A Study of Unmet Needs Among Highly Intelligent Individuals

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Jennifer Riedl Cross, Ph.D.

Tracy L. Cross, Ph.D.

Anyesha Mishra, Ph.D.

William & Mary

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Executive Summary

This report describes the findings of a study requested by the Mensa Foundation and conducted in a partnership between the Foundation and researchers at the William & Mary Center for Gifted Education. The purpose of the research is to identify the unique challenges and needs of gifted individuals and provide better support and resources.

To address the research questions, the study collected information from American Mensa members and other highly intelligent individuals around the world through an online questionnaire. Interviews were conducted with Mensa members. The final dataset included 3,443 participants. These were diverse in terms of age, gender, geographic region, occupation, and disability status. The large majority of participants (87%) were White or European. Ten Mensa members representing five age groups participated in the interviews.

In the academic domain at both the K-12 and college levels, the highest level of need was for mentors in participants' areas of interest. Lessons in academic skill development, such as time management and study skills, were the next highest rated unmet need. An adequate education, offering choice in pacing and subjects at an appropriate level of challenge was the next greatest area of academic need.

In the career development domain, participants reported most needing access to information about careers and lessons in career planning. They also need support and positive social connections with others in the workplace. The highest levels of need in the social and emotional domain were in the areas of social and emotional learning (e.g., lessons in self-regulation, goal setting, etc.) and opportunity for interaction. The greatest need areas in mental health as young, middle-aged, and over 55 were for a trusted other who could help them with mental health concerns and effective strategies for dealing with failure, upset, anxiety, and frustration.

Open-ended comments allowed for rich expressions of participants' needs in the four domains. Not all participants reported having high levels of need. Based on their responses, they could be classified as having Low (1/4 of the sample), Moderate (1/2 of the sample), or High (1/4 of the sample) levels of need.

Recommendations for possible Mensa Foundation actions to address these unmet needs are in six areas:

- Improve Societal Attitudes toward High Intelligence
- Support Academic Skill Development
- Support Academic and Career Planning
- Provide Financial Supports for Academic and Career Opportunities
- Foster Social Connectedness
- Provide Mental Health Supports

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Introduction

I am grateful for this survey. It's the first time in my life that someone has taken seriously the lack of resources I had as a gifted student in my youth. Literally until today I have only encountered the attitude that "you did fine". I often wonder what would have been different if I had had access to a full complement of resources. Would I have been able to clerk at the Supreme Court? Could I have become the general counsel of a publicly traded company?

- Female Mensa Member, Age 57

Since 1946, Mensa has been an organization that epitomizes a commitment to intellectual excellence. Mensa has been catering to individuals with high IQs (top 2% scores on a standardized test) from diverse backgrounds and countries, placing a strong emphasis on fostering intellectual and social connections among its members for the benefit of humanity. Mensa also seeks to make the world a better place by encouraging "research into the nature, characteristics, and uses of intelligence" (Mensa Foundation, 2023). The Mensa Foundation is a charitable organization seeking to "make the world a better place" through the following mission:

- To identify and foster intelligence for the benefit of humanity
- To encourage research into the nature, characteristics, and uses of intelligence (Mensa Foundation, 2023)

The organization aims to identify ways to provide effective, targeted supports for "the gifted, the highly intelligent, and the intellectually curious" throughout the lifespan (Steinhice, 2023, p. 30). To achieve this objective, the Foundation sponsored a study of members and non-members who consider themselves in one of these categories (i.e., gifted, highly intelligent, or intellectually curious) to explore potential areas of "unmet need" (p. 30) in the domains of education, career development, social and emotional support, and mental health.

There is a significant body of research indicating potential need areas in the domains of interest, primarily from the field of gifted education. Difficulties among individuals with gifts and talents (IWGT) have been documented in the academic, career development, social and

emotional, and mental well-being domains. This research provides the foundation for the study of unmet needs.

Needs and Well-Being

This study was informed by *positive psychology*, "the scientific study of what goes right in life, from birth to death and all stops in between...takes seriously those things in life that make life most worth living" (Peterson, 2006, p. 4). The primary reason to identify unmet needs is to determine how we may make things "[go] right in life" (p. 4). The scientific discipline of psychology, "the study of the mind and behavior" (American Psychological Association, 2018), has offered many valuable frameworks for understanding what contributes to human thriving. Maslow's (1987) Hierarchy of Needs theory focused psychologists' attention on the importance of need satisfaction to human functioning. Maslow proposed that physiological needs, such as thirst and hunger, must be satisfied before one could consider psychological needs, such as for love and belonging or self-esteem. This humanistic approach to understanding behavior as a response to fulfill needs stimulated other need theories, including Deci and Ryan's (2000) self-determination theory (SDT).

According to SDT, three primary needs serve as "innate psychological nutriments that are essential for ongoing psychological growth, integrity, and well-being" (Deci & Ryan, 2000, p. 229): the needs for *competence*, *relatedness*, and *autonomy*. In their daily activities, people will be motivated by these needs. Individuals can flourish when they perceive a sense of choice and control over their actions (autonomy), feel capable and effective in their pursuits (competence), and experience meaningful connections with others (relatedness). Meeting these needs is critical for the pursuit of goals in all areas, including academic, career development, socio-emotional, and mental well-being domains. Idiosyncrasies will determine how much competence, for example, is required to satisfy one's need. Developmental science and experience indicate profound differences in the needs of individuals at different life stages in these domains due to cognitive and physical maturation, social norms, and environment (Lally & Valentine-French, 2019).

At any age, an inability to develop a sense that one is competent can be demotivating. The classroom or workplace that does not allow one to work at the level of which they are capable can frustrate needs for competence and autonomy. A desire to feel connected to others (relatedness) may make it possible to exist in an environment that does not satisfy these needs,

but it is the balance of need satisfaction in all three areas that will lead to the most positive outcomes. In the worst case, unmet needs can result in psychopathology, as Ryan and Deci (2000) explain:

Specifying psychological needs as essential nutriments implies that individuals cannot thrive without satisfying all of them, any more than people can thrive with water but not food. Thus, for example, a social environment that affords competence but fails to nurture relatedness is expected to result in some impoverishment of well-being. Worse yet, social contexts that engender conflicts between basic needs set up the conditions for alienation and psychopathology (Ryan et al., 1995), as when a child is required by parents to give up autonomy in order to feel loved. (p. 75)

The satisfaction of competence, autonomy, and relatedness needs is foundational to this study. Highly intelligent people may be assumed to have an advantage in meeting their psychological needs, but there is ample evidence this is not always true, as the following literature review makes clear.

Comprehending the Complexities of High Intelligence

Conventional wisdom (myths) might suggest that high intelligence ensures success and fulfillment without facing any problems or challenges (Moon, 2009) and without having unique social and emotional needs (Peterson, 2009). Mõttus et al. (2008) found that study participants believed a typical highly intelligent young adult to be emotionally stable, extroverted, open to new experiences, and conscientious. However, there were only low correlations observed between intelligence measured by psychometric tests and these personality traits. Even though there is a significant overlap between stereotypes about personality traits related to ability and how socially desirable they are perceived to be, there is a mismatch in views regarding agreeableness. While aspects of agreeableness are seen as socially beneficial, participants did not necessarily associate trustworthiness, straightforwardness, and altruism with intelligence. Personality differences were also found among gifted students and their peers by Zeidner and Shani-Zinovich (2011), with gifted students higher in Openness to Experience and lower in Neuroticism and Agreeableness. In another study, the majority of gifted students had high Openness to Experience scores, but a sizeable minority had high scores in Emotional Stability and another group had low Agreeableness (J. Cross et al., 2022). Mammadov et al. (2018) found a strong negative relationship between agreeableness and academic achievement, suggesting less

agreeable gifted students were more likely to be high achievers. The mismatch between conventional wisdom and the findings of these studies indicates the complexity to be found in the population of highly intelligent individuals.

Recently, a growing body of literature reveals a complex interplay of several factors that contribute to the impediments faced by highly intelligent individuals. In fact, despite Terman and Oden (1959) showing that intellectually gifted children evolved into well-adjusted and productive adults by midlife, several other studies have found that they frequently encounter unique obstacles across various domains of life, including education, career, social interaction, and mental well-being (e.g., Freeman, 2006a; Kanevsky & Keighley, 2003; Karpinski et al., 2018). Freeman (2006b) found that factors such as hard work, emotional support, and a positive, open personal outlook were better predictors of adult success than intelligence. However, research specifically on social and emotional aspects of giftedness has had conflicting results (e.g., Abdulla Alabbasi et al., 2021; Persson, 2007; Shechtman & Silektor, 2012; Tasca et al., 2022). Thus, it is imperative to understand and address the unmet needs of highly intelligent individuals in academics, career development, social/emotional, and mental well-being domains, not only for their holistic development and success (Peterson, 2009; Smith, 2017) but also for the enrichment of society at large (Persson, 2014).

Studies with participants from American Mensa have found that high IQ could be a possible risk factor for affective (anxiety and mood) disorders, ADHD, and ASD and higher occurrence of diseases linked to immune dysregulation (Karpinski et al., 2018). While these disorders do exist in the population, they are not typical, nor do they offer a complete profile. In his research focusing on Swedish Mensa members, Persson (2007) found that they exhibit significant levels of empathy and responsibility, often displaying a keen inclination towards societal involvement and a sincere interest in fostering social development. In fact, Egeland (2019) discovered that, within a Norwegian Mensa community, the favorable pattern also encompasses social understanding, contradicting the notion of a drawback associated with giftedness found by Karpinski et al. (2018). The individuals involved in Egeland's research exhibited similar emotional perceptions to the general population; in fact, they demonstrated enhanced comprehension of anger, a phenomenon believed to be influenced by subcortical mechanisms (Egeland, 2019). However, 73% of Persson's (2007) participants reported being passively involved in societal issues (e.g., freedom of speech, health issues, gender issues,

human and animal rights, etc.), and 10% reported no interest. Moreover, Persson (2007) noted that the participants largely exhibited the typical personality traits associated with gifted individuals, like curiosity/discovery, understanding of causality, fairness as a leading principle, and the like, measured through the works of Webb (1993) and Tardif and Sternberg (1988). That is, as the author notes, "Questions particularly addressing personality came by way of the collection of characteristics and potentially associated problems in a social context as compiled by Webb (1993) and Tardif and Sternberg (1988)," (p. 24). Nevertheless, there are apprehensions regarding the well-being of highly intelligent individuals, including the potential detrimental consequences of recurrent social exclusion across various societal levels, a phenomenon that can gradually affect individuals regardless of their gifted status (Persson, 2007).

In another study conducted in an educational context where giftedness was not formally acknowledged (Persson, 2010), Swedish Mensa members were investigated to understand the experiences of intellectually gifted students regarding familial support, age of identification, school support, and acceptance across different educational levels. The findings revealed concerning facets, particularly highlighting the adversarial atmosphere in primary school (92% reporting a negative environment). However, there was some improvement noted as participants progressed from primary to secondary education (77% reporting negative environment) and further to tertiary education (65% reporting negative environment). Despite this, participants remained dissatisfied across all educational levels. The study identified four main problem areas contributing to the challenges faced by gifted students within an ostensibly egalitarian and inclusive school system. These were anti-intellectualism, lack of teacher training, lack of systemic policies and standards, and lack of training of psychologists and psychiatrists. Persson (2010) states, "The current Swedish school system has been promoted as inclusive and widely touted as 'a school for all.' But a school 'for all' means for nongifted children and children with social, developmental, physical, and learning disabilities only" (p. 558).

Gifted Education Research Clarifying Unmet Needs

Research in gifted education has identified challenges to IWGT in the academic, career development, social, and mental well-being domains (e.g., Freeman, 2006a; Kanevsky & Keighley, 2003; Karpinski et al., 2018). While exceptional abilities offer opportunities for growth and achievement, IWGT also confront distinct pressures and expectations that can impede their fulfillment of the three psychological needs outlined in SDT. For instance, IWGT

may grapple with feelings of isolation or alienation (J. Cross et al., 2018), navigating social dynamics that differ from their peers (Robinson, 2008), and managing the weight of academic or professional aspirations from self and others (Jung, 2020; Miller & Cummings, 2009). Various perspectives within the literature on giftedness and talent development aim to delineate the essence of giftedness. These perspectives often enumerate characteristics encompassing intellectual prowess, creativity, domain-specific behaviors, emotional attributes, and trait disparities, serving to underscore both the resemblances between gifted students and eminent achievers and the distinctions between gifted students and their typical counterparts (Reis & Housand, 2007; Renzulli et al., 2009; Renzulli, 2021; Rimm et al., 2018; Sternberg & Davidson, 2005). Gifted and talented individuals are characterized as atypical learners, demonstrating advanced capabilities and qualitative divergence from their non-gifted peers across cognitive aptitudes, personality attributes, past experiences, and emotional traits (Clark, 2002; Renzulli, 1978, 1996; Treffinger et al., 2002).

Coleman et al. (2015) offered a comprehensive synthesis of research spanning twenty-five years, focusing on the lived experiences of gifted students within educational contexts. The summary aimed to authentically capture the voices of these students, providing insights into their unique challenges, opportunities, and perceptions. The article examined various facets of the gifted experience, including social and emotional development, academic engagement, and the influence of educational environments on their well-being. Key themes such as identity, passion, labeling, stigma, culture, schooling, academic resistance, and bullying were discussed. Coleman et al. highlight the importance of supportive peer relationships, the role of teachers in fostering gifted potential, and the impact of societal expectations on students' self-concept and identity formation. By foregrounding the perspectives of IWGT themselves, the article enhances the understanding of their lived experiences and advocates for educational approaches that acknowledge and cater to their diverse needs and aspirations. Within this section, we shall conduct a comprehensive examination of the needs and challenges encountered by IWGT across domains of education, career development, social and emotional support, and mental health.

Needs and Challenges of IWGT in the Domain of Education

IWGT inherently challenge the conventional expectations of schooling by possessing characteristics that diverge from the norm. Their rapid acquisition of knowledge, propensity for researching deeply into subjects, capacity for abstract thinking, and intense focus on personal

interests disrupt the traditional structure of schooling (Coleman et al., 2021; Coleman & Cross, 2000). Moreover, their development is often uneven, with exceptional strengths in certain areas contrasting with their performance in other areas. These fundamental attributes of giftedness, characterized by a combination of exceptional ability and intrinsic motivation, defy the standardized expectations of the school environment, necessitating a more flexible and tailored approach to education to fully support their unique learning needs (Coleman et al., 2015; VanTassel-Baska & Stambaugh, 2005). While significant endeavors are devoted to aiding students who fall behind academically, there is often a lack of initiative in recognizing the distinctive learning needs of students who excel beyond their grade level (Mendoza, 2006). Moreover, such gifted characteristics as advanced cognitive abilities, exceptional creativity, and intense curiosity and focus on interests, imply a need for specialized curriculum that challenges and engages gifted students at their level of ability, promoting deeper exploration and critical thinking (Housand, 2021). Failure to adapt curriculum to accommodate gifted characteristics can lead to boredom, underachievement, and a lack of intellectual stimulation. Research suggests that academically, students in this population are often unchallenged (Coleman et al., 2015; J. Cross et al., 2022), reporting frequent boredom due to a lack of challenge (Kanevsky & Keighley, 2003; Preckel et al., 2010). Complexity, precocity, and intensity are the three characteristics of gifted and talented students that are critical for curricular planning and development (VanTassel-Baska, 2011). International study results indicate that high-ability students in the US are not receiving an appropriately challenging education. For example, in mathematics, the percentage of US students achieving a top score on the PISA in 2022 was below the Organization for Economic Co-operation and Development (OECD) average (7% vs. 9%; OECD, 2023), suggesting an unmet need for students who could excel in mathematics.

The link between academic experience and occupational outcomes has been understudied (cf., Wai & Rindermann, 2017), particularly in relation to career development. Although IWGT are typically anticipated to excel beyond their peers in terms of cognitive abilities and academic performance, it is essential to acknowledge that they can encounter challenges that hinder their educational journey, possibly leading to career impediments as well. These challenges might include learning disabilities, psychological issues, social difficulties, or emotional struggles. Consequently, IWGT may necessitate specialized support and services to address these impediments effectively. Peterson (2006) and Reis (n.d.) have highlighted the importance of

recognizing and catering to the diverse needs of IWGT, ensuring that they receive the appropriate assistance to thrive academically and personally. Positive psychological development depends on an informed support network of peers, family, educators, and mental health professionals (J. Cross & Cross, 2017).

Coleman et al. (2021) highlight the struggle of IWGT in traditional schools. These students often outpace their peers academically, but standard curricula may not challenge them adequately, leading to boredom and underachievement. Coleman et al. illustrate how this mismatch can cause disengagement, behavioral issues, and feelings of isolation. Moreover, slowpaced instruction further hampers their intellectual growth, risking unfulfilled potential without tailored support. Coleman et al. (2015) further described how various research suggests that the experiences of IWGT in school often revolve around a sense of being different and the process of understanding their own identities. IWGT are keenly aware of their unique abilities and interests, which set them apart from their peers. They describe how this sense of difference permeates their school lives, largely stemming from external sources such as social interactions rather than internal factors. Various studies indicate that the label of "gifted" influences these students' interactions with others (e.g., T. L. Cross et al., 1991; Košir et al., 2016; Manor-Bullock et al. 1995; Rentzsch et al., 2011), though the exact implications remain uncertain. Other recent studies (e.g., Guignard et al., 2021; Klimecká, 2023) have similarly demonstrated that labeling decreases social integration and increases conformity and denial of giftedness as coping mechanisms, leading to adverse academic outcomes. However, to gain a deeper understanding of the effects of labeling, further research is needed to explore children's awareness of their giftedness prior to receiving the label (Coleman et al., 2015).

IWGT's school experience should be structured around an appropriate curriculum, setting expectations for growth and learning while also reflecting the values of the educational environment (Little, 2012). IWGT often remain far from being satisfied with any level of the education system (Persson, 2010). In their 11-year longitudinal study, Peterson et al. (2009) found that students generally cited academic challenges, school transitions, overcommitment, and peer relationships as their most challenging experiences. For IWGT, the level of motivation derived from the curriculum depends on how well it aligns with their goals and values. Little (2012) clarifies the relationship between curriculum and student motivation through concepts such as achievement goal orientation, challenge, meaningfulness, boredom, and interest,

providing recommendations for appropriate curriculum for advanced learners, emphasizing the significance of challenges, meaningfulness, and alignment with student interests. Moreover, Persson (2010) found that IWGT in his Swedish Mensa sample were often dissatisfied with the intellectual stimulation at school and colleges often meet their intellectual needs. He stated:

In primary school, 76% claimed they learned very little, whereas 8% learned more or even a great deal. A larger group of participants, 16%, felt that on the whole school was a rather bland experience and only occasionally stimulated them. In secondary school, stimulation increased: 52% felt intellectually starved and 17% were more or less satisfied. The group that took a neutral stand on describing their experience is larger in secondary school (31%) than in primary school. Once at university, 46% of the intellectually gifted participants felt that they had finally met the intellectual challenges they had sought and needed for a very long time. However, for reasons discussed earlier [lack of support], 30% felt that they remained unchallenged and 24% experienced tertiary education as fairly dull (p. 556).

In a recent study on Chilean gifted student's lived experiences by Gomez-Arizaga et al. (2020), IWGT were dissatisfied with the national curriculum and teaching methods due to their rigidity, lack of relevance, and unchallenging assessments. However, there were favorable experiences noted regarding teaching techniques, particularly those that introduced innovation and departed from traditional methods. Instances of waiting were frequent, yet students often viewed them as chances for creative production.

Housand (2021) demonstrated the various components of an effective curriculum tailored to the specific characteristics of IWGT such as curiosity, creativity, high ability, conscientious leadership, and the need for connection. For example, for students who thrive on feeling connected, an effective curriculum should integrate real-life relevance by connecting to students' experiences, fostering collaboration, and addressing global issues sensitively. To cater to the curiosity of gifted learners, the curriculum should promote inquiry-based learning, problem-solving, and delve into interest-based content while providing emotionally compelling topics to support persistence and engagement. Additionally, nurturing creativity entails fostering divergent thinking as a problem-solving strategy and offering opportunities for original, practical work within various disciplines. For students with high ability, the curriculum must provide cognitive challenges, challenge existing beliefs, and delve into profound ideas while emphasizing growth

and authenticity in outcomes. Moreover, conscientious leadership traits can be nurtured through self-reflection, metacognition, consideration of one's place in the world, and sensitivity to multicultural and global concerns, thus fostering respectful decision-making and contributions to society (Housand, 2021). Such approaches can not only enhance the educational experience for intellectually gifted and talented students, but also ensure that their unique needs are met, maximizing their potential to excel and contribute meaningfully to both their communities and the broader global landscape.

Rural areas often face further challenges in providing opportunities with gifted services to cater to the needs of IWGT due to limited funding, limited time and limited availability of resources for gifted programs (Lewis & Boswell, 2020). IWGT in rural areas exhibit shared traits that may or may not correspond with established characteristics of giftedness identified through research. Distinctive behavioral traits observed among gifted individuals in rural areas stem from the cultural context unique to those settings, differing from the typical traits associated with gifted students in urban and suburban environments. Such distinctions impact the perceptions of local educators regarding gifted characteristics, particularly among students who deviate from the predominant traits observed within the local community (Richards & Stambaugh, 2015).

