exploring different roles and possibilities and trying to find one's place in the world (Erikson, 1959). The successful resolution of this crisis leads to a sense of self-continuity and purpose. While "the specific quality of a person's identity differs from culture to culture, the accomplishment of this developmental task has shared elements in all cultures" (Erikson, 1966, p. 43). Ultimately, the establishment of a personal identity represents the psychological connection between childhood and adulthood.

## Importance of Balance

The balance between syntonic and dystonic (Erikson, 1982) outcomes of the previous stages is key to identity development (Erikson, 1985). For example, Erikson (1982) describes how lack of autonomy may lead to self-doubt and difficulty in forming a strong sense of self, while excessive and unresolved autonomy may result in disrespectful defiance of authority figures. Furthermore, a positive outcome of the initiative versus guilt stage allows for the development of purpose, which is key in later stages of life, while a negative outcome may lead to a sense of guilt and hesitation. Similarly, a positive outcome of the industry versus inferiority stage leads to the development of competence, which is crucial for successful navigation towards later stages of life, while a negative outcome may result in feelings of inadequacy and inferiority (Erikson, 1982). Therefore, by examining how certain elements relevant to the previous stages have developed, one can identify potential areas of strength and weakness in an individual's identity development and work towards fostering a positive identity outcome in later stages of life.

## Fidelity

As discussed previously, Erikson's (1968) theory posits that adolescence is a period of identity exploration, marked by confusion and experimentation in navigating the path of life. This stage is characterized by Marcia (1966) as psychological moratorium, where adolescents temporarily suspend their current identity and engage in explorations to discover their options for identity. Successful navigation of this stage culminates in the development of a more coherent sense of self, including a strong identity that can withstand challenges to one's beliefs and values and the ability to form commitments and sustain loyalties to oneself and others, known as fidelity. Erikson defined fidelity as "the ability to sustain loyalties freely pledged in spite of the inevitable contradictions of value systems" (Erikson, 1964, p. 125). The sense of fidelity emerges when the crises between identity and role confusion resolves at the end of adolescence. Fidelity is known to encompass loyalty, commitment, sincerity, genuineness, and a sense of duty in one's relationships with other people, choice or beliefs (Erikson, 1962, 1964; Markstrom & Kalmanir, 2001; Markstrom & Marshall, 2007). Erikson claims, "we have almost an instinct for fidelity—meaning that when you reach a certain age you can and must learn to be faithful to some ideological view" (in Evans, 1967, p. 30). While there is a clear distinction between Erikson's identity and fidelity, in this review the terms may often be used interchangeably due to the strong relationship between them, as Erikson (1964, 1968) explains that fidelity occurs after a successful identity development. Moreover, due to the limited studies on

**Table 1:** Ego status (adapted from Marcia, 2009)

	High Commitment	Low Commitment
High Exploration	Identity Achievement	Moratorium
Low Exploration	Identity Foreclosure	Identity Diffusion

fidelity (Brittian & Lerner, 2013) one may find it helpful to study the construct with the help of the effective identity formation of any individual. Understanding the construct can have significant implications for the positive development of individuals and provide insights on its antecedents or predictors.

As an adolescent, it is essential to develop a sense of fidelity, which helps to make and maintain meaningful and lasting relationships with others who share similar interests and values (Côté, 2009; Markstrom et al., 1998). It provides a sense of security, belonging, purpose, and direction during the transition to adulthood (Erikson, 1963). To develop fidelity, adolescents need positive relationships with parents and other adults, opportunities to explore different roles and identities, a sense of belonging to a community or group, and exposure to positive role models (Erikson, 1963; Kroger, 2006). However, adolescents may face several challenges that impede their identity and fidelity development. These challenges may include peer pressure to conform or rebel, parental expectations or conflicts, social media influences or cyberbullying, academic or career demands or uncertainties, cultural or religious diversity or discrimination (Kroger, 2006). Such challenges may lead adolescents to role confusion, resulting in difficulty forming relationships, lack of direction in life, and feelings of isolation, conflict, and meaninglessness (Brittian & Lerner, 2013; Markstrom & Kalmanir, 2001). Thus, it is crucial to provide young people with the support they need to develop a strong sense of identity and fidelity. This can be achieved by creating a safe and supportive environment that encourages exploration and expression of individuality, providing positive reinforcement, and being a positive role model (Kroger, 2006).

## Identity Formation

Marcia (1966) operationalized the concept of identity by Erikson with his empirical work. While Erikson (1968) focused on awareness, Marcia (1966, 1980) focused on self-structure. To understand it in further detail we can see that Erikson (1968) defined identity as

awareness of the fact that there is self-sameness and continuity to the ego's synthesizing methods, the style of one's individuality, and that this style coincides with the sameness and continuity of one's meaning for significant others in the immediate community. (p. 50)

Whereas Marcia (1966) defined identity by focusing on the presence or absence of exploration (originally

called "crisis" (Marcia, 1966, p. 551)) and commitment. He defines identity as a self-structure which is "an internal, self-constructed, dynamic organization of drives, abilities, beliefs, and individual history" (Marcia, 1980, p. 106). According to him, four different identity statuses can develop with high and low combination of exploration and commitment (see Table 1). While exploration refers to the process of exploring different potential identities and options (Grotevant, 1987), commitment refers to the degree of attachment or personal investment to a particular identity, action or belief (Bosma & Kunnen, 2001; Kroger & Marcia, 2011). Kroger and Marcia (2011) state that it is during late adolescence that the individual sorts through, rethinks and tries out different "roles" as well as "life plans" (p. 33).

Identity diffusion refers to the stage where individuals have not yet explored or committed to any particular identity. They may be avoiding the process of exploring their options, or they may be overwhelmed by the choices available to them. This stage often tends to be associated with low self-esteem, drug or alcohol issues, delinquency (Adams et al. 2005; Luyckx et al. 2005; Schwartz et al., 2005). Considering their unique characteristics, a SWGT experiencing identity diffusion might exhibit a lack of clear direction and commitment, appearing disengaged or aimless in their pursuits. They might struggle with integrating their exceptional abilities into a cohesive sense of self, potentially leading to underachievement, disconnection, or even negative psychosocial outcomes.

Identity foreclosure refers to the stage where an individual has committed to a particular identity without exploring other options. They may have adopted the values and beliefs of their parents or other authority figures without questioning them. While foreclosure is associated with high self-worth, it is also associated with rigidity, closed-mindedness, and authoritarianism (Kroger & Marcia, 2011). Identity moratorium refers to the stage where individuals are actively exploring different options for their identity but have not yet committed to a particular identity. They may be trying out different roles or experimenting with different lifestyles. Studies have found that this stage is often positively correlated with positive aspects like openness and curiosity (e.g., Luyckx et al., 2006), and negative aspects like anxiety, depression, and low self-worth (e.g., Schwartz et al., 2009). This stage can be manifested in an SWGT as active exploration of different academic and extracurricular paths, experimenting with diverse interests, and seeking experiences beyond their comfort



zone. They might express uncertainty about their future direction and be open to trying out different roles, talents, and potential career paths. Moreover, the fact that multipotentiality exists among individuals with gifts and talents (Sajjadi et al., 2001), can also pose further challenges for them in their process of exploration and commitment. Frazier (2021) discusses how various identity developments among SWGT are impacted by their multipotentiality, and provides recommendations for supporting them.