While the topics of rurality and gifted education have been explored separately in educational research, their intersection remains a frequently overlooked area in education policy, as noted by Azano et al. (2014). Within rural education, the challenges pertinent to gifted education have been extensively documented. One of the most pervasive issues affecting rural gifted education is the issue of funding, or rather the lack thereof (Brown & Wishney, 2017). Rural school districts often find themselves with fewer resources, such as financial allocations and staffing, specifically designated for gifted education compared to their urban and suburban counterparts (Kettler et al., 2015). Consequently, this disparity frequently results in opportunity gaps for IWGT in rural areas (Azano et al., 2014; Plucker, 2013; Stambaugh & Wood, 2015), a longstanding barrier that has plagued rural schools for years (Plucker, 2013). Moreover, rural IWGT who would benefit from challenging coursework often do not have access to such opportunities at the same rate as their urban and suburban peers with gifts and talents (Gagnon & Mattingly, 2016). This inequity not only hampers the educational prospects of gifted students in rural areas but also perpetuates a cycle of unequal access to resources and opportunities within the education system.

Needs and Challenges of IWGT in the Domain of Career Development

Traditionally, the concept of college and career readiness (CCR) has predominantly revolved around academic metrics such as grades and test scores. However, recent shifts in focus have underscored the significance of non-academic skills and contextual factors within the school environment that influence student motivation and engagement (Krauss et al., 2016). This signifies a growing recognition of the importance of equipping students with 21st-century skills, such as critical thinking and adaptability, alongside fostering strong academic performance. In essence, there is a heightened emphasis on preparing students not only academically but also ensuring they possess the multifaceted competencies needed for success in postsecondary education and beyond. Career development or CCR stands as one of the prominent focal points in social and emotional development of IWGT. Because they possess unique cognitive abilities and aptitudes, understanding and fostering their career development becomes imperative. Often, career development research among IWGT has focused on their interest. Traditionally, interests predict the type of work and activities that one finds intrinsically satisfying (Lowman, 1991). Interests develop through genetic influences and social learning activities (Holland, 1997). Emmett and Minot (1993) found 20 factors that adolescent IWGT identified as important to their career decisions which were clustered under sensitivity to others' expectations, perfectionism, developmental issues, superior intelligence, and multipotentiality. They noted that the factors considered most frequently were sensitivity to others' expectations and perfectionism. Hall and Kelly (2015) described the career interests of adolescent IWGT. They reported five important facts regarding the professional interests of talented teenagers. First, there is no relationship between ability and particular interest categories. Adolescents identified as gifted demonstrate a wide variety of human interests, with exceptional achievement demonstrated in each domain. Second, there is a concrete-abstract dimension that can be used to group interests. Investigative and artistic endeavors show more abstract goals, while realistic, enterprising, and conventional activities reflect more concrete foci. People who show an interest in abstract subjects like science, math, literature, or music are most likely to be identified as gifted. However, realistic (e.g., professional tennis player Serena Williams) and enterprising (e.g., Yahoo CEO Marissa Mayer) pursuits can also showcase extraordinary achievement. Third, among the group of young people who are intellectually precocious, interests tend to be divided between human/literacy activities and scientific pursuits (Schmidt et al., 1998, as cited in Hall & Kelly, 2015). In other

words, IWGT adolescents' interests are mainly those of scientists or humanists, who have a preference for and non-linguistic ideation about objects as opposed to linguistic ideation and preferences for people. Fourth, the growth of scientific knowledge is connected to the research interests of young people with mathematical and scientific aptitude. Finally, during early adolescence, interests start to solidify and remain consistent for extended periods of time.

Career development can be complicated by several concerns unique to IWGT: "early emergence of career interests, career choice and career indecision, personality factors, underachievement, and diversity issues" (Muratori & Smith, 2015, p. 174). Sampson and Chason (2008) found that IWGT, particularly those inclined towards perfectionism, experienced pressure to select the ideal career path. Unlike their peers, IWGT often grapple with early emergence of career interests, complex decision-making processes, and heightened expectations, all of which also intersect with their social and emotional development. In fact, Moon (2002) proposed that due to their precocity, IWGT might require career guidance at an earlier stage compared to their peers. Hall and Kelly (2015) argued that gifted individuals are more inclined than their counterparts to access careers characterized by stringent entry requirements and lengthy initiation periods, advance rapidly within their chosen fields, and establish a track record of creative output. Similarly, Greene (2006) asserted that committing oneself to a singular pursuit demands a strong internal motivation for mastery and above-average dedication to tasks, qualities often observed in many gifted individuals. Nevertheless, IWGT exhibiting multipotentiality may encounter challenges when it comes to selecting a college major and pursuing a career path (Corwith & Olszewski-Kubilius, 2012; Sajjadi et al., 2001). This indecision may resolve itself with maturity, however. Multipotentiality has been found to have a very small correlation with occupational indecision and intention (Jung, 2013). In their longitudinal study, Sajjadi et al. (2001) found that, by college age, IWGT had not experienced difficulty in deciding on and pursuing a career.

IWGT with distinctive traits may encounter various obstacles in navigating their career paths. These hurdles may include a diversity of interests or a propensity for frequent changes, as well as the risk of prematurely committing to a career, thereby constraining their personal development to avoid drawing attention to their talents (Jung, 2019). As a result, they may feel pressured to excel constantly, leading to a gradual loss of self-confidence. Prior research has consistently demonstrated that positive learning encounters exert a considerable influence on the

process of making career decisions, particularly regarding the development of self-efficacy beliefs and the establishment of career-related goals (Watters, 2010).

In a study of IWGT, Jen et al. (2016) found that career aspirations were a significant concern, with older students showing a greater desire to discuss career topics with supportive adults. Moreover, even though IWGT from different genders exhibit more similarities than differences in their abilities and the way they cultivate their interests and career aspirations (Kerr et al., 2012), they encounter similar obstacles in their career advancement. These challenges, while diverse in nature, often stem from gender stereotypes (see Hébert, 2011; Kerr, 2012) and gender-based disparities (Neff et al., 2007). According to Greene (2003), the process of making career decisions for gifted girls might be notably more stressful compared to gifted boys due to factors such as early puberty, emotional development, and larger disparities in self-concept. This heightened stress could stem from the added challenge of confronting societal expectations and facing minority status in certain male-dominated professional environments. For example, Grant et al. (2000) indicated that gifted girls interested in STEM fields often altered their career aspirations during high school due to negative school experiences, leading to uncertainty about their future careers. Women in STEM also often lose self-confidence, doubt their ability, and lack career information and preparation, thus lowering their career aspirations (Kerr & Robinson Kurpius, 2004). Moreover, Kerr and Robinson Kurpius (2004) also found that certain gifted women who pursued unconventional career paths in mathematics and science encountered a lack of support and confidence in their educational abilities. As a result, they lost enthusiasm and opted for more conventional career options typically associated with women. However, Kerr and Gahm (2018) cautioned that while differences may exist among genders, they are heavily influenced by experiences and are subject to change. Additionally, gender roles, particularly women's roles, have changed over the past decade (Kachel et al., 2016). Supporting this, a recent study by Yu and Jen (2021) found that gifted girls possessed neutral characteristics, with simultaneous masculine and feminine traits. For them higher social gender-role awareness and career self-efficacy correlated with better career development, yet STEM gifted girls showed lower career self-efficacy compared to language/social sciences. Moreover, they also found that career self-efficacy of students in STEM decreased with higher education stages, impacting subsequent career development. This underscores the need for career guidance and mentorship programs tailored specifically for girls with talents in mathematics and science (Yu & Lin,

2010). The type of mentorship and support provided by educators can significantly impact the career ambitions of high-achieving adolescent girls (Watson et al., 2002). Maxwell (2007) proposed that women have the potential to receive support from external contexts, including achievements in performance, observational learning, emotional stimulation, and verbal encouragement. These interactions offer avenues for success, access to role models and mentorship, as well as emotional support and motivation. In a more recent investigation conducted by Gómez-Arízaga (2023), it was observed that academic choices among IWGT are primarily influenced by internal factors associated with their gifted characteristics, academic and cognitive abilities, and personal interests, as well as external factors such as family dynamics, school environment, and experiences of peers or professionals in STEM fields of interest.

Adolescent IWGT from economically disadvantaged backgrounds exhibit distinctive patterns in career decision-making compared to their gifted (Jung & Young, 2019) and other (Muratori & Smith, 2015) peers. These students navigate career choices amidst a complex array of factors, including limited access to quality education and healthcare, financial constraints, and a scarcity of role models (Eshelman & Rottinghaus, 2015; Hsieh & Huang, 2014). Related to diversity issues noted by Muratori and Smith (2015) researchers and practitioners in vocational fields have acknowledged the significant impact of demographic and contextual factors on career development (e.g., Lent et al., 2000; Lui et al., 2004). While ethnicity and race have garnered attention in understanding the career trajectories of gifted and talented students over the past two decades (Flowers & Banda, 2018), the influence of social class has been relatively understudied (Jung & Young, 2019). Notably, for IWGT from low-income backgrounds, access to career counseling becomes even more crucial, given their limited resources and information, hindering their ability to navigate pathways to postsecondary education or the workforce effectively (VanTassel-Baska, 2010). While prioritizing economic stability in their future occupations (Gore et al., 2015), they are also more significantly influenced by familial opinions (Jung & Young, 2019) and values compared to factors like personal interest and satisfaction (Blustein et al., 2002). Recent studies suggest that an individual's social status is linked to their career aspirations, perceptions of barriers, and access to supportive role models, potentially leading to diminished career self-efficacy and limited access to career development resources (Aries & Seider, 2007; Jung & Young, 2019).

Boulden et al. (2021) described several systemic barriers faced by rural school communities that impact the college and career readiness of students which extend to IWGT as well. They also described the strategies that school counselors can apply to support the college and career readiness of elementary level gifted learners. In the past, college and career readiness (CCR) initiatives primarily commenced during secondary education, a concept reinforced by a significant portion of existing research focusing on career development at the high school level (Wimberly & Noeth, 2005; Blackhurst & Auger, 2008). However, delaying these efforts until later stages could be detrimental to students' aspirations for postsecondary education, particularly for those for whom CCR is a relatively novel concept (Gaertner & McClarty, 2015). Consequently, elementary school presents a valuable opportunity to actively promote CCR, despite concerns suggesting that it might be premature for such interventions at this level (Pappano, 2015). Indeed, many proponents, including career development theorists, educational associations, and scholars, argue that elementary school is a crucial period for fostering students' career development (Knight, 2015; Sharf, 2013). For instance, Howard et al. (2017) emphasized that CCR-related initiatives and programs at the elementary level lay a solid foundation for subsequent CCR efforts in middle and high school. Several empirical studies have demonstrated that participating in CCR-related activities during elementary school not only positively influences students' interest in postsecondary education (Soo Yeon et al., 2015) but also enhances their awareness of feasible postsecondary opportunities (Colston et al., 2017; Robinson & Diale, 2017). Likewise, elementary CCR initiatives facilitate students in bridging the gap between their learning experiences and potential postsecondary pathways, likely fostering motivation and engagement (Ginsberg et al., 2017). Ultimately, early exposure to CCR can yield significant benefits in preparing students to thrive in the global workforce (Byars-Winston, 2014).

Needs and Challenges of IWGT in the Domains of Mental Health and Social/Emotional Support

IWGT are often characterized by a unique blend of social and emotional vulnerabilities, which stem from common traits such as asynchronous development, perfectionism, heightened sensitivity, emotional intensity, deep perception, and overexcitability (Daniels & Piechowski, 2009; Mofield & Parker Peters, 2015; Nevitt, 2001; Wood & Laycraft, 2020). Robinson (2002) emphasized that despite these vulnerabilities, IWGT exhibit more similarities than differences in

their skills, temperament, and personality traits when compared to the general population. However, if the educational system fails to adequately address their distinct needs, these vulnerabilities are exacerbated (Robinson, 2002). Betts and Neihart (1988) explain the profiles of the gifted and talented student which show a wide range of behaviors, feelings and needs of the individuals with gifts and talent which provided insight about the facilitation requirements for their growth. Psychological health issues may arise if these needs are not met apart from reasons like environmental conditions or experiences that the individual might encounter. Dabrowski (1964), in his Theory of Positive Disintegration (TPD), discusses overexcitabilities (sensual, intellectual, psychomotor, emotional and imaginational), which indicate the intensities of the emotions, feelings and behavior of these individuals. These intensities may lead the gifted individuals to feel and sense in extremities which may lead to further troubles in their psychological health (Mendaglio, 2022).

The social and emotional aspects of IWGT have been studied since the time of Terman (1925) and were later built on by Hollingworth (1942), substantiating Terman's finding that gifted children in general are well-adjusted. However, Hollingworth (1942) also found that gifted individuals having higher IQs were more likely to face challenges in adjustment than those gifted individuals with lower IQs. Though some studies (e.g., Abu Bakar & Ishak, 2014) have shown a significant correlation among depression, anxiety and stress among the gifted individuals, there is a lack of focus in the literature in reviewing the psychological health of the gifted individuals with their varying definitions of giftedness and mental health.

While there exists a misconception regarding the emotional states of gifted students, empirical research consistently refutes the notion that their emotional adjustment is lower than that of their peers (Assouline & Colangelo, 2006; Garland & Zigler, 1999; Nail & Evans, 1997; Robinson, 2002). Eren et al. (2018) found that gifted children tended to perceive themselves as more inattentive and lively compared to children of normal intelligence, while also reporting lower social functionality and a poorer perception of their physical health status. Additionally, gifted boys were found to exhibit more depressive symptoms than their female counterparts.

Ogurlu et al. (2016) established a significant correlation between social and emotional learning skills – problem-solving skills, self-esteem enhancing skills, coping with stress skills, and communication skills – and perceived social support. Regression analysis revealed that social and emotional learning skills accounted for a substantial portion of both the importance

and frequency of social support. Notably, gifted students in the study tended to rely heavily on close friends as their primary source of social support, followed closely by their teachers.

Despite the numerous benefits associated with giftedness, many gifted adolescents perceive their advanced abilities as potential obstacles in their social relationships (Swiatek, 2001). Vialle et al. (2007) examined the relationship among personality factors, social support, emotional well-being, and academic achievement in gifted secondary students. Surprisingly, while teachers often view IWGT as well-adjusted and less prone to behavioral or emotional issues compared to their non-gifted peers, the gifted students themselves frequently report feeling sadder and less satisfied with their social support network (Vialle et al. 2007). This incongruity highlights the nuanced challenges faced by gifted individuals in navigating their social and emotional landscapes.

Socially, IWGT may be challenged to build positive relationships with others. One longitudinal study found that high IQ in adolescence was associated with dissatisfaction with friendships in adulthood (Zettergren & Bergman, 2014). IWGT have reported being rejected by peers for their exceptional abilities (J. Cross et al., 2019, 2022) and some choose to lie about them rather than be exposed as highly intelligent (J. Cross et al., 2022; T. Cross et al., 1991). Social comparisons can inhibit the formation of friendships (T. Cross & Cross, 2022; Exline & Lobel, 1999). Relationships with others are critical to psychological well-being (Baumeister & Leary, 1995). It is important to understand how IWGT build relationships with those of differing intellectual capacities or make connections through homophilic groups such as Mensa.

Numerous studies have found no significant differences in the mental health of IWGT and neurotypical samples (e.g., Duplenne et al., 2024; Martin et al., 2010), while others indicate a protective effect of giftedness (e.g., Eklund et al., 2015) or a negative effect related to various mental health concerns (e.g., Hyman et al., 2003; Karpinski et al., 2018). An analysis of risk and protective factors for suicidal behavior includes those unique to IWGT, based primarily on the context in which their abilities manifest (T. Cross & Cross, 2021). In a recent study, Aykutlu et al. (2024) found that while IWGT did not significantly differ in the frequency of psychiatric disorders from their peers, they have lower resilience and higher negative reactivity and activity than controls. They also found that negative reactivity was a significant predictor of psychopathology among IWGT, indicating an increased vulnerability to stress and reduced

coping skills. Thus, while general support for mental health will be beneficial, targeting support for these unique individuals can only come with a greater understanding of their needs.

Examining the link between high intelligence and social cognition through self-assessment among 11-15 year-old identified gifted students in the Czech Republic, Machů and Červinková (2014) discovered a negative association with certain facets of social cognition. They distinguished between social information processing, social skills, and social awareness, finding that intellectually gifted children lagged behind their average counterparts in the latter two aspects. However, no disparities were observed in social information processing. While studies involving clinical samples have demonstrated a correlation between intelligence and social cognition (Egeland et al., 2017), a hypothesis posits a threshold effect, suggesting that a certain level of general cognitive abilities is necessary for effective social information processing; beyond this threshold, no correlation exists (Fanning et al., 2012). If this holds true, individuals with superior intelligence should not exhibit superior social information processing abilities compared to the general population.

IWGT navigate a complex social and emotional landscape influenced by family dynamics, peer relationships, and societal perceptions. A dynamic model of adaptive family complexity (Csikszentmihalyi et al., 1993) emphasizes both integration and differentiation, fostering efficient focus on productive activities among gifted teens. However, adolescence brings about a juxtaposition of differentiation and integration, with peers increasingly becoming the main source of acceptance and influence, while gender and sexual roles become more pronounced, impacting various aspects of talent development, social interactions, and friendships, especially within the school environment. The stigma of giftedness (Coleman & Cross, 2005; T. Cross et al., 1991) can lead to limited access to social environments and affect the self-concept of gifted adolescents. Silverman (1993) highlighted the importance of peer relationships in shaping IWGT's school experiences, emphasizing the need for educational environments that promote the growth of friendships alongside academic excellence. Cultural context further influences social interactions and educational experiences, with considerations such as relationships with teachers for students of color (Long-Mitchell, 2011), varying Hispanic identities (Castellano, 2011), and barriers faced by rural (Floyd et al., 2011) and Asian (Kitano, 2011) IWGT. These insights underscore the importance of creating supportive and inclusive

environments that address the social and emotional needs of gifted students across diverse cultural backgrounds and contexts.

Jones (1994) outlined several common traits observed among IWGT in rural Appalachian states, such as individualism and pride, religious beliefs, neighborliness and hospitality, strong family bonds (familism), personal connection (personalism), affection for their locality, humility, appreciation for aesthetics, a penchant for humor, and a strong sense of patriotism. The effects of childhood adversity are widely recognized, with highly stressful environments and resource deprivation significantly impacting children's emotional, mental, and physical well-being (Bowman, 2019). Poverty is a well-documented factor contributing to this, but racism adds another layer of challenge for students of color and their families, permeating various aspects of their lives, including housing, employment, education, and healthcare (Bowman, 2019). Within the educational system, systemic racism is evident, leading to disproportionate representation of students of color in special and gifted education, placement in restrictive learning environments, and harsh disciplinary measures compared to their White counterparts (Weir, 2016). Teacher bias exacerbates these issues, manifesting in lowered expectations, misconceptions about the behavior of children of color, and differential treatment in disciplinary interventions (Stark et al., 2020; Werner & Smith, 1992). Consequently, there exists a significant lack of trust between students of color and their teachers, particularly among Black students who are acutely aware of racial bias (Yeager et al., 2017). Despite these formidable challenges, they also present opportunities for progress and change.

Addressing Unmet Needs

The empirical evidence points to the potential for highly intelligent individuals to experience unmet needs in their academic and career trajectories and in their social and emotional and mental health development. Mixed results in the research base are likely due to the heterogeneity in this population. Some highly intelligent individuals will experience unmet needs in all four domains, others in none. The majority of highly intelligent individuals is likely to have some unmet needs, which some will be prepared well to manage and others will be less so. Research from positive psychology has emphasized subjective well-being, a measure of the presence of pleasant emotions (positive affect), the relative absence of unpleasant emotions (negative affect), and general satisfaction with one's life (Biswas-Diener et al., 2004). There is no reason to believe highly intelligent individuals will differ from others in their subjective well-

being, but a high level of unmet needs is likely to be associated with poor subjective well-being. Subjective well-being in research has been associated with academic attitudes, physical health, social support, satisfaction with romantic relationships, and identity development (Sirgy, 2021; Suldo et al., 2016). The Mensa Foundation is to be lauded for its desire to support subjective well-being among Mensa's members and other highly intelligent individuals who experience unmet needs in the four domains of academics, career development, social and emotional, and mental health.

The Present Study

To identify the areas of greatest need among highly intelligent individuals, the Mensa Foundation partnered with the researchers to conduct a study. The research questions were:

- 1. What are characteristic educational, career development, social/emotional, and mental health needs reported by highly intelligent adults?
- 2. How are these self-reported needs associated with subjective well-being?
- 3. How do these self-reported needs differ among emerging, young, middle-age, older, and elderly highly intelligent adults?
- 4. How do these self-reported needs differ among individuals with different personality characteristics?
- 5. What do highly intelligent adults report were or could have been effective supports to meet these needs?

The study explored unmet needs in the four domains among IWGT through a survey developed using the SDT framework. Interviews shed light on factors contributing to successful development.

Method

Participants

Survey participants were recruited via emails and social media posts. Emails were sent in multiple waves to the American Mensa contacts database, which includes present and past members of American Mensa and others who sought testing or information. The initial email invitation went to 74,001 addresses and 41.8% of these were opened by recipients. This was followed by two reminder emails one (78,448; 41.6% opened) and two weeks (80,352; 39% opened) later. To ensure a more even distribution of age in the sample, a targeted email was sent after the first week to 31,277 members under the age of 50, requesting participation under the subject "Younger Perspectives Needed for Mensa Foundation Research". Approximately half (48.3%) of the targeted emails were opened. Participants were offered the following incentives:

- 1. Access to past Colloquium recordings. (\$199 value)
- 2. Entry into a drawing for one of four \$100 Amazon gift cards.
- 3. Entry into a drawing for a series pass to the Mensa Foundation Speaker Series (30 available) (valued at \$350).

The survey was anonymous, but participants were redirected to a second survey that collected contact information and asked if there was interest in participating in future Mensa Foundation research. Those who indicated they would be interested in further research participation were invited to volunteer for the interview portion of the study. More than 500 participants volunteered to be interviewed. From these, 10 were selected to represent the five age groups. Interview participants were offered a choice of access to the Mensa Foundation Colloquium recordings or an entry into a drawing for a 2-year subscription to the *Mensa Research Journal*.

The final number of survey responses was 4,055, but those with missing age or no responses in any of the domain needs sections were deleted. The total number of usable survey responses was 3,443, a 4.3% response rate.

Instrument

The *Four Domains Needs Questionnaire* was developed for this research project (see Appendix A). It included four sections: demographics (18 items, plus follow-ups in some

conditions), the 8-item Flourishing Scale (Diener et al., 2010) to measure subjective well-being (Cronbach's α = .85), the Ten-Item Personality Inventory (TIPI; Gosling et al., 2003) to assess personality type, and an instrument customized to explore participants' historic need fulfillment in the four domains. The academic domain included a section for K-12 schooling (21 items) and one for college (12 items). The career domain contained 22 items and social and emotional needs were covered in 26 items. The 16 items in the mental health section were repeated to assess the very different needs of individuals at different stages of life. Those who were old enough to be included in each of three age groups were asked "Please think about your mental health 'as a young person (i.e., youth through college age),' 'in the years post-college age to 55 or so,' and 'in the years after about age 55.'"

Where appropriate, items in the domain needs sections were developed to assess autonomy (e.g., "Able to pursue the career I wanted"), competence (e.g., "Confidence in my ability to achieve in school"), and relatedness (e.g., "Able to develop positive relationships with others"). Participants indicated their level of fulfillment and satisfaction with the subject of the item with response options 1 = "I had this in the right amount," 2 = "I had some of this but needed more than I had," 3 = "I did not have this and that's ok," 4 = "I did not have this and needed it," and 5 = "I had too much of this and needed less." Items were recoded to indicate a continuum from no need to high need: 1 = "I had this in the right amount," 2 = "I did not have this and that's ok," 3 = "I had some of this but needed more than I had," and 4 = "I did not have this and needed it." The *too much* option – "I had too much of this and needed less" – was moved to a different variable and not included in the calculation of means, as its value was outside the continuum of need and it had a significant impact on the means of items where it was selected with some frequency. Open-ended items asked participants to share their greatest frustration in each domain and to offer ideas for solutions.

The interview protocol (Appendix B) mirrored the survey questions in a very general way. Participants were asked to expand on topics touched on in the questionnaire regarding academic, career, social and emotional, and mental health needs.

Data Analysis

Analyses were conducted with IBM SPSS version 27 for Mac. Survey data was first analyzed with descriptive statistics. Need items in each domain were sorted by means to indicate rank order. Exploratory factor analysis (EFA) with maximum likelihood extraction and direct oblimin rotation was conducted for all need items within a domain (i.e., K-12, college, career, social/emotional, and mental health each had separate EFAs) to produce meaningful factors for further analysis. Items with low loadings (≤ 0.30) on any factor were dropped from the analysis. These factors were correlated with personality and subjective well-being and in analysis of variance (ANOVA) between various demographic groups.

To classify participants according to their need profile, average scores were calculated from all items in each need area: Academics (K12 and college), Career, Social/Emotional, and Mental Health. These were highly correlated with the EFA factors (rs = .56 - .8.87). Latent Profile Analysis (LPA) was conducted with Mplus v. 7 for Mac, testing two to eight models for fit.

An analysis of missing data was conducted on the personality and flourishing scales. Fewer than one percent of data was missing in these scales. Data in the need domains was missing for large numbers of participants who discontinued the survey without entering data in all domain sections. Therefore, no missing data was replaced.

The 12 open-ended items in the survey were analyzed with a generative artificial intelligence (AI) tool, AILYZE (https://www.ailyze.com/). This tool was selected for its accuracy and data security profile (https://www.ailyze.com/data-security). All data was encrypted and deleted upon completion of the analysis. Appendix C contains the specific steps followed in the analysis. The instructions used to conduct the thematic analysis of data requested output of emerging themes, with the long response output option. See Appendix C for specific instructions. Repeated analysis of the same data did not produce identical themes. To ensure the themes were appropriate, data was chunked into multiple batches of 150 quotes and output was manually compared. Themes that appeared in the output from multiple batches were retained. The final themes were a result of AI and human analysis.

Ethics Approvals

This study was approved by the William & Mary School of Education Institutional Review Committee (March 6, 2024; EDIRC-2024-03-06-16930-jrcross) and the Mensa Research

Review Committee (April 2, 2024). The online questionnaire and interview volunteer sign-up survey included an explicit consent form to which participants had to agree before being allowed to proceed. Appendix E^1 includes approvals and consent forms.

¹ Note that Appendix E is out of sequence in the text, as the files it contains are not Word documents and must be appended at the end of the report.

Results

Participant Demographics

Survey respondents represented a wide variety of demographics (see Table 1). A third of respondents were in the 35-49 age group and another third in the 50-69 age group. The remaining third were divided among young adults (18-24, 3.7%; 25-34, 10.1%) and seniors (70+, 20.1%). A large majority had qualified for Mensa at some point. More than 2000 respondents either were or had been a member of Mensa (n = 2196, 63.8%), indicating a top 2% score on a standardized test of intelligence. In addition to the mass emails from the Mensa Foundation, participants were invited through websites, in social media, or by others who considered them highly intelligent. Many of these non-affiliated participants reported having been identified as gifted (n = 854, 24.8%) or receiving a high standardized test score (n = 244, 7.1%). The remaining participants had responded "Yes" to one of these questions: "Do you consider yourself or do others consider you highly intelligent? "Do you consider yourself or do others consider you highly creative?" or "Do you consider yourself highly curious?"

Males (n = 1550, 45.00%) made up nearly half the sample of respondents and females slightly more than half (n = 1779, 51.7%). Several respondents were nonbinary (n = 55, 1.6%) or preferred to self-describe (n = 32, 0.9%). Self-descriptions included agender, genderqueer, gender fluid, transgender, androgynous, among other descriptors. Several respondents objected to the use of options for nonbinary or self-description of gender. Participants could select as many race/ethnicity options as applied. Far and away, the most frequently reported race/ethnicity was White or European (n = 2986, 86.73%; see Figure 1). Among those who preferred to self-describe, Jewish was the most frequent self-description (n = 18), with multiple combinations of racial or ethnic heritages.

Table 1
Participant Demographics Including Class Membership

			Low Needs Class	Moderate Needs Class	High Needs Class	Total	Percent of Total or Subgroup
Total		Count	814	1811	818	3443	100.00%
		% within Total	23.64%	52.60%	23.76%		
*Gifted Type	Mensa member (ever)	Count	556a	1162a	478b	2196	63.80%
		% within Gifted Type	25.30%	52.90%	21.80%		
	Identified Gifted	Count	180a	452a	222a	854	24.80%
		% within Gifted Type	21.10%	52.90%	26.00%		
	High Test Score	Count	44a	126a, b	74b	244	7.10%
	_	% within Gifted Type	18.00%	51.60%	30.30%		
	Self Identified	Count	34a	71a	44a	149	4.30%
		% within Gifted Type	22.80%	47.70%	29.50%		
Member of Mensa	Current Member	Count	528a	1099a	443a	2070	94.26%
		% within Member of Mensa	25.50%	53.10%	21.40%		
	Not a Current Member	Count % within Member of	28a	63a	35a	126	5.74%
		Mensa	5.00%	5.40%	7.30%		
Current Member Mensa History	This is my first year as a Mensa member.	Count	35a	92a	39a	166	7.56%

			Low Needs Class	Moderate Needs Class	High Needs Class	Total	Percent of Total or Subgroup
		% within Current Member Mensa History	21.10%	55.40%	23.50%		<u>U</u> 1
	I have renewed my Mensa membership at least once.	Count	400a	828a	328a	1556	70.86%
		% within Current Member Mensa History	25.70%	53.20%	21.10%		
	Other	Count	93a	178a	76a	347	15.80%
		% within Current Member Mensa History	26.80%	51.30%	21.90%		
*Age Group	Emerging Adult 18-24	Count	59a	56b	12c	127	3.70%
8 - 1	. 8 8	% within Age_Group	46.50%	44.10%	9.40%		
	Young Adult 25-34	Count % within Age_Group	68a 19.60%	205a 59.10%	74a 21.30%	347	10.10%
	Middle Age 35-49	Count	216a	597b	279b	1092	31.70%
	Wildele Fige 35 17	% within Age_Group	19.80%	54.70%	25.50%	10,2	2117070
	Older 50-69	Count	241a	642b	303b	1186	34.40%
		% within Age_Group	20.30%	54.10%	25.50%		
	Senior 70+	Count	230a	311b	150b	691	20.10%
		% within Age_Group	33.30%	45.00%	21.70%		
*Gender you most identify with	Male	Count	438a	788b	324b	1550	45.00%
		% within Gender	28.30%	50.80%	20.90%		
	Female	Count	358a	962b	459b	1779	51.70%

			Low Needs Class	Moderate Needs Class	High Needs Class	Total	Percent of Total or Subgroup
		% within Gender	20.10%	54.10%	25.80%		2 40 81 3 4 p
	Nonbinary/Third gender	Count	6a	34a	15a	55	1.60%
	,	% within Gender	10.90%	61.80%	27.30%		
	Prefer to self-describe:	Count	5a	16a	11a	32	0.90%
		% within Gender	15.60%	50.00%	34.40%		
	Prefer not to say	Count	7a	11a	9a	27	0.80%
	-	% within Gender	25.90%	40.70%	33.30%		
*LGBTQ+	Yes	Count	81a	245b	127b	453	13.16%
2021		% within LGBTQ+	17.90%	54.10%	28.00%		
*Disability	Yes	Count	140a	465b	269c	874	25.38%
2100011109		% within Disability	16.00%	53.20%	30.80%		
High School Graduate	Yes	Count	787a	1745a	771a	3303	95.93%
		% within High School Graduate	23.80%	52.80%	23.30%		
	No	Count	16a	32a	17a	65	1.89%
		% within High School Graduate	24.60%	49.20%	26.20%		
	Other	Count	11a	34a	29b	74	2.15%
		% within High School Graduate	14.90%	45.90%	39.20%		
College	Yes	Count	784a	1755a	788a	3327	96.63%
-		% within College	23.60%	52.80%	23.70%		
	No	Count	29a	56a	30a	115	3.34%
		% within College	25.20%	48.70%	26.10%		

			Low Needs Class	Moderate Needs Class	High Needs Class	Total	Percent of Total or Subgroup
*Highest Degree	Associate's	Count	32a	87a	50a	169	4.91%
		% within Highest Degree	18.90%	51.50%	29.60%		
	Bachelor's	Count	196a	503a	214a	913	26.52%
		% within Highest Degree	21.50%	55.10%	23.40%		
	Master's	Count	263a	614a	280a	1157	33.60%
		% within Highest Degree	22.70%	53.10%	24.20%		
	Doctorate	Count	150a	250b	80c	480	13.94%
		% within Highest Degree	31.30%	52.10%	16.70%		
	Professional certification (write in)	Count	73a	157a	85a	315	9.15%
	,	% within Highest Degree	23.20%	49.80%	27.00%		
	Other (write in)	Count	80a	168a	100a	348	10.11%
	· · · · · ·	% within Highest Degree	23.00%	48.30%	28.70%		
Live in US	Yes	Count	757a	1630b	701c	3088	89.69%
		% within Live in US	0.245	52.80%	22.70%		
US Region	West: Pacific, Mountain	Count % within US Region	170a 20.80%	448b 54.80%	199b 24.40%	817	26.46%

			Low Needs Class	Moderate Needs Class	High Needs Class	Total	Percent of Total or Subgroup
	Midwest: West North Central, East North Central	Count	154a	295a	141a	590	19.11%
		% within US Region	26.10%	50.00%	23.90%		
	South: East South Central, West South Central, South Atlantic	Count	261a	556a	242a	1059	34.29%
		% within US Region	24.60%	52.50%	22.90%		
	Northeast: Middle Atlantic, New England	Count	165a	321a, b	116b	602	19.49%
		% within US Region	27.40%	53.30%	19.30%		
	Other	Count	7a	10a	3a	20	0.65%
		% within US Region	35.00%	50.00%	15.00%		
Geographic Region	Africa	Count	1a	0a	1a	2	0.56%
		% within Geographic Region	50.00%	0.00%	50.00%		
	Asia	Count	6a	24a	10a	40	11.27%
		% within Geographic Region	15.00%	60.00%	25.00%		
	Europe	Count	38a	113a	78a	229	64.51%
	-	% within Geographic Region	16.60%	49.30%	34.10%		
	Oceania	Count	2a	15a	9a	26	7.32%
		% within Geographic Region	7.70%	57.70%	34.60%		

			Low Needs Class	Moderate Needs Class	High Needs Class	Total	Percent of Total or Subgroup
	The Caribbean	Count	1a	0a	0a	1	0.28%
		% within Geographic Region	100.00%	0.00%	0.00%		
	North America	Count	7a	16a	15a	38	10.70%
		% within Geographic Region	18.40%	42.10%	39.50%		
	Central America	Count	0a	5a	0a	5	1.41%
		% within Geographic Region	0.00%	100.00%	0.00%		
	South America	Count	2a	8a	4a	14	3.94%
		% within Geographic Region	14.30%	57.10%	28.60%		
Community Characteristics	Rural	Count	83a	146a	83a	312	9.06%
		% within Community Characteristics	26.60%	46.80%	26.60%		
	Small city or town	Count	226a	525a	235a	986	28.64%
		% within Community Characteristics	22.90%	53.20%	23.80%		
	Suburb of a large city	Count	315a	736a	305a	1356	39.38%
		% within Community Characteristics	23.20%	54.30%	22.50%		
	Large city	Count	174a	365a	173a	712	20.68%
		% within Community Characteristics	24.40%	51.30%	24.30%		
	Other (please describe)	Count	16a	38a	21a	75	2.18%
% within Com	% within Community Characteristics	21.30%	50.70%	28.00%			

			Low Needs Class	Moderate Needs Class	High Needs Class	Total	Percent of Total or Subgroup
*Greatest							
Interest/ Ability Areas	Science or Mathematics Only	Count	99a	160b	64b	323	9.38%
•	·	% within Interest/Ability	30.70%	49.50%	19.80%		
	Humanities Only	-					
	(Reading/Social Science/Languages)	Count	87a	257b	116a, b	460	13.36%
		% within Interest/Ability	18.90%	55.90%	25.20%		
	Performance Only (Art/Music/Athletics)	Count	15a	35a	10a	60	1.74%
	(,	% within Interest/Ability	25.00%	58.30%	16.70%		
	Science-Math/	•					
	Humanities/ Performance	Count	242a	560a	270a	1072	31.14%
		% within Interest/Ability	22.60%	52.20%	25.20%		
	Science-Math and Humanities	Count	147a	373a	147a	667	19.37%
		% within Interest/Ability	22.00%	55.90%	22.00%		
	Science-Math and Performance	Count	83a	125b	53b	261	7.58%
		% within Interest/Ability	31.80%	47.90%	20.30%		
	Humanities and Performance	Count	118a	279a	147a	544	15.80%

			Low Needs Class	Moderate Needs Class	High Needs Class	Total	Percent of Total or Subgroup
		% within Interest/Ability	21.70%	51.30%	27.00%		
	Other	Count	23a	22b	11a, b	56	1.63%
		% within Interest/Ability	41.10%	39.30%	19.60%		
†Race/ Ethnicity Identity (check	American Indian or Alaska Native (e.g., Navajo Nation, Blackfeet Tribe, Inupiat Traditional Gov't., etc.)	Count	17	35	30	82	2.38%
all that apply)	Gov t., etc.)	% within Race/ Ethnicity	20.70%	42.70%	36.60%		
	Asian or Asian American (e.g., Chinese, Japanese, Indian, Filipino, Korean, South Asian, Vietnamese, etc.)	Count	40	105	42	187	5.43%
		% within Race/ Ethnicity	21.40%	56.10%	22.50%		
	Black or African American (e.g., Jamaican, Nigerian, Haitian, Ethiopian, etc.)	Count	31	56	28	115	3.34%
	,	% within Race/ Ethnicity	27.00%	48.70%	24.30%		

		Low Needs Class	Moderate Needs Class	High Needs Class	Total	Percent of Total or Subgroup
Hispanic or Latino/a (e.g., Puerto Rican, Mexican, Cuban, Salvadoran,	Count	28	81	46	155	4.50%
Colombian, etc.)	% within Race/ Ethnicity	18.10%	52.30%	29.70%		
Middle Eastern or North African (e.g., Lebanese, Iranian, Egyptian, Moroccan, Israeli, Palestinian, etc.)	Count	10	22	18	50	1.45%
· · · · · ·	% within Race/ Ethnicity	20.00%	44.00%	36.00%		
Native Hawai`ian or Pacific Islander (e.g., Samoan, Guamanian, Chamorro, Tongan, etc.)	Count	4	5	4	13	0.38%
	% within Race/ Ethnicity	30.80%	38.50%	30.80%		
White or European (e.g., German, Irish, English, Italian, Polish, French, etc.)	Count	710	1568	708	2986	86.73%
Tonon, Trenen, etc.)	% within Race/ Ethnicity	23.80%	52.50%	23.70%		

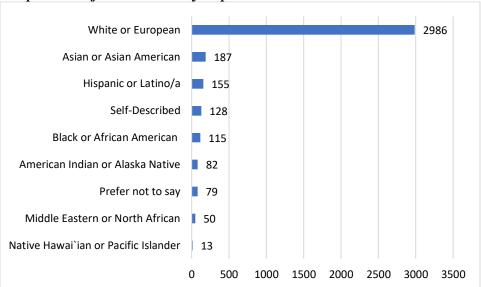
			Low Needs Class	Moderate Needs Class	High Needs Class	Total	Percent of Total or Subgroup
	My race or ethnicity is best described as: (Write in)	Count	19	67	42	128	3.72%
	, ,	% within Race/ Ethnicity	14.80%	52.30%	32.80%		
	Prefer not to say	Count	16	47	16	79	2.29%
	·	% within Race/ Ethnicity	20.30%	59.50%	20.30%		
Employment Status	Currently employed						
	Yes	Count	487a	1186b	513a, b	2186	63.49%
		% within Currently Employed	22.30%	54.30%	23.50%		
	No	Count	324a	622b	303a, b	1249	36.28%
		% within Currently Employed	25.90%	49.80%	24.30%		
	Retired						
	Yes	Count	282a	507b	220b	1009	29.31%
		% within Retired	27.90%	50.20%	21.80%		
	No	Count	528a	1300b	597b	2425	70.43%
		% within Retired	21.80%	53.60%	24.60%		

^{*} Frequencies vary within subgroups, $\chi^2 p < .05$; Each letter beside count denotes a subset of latent class categories (i.e., Low, Moderate, or High Need Class) whose column proportions do not differ significantly from each other at the .05 level.

Note. Missing data explains varied counts.

[†] Frequencies cannot be compared for "Select all that apply" items.





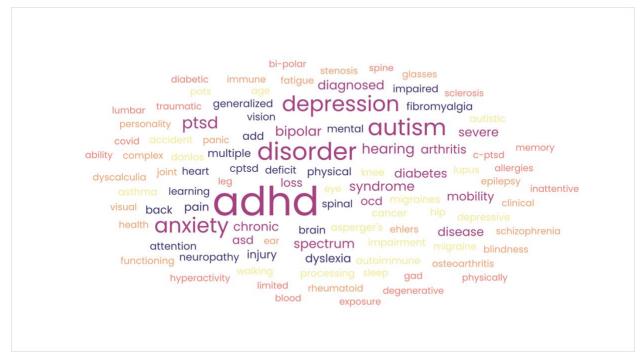
Note: Respondents could select as many as applied.