Finally, identity achievement refers to the stage where individuals have explored different options for their identity and have committed to a particular identity. They have made a decision about who they are and what they stand for. This is often linked with a well-balanced mindset, healthy social connections, and careful contemplation of various life possibilities (Berzonsky, 2004; Zimmer-Gembeck & Petherick, 2006). Though Marcia (1966) did not talk about fidelity in his studies, one may understand that identity achievement is the same as what Erikson called fidelity, where commitment to one's identity is the main characteristic of the individual. Furthermore, Markstrom and Kalmanir (2014) found that fidelity was predicted by advanced identity development. Markstrom et al. (1997) also found fidelity to negatively correlate with ideological diffusion and ideological and interpersonal moratorium, which are characterized by low commitment. This relationship between identity and fidelity indicates that if one tends to study the identity status of an individual, one may also tend to understand their fidelity.

Marcia (1966, 1980) believed that exploration was the process that leads to the development of identity, while commitment was the end result. However, more recent models (e.g., Ciecuch & Topolewska, 2016; Crocetti et al., 2008; Luyckx et al., 2006) consider both exploration and commitment as ongoing processes. These models use a process similar to Marcia (1966) to identify the identity statuses, thus providing a strong empirical foundation that captures the process of identity formation (Schwartz et al., 2011). Marcia (1966, 1980) also deviated from Erikson's focus on the role of social context on identity formation (Côté & Levine, 1988; Waterman, 1988).

### Psychosocial Constructs related to Fidelity and Identity Development: A Glimpse

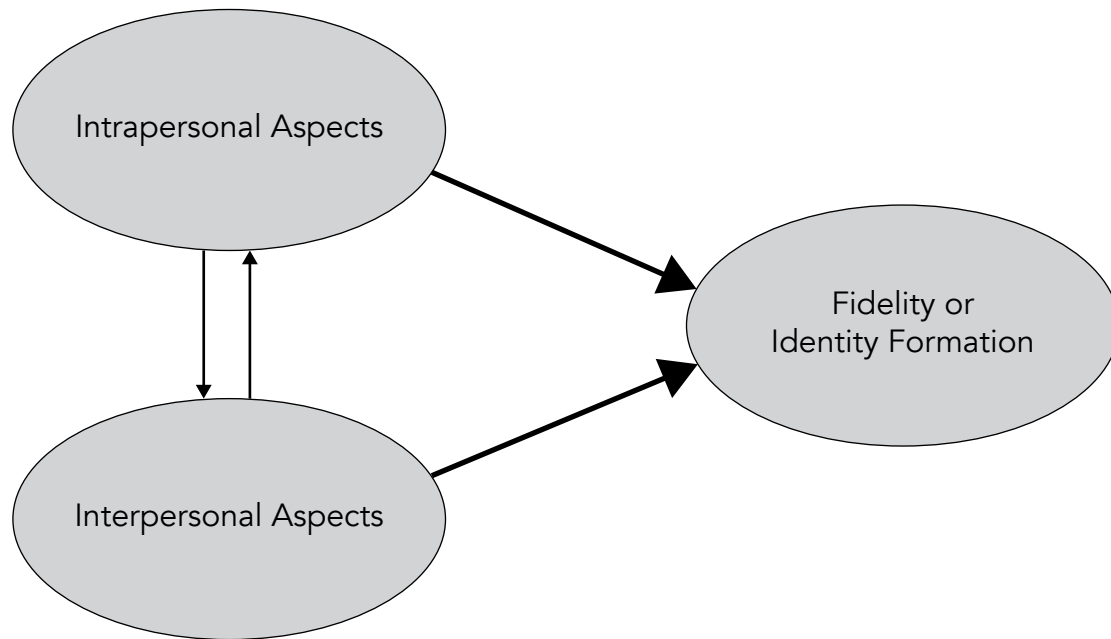
Though there is a dearth of literature on fidelity, in this section we will explore what psychosocial factors are related to both fidelity and identity development and in what way. Erikson (1950) separated "ideology" and "relationships" as distinct areas for identity development. This may indicate that by using the distinction between intrapersonal and interpersonal aspects of identity (Kroger & Marcia, 2011), it is possible to understand

that identity development occurs in and through both these domains. While a person's subjective sense of feeling, thoughts, values is intrapersonal in nature, their behavior towards others is interpersonal. And the interaction between both these factors can have an influence in identity formation (Schwartz et al., 2015; see Figure 1 for a visual representation).

Identity has been found to be related to several factors of well-being such as self-esteem (Swann et al., 2007), meaning in life (Steger et al., 2013), and life satisfaction (Pavot & Diener, 1993). Hamachek (1988) described a stable self-concept as one of the characteristics of an individual who has a sense of identity. Additionally, Oyserman et al. (2012) stated that "self, self-concept, and identity can be considered as nested elements, with aspects of the 'me' forming self-concepts and identities being part of self-concepts" (p. 75). Thus, it can be said that there is also a close relationship between self-concept and the above variables.

Waterman et al. (2013) also unearthed that strong identity commitments (which can be likened to fidelity) are linked to positive outcomes such as improved subjective well-being (also found by Hofer et al., 2007; Waterman, 2007), psychological well-being (also found by Abu-Rayya, 2006; Waterman, 2007), self-esteem (also found by Basak & Ghosh, 2008; Schwartz, 2007), and internal locus of control (also confirmed by Adams & Shea, 1979; Schwartz, 2007), with a reduced probability of experiencing symptoms of anxiety (also found by Marcia, 1967; Schwartz et al., 2011) and depression. However, when the Schwartz et al. (2011) added a measure of the quality of identity commitments to their analyses, they found that commitment quality was the key factor that accounted for the associations between identity commitments and psychosocial functioning, and low-quality identity commitments were associated with psychological costs instead of the benefits. As a result, they (Schwartz et al., 2011) discussed the implications of helping emerging adults make better identity choices to enhance their well-being through stimulation of identity exploration, commitment or both. Similarly, Soenens and colleagues (2011) found that identity commitment quality matters linking it to Self-determination theory (Deci & Ryan, 2009). In their study, autonomous motives (self-determined) were linked to better adjustment even after accounting for the strength of identity commitments, while controlled motives (extrinsically driven) had a negative impact on adjustment.

In another study about identity structure and processes, conducted by Bogaerts et al. (2019), it was found that adolescents who scored high on identity synthesis (for definition see Erikson, 1968) compared to their peers also scored high on proactive exploration and commitment processes and low on ruminative exploration (for definition see Luyckx et al., 2008) one

**Figure 1:** Interaction between the domains

year later compared to their peers. On the other hand, adolescents who scored high on identity confusion compared to their peers also scored high on ruminative exploration one year later. The effects of identity processes on identity structure were also observed in adolescents who scored high on identification with commitment compared to their peers, as they scored low on identity confusion one year later. Moreover, it was found that when adolescents scored high on identity synthesis compared to their own average score, they reported increased proactive exploration processes one year later (Bogaerts et al., 2019). These results suggest that achieving identity synthesis is essential for proactive identity exploration at both the between- and within-person levels.

Extending on and confirming the above findings, Becht et al. (2021) conducted a longitudinal study to understand how daily identity dynamics shape identity. They found that during adolescence, there is a dual-cycle process model of identity formation and maintenance that operates within a person across days. Individual differences in these short-term identity processes during adolescence predicted differences in identity development in emerging adulthood. Adolescents with low daily commitment levels and high levels of identity reconsideration were more likely to have weak identity commitments and high identity uncertainty in emerging adulthood. Similarly, adolescents with strong daily changes in identity commitments and continuing identity uncertainty were more likely to have high identity uncertainty in emerging adulthood. These findings support the idea that there is a link between short-term daily identity dynamics in adolescence and long-term identity development in emerging adulthood.

Furthermore, to understand the role of intrinsic motivation in identity formation, Waterman (2004) first conducted a literature search to understand the constructs that predict intrinsic motivation and then found their correlation to different measures of identity. He found that subjective states like interest, flow and personal expressiveness were predictors for intrinsic motivation, along with self-determination, competence in the form of balancing challenges and skills, and self-realization values, which in turn are the predictors for identity. It is important to note here that Waterman (2004) referred to the literature base to find the relationship of the variables to identity through personal expressiveness and it was not an empirical study.

Also, while trying to understand the determinant of identity development, Bosma and Kunnen (2001) found that the process of identity development is influenced by the factors that enhance openness to change, environmental support, and the developmental history. Considering the psychosocial crisis in the earlier stages by Erikson (1950, 1968) a study by Brzezińska et al. (1996) suggested that the key factors that contribute to identity formation are shame proneness and strategies for regulating shame, as well as personal beliefs about one's life and significant social experiences that define the quality of adolescents' social participation. Parental attitudes and psychological well-being were also found to be correlated with identity formation among adolescents in studies from different parts of the world (e.g., Floyd et al., 1999; Sandhu et al., 2012). Luyckx et al. (2007) also found that parental warmth is associated with identity formation, although excessive parental practices are likely to hinder the exploration. However, a study by Wires et al. (1994) was unable to establish a

relationship between identity status and child-rearing values, social problem-solving, independence stress, and health concerns.

## Fidelity and Identity Development: Role of Education

Though many scholars have criticized the individualistic approach (Rich & Schachter, 2011) to Erikson's theory by the neo-Eriksonian tradition (Schwartz, 2001), it is important to remember that Erikson's theory was a psychosocial theory that focused on the relationship between the individual and the society (Erikson, 1950, 1968). Educational researchers have recently begun to focus on adolescent identity development, recognizing the importance of social aspects in constructing identity. As a result, they have studied various school effects on different aspects of identity development (e.g., Faircloth, 2009; Lannegrand-Willems & Bosma, 2006; McLeod & Yates, 2006). Additionally, certain experts in the field of education have emphasized the importance of the concept of identity as a means to gain deeper insights into a wide range of educational events and phenomena thus enhancing our comprehension of educational processes (e.g., Kaplan & Flum, 2009; McLeod & Yates, 2006; Roeser et al., 2006; Sfar & Prusak, 2005). Studies have indicated that educational institutions that incorporate identity-promoting characteristics play a significant role in fostering student identity development (Rich & Schachter, 2011). Moreover, engaging academically in studies that are personally meaningful is a crucial factor that enhances student exploration and boosts their confidence in forming their identity (Rich & Schachter, 2011).

Verhoeven et al. (2018) integrated the findings of different studies on how schools and teachers play a role in the identity development of adolescents both intentionally and unintentionally. They found that different types of educational processes (differentiation, teaching strategies, teacher expectation, peer norms) and explorative learning experiences (in-depth, in-breadth, reflective) have an influence on the development of adolescents. Noddings (2005) has made a convincing argument that the way teachers feel about and interact with their students can have significant impacts on various aspects of students' development, such as their self-esteem and academic efforts. This has been supported by several studies showing that teachers' expressions of care and support are positively associated with students' pursuit of prosocial goals, academic efforts (Wentzel, 1997), engagement (Patrick et al., 2007), self-confidence, liking of school (Hallinan, 2008), students' academic and social motivation (Wentzel et al., 2010), self-efficacy (Cornelius-White, 2010), and competence (Deci & Ryan, 2009). These constructs have been considered as 'identity capital' that fosters

identity development (Côté & Schwartz, 2002). Furthermore, caring has also been indirectly related to identity development through educational contexts that support relationships and belonging (Faircloth, 2009; La Guardia, 2009). The influence of teachers as role models has been seen to outweigh their level of care when it comes to predicting student identity development (Rich & Schachter, 2011).

In addition to several other constructs affected by the identity of an individual (as discussed previously), recent research has revealed a crucial link between a student's sense of self, their identity, and how they engage with learning. This connection significantly affects not only their active participation in the learning process but also their emotional and affective responses to it (Faircloth, 2012). Reciprocally, Lannegrand-Willems and Bosma (2006) also found that, not only did the school environment have a significant impact on the formation of students' identities, but also the school experience was a valuable tool for personal growth and identity development.

## Fidelity and Identity Development: Role in Giftedness and Gifted Education

Erikson's concept of fidelity can also provide a framework for understanding the psychological needs of students with gifts and talents (SWGT) as they navigate the challenges of intellectual and social development. Erikson's concept of fidelity pertains to staying loyal to oneself and important people in one's life. Kelland (2015) proposes that this stage is most manageable for individuals (including SWGT) who have received adequate training in achieving specific objectives and have received ample positive feedback from their peers. SWGT often experience a unique set of challenges related to their advanced intellectual abilities, such as boredom, underachievement, and social isolation (Gallagher, 2008). These challenges can impact the development of identity and fidelity, as they may struggle to find a sense of purpose and belonging in a world that may not fully understand or appreciate their abilities. SWGT may face unique challenges in this regard, as they may struggle to reconcile their intellectual abilities with their social and emotional needs (Gross, 1994). By understanding the role of fidelity in the development of SWGT, educators and parents can help support these students in their journey towards self-discovery and self-actualization. Erikson (1968, as cited in Kidwell & Dunham, 1995) argued that SWGT are more likely to experience an identity crisis than their non-identified peers since they may experience noticeable exploration because of their unique characteristics.