A quarter of respondents reported having a disability (n = 874, 25.38%). The most frequent disability named was ADHD, mentioned by 250 participants (7.3%). Autism (n = 112), depression (n = 101) and anxiety (n = 97) were also frequently named. Figure 2 includes a visualization of terms included in respondents' descriptions of disability, with the font size representing the word's frequency.

Participants were well-educated. Even among those who had not graduated from high school (n = 139, 4.04%), the majority of those commenting reported earning their GED (General Education Development; n = 41) and many had gone on to receive advanced degrees. Nearly all respondents (n = 3327, 96.63%) had attended college and many had graduate degrees (see Table 1). Ninety percent of respondents lived in the United States, with a third living in the South (see Table 1, Figure 3). The majority of those living outside the US were in Europe (n = 229, 64.51%). Forty percent of respondents lived in suburban areas (n = 1356, 39.38%) and fewer than 10% of respondents lived in rural areas (n = 312, 9.06%). See Table 1 for demographic details. More than half of respondents were employed (n = 2186, 63.49%) and almost a third were retired (n = 1009, 29.31%). Their descriptions included a dizzying array of occupations. Table 2 includes frequencies of the top-mentioned terms when asked to describe their employment.

Figure 2

Disabilities Word Cloud



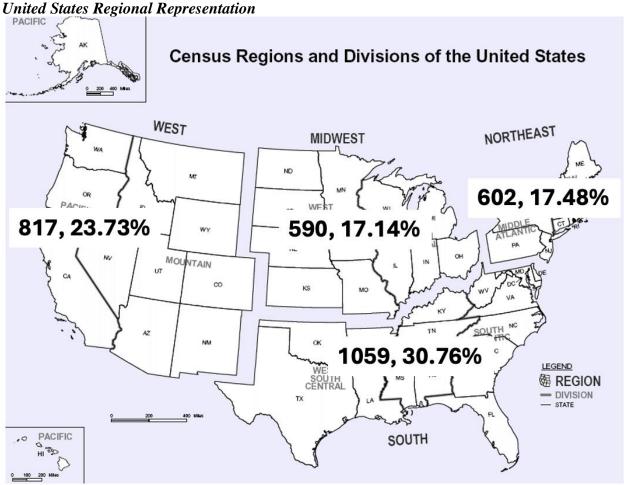
Note: Produced by https://www.freewordcloudgenerator.com

Table 2

Top 10 Employment Terms/Categories

Descriptor	Count
Teacher/Professor/Education/Educator	514
Management/Manager	324
Engineer/Engineering	309
Software/Computer/Technology	294
Health/Medical/Clinical/Physician	176
Business/Executive	169
Research/Analyst	156
Consultant/Consulting	140
Financial/Finance/Accounting	139
Attorney/Law	115

Figure 3



Exploring Needs in the Four Domains

The survey included items that, if adequately present, would contribute to an individual's wellbeing. Where possible, items were designed to access a person's autonomy, competence, and relatedness, core components of Deci and Ryan's (2000) self-determination theory of motivation. For example, being "Able to choose what I learned about" indicates a sense of agency and control over one's environment (autonomy). Not having this ability would be frustrating at some level. That level may differ among individuals. People are motivated to develop a sense of competence in their abilities. They may avoid activities that make them feel incompetent or be attracted to those in which they feel competent. Simplistic tasks do not provide evidence of one's competence, which is why "schoolwork appropriate for my ability level" is so important for highly intelligent individuals. Being connected to others – feeling caring and acceptance from at least one other person – is a cornerstone of psychological wellbeing. "Classmates who shared my

academic interests" or "Teachers who appreciated my intellectual abilities" contribute to an environment of acceptance. In combination with items designed to reflect research with high-ability students, items based on autonomy, competence and relatedness enable a relatively comprehensive view of the unmet needs of survey participants. In this section, responses to the four domains will be described.

Academic Needs

Tables 3 and 4 portray the ten highest need items in K-12 and college among all survey respondents. Keep in mind that responses were on a continuum from no need to need: 1 = "I had this in the right amount," 2 = "I did not have this and that's ok," 3 = "I had some of this but needed more than I had," and 4 = "I did not have this and needed it." While nearly all average scores were below 3, the high standard deviations for each item indicates wide variability in responses. There was a trend of average need scores being lower (less need) in regard to college-level academics than K-12. The highest average scores for both K-12 and college was "Mentor(s) in my areas of interest." Similarly high were the need for "Lessons in academic skill development (e.g., time management, study skills, etc.)." Even the most gifted intellectuals may need support for the skills required to be successful in school.

Table 3
Top Ten Academic Needs in Kindergarten-Grade 12

Item	Mean	SD	N
Mentor(s) in my areas of interest	3.08	1.05	2909
Lessons in academic skill development (e.g., time management, study skills, etc.)	2.96	1.11	2925
Feelings of belonging in school	2.80	1.18	2963
Able to work at the pace I wanted to	2.76	1.19	2936
Schoolwork appropriate for my ability level	2.75	1.15	2919
Able to choose what I learned about	2.72	1.11	2972
Adequate money to afford outside-of-school learning opportunities	2.63	1.27	2877
Someone who recognized my talents or potential	2.61	1.15	2920
Outside-of-school learning opportunities	2.59	1.20	2938
Classmates with intellectual abilities similar to mine	2.53	1.14	2938

Table 4
Top Ten Academic Needs in College

Item	Mean	SD	N
Mentors in my areas of interest	2.77	1.15	2646
Adequate money to afford the college I wanted to attend	2.45	1.28	2713
Feelings of belonging in college	2.30	1.19	2687
College classmates with intellectual abilities similar to mine	2.18	1.14	2634
College classmates who shared my academic interests	2.15	1.13	2660
Accessible professors	2.07	1.13	2687
Confidence in my ability to achieve in college	2.05	1.20	2655
College classmates who accepted me	1.99	1.12	2669
Multiple options for colleges I could attend	1.96	1.14	2657
Expectations from professors for outstanding performance	1.91	1.06	2466

Academic Frustrations

The survey opened the door for participants to freely express their frustrations and make recommendations for how those could have been eliminated or at least ameliorated. Deci and Ryan's (2000) concepts of autonomy, relatedness, and competence have relevance in every theme identified in Table 5. Participants were frustrated by an inability to connect with teachers who recognized and appreciated their abilities, felt misunderstood by others who made inappropriate assumptions about their abilities and needs, and were ostracized by peers for their differentness. Their ability to develop an accurate sense of their competence was thwarted by inadequate educational opportunities, instruction, and guidance. Inflexible educational systems and ineffective teachers challenged students' needs for autonomy. All these frustrations had negative impacts on participants' self-concept and identity development. Navigating transitions and adjusting to new environments were complicated by these difficulties with unmet needs.

While these themes did emerge from the data, it is important to note that they are not representative of all participants' experience. The average scores in Tables 3 and 4 suggest many participants lacked adequate academic guidance and support for the development of their

academic skills. Others may have assumed they had these skills and did not need guidance, but it is clear from both the survey and open-ended comments that this was an area of unmet need.

Participants had many suggestions for how their academic frustrations may have been avoided (Table 6). In keeping with the highest-rated need in the academic domain (Tables 3 & 4), mentorship was mentioned time and again as a solution to the challenges participants faced in school. Stable, accepting, and supportive environments in both home and school would have made a big difference for many participants. Focusing on self-understanding in formal and informal settings would have been beneficial. Helping others accurately understand their needs would have also been important. Professional development for teachers may have alleviated hours of unproductive time in school. This may also have supported the early identification of exceptional abilities or diagnosis of multiple exceptionalities. Many participants craved greater autonomy in school and offered suggestions for tailored educational opportunities. Finances were a barrier to some participants' education and scholarships or funded activities would have made it possible for them to engage in appropriate activities. Rural areas, where there are fewer students, teachers, and resources, need additional attention to provide an adequate education to highly intelligent students.

Table 5

Academic Frustration Themes

Academic Frustration Theme	Description	Example Quotes
Disappointment with teachers	Struggles with teacher-student relationships, including feeling misunderstood, unchallenged, or unfairly treated. Disappointment with the lack of open thought and ineffective teaching methods.	"Too many teachers who were simply not good at transferring knowledge to others" (3327MM3M) "Teachers preferring students who didn't ask a lot of questions and just sat quietly" (1163GF2M) "Incompetent teachers unnecessary policing and of course standardized education which is the backbone of the education industrial complex" (266GM2M) "Abusive K-12 teachers" (1291MM3M)
Misunderstanding and Neglect of Giftedness	Teachers and parents failing to recognize and support gifted students. Feeling ostracized and misunderstood due to intellectual abilities.	"A general assumption that you don't need help if you are smart" (2407MF4M) "Being ostracized by peers because of intellect and physical and physiological shortcomings." (1696MM4H) "The system is set up to cater to, and take care of, the average student There just isn't support for high-I.Q. students" (2321MM4M)
Lack of Challenge and Individualized Learning Opportunities	Frustration with the rigid educational system that does not cater to different learning styles or allow for advancement beyond the standard curriculum, not being intellectually challenged in K-12 education,	"My greatest frustration in K-12 was being limited. There was nothing extra offered, no way to advance past the other students. Teachers would say, 'Keep up the good work.' That was all I could do" (295HF2M) "I had so many interests but not enough options of ways to learn and grow in them. I found school quite easy throughout my schooling. I could have used more challenges." (2388HF3M)

Academic Frustration Theme	Description	Example Quotes
	being held back and not allowed to explore diverse interests. A one-size-fits-all approach that did not cater to individual needs and interests	"Lack of opportunities to pursue passions when I stumbled upon them." (2731MM3H) "Quick funneling into specific pigeonholes/career tracks with no ability to explore diverse interests." (2182MF3M) "In k12, I was consistently ahead of classmates and bored in class." "Too slow, too much repetition." (3072GF3M) "Everything was constantly 'dumbed down for easy digestion'. Professors' feedback always stated I consistently submitted graduate-level coursework/assignments for my undergraduate classes and asked me to 'dial it down'" (1791HM3H) "There were far too many students in every step of educational experience. I didn't know it at the time, but I needed individualized assistance, and I never got it. The result was under-stimulation in K-12, and massive over-stimulation in college." (499MF2M)
Inflexible Academic Systems	Challenges with mandatory courses, group assignments, and attendance policies hindering personal growth and academic progress.	"I had to finish all of them I had a lot of mandatory group assignments where I had to carry my groups They also changed policy making attendance mandatory, which I obviously couldn't do while following 4 fulltime programs, and they no longer allowed me to skip classes by handing in extra assignments What I hated most is that it is so set in stone that they have zero room for individuals with a unique track." (1648HF2M) "I was in a gifted program in a large school district with about 45 other kids of similar overall ability. While we were all accelerated relative to the general population, our coursework was one size fits all" (1070MM3H)
Lack of Support and Guidance	Feeling misunderstood and unsupported by teachers,	"Not having a mentor and academic peers in high school." (1480MM5H)

Academic Frustration Theme	Description	Example Quotes
	parents, and mentors in exploring interests and in making informed decisions in career paths.	"coming from a small community with relatively limited resources. Even though individuals would take a vested interest, the guidance I received was based on a lot of limited life experience. I wish I knew even half of what I did now and that I had more support to explore options further away from home." (3277MF3M) "Trying to overcome the self-doubts created by my mother's mental and emotional abuse of me and my sister and my father's seeming inability to help us." (2789MM5M) "My parents were either not knowledgeable in most subjects, or bad at teaching" (1629GM3M) "My peers in the gifted classes had parents who would almost do their projects for them, while I struggled to plan out and complete things with no support at home. Then I was judged at home for not doing as well as they thought I should because I was labeled "gifted"" (1838MF4M)
Misalignment of Educational Goals and Methods	Discontent with the focus on memorization over true understanding, leading to a disconnect between learning and application. Disappointment with the lack of open thought, ineffective teaching methods, and feeling disconnected from the educational environment.	"My greatest frustration with college was just being expected to memorize information for tests without actually learning the material." (2680GF4M) "Lack of opportunities to pursue passions when I stumbled upon them. In my post secondary education, the greatest issue by far was the lack of any real open thought in modern education and the strictures of modern rules on the acceptability of opinions" (2731MM3H) "I was never taught academic skills, and I was never confronted with an academic challenge that pointed out a need for improvement" (795MN3M) "does not correspond to how to be successful in life. Formal education is a clearly defined set of hurdles which are clearly laid out education is highly focused on, "do you know the answer," as opposed to developing the kind of determination and dedication to the process of find out an answer" (1230MM4M)

Academic Frustration Theme	Description	Example Quotes
Self-esteem issues	Struggles with self-confidence and identity.	"I still don't know what I want to do when I grow up and don't know who I can really talk to about it" (2407MF4M) "No one is able to expand beyond one's true limitations. Therefore, my wanting is purposeless as my expectations or wishes cannot be accommodated by others who simply lack the capacity to do so. Of course, it might feel empathetic and a little compassionate if it could be admitted that it is not I who is lacking. Generally, that has been the response: I was inadequate; I was inherently less or I was defective. It wrecked my self-esteem for decades, being shunned. I truly had no idea that I was valuable or extremely competent" (2694GF4H)

Academic Frustration Theme	Description	Example Quotes
Theme	Description	"Moving in 6th grade to a school district that I felt set me back two years." (560MM4H) "When I hit junior high and relocated to the US after three years in [another country], I ran into mean girls. Ever since then, hypercompetitive people have been my main problem in my education and my social life. I try to fly under the radar and emphasize my friendliness and warmth, but I can't hide my intelligence because of my articulateness. This has caused problems for me, both in my academic career and after. Because I am a kind and good friend, I eventually find people to hang out with in any location, but the mainstream frat boys/sorority girls are no fonder of smart people at fifty than they were at twenty. Had I gone into academia (which I almost did), I probably would have found more acceptance, as I was very well-liked and successful in my doctoral program" (320MF4M) "the dropoff from being valedictorian in high school to strugglng as an undergraduate. My graduating class was 45 students but my university had 45000 students. a huge adjustment and I was only 17 when I started and I was the first to attend college." (11MM4M)
Transition and Adjustment Challenges	Struggles with transitions between educational levels and institutions.	"Also, sometimes, especially in sociology classes and communication classes, I had a hard time guessing what the teacher wanted to hear. Many times, I saw there could reasonably be many correct answers, and yet I couldn't as easily limit my mind to only see the one answer they saw. So I felt like I was spending more time learning their preferences than I was in truly letting my mind go free. I imagine almost everyone has to adjust to their teacher, but I felt it was limiting for me, especially in college." (1716MF2M)

"I was moved up a grade due to my academic ability at a young age. This had a negative impact on my formative years, because I was too advanced to relate to kids my own age, and too young to relate to kids in my school grade..." (2932GF3M)

"Teachers preferring students who didn't ask a lot of questions and just sat quietly..." (1163GF2M)

"...I was physically and verbally abused daily by a girl in my class..." (2035MF3M)

"I was often a social outcast (especially in K–12)." (19MM4M)

"When I was in kindergarten I was separated from everyone as being different. I would already know my numbers, alphabet and learning skills at higher level than everyone else and my teacher would scold me and put me in corner that I had to stay at level with rest of the class. This set the way for me to be constantly ostracized and bullied that I was dumb when some teachers did say I was extremely gifted but my parents held me back because they didn't want to send me to a specified school..." (3332GF4H)

"Social alienation in K-12 when daring to be different, care about school, dress differently, to the point of bullying." (1668GF2M)

"I was bullied in high school because I was smaller and younger than my peers..." (2239GM2M)

"Socialization. I was INTP in high school and INTJ by my second Master's degree. I have always had few friends but having such a low level of socialization, belonging, and trust really takes from your energy levels/enthusiasm/vitality. Group work projects were always very frustrating so I preferred to work by myself, but I understand now how wonderful it is to work with other high IQ, reliable, low-conflict experts. There are these ideal dyad dynamics that make work easy and the results of work so much greater than what I could have achieved on my own." (264GF2M)

"I was moved up a grade due to my academic ability at a young age. This had a negative impact on my formative years, because I was too advanced to relate to kids my own age, and too young to relate to kids in my school grade..." (2932GF3M)

Experiencing bullying, feeling isolated due to intellectual differences, struggles with teacher-student relationships, including feeling misunderstood, unchallenged, or unfairly treated. Challenges of fitting in and finding their place within the educational system. These sometimes also affected the identity of the students.

Social Challenges

"...I was a very strong student academically, but never had an easy feeling of being 'at home' with my peers and instructors." (2824GF4M)

Academic Frustration Theme	Description	Example Quotes
Inadequate Preparation for Higher Education and Career	Lack of study skills and preparation for college leading to struggles. Limited exposure to real-world skills and experiences in education.	"I never learned how to study or do anything that was hard for me, and that made it difficult to succeed my freshman year" (1460MF4M) "There was zero education on finances or entrepreneurship through my high school career." (3290GM3M) "Not knowing what to expect when I left high school, and no opportunities to prepare me for what careers I could pursue." (2737GM3H)
Financial Challenges	Financial constraints hindering educational opportunities and completion.	"Lack of money needed to allow me to remain in college" (1005GM3H) " When I was college level I wanted to go into a specialized field of science and research. It I could not afford it and because my parents did" (3332GF4H) " Coming from a poor family with parents who do not understand the advantages of a good college education" (141GF4M) "I was limited in college options by money." (1629GM3M) " Because I did not receive academic scholarships I had to work and attend school full time" (313GM4H) "Because of my parents financial difficulties, I was not able to apply to university" (2536G33H) "Being too poor to attend the best schools." (706MF4M) " Due to finances I was unable to attend a university that was more academically challenging" (3080MF3M) "Economic constraints prevented me from pursuing law school" (601MM4L)

Academic Frustration Theme	Description	Example Quotes
Mental Health Challenges	Mental health issues due to several factors that led to educational struggles	"I started drowning due to mental health, parents divorce, abusive father, etc. and nobody noticed or knew what to do, ending with over a decade of drug abuse before I got my act together." (550GM2H) "Well I wasn't helped with my giftedness in either college or K-12 and by the time I was in college/university I was enduring serious mental health problems from my abusive childhood eg CPTSD so that affected my education and my family didn't want me to succeed so they would sabotage me often it was exhausting. I felt agonized as well like why was I so weird but my intelligence helped me survive and get multiple degrees either way" (1312GF4H) "My school experience through 11th grade was really excellent. I was in a gifted elementary program and an IB diploma program in high school. My mental health started going downhill my senior year of high school and my depression ever since, despite treatment attempts, really thwarted my ability to succeed in college. It was frustrating knowing that I was more intelligent than most of my classmates but unable to fully participate and succeed in classes due to my mental health struggles. I eventually felt I had to settle for a degree in a major I was only sort of interested in because of credits I already had and classes that I could pass. I was unable to pursue what I was really interested in because my mental health simply did not allow me to be present and do the work required in the classes and major I would have much preferred." (2157GF3M)

Academic Frustration Theme	Description	Example Quotes
		"I know I could have achieved far more had I a better start, an earlier start, focusing on a goal rather than Forrest Gumping my way into a degree." (2636GM4H) "I guess my biggest frustration looking back was that I didn't have the tools I needed to fulfill my capabilities. I missed out on a lot of important
Missed opportunities and	Regret over missed opportunities and unfulfilled potential. Frustration with not pursuing desired paths due to external influences or lack of guidance. Feeling unfulfilled due to a lack of challenging experiences and the inability to explore interests fully	opportunities." (1053GF3M) "I missed out on extra curricular activities, was unable to purchase necessary textbooks and so on due to not being able to afford them." (1940GF3M) "I really wish I had the chance to study things more deeply and quietly, with less subjects, so that I could have really learnt instead of just learned enough to pass the test with a good grade." (2166HM2M) "I wish I could go back in time and enjoy school without caring about people, wish I could pay attention to class and learn more about everything." (967SF1H)

Note. Identifier = ID Number, Gifted Type (M=Mensa member [ever], G=Identified Gifted, H=High Test Score, S=Self-Identified), Gender (M=Male, F=Female, N=Nonbinary, O=Other), Age Group (1=18-24, 2=25-34, 3=35-49, 4=50-69, 5=70+), Class (L=Low Needs, M=Moderate Needs, H=High Needs).

Table 6
Academic Recommendations Themes

Academic Recommendations Theme	Description	Example Quotes
Need for Individualized Support and Mentorship	There was a desire for better support based on the need of the individual, especially through mentorship. the theme focuses on the importance of personalized guidance and assistance in navigating educational and career paths. The quotes highlight the significance of having mentors who understand the unique needs and challenges of individuals, especially those who are first-generation college students or lack adequate support structures. Mentors play a crucial role in providing tailored advice, inspiring motivation, and actively listening to concerns. They assist in decision-making processes, offer direction in academic pursuits, and facilitate connections between personal interests and educational opportunities. The absence of such mentorship can lead to	"Having a mentor that I could go to as a first-generation college student when the college-assigned advisor (intentionally not in my major) advised me in a way that didn't meet my interests and ability." (2160GF3M) "Mentors who took the time to help me figure out my goals. Who inspired me. Who simply took time to LISTEN and help me find my voice" (14MN4H) "Someone to help with decisions, filling out forms, taking the right classes in the first place, and maybe to notice that I wasn't ready and direct me to help" (2312MF5H) "I should've had more direction from someone, who could've steered me in the right direction" (1175MM4M) "More guidance from the school as to the best courses to take that coincided with my interests." (518MF5M) "In college, having a mentor outside of the academic system would have been useful." (2517MF4M)

Academic Recommendations Theme	Description	Example Quotes
Ineme	feelings of being adrift or lacking direction, emphasizing the necessity for support systems both within and outside formal educational institutions. There was a need for challenge and more engagement in the coursework in school or college, that is, a dynamic and stimulating learning environment that fosters growth and fulfills individual passions. The quotes emphasize the importance of engaging coursework, particularly during formative years, to nurture intellectual curiosity and enable students to pursue their academic interests. The desire for appropriate	"Unique and interesting projects that could have real-life applications" (392GN3H) "Having more engaging coursework in the more formative years." (2451MF1L) "If I had been allowed to pursue the academic subjects I was passionate about, I think I would not have suffered so much at high school." (1991GF4M) "Being challenged with appropriate level instruction" (1426GM4M) "I probably still need to be diagnosed for ADHD or other. I needed help when I was younger and I needed more challenge at school. My parents gave me
Desire for Challenging and Engaging Education	challenges underscores the need for personalized instruction tailored to individual abilities, ensuring students are pushed to reach their full potential.	good challenges at home with real world problems of fixing homes, vehicles, etc. Now as an adult, I feel I still don't have the skills I need to perform as well as I could." (1640MM3M) "I lamented the fact that I couldn't study the majors I wanted, because I wasn't adequately prepared by the time I went to college." (2420MM4M)

Academic Recommendations Theme	Description	Example Quotes
Call for Supportive and Understanding Environment	The participants needed an supportive environment which included family and other community. The participants demonstrate the importance of stability, community involvement, and support from immediate family members. They express a longing for an environment that fosters acceptance and embraces differences, particularly in terms of intelligence and abilities. There's a plea for parents to instill values of acceptance and understanding in their children, advocating for a shift in societal attitudes towards intelligence and the recognition of individual abilities.	"A different family. It wasn't that they didn't try to dispose of me to another family. Nobody would take an unruly child that was "Too smart for my own good". I was disposed to insane asylums, before I was a teenager." (2364GM4H) "Stability in my household." (312GF4M) "More community involvement from people with experience and time to mentor." (786MM3L) "More support from my immediate family." (928SM4H) "A more supporting environment would have been beneficial" (2477GM2M) "Parents teaching their children acceptance for differences - age, intelligence, and ability levels" (915MF2L) "social attitudes to intelligence are also quite detrimentalexample teacher who flunked me for the entire year, despite the fact I was there every day, taking notes, doing the work, getting good grades, etc. She told me she thought I "needed to be taken down a peg." The shyest kid in the class, a kid who had to carry all her books and coat around with her because she couldn't open her locker - that one needed to be taken down a peg." (2312MF5H)
Desire for Personal growth and development	Wishing for better intrapersonal abilities to understand one self and one's abilities. The quotes emphasize the importance of self-analysis, self-discovery, and their application to one's career path. They highlight the desire	"Curriculum around self-analysis and discovery - and how to apply that learning to a career path." (1885MM4H) "More confidence, more self-awareness, less trauma from the past." (1914HM4M) "Learning how to think earlier in college, would have made it so much easier." (1094HM2H)

Academic Recommendations Theme	Description	Example Quotes
	for increased confidence, self-awareness, and resilience against past traumas. This theme demonstrates the inherent human inclination to seek growth and self-improvement, both personally and professionally, and the recognition that such development is a lifelong journey.	"Understanding the problem, but also more stimulating classroom experiences to alleviate the punishing 'time out' aspect of school" (2158HF4M)
Support for Mental Health and Emotional Well-being	Provision of more support for the emotional needs, emphasizing the need for empathy, understanding, and proactive intervention in various aspects of life.	"More social emotional support for transition at college socially and academically" (2972HF3M) "Knowing I had ADHD at a young age, instead of 'distracted,' 'lazy,' 'underachiever' that I was labeled with so often." (1090MF3H) "Being raised to believe that women are equal in all ways." (231MF4M) "A more balanced approach to female ways of learningMore understanding about households with addiction and violence" (1103MG4M)
Early Recognition and Support for Giftedness	Need for advocacy of giftedness from others and early identification to harness the potential of gifted individuals. The quotes highlight the missed opportunities and challenges faced by gifted individuals when their talents are not recognized early on.	"Had my giftedness been observed at an early age I know life would have offered greater opportunities" (1476MM5H) "Better awareness of gifted and other neurodivergent traits and how to support those folks" (3446GF3M) "If my situation could have been identified early on and then have someone in the educational system reach out to me and encourage me to participate in some type of mentoring program" (1562MM5H) "I think if my giftedness had been recognized earlier and encouraged, I would have gone in a different academic direction." (1308MF4H)

Academic Recommendations Theme	Description	Example Quotes
		"To unleash learning, don't keep me stuck with slower learners, or put my skills to use." (114MM2M) "More knowledgeable adults with regards to emotional and mental health support." (1270SM2L)
Need for Recognition of Unique Learning Needs	There was a need for understanding that they had different learning needs and required tailored approaches to education. The participant's comments suggested a desire for a more inclusive and comprehensive educational landscape that provides opportunities for students of varying abilities and interests to thrive.	"Teachers need to be better at differentiation, not just for struggling learners but for gifted learners as well." (2579MM1L) "Understanding that studying is different for everyone and not one method should be used by everyone." (342MF4M) "More academic level options in high school, especially early on before we could take AP classes." (3104GF2M)
Need for Tailored Educational		"Less students per class, teachers who can make a living with their job." (2615SF3M) "More flexible learning arrangements that adapted to my feedback and that permitted me more agency" (1943GM2M) "More personalised learning (being able to go faster, to do other kinds of assignments, to do more subjects)" (1408GF2H) "More special programs (field trips, extracurricular learning opportunities) would also be a great help." (2321MM4M) "Customized degree plans plus opportunities for internships, mentoring,

Academic Recommendations Theme	Description	Example Quotes
Financial support	Participants highlighted the critical role of adequate resources in facilitating educational pursuits, alleviating financial burdens, and providing opportunities for personal and academic growth.	"more scholarship aid." (2639MF5L) "Being able to afford to actually take the time off work to attend school would have been helpful." (707HM3H) "More money in the house." (2800GF4M) "more funding" (91MM4M) "scholarship money so i didn't have to work part time" (2707MM3M) "Had more money, stability, less responsibilities." (2038GO3H) "If my parents had enough money to finance my 1st-choice school?" (3164MF5M) "Being poor also impacted my educational opportunities" (2813MF3M)
Advocacy for Inclusive and Diverse Education	The participants' comments reflected the need for educational environments that embrace diversity in all its forms that recognizes and celebrates the unique identities and experiences of all students, while actively working to address systemic barriers and biases.	"More acceptance of women students" (588MF5H) "If students were expected to accept everyone, regardless of religion, race, color, academic ability, body type, family size, etc. the social aspects of school would have been a better and safer place to be." (574MF4M) "Racial tensions. I remember being told that I did good for a Mexican girl when I scored in the top 2%" (357GF4M) "As a transgender woman in an age when being transgender was, at best a stigma and at worst a crime, I had to hide myself just to survive" (2293MF5H) "A more balanced approach to female ways of learning." (1103MG4M) "society wasn't ready to accept females, especially highly intelligent ones, at that time." (1148MF4M) "Equal opportunities." (2756GF4M) "As a gen x female (heck, even for kids now), we were rarely screened for adhd or autism." (2678MF3M)

Academic Recommendations Theme	Description	Example Quotes		
		"Seeing and recognizing each child for who they are and accepting that; education meeting children where they are and affirming each child's right to growth." (2088MF3M) "more opportunities to grow in performing arts and had a stronger community of Black students" (1499MF3M)		
Need for more resources in rural areas	This theme emphasizes the pressing need for increased resources, including better funding, access to quality teachers, and educational infrastructure, to address the educational disparities faced by students in rural areas. Without adequate resources, rural students are at a significant disadvantage in accessing quality education and fulfilling their academic potential.	"I grew up in rural Appalachia, so that was probably all they could muster. I went outside of school to library and addressed my interests on my own" (3150MM4H) "Students at economic levels who do not have parents and money and experience in Ivy League type schools still experience a gaping opportunity gap, as do students who are in rural areas or lower income or whose parents/families have no further education." (2453MF4M) "More interesting, engaging, intellectual teachers, but that wouldn't happen in a rural public school, which is what I had access to." (419MF3M)		
Overall Educational system reform	The participants advocated for an educational system that is personalized, fosters critical thinking, incorporates multimedia and interactive elements, focuses on conceptual understanding, adapts to individual needs, and promotes a	"It would have been ridiculously helpful to have had a structured and supported academic program that pre-selected gifted participants and provided appropriate tools, information, support, resources, calibration hell, even counseling" (356MM4M) "A society that prioritizes critical thinking skills in K-12 education instead of mechanistic syllabus and rote-based didactic methodologyMore illustrated, animated, audiovisual or interactive materials to enable a baseline		

Academic Recommendations Theme	Description	Example Quotes
	holistic approach to learning and personal development.	understanding for a society who's grown up with these mass media and social media communication modalities" (1791HM3H) "Classes that focused on ideas and concepts" (2198GF5H) "Individual dynamically adaptive curriculum in elementary education" (245MM3H) "I think the best answer to this would be many reforms of our education system, from kindergarten through graduate school" (647MM3H) "on how to harness my abilities to better excel at learning and see the usefulness in things I was not interested in." (2313MM3M)

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Career Development Needs

Participants indicated their career development would have benefitted from "Formal lessons in career planning," the top-rated item in the Career Development domain. Similar to the need for mentors during their academic careers, "Someone who could provide career advice/guidance" was the second-highest average rated item in this domain.

Table 7

Top Ten Career Development Needs

Item	Mean	SD	N
Formal lessons in career planning	2.97	1.07	2777
Someone who could provide career advice/guidance	2.92	1.08	2737
Information about different careers	2.85	1.08	2787
Connections with people who could help me advance in my career	2.68	1.13	2728
Able to pursue the many things I was interested in rather than being forced to choose only one	2.55	1.25	2703
Satisfied with my work environment	2.51	1.16	2755
Support from experienced people in my workplace to help develop my abilities	2.50	1.13	2740
Someone who recognized my talents or potential early in my career	2.49	1.22	2724
Able to pursue the career I wanted	2.46	1.22	2751
Satisfied with my career achievements	2.40	1.15	2752

Career Development Frustration

Participants were frustrated by a lack of autonomy in their careers, unable to change professions, even when they faced poor treatment or a lack of fulfillment (Table 8). Pursuit of the ideal career was often blocked by the expense of educational opportunities, other responsibilities, or a lack of guidance and information regarding career paths. As was evident in their survey responses (Table 7), participants believed advisors, mentors, or other network connections could have made their career trajectories more effective and fulfilling. Support in career planning, as opposed to accepting opportunities as they arose without a clear strategy, would have led to

greater fulfilment. Resources, such as training, support groups, and funding for career exploration, could have provided opportunities for career development.

Table 8Career Development Frustration Themes

Career		
Frustration Theme	Description	Example Quotes
Feeling Stuck in the Wrong Profession	Many individuals expressed frustration with feeling stuck in a career that they do not enjoy or feel passionate about. They highlighted the challenges of not being able to make a change due to various constraints such as job scarcity, financial limitations, lack of opportunities, and societal expectations.	"I feel like I'm in the wrong profession but don't know what to do about it since jobs are scarce." (3427HF3M) "I'm not doing something that I love or anything that helps people, it's unfulfilling and redundant" (494M21L) "I'm not satisfied with the limiting nature of the corporate structure" (382GF3H) "I long to pursue other careers that will fulfill me both intellectually and creatively." (2922HF3H) "My current PTSD struggles are from toxic workplace environments" (2524MF2M)
Lack of Career Guidance and Mentorship	Another prominent theme that emerged was the lack of career guidance and mentorship, especially during crucial stages of decision-making such as high school and college. Many participants expressed regret over not receiving adequate support in exploring career options, making informed choices, and avoiding pitfalls.	"Never had direction before/in college as to the 'how' to move towards my career choice or what pit-falls to avoid" (1226GM3H) "Not having someone to speak candidly with for advice and guidance." (1661MF4M) "I received virtually no guidance in high school in choosing a college or major, and I desperately needed it" (2097HN2M) "I did not have the privilege of choosing education or career." (408MF5M) "I never had guidance and tried to figure it out on my own." (702GF3H) "I feel that I chose a career path too early, and too many people validated my plans in spite of their flaws." (1679MM1M) "I didn't know a single person in STEM growing up most of the people I knew didn't come from STEM families, so we didn't know the nuances of what specific careers were" (788MM2M)

Career Frustration Theme	Description	Example Quotes
Struggles with Advancement and Recognition	Several participants highlighted their frustrations with the lack of recognition for their contributions in their respective fields and the challenges they faced in advancing their careers. They expressed feelings of being overlooked for promotions, not being given opportunities for growth and development, and facing obstacles in achieving their full potential.	"My greatest frustration with my career is lack of recognition for my contribution to the field that I work in" (2156MM3M) "I have a low threshold of boredom and as much as I loved my job it became tedious after a while." (1873MF5L) "I had to leave the corporate world because I just didn't fit. I could do the work, but it took such a toll on me because of the social interactions and unwritten rules" (3296MF4H) "I was treated badly during years and when the new unit leader systematically treated me bad I got burned out and lost my job" (3085HF3M) "Quality in my work is often recognized, but to no end beyond frequent recognition. Mediocrity leads to the outcomes, and excellence is not at all rewarded beyond verbal recognition." (3105MM3M) "I always faced jealousy - sometimes to my face. I was treated the worst by co-workers in my chosen field who were sometimes school dropouts, other women, bigots, and sometimes closet alcoholics" (528MO4L)
Biases and Societal Expectations	Many individuals highlighted the challenges they faced due to societal norms, limited career options for women, and biases in the workplace.	"Told that a BA would open doors that did not in fact happenbecause men got the career track and women were asked to type." (1330MF5M) "Being female in male dominated fields" (1201MF4H) "People assumed that because I was quiet and light-complexioned, my intelligence was just average" (2100MF5H) "I was frequently underestimated because of my gender." (2769MF4H) "I was denied positions in some fields because I am a woman, and they just couldn't accept that" (1129MO5M) "I was a woman attempting to do a man's job" (40MF5M) "girls were told they had to be submissive to men and were not competent to do anything intellectual" (231MF4M)

Career Frustration Theme	Description	Example Quotes
		"My family wanted me to be a Secretary, teacher, nurse or housewife despite my father being an MD." (1875MF5M)
Imposter Syndrome and	Many individuals expressed feelings of inadequacy and a lack of confidence in their abilities.	"No amount of positive feedback could convince me that I was doing a good job" (3234MF5M) "I feel like I should be doing better in my career but lack the executive functioning skills and ambition to drive myself to do better." (3435GF3H) "I didn't use my full potential because I didn't trust my abilities." (2751MF4M) "I had low expectations and a lack of confidence and ego" (2663MM4H) "I lacked belief in myself to really be able to do and achieve more. I feel quite insecure, mostly in applying for jobs and 'selling' myself" (1951SF3M) "I just really wish I knew what I'm supposed to offer this world. I have no purpose. No passion" (3415GF4H)
Financial Constraints and Educational Barriers	Many individuals mentioned limitations in pursuing higher education, lack of resources for career development, and financial challenges that impeded their professional growth.	"Lack of resources to help develop a career path" (1426GM4M) "Financial challenges limited my initial educational and career plan" (1904GF3H) "Needing to have a certain degree or certification to do something, not having time or money to get degree or certification needed." (1704MF3H) "my biggest frustration has probably been finances and health insurance." (3321GF4M) "I don't have a career, just a series of moves to try to ameliorate various serious life mistakes." (541MM4M) "My family was in such poverty that I just assumed that I would never be able to attain higher education" (1560GF3H)

Career Frustration Theme	Description	Example Quotes
Realizations about Potential	Participants reflected on missed opportunities, unfulfilled potential, and the impact of past decisions on their career trajectories. Some individuals expressed regret over not pursuing their true interests or not recognizing their full capabilities earlier in their careers.	"I had the ability to do so much more with my life than I did" (2169MF5H0 "I wish I had known that being a salesman is far more important to the practice of law than being a good lawyer." (1478MM4M) "I feel like there was a 'vacuum' in my understanding of career and what that meant for my future" (1692GF4M) "I had to build nearly everything myself and teach myself how to do anything new." (2313MM3M)
Frustrations/ Regret with Career Choices and Progression	Many participants expressed dissatisfaction with the career paths they ended up in, feeling that they were not able to pursue their true interests or make meaningful contributions.	"I feel like I was more blind and ignorant of the skills needed to plan, experience, and develop my professional track." (1692GF4M) "Sometimes I regret the path I took, and wish I would have pursued something even more challenging and meaningful" (1548MM3H) "I feel like I've stagnated in my career because I am not willing to play politics nor be more extroverted." (2578MF3M)
Balancing Personal and Professional Responsibilities	Some participants mentioned challenges in balancing personal responsibilities, such as caregiving or family planning, with their career aspirations, leading to feelings of unfulfillment.	"My son's autism diagnosis meant I had to give up my career in order to prioritize his future" (31601F4M) "I was taught as a child that the only respectable career for a girl was marriage." (1142MF5H) "I had to fit my career around the needs of my children" (1059MF4M) "I made that choice mostly because everyone around me friends, family and teachers said that's what I should do because I was so smart" (3158GF3H)

Career Frustration Theme	Description	Example Quotes
Confusion	Individuals faced challenges in navigating the complexities of career choices, often feeling overwhelmed by the multitude of options available to them. They struggled with indecision, lack of clarity about their interests, and the pressure to make the	"The openendedness of career development allows for a range of options but sometimes too many options" (659MM3L) "I keep getting stuck in dead-end places that tell me there's room for growthit's always a lie." (2301MF4M) "I was too confused about what I actually wanted to do for my career." "I feel that I chose a career path too early, and too many people validated my plans in spite of their flaws." (2014MM4H) "I had too many choices, so went to school for something I loved" (755GF3M)
Regarding Career Path	"right" choice without adequate information.	"I had no idea what career I wanted to go into, had no options for help with that, and fell into my career." (198MF5H)
		"I never really did any career planning, I just pursued opportunities as they came along." (812MM5M) "I always wanted to be a physicist and will never be able to do that" (647MM3H)
	The theme reflects the disappointment and sense of unrealized potential experienced	"I get bored with doing the same things over and over again. I like to change careers often, which is not conducive to a very healthy retirement account." (2128GF3L)
	by individuals in their professional lives. Participants shared feelings of being	"I should have stayed with my original career (engineering) but it was not challenging enough as a new worker and I did not feel appreciated at all for my abilities" (2673MM3M)
Unfulfilled Career Aspirations	constrained in their career choices, either due to external circumstances or personal limitations.	"I feel unfulfilled and unaccomplished. I feel like my job does not allow me to work up to my potential and if I could go back in time with what I know now, I would have chosen my college, college degree, and career differently." (204GF3M)

Career Frustration Theme	Description	Example Quotes
		"Originally, I wanted to perform on Broadway. I didn't understand what the steps might be to achieve this and didn't have a mentor or support to help me figure out how to pursue it." (314GF3M)

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Table 9

Career Development Recommendation Themes

Career Recommendations Theme	Description	Example Quotes
		"More peer support and mentors would have been helpful" (3070MN2M) "More career connections" (2848HM4M) "More mentoring and opportunities." (2733MM5L) "A good mentor who would have helped me understand myself." (2040HF3H) "More opportunities from high tech industries to explore high tech industries" (1079MM5H) "Mentors, a culture that celebrated generalist knowledge and not only specialist knowledge" (2991HF3M) "If I could utilize the networking possibilities available to me, I could find out about career moves that might be beneficial." (230MF4H) "Effective career counseling starting in high school, especially focused on being female, introverted, and neurodivergent in the workplace" (559MF4H)
Need for Guidance, Mentorship and Networking	Participants express a desire for more support and direction in their career paths, especially during their formative years in high school and college. They highlight the importance of having mentors who can provide advice, encouragement, and practical guidance.	"A mentor who was invested in my success, but also willing to take things at my speed and not mold me into who they wanted me to be, just AVAILABLE to help." (3159MF3M) "More contacts, possibly financing or grant for MBA." (263MF4M) "I wish I had more people who built me up." (2651MF3M) "I was not exposed to technical and engineering careers that would have been a better fit for my interests." (2499MF5M) "More emotional support and guidance." (784GF1H) "More and better guidance and exposure." (2484GF4M)