Cross (2001) postulated that gifted teenagers may have difficulty developing their identity because they have many choices and opportunities to explore. They may also feel different from their peers or feel pressure

to conform or succeed. However, if they are provided with supportive environments, role models, and peers who share their interests and beliefs, their giftedness can help them develop their identity and build a sense of belonging. Also, educators can provide opportunities for SWGT to explore their interests and passions, and to engage in activities that allow them to develop a sense of purpose and direction (Silverman, 1993). Moreover, educators and parents can help them to develop healthy relationships with peers and mentors who share their interests and can provide support and guidance (Neihart, 2006; Neihart, 2021). By providing a supportive and nurturing environment, educators and parents can help SWGT to develop a strong sense of identity and fidelity, which can be critical for their long-term success and well-being. Mahoney (1998) proposed the Gifted Identity Formation model focusing on some of the above factors as a guide to understand the SWGT. He focuses on validation, affirmation, affiliation, and affinity as the underpinnings from the systems (internal and external forces like self, family, culture, etc.) that help in shaping the identity.

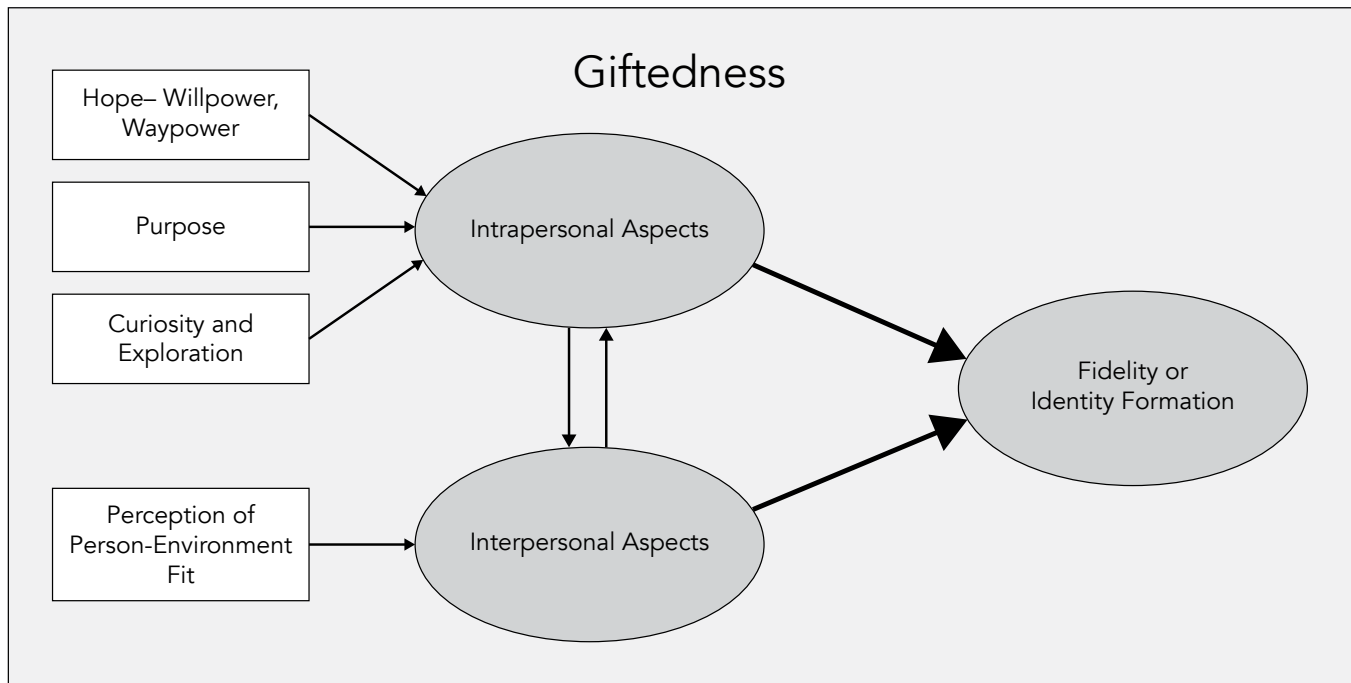
However, the School-based Psychosocial Curriculum Model (SPCM, Cross et al., 2017; Cross & Cross, 2017a) helps in providing a framework for the psychosocial development of SWGT by establishing the essential ego-strengths (Erikson, 1968) which can help in their highest level of accomplishment. Cross and Cross (2017b) recommended fidelity as a starting point in planning any talent development program. Considering the advantages of identity achievement (Marcia, 1993) or fidelity, as discussed previously, it is evident that the recommendation is in line with promoting the optimal psychosocial development of SWGT. Additionally, the model focuses not only on the intrapersonal aspects of the individual, but it also focuses on their interpersonal aspects. This aligns with Erikson's theory (1950, 1968), on which the model is based. It emphasizes the importance of creating a supportive learning environment that fosters the psychosocial needs of SWGT which includes providing opportunities for positive peer relationships, mentorship, and academic challenge. To demonstrate the importance of psychosocial development, Cross and Cross (2017b) state "talent development requires a strong ego. SWGT must be motivated and able to pursue the goals necessary to achieve their maximum potential" (p. 182). For SWGT, the messages they receive about themselves from their environment can often complicate identity development (Cross & Frazier, 2009) which can lead to several intrapersonal and interpersonal consequences. This provides additional evidence that emphasizing the development of identity in youth is crucial for success (Zuo & Cramond, 2001), underscoring the significance of comprehending the factors that contribute to it (both intra- and inter-personal).

## A Proposed Conceptual Framework

With the help of the previous discussion of literature and relationships among the different constructs, this paper proposes and describes the following conceptual framework (see figure 2) which also tries to fill the gap in the literature. Considering the framework for the realm of gifted education, it may help in exploring how SWGT manage and integrate their diverse abilities, as well as how their interactions with peers, mentors, and role models impact their identity formation. It is to be noted that while there are many other factors that can be incorporated both within the intrapersonal and the interpersonal determinants this framework provides an example of and describes only some of them.

The proposed conceptual framework diagram depicts the interconnectedness of the intrapersonal and interpersonal dimensions and how they contribute to Eriksonian identity formation and fidelity. While individual relationships among the different constructs have been studied, no research has focused on the holistic relationships among them to understand the overall concept of fidelity. The aim of this framework is to help understand the factors that affect how people seek Eriksonian fidelity in education, so that effective interventions can be developed to support their quest towards success. More specifically, the present conceptual framework aims to provide a partial empirical understanding of the School-based Psychosocial Curriculum Model (Cross et al., 2017; Cross & Cross, 2017a, b), in order to maximize the potential of SWGT (Cross & Cross, 2017a).

The framework postulates that individuals' identity formation and senses of fidelity are shaped by interpersonal and intrapersonal factors demonstrating the interrelationships between these factors. The intrapersonal dimensions, including hope, willpower, purpose, waypower, curiosity, and exploration, have been seen as essential determinants of Eriksonian identity formation and fidelity. These dimensions that are influenced by an individual's personal experiences, beliefs, and values, have a crucial role in guiding the individual's pursuit towards Eriksonian fidelity. The interpersonal dimension, which in the present context we are looking at with the lens of the perception of person-environment fit, can be considered as another critical factor that contributes to Eriksonian identity formation and fidelity. The environment, including educational settings, plays a significant role in shaping the individual holistically. As we have understood from the literature discussed above, it can be hypothesized that the person-environment fit can have both direct and indirect effects on an individual's intrapersonal dimensions, thus ultimately impacting their sense of Eriksonian fidelity.