Career Recommendations Theme	Description	Example Quotes
Need for Clear Career Planning and Development	Participants express a desire for structured career paths, clear goals, and opportunities for advancement. They highlight the importance of having a roadmap for their careers and receiving guidance on how to achieve their professional aspirations.	"Give me options for advancement in my career path. Give me guidance on how both my needs and the company's needs could be met" (2035MF3M) "Realistic career planning, less encouragement to pursue lofty concepts, and instead help finding a career track that was practical" (2112GF3H) "I needed more guidance on my strengths and weaknesses. I needed a lot of financial support due to living in poverty" (768GF3H) "I wish I had had more career guidance in High School. I graduated from High School and thought, now what?" (372MM5H) "More guidance about how my NLD made teaching unsuitable." (2107MM4M) "Ability and encouragement to choose the right college major and plan career goals." (72MF4H) "Suggestions on career paths that had higher earning potential." (2162MM4M) "College gave no prep or guidance for career planning and obtaining a job after college. Zero." (1323GF3L) "More understanding and encouragement for careers that do not necessarily make a lot of money but are intellectually and creatively fulfilling." (682GF4M)
Overcoming Barriers and Challenges	Participants discuss various obstacles they faced in their career journeys, such as financial constraints, lack of support, and societal expectations. They highlight the need for interventions to address these barriers and create a more inclusive and supportive	"Help overcoming health and economic barriers" (1167HF3M) "Be surrounded by more people who thought unconventionally." (2063MM4M) "Changed societal expectations of teachers." (2039GF3H) "Be wealthy with a support system." (1704MF3H) "Living in a wealthier community that offered options and resources, such as educational scholarships." (2208MF4H) "A universal basic income system so that you don't fall into a pit you can't climb out of" (3176GM3H)

Career Recommendations Theme	Description	Example Quotes
	environment for individuals pursuing their career goals.	"It's easier now that there are so many well-known women architects, as well as support groups for women in architecture." (454MF5H)
Desire for Autonomy and Recognition	The participants expressed a desire for autonomy and openness in their tasks at work and recognition of the potential the participant held.	"More autonomy, better adaptation to solutions from others" (2529SM3M) "Give me options for advancement in my career path" (2035MF3M) "Understanding my neurodivergences earlier and figuring out how to work with them." (924MN2M) "Employers willing to take a chance" (3176GM3H) "I needed someone to believe in me more than I did myself" (2663MM4H) "Recognition by management part of their job is to support those who work for them to move-on to new challenges" (850MM5L) "More autonomy, flexibility, empowered authority" (1199GM3H) "I can do absolutely anything I want to do. I know this. I just need people to give me the opportunity and get OUT OF THE FREAKING WAY." (2374GF4H) "Feeling free to even think of choosing anything I want without taking into account the opinions of others." (1038HF4M)
Access to Resources and Information	Participants emphasized the importance of having access to resources and information to explore different career paths and make informed decisions.	"More and better information about my chosen path." (3431MF4H) "Access to people who could assess my skillsets and make suggestions on possible careers and/or skills I may enjoy" (3378MM3H) "More course options in college; a less rigid degree structure without classes that don't apply to anything real-world" (2394MF3H) "If I had scholarships, a way to join mensa, if I didn't get burned out from standardized testing in elementary school, middle school, high school, I could have maybe found a college to support me." (3163GF2H)

Career Recommendations Theme	Description	Example Quotes
Desire for Supportive Work Environment	Participants highlighted the need for understanding work environments, supportive supervisors, and opportunities for growth and development.	"A more understanding work environment and someone to help me manage my workload early on" (3120HF4H) "For me, and my fellow employees, a vastly more productive workforce would have been achieved under strong leadership vs. poor management." (2448MM4H) "Management power attracts a higher percentage of unethical characters" (310MM5M) "Better bosses." (1348MM5M) "Management to actually listen to their workforce and act on it." (3417HF2M) "Support for sensory and social needs in the workplace" (779GF3H)

Social/Emotional Needs

The highest expressed need in the social/emotional domain was "Formal lessons to develop my self-regulation (controlling emotions, planning, etc.; see Table 10)." Participants indicated a need for formal lessons in social skill development as a high need, along with a need to be "Able to understand my emotions and how to control them."

Table 10

Top Ten Social/Emotional Needs

Item	Mean	SD	N
Formal lessons to develop my self-regulation (controlling emotions, planning, etc.)	2.96	1.07	2933
Formal lessons to develop my social skills	2.91	1.06	2960
Able to understand my emotions and how to control them	2.86	1.13	2970
Opportunities to meet others with intellectual abilities similar to mine	2.77	1.10	2922
Able to communicate well with a romantic partner	2.77	1.14	2878
Formal lessons in goal setting	2.74	1.10	2909
Opportunities to meet others with interests similar to mine	2.71	1.08	2940
Opportunities to meet others I find interesting	2.71	1.12	2929
Comfortable in social interactions	2.69	1.14	2962
Able to develop a mutually satisfying romantic relationship	2.54	1.20	2862

Social/Emotional Frustrations

When asked to "Please describe your greatest frustration in your relationships with others," participants offered examples of being misunderstood by others and their difficulty in understanding others (Table 11). They struggled with relationships due to a lack of communication skills, an inability to read social situations or to regulate their own emotions. Previous experience has led some to be unable to trust others or build lasting relationships, which they longed for. Their recommendations emphasized the need for others to receive an education

in individual differences and the need for an education in developing their own understanding of others and how to interact effectively (Table 12). Mirroring their survey responses, participants suggested mentorship and guidance, especially at an early age, may have helped them build and maintain meaningful relationships with others, which they deeply desired. They believed they would feel understood in settings where they could be with similar others.

Participants were also asked to describe their "greatest frustration in the emotional support you have (or have not) received" (see Table 13). Emotional support came from positive, healthy relationships with others who understood them. The lack of understanding from others about their needs and the complexity of their emotions led them to feel unsupported and, often, alone.

The lack of emotional support could have been avoided with greater understanding and validation of their needs, which required an accepting environment (Table 14). Parents and teachers could use information about highly intelligent children to better understand their emotional intensities and needs. Guidance in understanding themselves and others could have helped them in developing their own emotional regulation and social skills. This guidance could be from a mentor or through formal lessons. Being around "like-minded" others would have been validating and may have led to the formation of supportive relationships.

Table 11
Relationships Frustration Themes

Relationships Frustration Theme	Description	Example Quotes
Feeling Misunderstood and Different	Many participants expressed frustration at feeling misunderstood and different from their peers, leading to a sense of isolation and disconnection in relationships	"I have spent most of my life feeling out of place with others in my age group" (535GM3M) "I've always felt different, and not in a good way" (14MN4H) "I do not express my emotions well to others and struggled for many years with my own emotional regulation." (1608HF3M)
Feeling Unappreciated and Unseen	Participants expressed a sense of being unappreciated and unseen in their relationships, leading to feelings of neglect and frustration, as their efforts to connect and communicate their needs go unrecognized.	"I feel that I do things for other people and my own needs are invisible" (3098GF3M) "I always gave more. For a long time, I would get disappointed or unhappy when people would ask for so much, but not be willing to help in return" (1061MF4H) "Having my intensity and complexity misunderstood as "too much" or being argumentative. Not recognising that others don't think as deeply as I do, and thus getting frustrated and disappointed in relationships." (1923SF2H)
Challenges in Communication	Participants highlighted difficulties in communication, including feeling unheard, misinterpreted, or unable to express themselves effectively, leading to frustration and barriers in forming meaningful connections.	"People do not take the time or have the mental capacity to consider who I am as a person" (1133GM3M) "I feel that no one understands me at all —they ascribe intentions to my words that I don't I mean" (2226GF3H) "I struggle to get out of my head and dwell in the emotional context of a situation I tend to get frustrated or impatient with other people during a conversation because I can't understand why they can't follow what I'm saying, and I get very bored in conversations" (14MN4H)

Relationships Frustration Theme	Description	Example Quotes
		"I have a hard time figuring out how to navigate social relationships with people" (3435GF3H)
Struggles with Social Expectations	Participants mentioned challenges in meeting social expectations, such as engaging in small talk or navigating social interactions that do not align with their interests or communication styles, leading to feelings of frustration and disconnect.	"I am not good at small talk. I get so bored." (2437MF5M) "I am not very outgoing and compensate for my awkward social skills with trying to be overly helpful" (2984GF1H) "I've been told that I'm too forthright and don't use tact enough." (2747GF5H) "I really don't work well with stupid people. I have no patience and it's painful for me" (733MF2L)
Struggles with Emotional Regulation	Some participants mentioned challenges in regulating their emotions, leading to difficulties in maintaining relationships and expressing themselves authentically, which contributes to feelings of frustration and isolation.	"Because of my borderline personality disorder, I sometimes verbally lash out at my spouseI hate when I am unable to regulate my emotions" (3328MM3M) "I have major object impermanence that extends to people" (1055MN1M) "I have to actively monitor my thoughts and emotions at all times" (550G12H)

Relationships Frustration Theme	Description	Example Quotes
Struggles with Trust and Boundaries	Some participants highlighted challenges in trusting others and setting boundaries in relationships, leading to difficulties in forming trusting connections and feeling misunderstood, which contributes to frustration and emotional distress.	"The inability to trust others." (1492MF3M) "Impatience, lack of ability to see my perspective." (1217MM4M) "I feel isolated often in relationships. There are trust issues that I feel. Perhaps because I am frequently misunderstood, I lack trust that the relationship is equitable. As a result of previous partners wrongly shaming me, it is difficult to move forward in relationships" (2694GF4H) "Manipulation of any and every form, dishonesty, scheming etc. I notice far too easily (after being a tad too trustworthy earlier perhaps)." (1188MM3M)
Challenges in Maintaining Relationships	Participants highlighted the struggle in maintaining long-term relationships, whether romantic or platonic. This theme underscores the challenges faced in sustaining connections with others, often due to differences in interests, communication styles, and emotional expressions.	"I've always been able to pick up on the emotional needs of other people and twisted myself into a pretzel trying to accommodate them while completely abandoning myself." (312GF4M) "I haven't ever had a really strong, long-lasting relationship with any one person" (1907MM1M) "I always find something wrong or irritating with a romantic partner." (2942MM3M)

Relationships Frustration Theme	Description	Example Quotes
Struggles with Social Skills and Communication Based on Social Norms	This theme revolves around difficulties in social skills and communication, leading to feelings of inadequacy in social interactions. Participants expressed challenges in expressing themselves, understanding social norms, and connecting with others on a meaningful level.	"I have zero social skills, I don't understand the fascination with fashion or sports, and I hardly connect with anyone." (1329MF3M) "My greatest frustration is working with stupid people who cannot solve problems while I can think of 5 possible solutions in under a minute" (696MF4M) "I always felt that others know something I was never taught when it comes to relationships." (1397MF4M) "Social interactions are hard. I had an upbringing that predisposed me toward a skewed norm. Had I had wider relationships with people whom I could relate to, and learn from, I think I would have done better and been less isolated." (2768MF4M) "People who play games and say what they think you want to hear, rather than what they really feel or want" (87MF5M) "People wanting me to be an extrovert. I'm not." (2803MF5H) ". But I'm terrible at maintaining contact I feel like I deserve to observe other people's happiness but not participate in it." (2497MF2H)
Desire for Deeper Connections	Many participants expressed a desire for deeper, more meaningful connections with others who share their intellectual curiosity and values, highlighting a frustration with surface-level interactions and a longing for more profound relationships.	"I prefer deep close stimulating connections with people" (820MO4H) "I want to dive deep into topics and brainstorm with people about things." (1813HF2H) "I have a strong desire to 'fit in' with whatever group or individual I happen to be with. Sometimes, I think I'm less than genuine in my relationship because I want to be liked." (370MM5M) "I can't connect with many people on the level I truly want to connect with people" (1835MN1L) "My biggest frustration was depth of intimacyMy desire of depth of understanding and deeper conversations continues to feel more elusive."

Relationships Frustration Theme	Description	Example Quotes
		(1692GF4M)
Desire for Understanding and Acceptance	Participants expressed a deep desire for understanding and acceptance in their relationships, highlighting a frustration with feeling unseen and unheard, leading to a sense of isolation and disconnect from others.	"I feel that no one understands me at all They tend to assume I am holding back information or implying other things when I am stating truths." (2226GF3H) "I find it exhausting when interacting with other people." (721MM4H) "I have always been surrounded by persons whose interests are so different from mine, we cannot even chat" (1351MF5H) "I have trouble even still intuitively understanding others' emotions and intellect" (2365MM4H)

Table 12
Relationships Recommendations Themes

Relationships Recommendations Theme	Description	Example Quotes
Education on Communication Differences and Neurotypes	Participants expressed a need for education on communication differences between neurotypes to improve relationships and social interactions.	"If others were educated on communication differences between neurotypes." (2226GF3H) "Lessons from psychologists specializing in Asperger's, a like-minded group of fellow nerds for friendship." (473MM3M) "More formal recognition of my giftedness." (3236HF3H)
Need for Social- Emotional Learning in Education	Participants highlighted the importance of social-emotional learning in schools to develop better interpersonal skills and relationships.	"Certainly an emphasis on social-emotional learning would be helpful. I had standard public school education which paid zero attention to these matters" (3039HM4H) "Learning coping skills and relationship skills" (471GF3M) "Perhaps more behavioral training on how to be a friend rather than to make another person your friend" (2394MF3H) "How to have a polite balanced conversation should be taught in school along with writing an essay and making a speech." (1351MF5H)
Desire for Guidance and Mentorship in social skills development	Participants expressed a need for guidance and mentorship, especially in understanding their unique traits and forming meaningful connections. Participants expressed a strong desire for social skills training and guidance, both in school and from parents. They highlighted	"A mentor or other direction that showed the reality of the situation." (493MM5H) "More social skills modeling at a young age" (1070MM3H) "Someone to explain social nuances and illogical social or interpersonal behavior." (2877MF4M) "I could have used someone to just listen to me. I had to fend for myself in pretty much all domains as a kid." (1776GM4M)

Relationships Recommendations Theme	Description	Example Quotes
	the importance of understanding social nuances, interpersonal behavior, and communication.	
Importance of Finding Like- Minded Peers	Participants emphasized the value of meeting peers with similar intellectual abilities and interests to feel less isolated and navigate relationships effectively.	"More opportunities to meet people" (2641MF3M) "I feel like I would have more friends with similar interests and I would be much better able to navigate romantic relationships" (3435GF3H) "Finding groups where I was understood. Easier as a child in dedicated gifted programs, but unsuccessful as an adult." (2234MF3M) "I wish I had realized how much my friends and family cared for me earlier." (2987MM4M) " a group that could work at my intellectual level" (723GN2H) "More satisfying relationships with others." (989MM4M)
Support for Gifted Individuals	Participants highlighted the lack of support for gifted individuals in childhood and the need for tailored education and resources to meet their specific needs. They highlighted the importance of adults acknowledging their unique abilities and challenges.	"I wish resources on giftedness was more about meeting our needs instead of overly focusing on achieving." (2770SN1M) "Had I grown up in a time and place where giftedness was actually recognized, I think things might have been different for me" (3120SF4H)

Relationships Recommendations Theme	Description	Example Quotes
Emphasis on Emotional Regulation and Boundaries	Participants expressed a desire for training in emotional regulation, establishing boundaries, and prioritizing their own emotional needs	"Learning to prioritize my own needs over those of others rather than prioritizing theirs at my expense and learning to recognize my own needs particularly emotional needs" (2158SF4M) "I wish I could've learnt about how to manage my emotions. Supposedly this is something parents teach?" (859MF1M)
Desire for Transparent Communication and Understanding	Participants expressed a need for transparent communication, understanding, and empathy in relationships to build trust and connection	"If they want to be direct or openly communicate their feelings and needs to me transparently as its shown that they respect me as a human being and they trust me as a partner" (1921MM1M) "Acceptance, and for people to have an understanding of what intelligence means" (1598MF4M) "Just finding at least one person like me so we can be happy together and share our more complex thoughts." (3225GF3H)

Table 13

Emotional Support Frustration Themes

Emotional Support Frustration Theme	Description	Example Quotes
Participants expressed frustration with the lack of trust and understanding in their relationships, particularly with family members. They highlighted the importance of having their intentions recognized and feeling supported in their emotional experiences.		"I need there to be a level of understanding and the baseline expectation that we have good intentions. I cannot work with a lack of trust, or lack of basic liking." (2155GF3M) "I was always told I was too much and also not enough" (1623MF3H)
Misunderstood Emotional Complexity	Many participants shared experiences of their emotional complexity being misunderstood as sensitivity or drama, leading to a lack of authentic emotional support. They felt that others did not grasp their unique perceptions and reactions to situations.	"My emotional complexity and intensity is often misunderstood as sensitivity or drama." (1779GF2M) "People not fully understanding how intensely I feel my emotions is infuriating." (906SM3M) "People who understand you enough but can still be intellectually overwhelmed can feel threatened by you" (2008SF4M) "I feel largely misunderstood and ignored, which has led to Dunning-Krueger accompanied by low self-worth and imposter syndrome." (3083GF2H)

Emotional Support Frustration Theme	Description	Example Quotes
Lack of Emotional Support and Desire for It	Participants expressed frustration with the absence of emotional intelligence in their relationships, both in personal and professional settings. They highlighted the struggle of not receiving the emotional support they needed sometimes since childhood, leading to feelings of isolation and loneliness and a desire for genuine emotional support and understanding from others.	"Emotional support has been almost non-existent for most of my life." (1356SM3H) "This ties into being socially isolated. I don't get emotional support because people hardly talk to me" (223MM2M) "I was left to fend for myself emotionally at school." (191MF3M) "I cannot expect to automatically get emotional support." (3161MF5M) "I wish I just had people around me who understood me!" (1347MN2M) "I could have benefitted from someone of similar intellectual capacity guiding me on how to have and express empathy." (2757GM3M) "I needed someone to notice how I was struggling and push me to ask for help." (771MM4M) "Life would be so much better if people could be more on the collaboration and cooperation side, instead of playing king of the hill just getting out of bed" (2594MF5H) "I silently deal with it alone." (1257GF4M) "I feel (even now) like I have had to fight for any kind of emotional support" (998GF3M) "It's very hard to find an effective therapist." (374GM3L) "Everyone just wants to send you to therapy and put you on medication and counseling instead of equipping you to learn from tested and proven principles and wisdom" (2480GF2M) "I've always done everything on my own, had emotional absent parents and an emotional absent family" (2348SF2H) "My parents were not emotionally supportive." (3156MM5H) "My intellectual giftedness allowed me to achieve sufficient success in ways my family approved that my unhappiness was of minor importance" (868GF3H)

Emotional Support Frustration Theme	Description	Example Quotes
Unmet Emotional Needs in Relationships	Participants shared frustrations about unmet emotional needs in their relationships, particularly with partners and family members. They highlighted the impact of lacking emotional support on their mental health and well-being.	"My greatest frustration was having parents and early spouses who were not healthy emotional communicators, so I did not have a role model or partner in emotional growth." (19MM4M) "My emotional needs were not met when I was growing up so I lost touch with them." (2899GF3M)
Challenges in Forming Relationships	Many participants discussed challenges in forming and maintaining relationships, particularly due to their giftedness and unique perspectives. They expressed frustration over the lack of support and understanding from partners and peers, leading to feelings of isolation and difficulty in connecting with others.	"It is incredibly challenging being gifted and maintaining a romantic relationship with somebody who isn't on your same level" (1804GF3L) "It's hard to look back and feel frustration or anger about not receiving love/emotional support in childhood from my family" (2163MO3M) "I just want to be understood and not judged, and that feels difficult to find." (290MO2M) "My greatest frustration has been dealing with conditional acceptance by others." (153MM5L)
Struggles with Emotional Intelligence or Emotional Regulation	Many participants mentioned challenges in understanding and expressing emotions. They felt misunderstood and struggled to connect emotionally with others.	"I could have benefitted from someone of similar intellectual capacity guiding me on how to have and express empathy." (2757GM3M) "I was raised in an abusive home as a child and had to learn healthy behaviors as an adult" (2119GF2H)

Emotional Support Frustration Theme	Description	Example Quotes
		"I have not had consistent emotional support in my life, which is likely the underlying cause of my struggle with emotional regulation and consistent levels of empathy and communication." (3087GO2H) "Greatest frustration: lack of self-nurturing so when I am very angry, sad, frustrated or confused I withdraw from others to recover" (2985MF5M) "I didn't learn how to properly process emotions until I was in my late twenties and finally saw a therapist for the first time due to my panic attacks mimicking heart attacks and seizures." (2556GF2M) "Showing emotions was not encouraged in my family as I grew up. I believe this played a part in my difficulties forming close friendships and romantic relationships" (2231MM4H)

Table 14

Emotional Support Recommendations Themes

Emotional Support Recommendations Theme	Description	Example Quotes
Need for Self- Reflection and Responsibility	Participants expressed a desire to self-reflect and take responsibility for their behavior and emotions. They highlighted the importance of understanding their unique strengths and sensory needs.	"My closest to be able to self-reflect and take responsibility of own behavior and emotions." (3418MM3M) "Maybe more validation for my unique strengths as a child and understanding that my sensory needs are real" (3280GF3M) "I could have tried to be more empathetic and sympathetic than I have been in my life" (2162MM4M) "Teaching me that asking for things I need is ok. Making sure I am comfortable asking for those things without feeling shame or guilt for asking" (3032GF3M) "More awareness in relationships and what are good and bad guidelines" (1101MF4H) "I want to be better at asking for what I want and getting the romantic partner I've always desired" (3178MM5H) "Understanding my emotional intensity as an exception to the rule, rather than that everyone is like that." (2543SF2M)
Desire for True Connections and Understanding	Participants emphasized the need for genuine connections with others who share similar experiences and abilities. They expressed a desire for peer support and understanding from educators and peers.	"More true connections with others." (2848SM4M) "Incorporating human and social interaction into the curriculum. Fostering an atmosphere of kindness and compassion" (3039SM4H) "If I could be paired with other profoundly gifted people for peer support." (2226GF3H)

Emotional Support Recommendations Theme	Description	Example Quotes
		"Finding my tribe. Working with, loving, talking with and spending time with the right people is really the only way to tap into that special joy that makes life worth living." (264GF2M) "More empathy for what it's like to be different." (290MO2M) "If other people took the time to learn about what it means to be autistic" (2700MF3M) "Had there been more opportunity to be with others as smart as I and to form friendships in which others did not fear me, but allowed me to be a companion and not a parent or problem solver." (1103MF4M)
Call for Individualized Education and Support	Participants highlighted the importance of recognizing individual needs and talents, as well as providing tailored learning environments. They expressed a desire for educators who care about student understanding and growth.	"Not treating children as identical replaceable units and actually recognizing individuality and individual needs and talents" (3039SM4H) "A school system better equipped for different learners." (3399GM3H) "The school system. In one school, I was placed in a gifted program that would have led me to Harvard but we moved and I went back to being bored in school" (696MF4M) "Academia throughout my experience never supported me It was clear to me academia doesn't value students with exceptional IQs." (2277SM5H) "[In]formation for teachers, parents, and guidance counselors that offered them tools to support and care for students with high intellectual abilities" (447GM4H) "EQ training to expand emotional vocabulary." (434MM3M)
Advocacy for Mental Health Resources and Support	Participants emphasized the need for better mental health resources, support from parents, and access to counseling. They highlighted the importance of	"More support from the school, extra curriculars, and parents." (1805GF2M) "Maybe having seen a therapist." (1862MF4M) "Earlier psych intervention, more active and empathic parents." (2640SM3M)

Emotional Support Recommendations Theme	Description	Example Quotes
THEME	early intervention and emotional support. The participants expressed a desire for greater awareness and acceptance of giftedness. They highlighted the challenges of	"Just one caring adult who understood me and had no interest in me as a useful commodity, a classroom novelty, or a freak who can perform on demand" (2096MN4M) "More access to mental and emotional health resources when I was a child/young adult." (2372MF3M) "Early therapy to overcome my social anxiety, feelings of inadequacy and lack of self-esteem" (1178MF5H) "A service or community to share problems where you don't have to describe everything - that can listen and understand. Like a mentor or psychologist." (1192GF2M) "Perhaps if programs for advanced students were a well-developed 'thing,' I might have found a place where I was challenged and could have explored and become comfortable with the idea I was somewhat 'extra' smart." (2663MM4H) "Maybe more validation for my unique strengths as a child and understanding that my sensory needs are real" (3280GF3M) "Learning that the whole range of emotions are acceptable and tools to help express them properly." (594MF4H) "It would have been positive and productive if my parents had been emotionally available." (1356SM3H) "If they took my concerns seriously and simply took time to listen to me
Need for Acceptance and Understanding	being misunderstood and the need for tailored programs for gifted individuals. They also highlighted the importance of understanding and accepting their individuality.	instead of dismissing them and me, or even mocking me for having them." (608MM4M) "If someone had just held me, acknowledged how I was feeling, and committed themselves to being with me through my difficult emotions, I would have felt safer and would have been able to process my emotions through and out my body." (3415GF4H)

Emotional Support Recommendations Theme	Description	Example Quotes
		"I wish I could have been in an intellectually enriching environment with likeminded peers" (3083GF2H)
Call for Increased Awareness	Participants emphasized the importance of raising awareness and understanding about neurodiversity, giftedness, and the unique challenges faced by individuals with exceptional IQs.	"Better public education about human emotions and human need for emotional support." (795MN3M) "Openness and lack of stigma about family problems, familial mental illness" (1841MF4H) "I feel that on a macro level, the education on neurodiversity and mental health needs improving so that clinicians and educators are equipped to both identify and nurture." (1958SF2H)
Guidance in Social Skills Development and Emotional Regulation	Many participants expressed a desire for mentorship and guidance in social skills development alongside academic achievement. They highlighted the lack of opportunities to develop social skills and interact with peers. Participants also expressed a desire for more guidance in self-exploration and personal development, starting from a young age.	"A mentor would have been wonderful." (875MF4H) "Please teach gifted children social skills. They definitely need development outside of academic achievement." (2859GF3L) "If I'd received lessons on how to conventionally interact with people, would that have forced me to hide my self away to be accepted by peers?" (1310MF2M) "If I had someone to talk to who understood emotions, who validated my emotions, who helped me understand my emotions, who helped me regulate my emotions" (3415GF4H) "Help me to recognize and understand my emotions and then regulate them." (3443SF3H) "Sit with me as a kid an explain emotions, what I'm feeling, how to deal with them" (3073GF3H)

Emotional Support Recommendations Theme	Description	Example Quotes
		"It would have been great to have had a community and/or mentors that understood me" (1681SF2H) "If I had an adult who became a consistent mentor and/or role model I may have been able to learn emotional regulation" (3087GO2H)

Mental Health Needs

The highest rated need items on the survey were found in the mental health domain as a young person (i.e., youth through college age; see Table 15). Identifying "A psychologist/ counselor who understands me" and "Someone I trusted to help me with my mental health concerns" were a significant need in participants' early years. High need ratings were also given to effective strategies for dealing with anxiety, nervousness, depression, distress, or upset. It appears these needs were especially acute in respondents' early years. Tables 16 and 17 display the top-rated items for mental health in in the years post-college age to 55 or so and in the years after about age 55. The ratings for mental health needs trended lower than those for young people, with notably lower highest scores. Mental health items were presented only to participants whose age was inclusive of the years they were to rate, so ratings in Tables 16 and 17 were given by fewer and older participants than those in Table 15. Although these received lower ratings in the older groups, it was still important to have "A psychologist/counselor who understands me."

Table 15

Top Ten Mental Health Needs as a Young Person

Item	Mean	SD	N
A psychologist/counselor who understands me	3.07	1.04	2793
Someone I trusted to help me with my mental health concerns	3.07	1.09	2840
Effective strategies for dealing with anxiety or nervousness	3.05	1.10	2934
Effective strategies for dealing with depression	3.04	1.11	2738
Effective strategies for dealing with distress or upset	3.04	1.11	3016
Able to be myself without fear of rejection.	2.98	1.15	2936
Able to avoid painful perfectionistic tendencies	2.96	1.15	2775
Supports for my mental health	2.96	1.12	2988
Effective strategies for dealing with failures	2.95	1.15	2996
Able to work with a psychologist or counselor	2.93	1.06	2663

Table 16

Top Ten Mental Health Needs Post-College Age to 55

Item	Mean	SD	N
Effective strategies for dealing with anxiety or nervousness	2.52	1.12	2721
A psychologist/counselor who understands me	2.50	1.07	2576
Able to be myself without fear of rejection.	2.48	1.16	2767
Effective strategies for dealing with depression	2.47	1.12	2564
Able to avoid painful perfectionistic tendencies	2.45	1.13	2554
Someone I trusted to help me with my mental health concerns	2.43	1.12	2673
Effective strategies for dealing with distress or upset	2.43	1.12	2829
Able to be myself without fear of being misunderstood.	2.41	1.15	2733
Effective strategies for dealing with frustration	2.40	1.12	2814
Effective strategies for dealing with failures	2.36	1.14	2820

Table 17

Top Ten Mental Health Needs after about age 55

Item	Mean	SD	N
A psychologist/counselor who understands me	2.15	0.99	1068
Able to work with a psychologist or counselor	2.06	0.97	1049
Effective strategies for dealing with depression	2.05	1.08	1117
Someone I trusted to help me with my mental health concerns	2.04	1.05	1155
Effective strategies for dealing with anxiety or nervousness	2.00	1.05	1195
Effective strategies for dealing with frustration	1.93	1.04	1243
Others misinterpreting my abstract, creative, or deep thinking as mental illness	1.93	0.66	798
Able to avoid painful perfectionistic tendencies	1.91	1.05	1087
Able to be myself without fear of rejection.	1.90	1.08	1243
Effective strategies for dealing with distress or upset	1.89	1.04	1245

Mental Health Frustrations

Participants struggled with a lack of recognition and sometimes misdiagnosis of their mental health needs (Table 18). Stigma and lack of access to mental health care kept them from seeking or obtaining the help they needed. Family situations were unhealthy for many participants. In addition to being misunderstood, they reported abusive environments and traumatic experiences. Multiple exceptionalities were difficult for many to deal with, especially when undiagnosed. Maladaptive perfectionism was an issue for some participants. The inability to find qualified and competent – including culturally competent – therapists who understood them was a major challenge for some participants.

To address these difficulties in the mental health arena, greater awareness of the unique needs of highly intelligent individuals — with and without multiple exceptionalities — is needed (Table 19). Mental health professionals need training to provide appropriate diagnoses and supports. An environment accepting of individual differences is critical to positive mental health. In some cases, early identification of giftedness may have put participants on a path to receive an appropriate education with trained teachers and peers of similar ability. Unfortunately, this was not the experience of many participants, who struggled in and outside of their homes to find acceptance and support. The dual stigmas of giftedness and mental health kept many participants from the resources they needed.

Table 18

Mental Health Frustration Themes

Mental Health Frustration Theme	Description	Example Quotes
Lack of Early Identification and Support	Individuals expressed frustration at not being recognized or supported early on, which hindered their ability to cope with mental health issues effectively. This lack of early intervention was seen as a barrier to achieving personal and professional goals, leading to feelings of missed opportunities and unfulfilled potential.	"The frustration was that I was not identified earlier, as having strategies to deal with it would have helped my career progression and overall happiness" (843GF4M) "My parents ignored my depression and mental issues. I didn't get help until after I graduated college and wish I had help earlier." (3063MF3M) "I wish I would have known that I was gifted at a younger age (discovered it at 49) so I would have had more efficient support in studies, frustrations, carreer path, loneliness." (2643SF4H) My greatest frustration is not being diagnosed at an early age to benefit from help" (3190MM4H)
Misdiagnosis	Many shared experiences of being misdiagnosed or having their conditions overlooked, resulting in ineffective treatment and prolonged struggles with their mental health. This frustration stemmed from a sense of not being heard or properly assessed by healthcare professionals, leading to delays in receiving appropriate support and interventions.	"Being misdiagnosed as BPD and Narcissistic tendencies while in reality I am autistic and gifted. It really stunted my recovery for quite a while" (1956SF2H) "I was often misdiagnosed with anxiety and depression, but ADHD was never considered in my youth" (2300GF3M) "I was also misdiagnosed with dysthymia as an emerging adult" (843GF4M) "As a late talker, everyone was quick to assume autism, which made getting actual help for DLD impossible. Many late talking kids (struggle with misdiagnosis and later have some language impairment but not ASD) are great at music or math, and I have become friends with some online. My mom recognized my giftedness and my perfectionism and looked for ways to help me, so at least I had that." (2831GM1L)

Mental Health Frustration Theme	Description	Example Quotes
		"I was misdiagnosed and mistreated (pharmacologically) from the time I was 8 until I was 48 despite actively seeking help and care across multiple states and multiple professionals. I'm a genius with ADHD (hyper focus variety) and am not bipolar nor do I suffer from depression but do deal with all the anxiety that resulted from a lifetime of being told to fit in, conform, and submit. I'm presently working through being rather angry about so many wasted decades of my life struggling with this because of imbeciles with licenses." (2286MO4M)
Barriers to Accessing Quality Care	Individuals described challenges such as long wait times, lack of suitable providers, and feeling unsupported or misunderstood by therapists. Financial constraints, lack of availability, and other barriers were cited as hindrances to accessing mental health services, resulting in untreated mental health issues and prolonged suffering. Participants emphasized the importance of receiving support from professionals who are knowledgeable about specific needs, such as giftedness, and who can offer tailored interventions and understanding. This frustration with the	"I was very worried in college that if I sought help or treatment for my depression, that I would be institutionalized" (2458GF2M) "I've struggled through multiple attempts in traditional therapy. Eventually, I get frustrated that I feel like I'm coming up with my own solutions and insights" (2328MM3M) "Help with dating is the area that I have not received good help from therapy, as well as some therapists unfortunately are not knowledgeable about giftedness" (820MO4H) "Availability of therapists has been a challenge since 2020. Out of pocket costs for autism diagnosis has also been a barrier." (2852GF4M) "I was too poor to access mental health care didn't have the time or resources available" (947MF5H)

Mental Health Frustration Theme	Description	Example Quotes
	healthcare system reflected a sense of inadequacy in meeting their needs and preferences, leading to a sense of disillusionment and self-reliance in navigating their mental health journey.	
Stigma and Social Attitudes	Many individuals expressed how societal perceptions and stigma surrounding mental health issues hindered their willingness to seek help and share their struggles openly. This barrier to seeking support was linked to feelings of isolation, fear of judgment, and a lack of understanding from others, highlighting the pervasive impact of societal norms on individuals' mental well-being.	"Social attitudes about mental health kept me from getting the help I needed" (2312MF5H) "It is a way of discrimination and extermination No one wants to employ you, no one wants to be your friend" (769MM3H) "Being stigmatized" (922SF3H) "Being misunderstood labeled as anxiety, despite the non-stop thinking not having a negative effect upon my emotions" (768GF3H) "The stigma around mental health challenges makes it so much harder to seek it out, do it openly, and feel good about doing it." (314GF3M) "I constantly had to dumb down/hold back to fit in I thought it was me that didn't fit in." (842MF3H) "I was so bored, even in grade school that by around age 10 I was already experiencing increasingly severe depression. I was alone and isolated. My peers hated me, or didn't understand me. I had nothing in common with them. I was invisible. By 13 it was so bad I was constantly thinking about killing myself. I finished high school at 16 despite everyone fighting me every step of the way, only to flunk out of college because the depression overwhelmed me. I had to fix myself. My dad is still in denial about the whole thing. My last therapist I had, I went looking for someone willing to handle someone with

Mental Health Frustration Theme	Description	Example Quotes
		high intelligence and they were really expensive. Like, I paid 5 times the rate of other therapists just so I wouldn't be treated like a freak." (1515MN4H)
Complex and Unique Experiences	Participants shared stories of enduring childhood trauma and subsequent traumatic events in adulthood, emphasizing the profound impact of these experiences on their mental wellbeing especially related to giftedness.	"Mental health professionals who don't understand the impact of being gifted. I struggle with discussing my intellect without feeling boastful." (1122MF3H) "I needed a therapist who could get through that veneer to see the massive anxiety behind it" (3165MF3M) "Childhood trauma compounded with violent trauma in adulthood impacted my mental health severely" (3262GF3M) "Since I have PTSD due to the traumatization in my parental home, all my 'differences' have been psychopathologized" (2717SF3M) "Abuse, lack of stability in housing, financial instability, violence in the communities I lived in" (2038GO3H) "Broadly I would say not having the larger perspective to understand and to cope with some of my challenges. Need to get support earlier to gain sooner and more lasting benefits from a therapist who had a deeper understanding of my uniquely gifted challenges. I eventually saw some therapists in my late 20s after having begun my career for 5-7 years. The initial therapists were adequate but it wasn't until I finally found a therapist who really understood my challenges that I realized that my problems were not the same flavor as so many others. Yes I had depression and anxiety and other issues as many people do. But the way they manifested and existed in me, and ultimately the understanding and the coping mechanisms I needed required identifying the relationship to my giftedness that most folks don't have and most therapist are either not trained to identify or are so steeped in clients that have other challenges (substance abuse, anger issues, true family dilemmas) that they

Mental Health Frustration Theme	Description	Example Quotes
		don't see the very different type of challenge that I was having." (2195MM3M)
Struggles with Identity and Acceptance	Many participants highlighted the challenges of accepting their mental health issues and unique identities, such as being highly gifted, queer, or on the autism spectrum. They faced stigma, self-doubt, and a lack of recognition for their individual needs.	"Most mental health professionals aren't equipped to deal with twice exceptional people and it has taken a lot of failed attempts to find good providers." (3426GF2M) "Once I created the space to be myself without judgment, my ostensible mental health issues of the past resolved themselves" (495GF3M) "I have learned all my coping skills, habits, and adaptations on my own through trial and error" (2097SN2M) "I longed for acceptance and active support to be imperfect, to let my guard down, to make mistakes" (2447GF3M) "I often struggle to understand my own identity and feelings versus what I think people want to see" (1783MF3H)
Cultural and Familial Influences	Cultural differences, family dynamics, and societal expectations play a significant role in shaping individuals' experiences with mental health. Issues like lack of understanding from family members or cultural stigma are highlighted. This theme underscores the importance of culturally competent and sensitive mental	"Mine is mostly cultural; Hispanic communities as a whole do not acknowledge mental health concerns are real in any form. I had no support within my childhood and early adulthood and was often told I was "weird" and to "just get over it."" (2859GF3L) "I did not feel understood or able to be myself. A lot of this was because i emigrated so I was assimilating to a new culture." (471GF3M) "I think that many, if not most, mental health professionals are really not very good. They are given formulas for helping people but may not be as capable of figuring out issues in depth that they need to be. Many follow cultural norms that don't always help or fit with the situation a person may be confronting." (163MF4H)

Mental Health Frustration		
Theme	Description	Example Quotes
	health care that respects and acknowledges individual diversity and experiences.	"Therapist not understanding cultural differences Therapist not wanting to get to root of issues" (432GF1H) "Access to racially/culturally and neuro affirming therapists. I am struggling as we speak to find a woman of color therapist who specializes in adult giftedness or even neurodivergence." (399MF3H)
	Many individuals described grappling with a high sense of perfectionism that fueled anxiety, other mental health issues and self-imposed pressure	"I have dealt with anxiety, perfectionism, and depression throughout my life. I now have pretty good tools and support to deal with them, but I did not when I was in school." (3321GF4M) "It's difficult to determine whether my perfectionism, procrastination, and disorganization are at a pathological level because I am still able to function well by external measures, but they still cause a fair amount of distress." (2352SF3M) "Procrastination born from perfectionism" (2252MM5M) "Perfectionism, anxiety and choices have always gotten in my way of making decisions. I tend to see all sides of a situation which makes it difficult sometimes to take or stand on a side. I have dealt with anxiety and some
Perfectionism	to meet unrealistic standards.	depression but I was able to get help from my doctors, as needed." (204GF3M)

Table 19

Mental Health Recommendations Themes

Mental Health Recommendations Theme	Description	Example Quotes
Need for Proper and Early Diagnosis	Participants expressed frustration over the lack of proper diagnosis of their mental health issues ang unique needs as gifted individuals	"Proper diagnosis. Understanding 2e kids - you can have a learning difference AND be gifted" (2300GF3M) "Earlier diagnosis would have been much healthier for me - physically and mentally." (2963MM4M) "Access to high quality, effective diagnosis and treatment, with medication would have made a huge difference. I had severe post-partum depression, and my sexually abusive gynecologist referred me to a male therapist who "didn't believe in medication." What he believed in was receiving third party payments from your insurer as long as possible" (2983MF4H) "Early diagnosis and treatment, understanding and supportive parents and teachers." (1754MF3M) "With right diagnosis in time, I would have been more comfortable with myself" (1956SF2H) "If I had gotten a correct diagnosis of a vascular malformation instead of a phony diagnosis of a mental problem 20 years ago, who knows what I would have been able to accomplish in life?" (2812MF4M) "If I have had my diagnosis as a kid I would have the needed support, not struggle so bad, not had suicidal thoughts, depression, anxiety, traumas, and so many other issues and would absolutely had so much more achievements, success, happiness and joy." (3045SF3H) "Sticking with a psychologist early on during my foray into mental health treatment would probably have done me a world of good. I am quite tired of talking about my childhood over and over again, especially every time I visit a new counselor." (867MM3M)
Diagnosis	individuals	new counselor." (867MM3M)

Recommendations Theme Description Example Quotes	
"More training of mental health professi is necessary" (2998MF3H) "Better psychologists." (3386GF3M) "More support outside of seeing a mental groups." (1020MF3M) "Access to someone who felt safe and netter indicates their understanding of and interest of the safe and professionals who inderstand a gifted personality. It must NEVER happer gifted personality. It must NEVER happer gifted personality, they she diagnoses in order to rebalance their vie."	al health professional, e.g., support sonjudgmental." (1198MF3M) se language in their marketing that erest in issues related to giftedness" standing by therapists of giftedness." andly gifted therapists, haha! As in, any specialise in care and trauma recovery eally helped me if any one of my as gifted and brought that into my accidentally as a 35 year old." rapist who understood me, challenged e to give me strategies tailored to my concept of giftedness and know which y should be able to differentiate and symptoms of giftedness-in that healthy personality traits of estioning of dubious structures, thologized. If therapists do not ould not simply label them with