**Figure 2:** Conceptual framework

### Intrapersonal Aspects

Hope, willpower, waypower, and purpose are important constructs that drive performance to translate goals to success (Bronk et al., 2018; Colla et al., 2022). These constructs are interconnected, as they can be understood within the context of Erikson's psychosocial theory as the virtues that emerge from the first three stages. Hope is the belief that things will turn out well in the future that can motivate individuals to persist in the face of challenges and setbacks. It is defined as "a positive motivational state that is based on an interactively derived sense of successful (a) agency (goal-directed determination) and (b) pathways (planning of ways to meet goals)" (Snyder et al., 1991, p. 248). It emerges as a virtue from the first stage of development—trust versus mistrust (Erikson, 1968). Snyder et al.'s (1991) theory of hope emphasizes the importance of goal-directed thinking and action in promoting positive outcomes. According to this theory, hope is not just a passive emotion, but an active cognitive process that involves setting goals and developing strategies to achieve them. They propose that hope consists of two main components: agency and pathways. Agency refers to the individual's belief in their ability to initiate and sustain action toward their goals, while pathways refer to the individual's ability to identify and plan effective routes towards their goals. Together, these two components form a positive feedback loop, in which successful goal pursuit increases one's belief in their agency and pathways, which in turn leads to greater motivation and success in achieving goals (Snyder et al., 1991). Colla et al. (2022) extended Snyder's original idea of

hope to include two more factors, an interpersonal factor called *WePower* and an intrapersonal factor called *WhyPower*. These additional factors were incorporated alongside the existing elements of hope theory (Snyder et al., 1991)—*WillPower* (motivation to succeed) and *WayPower* (planning to achieve goals). The researchers aimed to investigate the interplay between these factors to develop a more comprehensive and dynamic model of hope. According to their expanded model, hope is considered an emergent property that cannot be fully understood by merely examining its individual components, but rather as an energy system that arises from the interaction between these factors. It should be noted that willpower is also a virtue that emerges out of the second stage of Erikson's psychosocial theory—autonomy vs shame and doubt. It can also be defined as the ability to resist immediate gratification in pursuit of long-term goals (also referred as self-control; Hoffmann et al., 2012; Mischel & Ayduk, 2004).

Purpose, the virtue emerging from the third stage of Erikson's psychosocial theory of development, has been seen as a developmental asset (Benson, 2006) critical in a healthy identity formation (Hill & Burrow, 2012). Purpose development involves commitment where the individuals consider who they hope to become and what they hope to accomplish in their lives (Bronk, 2011; Hill & Burrow, 2012). Damon et al. (2003) define purpose as a future-oriented intention persisting over the long-term with the aim to achieve meaningful objectives that have significance to oneself and the wider world. Considering the above definition, Bronk et al. (2018) constructed a scale to measure purpose by understanding

an individual's meaningfulness, goal orientation and beyond-the-self orientation.

Exploration plays a crucial role in identity formation and hence fidelity (Erikson, 1964; Kroger, 2006; Marcia, 1966). Exploration has been defined as actively seeking out opportunities to acquire new information and experiences (Ainley, 1987; Berlyne, 1960; Pearson, 1970). Studies have illustrated how exploration is driven by curiosity (e.g., Ten et al., 2021). Curiosity is not only a characteristic of giftedness (Silverman, 2003), but it has also been targeted for cultivation in students to drive exploration (e.g., Kamis et al., 2018; Ostroff, 2016) for a better cognitive development, education and scientific discovery of individuals (Loewenstein, 1994). It shares similarities with various other psychological concepts that are focused on how individuals manage and control their attention when confronted with new or significant stimuli in their environment (Kashdan et al., 2009). Theoretical models of curiosity often highlight exploration as its significant component, which has been studied in previous research instruments (Kashdan et al., 2004; Kashdan et al., 2009). Another significant component of curiosity is the willingness to accept the unpredictability and novelty of everyday life (Berg & Sternberg, 1985; Beswick, 1971; Day, 1971; Silvia, 2008). However, while tolerance of uncertainty has been acknowledged as a crucial element of curiosity in theoretical models, previous attempts to measure this aspect have been consistently overlooked (Kashdan, 2009). Curiosity and exploration have also been linked to openness to experience (Costa & McCrae, 1992). Vuyk et al. (2016) explains how openness to experience can better explain various behaviors among individuals, especially SWGT. Nevertheless, given the importance of curiosity and exploration in identity formation, the relationship between the constructs has been rarely studied.

## Interpersonal Aspects

Drawing ideas from the person-environment fit theory (Hunt, 1975), Eccles and Midgley (1989) proposed the stage-environment fit. While the person-environment fit theory primarily emphasizes the role of social interactions and the overall perception of the environment, the stage-environment fit theory focuses specifically on how experiences and transitions within school settings influence the development of adolescents. Hunt (1975) reasoned the importance of understanding the person-environment fit with a developmental framework. He stated,

Maintaining a developmental perspective becomes very important in implementing person-environment matching because a teacher should not only take account of a student's contemporaneous needs by providing whatever

structure he presently requires, but also view his present need for structure on a developmental continuum along which growth toward independence and less need for structure is the long-term objective (p.221).

Focusing on Hunt's (1975) argument, Eccles et al. (1993) suggested the importance of "fit between the developmental needs of the adolescent and the educational environment" (p. 92). Achieving a positive stage-environment fit can facilitate healthy identity development by providing individuals with the appropriate resources, challenges, and support to master the developmental tasks of each stage (Eccles et al., 1993). For example, in the adolescent stage of identity versus role confusion, achieving a positive stage-environment fit may involve navigating the challenges of peer group and school environments to develop a clear sense of self. A positive stage-environment fit in this stage may involve having supportive peers, mentors, and adults who provide guidance and encouragement, as well as opportunities to explore different roles and identities (Eccles et al., 1996). In the context of SWGT, fostering a positive stage-environment fit during the adolescent stage of identity versus role confusion may entail creating supportive network should also provide ample opportunities for gifted students to explore diverse roles and identities that align with their talents and interests, facilitating their healthy identity development. Looking further at it in correspondence to giftedness, it has been previously proposed that if SWGT are provided with supportive environments, role models, and peers who share their interests and beliefs, their giftedness can help them develop their identity and build a sense of belonging (Cross, 2001) thus helping the formation of identity.

## Implications and Future Directions

The proposed framework for understanding identity formation among SWGT and the interaction among various interpersonal and intrapersonal determinants tries to offer valuable insights and open avenues for both research questions and practical applications in the field of gifted education. Research questions stemming from this framework may include inquiries into the specific factors influencing the transition between different identity statuses among SWGT, such as exploring the triggers that lead a student from moratorium to identity achievement or from diffusion to foreclosure. Researchers may also investigate the long-term consequences of different identity statuses on the academic and psychosocial well-being of SWGT, shedding light on how fostering a strong sense of identity can positively impact their educational journey and overall development.

Moreover, the practical applications of this framework can be directed towards educators, parents, and

policymakers. Educators can use this framework to design tailored interventions that facilitate identity development among SWGT. They may implement strategies to help students navigate the challenges associated with their giftedness, such as providing mentorship programs, creating flexible and enriching learning environments, and offering counseling support. Parents can utilize this framework to better understand their gifted children's unique needs and experiences, enabling them to provide appropriate guidance and emotional support during identity formation. Moreover, policymakers can draw from this framework to inform the development of inclusive educational policies and programs that recognize the significance of identity in the success of SWGT. This framework tries to bridge the gap between theory and practice, offering a foundation for research exploration and practical initiatives aimed at optimizing the potential of SWGT while ensuring their holistic development

## Conclusion

Thus, the existing literature highlights the significance of considering both individual and social aspects of Erikson's psychosocial theory in understanding identity development (hence 'fidelity'). In this body of literature educational researchers have recognized the role of

schools in fostering student identity development and all 'ego strengths' through meaningful academic engagement, supportive relationships, and focusing on several intrapersonal and interpersonal factors. SWGT sometimes may struggle to find a sense of purpose and belonging, but with supportive environments, role models, and opportunities to explore their interests, their giftedness and talents can contribute to their identity development thus helping in building a positive society. This literature review helps us emphasize the importance of understanding and addressing the unique psychosocial needs of SWGT to promote their maximum potential by providing partial evidence for the School-based Psychosocial Curriculum Model (SPCM). The aim was to understand the existing gap in the interrelations between the different constructs as predictors for fidelity. Specifically, the literature review tried to underscore the significance of including fidelity or identity achievement in planning talent development programs for SWGT, as advocated by Cross and Cross (2017b). By prioritizing the development of a strong ego, SWGT can overcome the psychosocial challenges they face and become motivated to pursue their goals effectively. More importantly, the development of fidelity can help the students in understanding and supporting themselves.

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## Author Information


Anyesha Mishra is a doctoral student in the Gifted Education Administration program of the Educational Policy, Planning, and Leadership department at William & Mary School of Education. With a background in psychology, Anyesha has a special interest in understanding the psychological and social experiences of students with gifts and talents, for their talent development. Her other areas of interest are institutional collaboration in nurturing such students, enhancement of their creative potential, and evaluation of programs for the gifted.



Interview

## Counsellor's Corner: An Interview with Sal Mendaglio

Sal Mendaglio, Ph.D.

Interviewed by Tracy L. Cross, Ph.D. 

In this ongoing series known as the Counselor's Corner, Dr. Tracy Cross interviews well respected professional psychologists and counselors to gain their insights into the lives of gifted and/or high ability people they have counseled. Dr. Sal Mendaglio recently retired from a long and active career at the University of Calgary. Over the years he contributed numerous articles and books about gifted students and is recognized as a leading expert on the works of Kazimierz Dąbrowski.



Dr. Sal Mendaglio

**Cross** • *Please tell us about yourself. Where did you grow up? Where did you go to college? Tell us about your professional life. How did you get interested in serving students with gifts and talents?*

**Mendaglio** • I was born in Capistrano, the one in Calabria, Italy, not California. My family moved to Montreal, where I grew up. During my early

years, it was challenging navigating the two conflicting cultures of small-town Southern Italy and the big city Anglo-Franco culture of Montreal. My elementary school had a significant proportion of Italian immigrant students. Having to master English created an acute awareness of words but left residual effects of being a second language learner.

I can describe most of my life with one word: improbable—from humble beginnings as an Italian immigrant boy to professor and psychologist. I was the first of my family to attend university. I received all my education in Canada: a BA in psychology from St. Francis Xavier, a liberal arts university in Nova Scotia, a B.Ed. from the Université de Montréal, a master's in counseling from McGill University, and a Ph.D. in counseling psychology from the University of Toronto. Following several years teaching elementary and junior high school in Montreal, I obtained an appointment at the University of Calgary, from which I have recently retired.

I am fond of saying that I am a good example of the chance theory of vocational development. Key elements of my education and occupation were all the result of serendipity—no planning on my part. One thing led to another. I suppose that in retrospect, I could claim, as Carl Rogers might say, that I was open to experience but

the truth is that I had little knowledge of how systems worked.

My getting involved with counseling gifted individuals is a prime example of the role of serendipity—or as Gagne might say more dispassionately, chance factors affecting my life. I had just begun my academic appointment at the University of Calgary and had also qualified for a licence in psychology in our province. One of the courses that I was assigned to teach was a master's level counseling practicum, which involved field supervision of students. I wanted to avoid simply teaching "by the book" and so I established a small independent practice. I soon began receiving referrals of clients of various ages and presenting problems. While I was establishing my general counseling practice, a local educator was piloting an elementary school level program for gifted students in the public school district. One day, I was approached by the administrator of the fledgling education program, asking whether I would accept a referral of a gifted student who was underachieving in her program. I informed her that I knew nothing about gifted students. Her reply, that neither did any other local psychologist, convinced me to accept the referral. That first referral led to my comprehensive self-study program: perusing literature, and attending relevant conferences. And, as they say, the rest is history!

**Cross** • *How would you describe your counseling practice?*

**Mendaglio** • In the early 2000s, I published two items: an article and a book chapter, about counseling gifted individuals. The message of the article (Mendaglio, 2005) became the foundation of my approach to effective counseling with these clients: we must take giftedness into account. Like all people who become clients, gifted individuals need counselors who demonstrate the ingredients of effective counseling: ability to establish and maintain a helping relationship, a theory of counseling, self-efficacy as a counselor, and relevant content knowledge. Without relationship-building skills and an explicit theory of counseling, effective counseling cannot happen. What is needed to successfully counsel gifted individuals is knowledge of giftedness. What this

means is that counselors must have a conception of giftedness that they infuse into the process—we must take giftedness into account. There is a lack of consensus on what constitutes giftedness; therefore, counselors must construct their own conception. Without this ingredient, clients may still benefit from what we consider effective counseling, but the likelihood of successful outcome is increased when we infuse giftedness into the process. My conception of giftedness includes both a definition and three characteristics of giftedness. In short, I view giftedness exclusively as a high level of intelligence. The only other author that defined giftedness in this way was Barbara Clark in her classic *Growing up Gifted* book (Clark, 1997). Further, I view high intelligence, and therefore giftedness, as potential for extraordinary achievement. In other definitions, prodigious productivity is part of the definition of giftedness. Regarding characteristics, I conclude that all gifted persons have three characteristics: heightened sensitivity, analytic attitude, and self-criticism described elsewhere (Mendaglio, 2007)

In my book chapter (Mendaglio, 2007) I labelled my counseling approach as *affective cognitive therapy*. I placed "affective" first to emphasize the preeminent role that emotions play in clients generally and especially among clients who are gifted. My assumption is, regardless of presenting problems, that many clients approach us because they are overwhelmed by their negative emotions. Due to the heightened sensitivity characteristic, gifted individuals generate a great deal of intense emotion—of course, it is the intensity of negative emotion that leads them to seek counseling. In my approach, in addition to general effective counseling ingredients, I infuse my conception of giftedness didactically in the process. My aim is to help gifted clients understand and accept that intense experiences are inherent in giftedness. The goal, then, is to help them manage their emotionality. Teaching them that their intensity is due to giftedness is an important step in eliminating their belief that there is something wrong with them because of the intensity of their feelings. It is important to note that what I am describing is different from stating: intensity is part of giftedness, do not worry. It is my presenting in detail my conception of giftedness that has the power—not simply stating the obvious.

A final comment on my approach: while the field of gifted education appears to move toward viewing giftedness in terms of prodigious productivity and achieving eminence, I have been involved in understanding the experience of being gifted, by creating a psychology of giftedness.

I can also describe my counseling practice based on the nature of the clients who seek my help. By far, the most common requests come from parents—to be honest—from mothers, who are concerned about their gifted children, most often their sons. A subset of parents state that their children had previously seen

other psychologists, whom parents believed were not aware of giftedness. For gifted students, parents are the referral source. It is rare, in my experience, to encounter self-referred students requesting my help. A small proportion of my clients are adults, most of whom were not identified gifted, but they are highly intelligent and are having work or intimate relationship difficulties.

My specialty is offering parent counseling. It often surprises parents when they contact me to counsel their gifted children that I say that I want to work with them first. Parents tend to be initially skeptical since they want their children "fixed". However they change their minds when I present my rationale. I realized years ago that when children are referred for counseling, it is likely that they will get a message that there is something wrong with them. In my experience that is rarely the case. In addition, when it comes to helping young children, I find it more efficient to consult with and guide their parents, sharing my conception of giftedness. Though I enjoy meeting with gifted children, I no longer meet with them unless it becomes clinically necessary.

**Cross** • *What topics do you think we can be most effective with in our counseling practice with gifted and talented students?*

**Mendaglio** • Academic underachievement continues to be a prevalent presenting problem. For counselors who have little knowledge about giftedness, this presenting problem may seem contradictory. Such a perspective is evidence of a myth regarding the nature of giftedness. I view academic underachievement as Blackburn and Erickson (1986) proposed many years ago, that this presenting problem is in fact a predictable crisis experienced by gifted students. The key to making progress with such clients is understanding that giftedness is potential and not achievement. Effort is required for students to actualize their academic potential.

Transition from regular education to gifted education programs is another challenge with which counselors could assist gifted students. There is a predictable lowering of academic self-concept as students move from being a star in a regular education program to being simply another gifted student in the special program. Known as "the big fish little pond effect," it is technically big fish little pond to just another fish. The consequent lowering of self-esteem will affect the student in the new program both socially and academically.

**Cross** • *What topics are you most concerned about currently?*

**Mendaglio** • My primary current concern is the potential disastrous effect of gifted individuals' emotional intensity. Many of us accept that it is heightened sensitivity, associated with giftedness, that creates intense emotions. Some have summed it up by declaring that gifted persons feel more because they see more. What concerns me most is the negative self-evaluation that I have heard

repeatedly over the years from clients regarding their intense emotionality. They feel that there is something wrong with them because they themselves think, or have been told, that they are constantly overreacting. We all overreact from time to time, but giftedness means a propensity to intensity of feeling. It is important for people who interact with gifted individuals, including counselors, not only to understand that intensity is part of giftedness, but to be careful not to reinforce the idea that there is something wrong with the gifted person. Helping clients understand that intensity is part of giftedness is a starting point to helping them learn to manage it. My message to such clients is: There is nothing wrong with you, it is your nature. The goal of counseling is to help manage that part of giftedness.

Another concern relates to gifted students' transition from high school to university, which I detail in Mendaglio (2013). I have dealt with numerous clients over the years who have suffered depression due to the shock of their low performance in the first semester of their university program. Most of these clients were in highly demanding programs such as engineering. They had the ability to be successful in their chosen field, but they lacked the one ingredient, appropriate level of effort. Elsewhere, I have termed this "hitting the wall", a phenomenon unique to gifted students. Receiving lower than expected grades is the overt problem, but the greater issue is covert—hitting the wall threatens the core of self-perception, resulting in the imposter syndrome. That is what causes the depression. When counselors attempt the help such clients, their focus should be the low self-esteem. Providing suggestions for enhancing study methods should not be the counselor's initial concern.

**Cross** • *What should everybody know about the social and emotional needs of gifted individuals?*

**Mendaglio** • In my experience, many of the challenges gifted individuals face are the result of the feedback they receive from the social environment. The lack of understanding that gifted children, adolescents, and adults experience from those around them contributes to gifted individuals' problems. If parents, teachers, and counselors knew more about giftedness, then many of the difficulties experienced by gifted individuals, leading them to seek counseling, would be lessened. There is one main need: acceptance. By this I do not mean excusing, for example, misbehaviors. As with all children, gifted children should be held accountable for disruptive behaviors. What I mean is understanding, for example that children will ask questions because of their cognitive characteristics and will be emotionally intense because of their giftedness. Such understanding would help gifted children begin to learn how to manage expression of their characteristics.

**Cross** • *What are common misperceptions about the social and emotional needs of gifted students?*

**Mendaglio** • I suspect that a common answer to this question would address a myth regarding giftedness: gifted students have it all and therefore have no extraordinary needs. Of course, I believe that is a misperception of gifted individuals' experiences. However, I take a different position on your question. I have noticed that some authors confuse characteristics with needs. For example, the following terms are included under the rubric "social and emotional needs": highly curious, constant questioning, outstanding memory, perfectionism, and underachievement! The first three words are actually cognitive characteristics, not needs. The latter two are actually negative outcomes of giftedness. Characteristics should not be misconstrued as needs. In my view, needs flow from characteristics. Therefore, identification of social and emotional needs should be connected to characteristics of giftedness. From what I have seen in the literature, Barbara Clark in her classic text, *Growing up Gifted* in numerous editions (e.g., Clark, 1997) takes this approach. She discusses characteristics using several categories. Of relevance to my answer to this question is her affective characteristics. Here are some examples of her characteristic-needs pairing: unusual sensitivity to the expectations and feelings of others—the need to learn to clarify the feelings and expectations of others; heightened self-awareness, accompanied by feelings of being different—the need to learn to assert own needs and feelings nondefensively; to share self with others, for self-clarification. Whether or not I agree with Clark's list of affective characteristics and needs, I think that she presents the appropriate approach to this question.

**Cross** • *As you reflect on your career working with gifted students, what are the most important professional lessons that you have learned?*

**Mendaglio** • I can think of a few important lessons that have influenced my counselling gifted individuals. Though I use "gifted children" I have learned that it is best to think of "children who are gifted," otherwise we lose sight of the fact that they are primarily children. Placing "gifted" first may create problems for the person throughout life. Meeting with parents of young, gifted children led me this conclusion. Specifically, this lesson arose from numerous parents of preschool-aged children who contacted me seeking enrichment ideas of their gifted children. Often this scenario arose soon after they had their young child assessed and the results indicated giftedness. In a sense, their message to me was: "My child is gifted, what should we do now? We want to ensure that we do our best to actualize our child's potential." Before responding, I asked for more information regarding the child. In many of these situations, parents described varying levels of

misbehaving children. My advice, which was not always well-received, was that attending to the child's behavior issues was more pressing than enrichment. In more extreme situations, parents would simply reply that the child's behavior was due to giftedness and their need to be independent and creative. My position is that gifted children, like all children, must be taught a minimum level of compliance with legitimate authority, alongside of receiving attention to their needs as gifted.

Considering the "gifted" part of child who is gifted, the characteristic of heightened sensitivity, in the sense of greater awareness, is of paramount importance. Heightened awareness permeates everything: how one sees the world, other people, and oneself. It is responsible for perceiving nuances in the social and physical environment that others miss. Most importantly, it has the power to create intense emotions. Greater awareness is a universal characteristic of giftedness. Viewing heightened sensitivity in this manner requires that giftedness must include a high level of intelligence, since awareness is a cognitive process. It is important to understand that my view of heightened sensitivity does not encompass expression of it. I am simply referring to mental experiencing, whether it is expressed or not is another matter.

I have learned that giftedness is not equivalent to production or achievement. Giftedness represents the potential for extraordinary achievement, despite what popular definitions would have us believe. This was obvious to me from the beginning—it is not a great leap from working with academic underachievers to reach my conclusion.

Lastly, I have learned that there exists a great divide in the field of gifted education with authors proposing definitions of giftedness on one side and researchers and educators on the other side. Authors propose definitions that include many criteria such as excellence in socially-accepted areas, while researchers use enrollment in a gifted education programs or high scores on tests of cognitive ability to select their participants. Meanwhile, educators use a high IQ score as a major, if not the definitive, criterion for selection of students for gifted programs/congregated schools. Ironically, scholars proposing more elaborate definitions shun Lewis Terman's high-IQ-based approach; researchers and educators, unwittingly, celebrate him. With many years of counseling experience with underachieving gifted students, leading to my viewing giftedness as potential not performance, I have no trouble siding with the researchers and educators.

**Cross** • *If you were to advise aspiring clinical psychologists about working with gifted individuals, what would you share with them?*

**Mendaglio** • It will not be surprising to hear that I believe that to work effectively with gifted individuals  
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requires a combination of sound counseling practices and knowledge of giftedness. Effective counseling is based among other things, upon a theory of counseling that guides one's practice and that is communicated to clients, skill at building helping relationships, content knowledge of presenting problems, and knowledge of relevant research on intervention techniques. Effective counseling is currently described as evidence-based. This phrase refers to the evidence-based policy of the American Psychological Association. One feature of the policy that tends to receive most attention is evidence-based interventions, which exhorts psychologists to use strategies that have received empirical support. Empirically based interventions cannot apply strictly to counseling gifted individuals. If we accept that clients who are gifted constitute a unique population, we are not likely to find a body of empirical evidence supporting interventions applicable to such clients. Fortunately in the APA policy evidence is not limited to empirical support: the policy accepts as evidence both psychologists' experience and expertise in counseling and psychotherapy and their knowledge of the characteristics of the clients with whom they work. To have the greatest impact, psychologists working with clients who are gifted must have knowledge about giftedness and its characteristics. When knowledge of giftedness is combined with ingredients of effective counseling, gifted individuals receive the most benefit. In my practice, a large proportion of clients have reported previous experience with other psychologists, whom the clients noted had limited or no knowledge of giftedness.

In addition to knowledge of giftedness, psychologists need a high degree of self-efficacy in their role. In my experience, gifted individuals of all ages are likely to question our interpretations and suggestions. I have emphasized the characteristic of heightened awareness. Gifted individuals' keen awareness can detect insecurity in the psychologist. It is imperative that psychologists are prepared to articulate and explain their counseling approach. Psychologists also need to examine their attitudes toward giftedness and gifted individuals, to ensure that their attitudes are positive, or at least neutral. One last comment based on experience: gifted youth tend to be reluctant clients, usually in counseling because of their parents. At times gifted students use language skillfully to manipulate us, telling us what they think we want to hear.

**Cross** • *Given that most doctoral programs in psychology do not offer formal training in gifted education, giftedness, gifted psychology and so forth, how should we prepare psychologists to work with students with gifts and talents?*

**Mendaglio** • To be blunt, we cannot look to counseling and clinical psychology preparation programs directly

for a solution to this situation. I have been in the academy most of my adult life. I have taught counseling psychology at the master's and doctoral levels. As part of my administrative duties, I have participated on program review committees and admissions committees. From direct experience, I can say that program requirements are quite heavy already and it would be difficult to persuade administrators to add more topics. Further, if we were to add courses in giftedness, then the cry would be: What about other exceptionalities? Though very desirable, it is logistically difficult to add giftedness to preparation programs.

Having said that, it may be possible to inject giftedness, along with other exceptionalities, in preparation programs for school psychologists. I suspect that this may be occurring given that intelligence testing is an integral part of psychological assessment. Giftedness may be easily infused in courses along with other exceptionalities.

A final thought relates to any counselor or psychologist working in schools. There are districts where gifted education is mandated, and teachers require a credential to work in those programs. Analogously, counselors and psychologists working in those programs could be required to obtain additional certification to work in gifted programs.

**Cross** • *What have I not asked you that you would like to share with us?*

**Mendaglio** • *I add one other question: How does Dąbrowski's theory of positive disintegration factor into your counseling?*

Despite what some authors believe, not all clients who are gifted are suitable for the application of Dąbrowski's theory in counseling. For one thing, Dąbrowski differentiated between high intelligence (i.e., giftedness) and intellectual overexcitability. Based on the theory, not all highly intelligent individuals are on the path of moral development (Mendaglio, 2022). Therefore, I do not routinely inject the theory of positive disintegration into my counseling. My conception of the psychology of giftedness is what I rely upon when counseling gifted individuals in general. However, occasionally, I encounter clients who present information that is consistent with elements of Dąbrowski's theory, such as forms of overexcitabilities and dynamisms. With those clients, I gradually introduce aspects of the theory to them. If the ideas resonate, then I use the theory to help clients understand themselves from the theory's perspective. In such cases, clients benefit significantly and deal more effectively with their presenting problems. My applying the theory follows Dąbrowski's own suggestion that counselors use his theory if they thoroughly understand it and if the client manifests a moderate to high level of developmental potential. It may seem difficult to determine level of developmental potential since we do not have a Dąbrowskian measure for that purpose. However, there is a practical way of inferring whether clients are suitable for using the theory—introduction of the theory to clients itself is an assessment procedure. A client's initial response to the theory will signal whether or not discussion of the theory would be beneficial.



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