Mental Health Recommendations Theme	Description	Example Quotes
		this behavior of some therapists and doctors is part of the so-called "structural violence" in the psychiatric and psychotherapeutic setting :("(2717SF3M) "If I had been connected to a therapist who understood that my issues were discrimination at work for an undiagnosed disability and then provided me with appropriate supports, I would have been much better off!" (2970GF3M)
Early Identification of giftedness	Many participants expressed a wish for early identification of giftedness. They believed that early recognition could have led to better outcomes and prevented years of struggles.	"If someone had noticed how different I was in grade school, and interceded then, my whole life might have been different" (2312MF5H) "If I knew sooner I am gifted instead of just weird." (650SF3M) "Being recognized as gifted and given appropriate developmental challenges, being put in company with others who were gifted." (2844MM4M) "I wish I had been told in grammar school that I was gifted intellectually" (726MF5H)
Importance of Education and Awareness of giftedness	Participants highlighted the need for more education and awareness about giftedness, especially among mental health professionals and educators. They emphasized the importance of understanding the unique needs and challenges faced by gifted individuals.	"More trained psychologists are needed, and they need to care about helping people, rather than just making lots of money" (2312MF5H) "People have no idea what being gifted means, which I guess it's normal to a certain extent, but the fact that mental health professionals don't have a clue either is just unacceptable and immensely dangerous" (769MM3H) "A mental health professional who is experienced with giftedness and how mental health difficulties may or may not look different through a gifted lens." (2352SF3M) "I could have been to special school education programmes where I could have met my needs as both an intellectually gifted person and a child/teenager" (2667GM2H) "Had my parents known about the challenges of giftedness, they could have handled my issues more easily" (2517MF4M)

Mental Health Recommendations Theme	Description	Example Quotes
	"I wish I had been put in a gifted program in school. I wish I'd had peers. I wish mental health professionals knew what to do with me." (1552MF4M) "Screening during K-12 and availability of counselors with formal training in the needs of the gifted community." (2516MM4M) "More resources need to be available to gifted people, and it needs to be acknowledged that being smart does not exclude a person from mental illness" (2527MF4H)	
Need for Supportive Environment and Relationships	Participants expressed a desire for a supportive environment where they could be themselves and feel understood. They highlighted the importance of having relationships with family, friends, and professionals who are accepting and supportive of their giftedness.	"Having someone who I could truly count on to be myself 100%. And to say, 'yeah that really sucks - but I'm here to listen or to just sit with you until you want to talk'" (1281MF4M) "Being recognized as gifted and given appropriate developmental challenges, being put in company with others who were gifted." (2844MM4M) "I wish that someone had noticed that had no friends in 7-8 grade and supported me better when I unknowingly began masking in high school." (1731SF3M) "If someone had cared enough to bother with me." (3376MM5H) "I wish I had been born or given to a loving family." (2299MF5M) "I wish adults would've been understanding of me and willing to provide emotional support." (859MF1M) "Schools or organizations should be there not only to help with this, but to get children together in the area that also deal with these issues so they know they aren't alone" (1703MF4M) "could have continued counseling to gain control over ongoing fear and anxiety. I think being part of a group of like-minded people could have a positive impact on my mental health. When I'm not understood, I feel isolated." (2932GF3M)

Mental Health Recommendations Theme	Description	Example Quotes
		"I probably would have integrated better in society and had a more fulfilling and secure career." (2625MM4H) "Deeper connection or care from mentors who had the ability to see past the symptom to the cause." (10MM3M)
Better Social Interactions and Acceptance	Some participants mentioned struggles with social interactions and acceptance, especially due to their giftedness. They expressed a desire for better social skills training and understanding from others.	"I wish I had learned better social skills as a kid, rather than being ignored by most humans, especially since I have problems figuring out social interactions in the first place." (2407MF4M) "I could have been happy. I'm happy now with where my life is and how I've developed and matured emotionally to the point where I feel almost unstoppable" (2606GM1H) "If people were honest and dropped the superiority attitude from the get-go, life would have been a lot easier" (2448MM4H) "Someone to listen and take it seriously without going overboard would have made a difference in my life." (519MF4M) "One trusted adult who looked out for me at school. One adult who celebrated who I was as a child and a student" (2298GF3M) "Have a guide or someone who can understand me and give me courage."
Reflection on Personal Growth and Self- Understanding	Some participants reflected on their personal growth journey, highlighting the importance of self-understanding, self-esteem, and the impact of their upbringing on their mental health. They expressed a desire for deeper understanding of their own needs and weaknesses.	"Understanding that I was a person with needs and weaknesses of my own, and respect as a fellow human being who needed freedom and privacy." (729GF1M) "Have a higher self-esteem. I would have been able to use my potential more in my career path if I had more understanding of myself and the mechanisms of gifted people" (2643SF4H) "I would've been set up much better to be confident, learn from failure, not avoid difficult things, and attempt to achieve more." (1055MN1M)

Mental Health Recommendations Theme	Description	Example Quotes
		"I could have been happy. I'm happy now with where my life is and how I've developed and matured emotionally to the point where I feel almost unstoppable" (2606GM1H) "I might have felt better if I had realized that I was intelligent and had more self-confidence." (893MF5M) "Empathy and understanding. Even from myself, for myself" (3399GM3H) "Knowing how to 'own' both the problems and the solutions at a much younger age would have been very empowering." (2950MO5H) "I wish I was able to not crush under spoken or unspoken high expectations by others because they think I'm a genius." (1038SF4M) "At the time, I didn't have any resources to compare my issues to, so I spent a lot of time researching how best to help myself" (2356MM3L) "I have learned to have variety in my life so I can express myself in various situations, instead of dumping all of myself in one place" (1838MF4M)
Advocacy for Normalizing Mental Health	Participants advocated for the normalization of mental health discussions and support, especially for gifted individuals. They highlighted the importance of reducing stigma, increasing access to resources, and promoting open conversations about mental well-being.	"Normalizing mental health." (326MM3H) "More resources available for mental health, and normalizing the utilization of those resources" (2899GF3M) "We need work reforms and more cultural normalization of mental health issues" (1100GF3M) "Normalized recognition of depression." (1438MF4M) "I think that if my parents and teachers had recognized that I was a good student and a good kid and worked hard instead of just discounting my infrequent struggles as the result of laziness, perhaps someone would have noticed my struggles and helped me. Maybe someone would have said, "She's really struggling with this concept or this particular task, and that's not like her. There must be a problem. Let's try to find a solution." Instead I was shamed. And when I say that I struggled, I mean I got a B on a test instead of

Mental Health Recommendations Theme	Description	Example Quotes
		an A. A B is still a good grade, but while classmates (even my twin) were praised for the grade I was shamed for it and accused of being lazy or phoning it in, which also wasn't my personality at all. Perfectionism was (and is) a constant problem for me. Simply not being made to feel ashamed for not being perfect all the time would have been a huge relief and would have made my anxiety and depression less of a problem. Once you're labeled as a gifted kid, you're not allowed to struggle. And if you do, you're the problem and not worth helping. In all my years as a student, I had only one teacher who told me it was okay to not be perfect all the time" (3240MF3M) "My family could have offered meds and/or counseling but there was a stigma attached and they thought I could just snap out of it." (3307MF3M)

Note. Identifier = ID Number, Gifted Type (M=Mensa member [ever], G=Identified Gifted, H=High Test Score, S=Self-Identified), Gender (M=Male, F=Female, N=Nonbinary, O=Other), Age Group (1=18-24, 2=25-34, 3=35-49, 4=50-69, 5=70+), Class (L=Low Needs, M=Moderate Needs, H=High Needs).

Additional Comments

Tables 20 and 21 display the themes found in responses to the questions "Is there anything else you would like us to know about unmet needs in your experience of the academic, career, social and emotional, or mental health domains?" and "Would you like to share any other comments?" Participants further describe their experiences of neglect, isolation, misperception, and maladjustment, in most cases related to their high intelligence. These occurred as children and adults, at home, in school, and in the workplace. The emphasis on achievement throughout life contributed to competition and a lack of attention to other needs, such as those for acceptance. Misunderstanding (of and by them) and absent resources impacted participants' development. Some participants took this opportunity to lodge complaints about the length and direction of the questionnaire. Many comments about the survey were positive and hopeful that their responses would stimulate change for future generations.

Table 20
Additional Unmet Needs Comment Themes

General Unmet Needs Comments Theme	Description	Example Quotes
Lack of Recognition and Support for Giftedness	Gifted individuals often face the challenge of not having their abilities fully recognized or valued by those around them. This lack of recognition can lead to feelings of being misunderstood and underappreciated.	"I was always written off as not very smart because I didn't care about STEM subjects and preferred to read and write instead" (2658MF2M) "It's hard to succeed in a world built for and by others" (2365MM4H) "It would be nice to see us getting the same kind of recognition and support without people believing we think we're better than them or rubbing their faces in our IQs." (755GF3M)
Struggles with Identity and Direction	The data also revealed that gifted individuals frequently struggle with issues related to identity and direction, particularly when it comes to choosing a career path. The ability to excel in multiple areas can create a sense of indecision and confusion about which path to pursue.	"Being strong in everything made it very difficult for me to choose in which direction to go" (768GF3H) "I have always loved learning I'm tired of struggling against a world that thinks different is bad" (2140GM3M) "I feel guilty and also 'lazy' because I underachieved in life but still don't know what I should have done differently." (2592GF3H) "Being smart doesn't make you 'special' or better than someone else those differences need to be understood" (2620GF4M) "I make myself smaller to fit in with people. I have even begged for the light of my understanding to go away so that I am not too much for people. I am always trying to fit myself in a box. It became exhausting" (553SF2H)

General Unmet Needs Comments Theme	Description	Example Quotes
Social Isolation and Emotional Challenges	Gifted individuals often grapple with feelings of social isolation, emotional regulation difficulties, and mental health issues such as anxiety and depression. The pressure to fit in and the struggle to find like-minded peers can contribute to a sense of loneliness and alienation. participants expressed a deep sense of emotional neglect and a lack of understanding of their unique needs.	"It can be demoralizing to constantly be around those that don't understand you" (2998MF3H) "I think emotional support for gifted kids and adults is almost non-existent." (2883SF3M) "I think most of my emotional needs were not met early on by my parents for various reasons" (2157GF3M) "Just because someone has a high IQ doesn't mean they are ok on their own. They need support and assistance just like anyone else" (2838MF3M) "At the end of the day, it's great to be a genius but it can be lonely if you don't know how to manage it." (3238MM3M) "The difficulty to understand one's place in the world, to find meaning, to figure out the big life principles has been a source of existential angst and depression throughout my life" (2259SF3H)
Educational System Limitations and Need for Reforms	Participants in the study highlighted the limitations of the traditional education system in meeting the needs of gifted students. The lack of opportunities for intellectual growth and advancement within the existing educational framework can hinder the development of gifted individuals.	"Education needs to evolve to teach all levels not tailored to the lowest achievers." (2572MF3M) "Not having needs met properly as a young person leads to lifetimes of struggling Identifying gifted youngsters and getting help early would be immensely more helpful" (707SM3H) "School overall was not challenging when I was very young This was a snowball effect as I got older and affected other things later in my life." (1353MM4M) "There really cannot be personalized everything for everyone in a society where we want to live up to the values of equality and equity of opportunity" (2443MM3M) "More exposure to a variety of things, better identification of gifted individuals, not just focus on a test, all would have been welcome." (2053GM3H)

General Unmet Needs Comments Theme	Description	Example Quotes
		"All teachers should be trained to handle gifted children in their classrooms" (755GF3M) "It is quite frustrating to constantly be faced with watered-down academic materials" (1748GF3M) "I was severely undertaught in social skills, which I still think are not properly taught" (2505MF2M) "We need more equity because the access to joy, happiness and other abundance is limited if our psyche is under attack and our support systems are under-resourced." (2398SM3H) "The stigma for gifted education needs to be removed. Gifted kids are often struggling with their mental health needs not being met because people don't understand that their intellectual needs are different" (376MF2M)
Unmet Needs and Missed Opportunities	Gifted individuals often express regret over missed opportunities, unmet academic and social needs, and a lack of mentorship or guidance during their formative years. The absence of adequate support systems can result in untapped potential and unfulfilled aspirations.	"I wish I had been more proactive and less reserved in seeking out connections and opportunities myself" (3063MF3M) "My unmet needs as a gifted child (and now gifted adult) are inseparable from the pathological relationships of my family of origin" (868GF3H) "Unmet needs are also an opportunity to learn more about yourself and work out how to meet those needs yourself" (629MF4M) "I didn't have an understanding of how intelligent I am or how it could negatively affect me as an adult. It wasn't acknowledged or nurtured, I didn't have a support system of like-minded individuals, and I didn't have opportunities that challenged me" (553SF2H)
Desire for Belongingness	The data also revealed a deep- seated desire among gifted individuals for a sense of belonging, understanding, and	"One word: belonging. Very important, and very hard" (2185MF3M) "It would have been helpful to learn how to make meaningful connections in adulthood." (2083GF3H)

General Unmet Needs Comments Theme	Description	Example Quotes
	meaningful connections. Building supportive relationships and cultivating resilience skills are crucial for navigating the challenges of being gifted in a society that may not always appreciate or accommodate their unique needs.	"I needed to be taught social skills, so I wouldn't be so often rejected and lonely" (275MF5H) "I want more friends. I think I have lots of social connection, but few friends I feel like I can be myself around" (3016MF3L) "I figured if I could find a community of curious thinkers, it would somehow calm my hyper awareness of all the yik-yaking that engulfs me. That's when I found Mensa" (553SF2H)
Struggles with Mental Health	The theme of struggles with mental health and social support emerges prominently in the participant's narrative. The individual expresses deep emotional turmoil and a sense of being misunderstood and unsupported in dealing with issues such as depression, anxiety, and social challenges.	"I often feel like people see my academic abilities and assume that that intelligence translates to all areas of life and that I shouldn't struggle with anything. I'm good at school and math and science, but I struggle immensely with all aspects of life outside of that. I'm extremely mentally and emotionally unstable, I struggle living alone and keeping up with household chores and basic tasks like feeding myself. I feel like people think I'm faking or just being lazy. I don't feel like my brain is compatible with life and no matter how clearly I articulate how much I'm struggling, nobody understands." (2984GF1H) "Not having needs met properly as a young person leads to lifetimes of struggling with depression, anxiety, social issues, and financial issues" (707SM3H) "It's not only difficult to obtain mental health care in this country, there's a stigma attached to getting it" (1390MF4M) "I and many gifted people I know developed maladaptive coping mechanisms just to make it through school" (2360GF3H)

General Unmet Needs Comments Theme	Description	Example Quotes
Career and Job Struggles	The theme of career and job struggles reflects the participant's frustration with limited career opportunities and feeling marginalized in pursuing desired paths. The individuals expressed a sense of disillusionment with the conventional notion of work and the impact of external factors such as mental health issues and lack of support on career progression.	"I can not stand this endless procession of days into weeks into months and years, working my life away It's a game we call economics is stupid" (1813SF2M) "I thrived in the structure of school but fell apart in my first job quitting felt like failure" (3165MF3M) "Based on my experience and my desire for more autonomy, I have decided to become self-employed. I am currently doing an MA degree to prepare for my new field of work." (1040SF3H)
Need for Early Intervention and Support	The theme of the need for early intervention and support emphasizes the critical role of timely identification of giftedness, access to appropriate educational programs, and the establishment of robust support systems. The participants advocate for proactive measures to address the mental health and social needs of gifted individuals from a young age to prevent long-term challenges.	"Identifying gifted youngsters and getting help early would be immensely more helpful" (707SM3H) "Many gifted programs are being cancelled in schools Our future well-being depends on identifying the gifted individuals in the community and making sure they get the attention and resources to help them succeed." (1562MM4H) "I'd think things could have been better if I were identified and tracked as a person with a high IQ early on, so that appropriate accommodations and considerations could have been explored" (2718MN3H)

General Unmet Needs Comments Theme	Description	Example Quotes
Family Dynamics and Lack of Support	The theme of family dynamics and lack of support sheds light on the individual's reflections on how familial relationships have influenced their self-esteem, mental health, and social interactions.	"I never seemed to measure up to my mother's standards." (3328MM3M) "My mental health needs were never addressed as a child because my family didn't perceive them as real or valid" (389MF4M) "My unmet needs as a gifted child are inseparable from the pathological relationships of my family of origin" (868GF3H)
Gender Dynamics	The theme of gender dynamics and workplace challenges added another layer of complexity to the narratives, with some participants discussing the difficulties faced in navigating social interactions, particularly with neurotypical women, in the workplace.	"Other neurotypical women rather suck I really could use some help with how to diffuse the girl clique time bombs in workplaces." (2374GF4H) "I went to grade school in the 60s and 70s and It was frowned upon for girls to be 'too smart'" (241MF4M)
Need for Mentorship and Guidance	The importance of mentorship and guidance was a recurring theme, with participants emphasizing the value of exposure to diverse career paths and tailored support to navigate their potential successfully.	"Opportunities, mentorship, and engagement would have been better for me than holding back, conforming to lower expectations" (2231MM4H) "I just always felt I could have accomplished so much more if I would have had a mentor to lay out some specific paths for me" (204GF3M)

General Unmet Needs Comments Theme	Description	Example Quotes
		"I felt a lot of pressure to "achieve" in a conventional sense. I have kids who are going through this now at school. I think it was tremendously damaging for me and, ironically, probably undercut achievements. I think a more useful goal is for people to learn about themselves deeplyhow their brain works, what tasks (as specifically as possible) they are good and bad at, what they enjoy/dislike, who they want to spend time with, etc, etc. The goal should be to learn enough about yourself that you can figure out how to balance all of the things in life that lead to a healthy, fulfilling life. Once you have a life that fits YOU, that will maximize your output on its own. I wanted to be top of a field-I felt like that would be fulfilling because that's what everybody seemed to expect. And I saw where I could achieve well, and went for that, but it turned out that I wasn't happy and I couldn't balance it with other things I wanted in my life. Now that I've stepped back and re-evaluated, I think I'm on the way to building something that is a lot more likely to add to the world. I wish I had felt less expectation to achieve big things because I think then I would've had the freedom to explore myself more. Also, I know a lot of gifted peopleand we don't all achieve big things. And that should be ok! It's not really the point of life, is it? But as I watch my kids in school, I see that everyone expects them to do big things because they are smart" (3373GF3M) "I thought everyone was about the same intellectually and was bewildered when others struggled. I thought I was missing something important and learned to second-guess myself. My self-confidence plummeted even more when teachers, classmates, and family made a big deal out of every time I made a mistake. I felt a tremendous amount of pressure to achieve, but was not
High	Participants often reported feeling the pressure from the society to achieve and be	given the advanced guidance to progress further." (1357GF4H) "The stigma for gifted education needs to be removed. Gifted kids are often struggling with their mental health needs not being met because people don't
Expectations in achievement	successful because they were identified as gifted	understand that their intellectual needs are different. Instead, we're pushed to be at the top of the class and hold that standard at all costs, to go to the best

General Unmet Needs Comments Theme	Description	Example Quotes
		college despite the cost and go into debt for the rest of our lives, but there is no emphasis on making us feel happy and fulfilled. This is important for school age children because those who don't have it end up being anxious and depressed adults who feel pressured to constantly achieve things rather than live in the moment." (376MF2M)
Need for Financial	Participants reported the need to learn about finance management earlier in life.	"I believe that a course in personal financial management should be mandatory in high schools, and, had I understood that better at the beginning of my career, I could have saved myself a lot of financial and mental health problems." (3095MM5M) "I wish I had financial literacy in childhood, college and post college. Money is an abstraction to me, which of course is difficult when navigating a society hyper fixated and dependent upon it." (3284GF3M)
Literacy	The theme of financial barriers to education and career progression sheds light on the significant challenges faced by	hyper fixated and dependent upon it. (3284OF3M)
	gifted individuals in accessing opportunities for further education and professional advancement. Participants highlighted the obstacles posed by financial constraints, including difficulties in securing	"Not finding financial assistance to pay for college serves as a major roadblock to career progression leading to depression" (1422SM2L) "My greatest unmet need is financial remuneration. It's possibly a trade-in for my breadth of experience. Luckily, I live well on almost no money!" (1452MF5H) "At 47, I'm now starting to find and explore areas of interest that I wouldn't have before. So much time and opportunity has been lost, however, that
Overcoming Financial Barriers	financial aid, lack of employer support for tuition, and the high costs of education.	whatever I could have been or should have been isn't accessible to me the way it would have been if I had had the ability (financial, mental, or behavioral) in my 20s." (2394MF3H)

General Unmet Needs Comments Theme	Description	Example Quotes
Lack of Recognition and Support for Giftedness	Gifted individuals often face the challenge of not having their abilities fully recognized or valued by those around them. This lack of recognition can lead to feelings of being misunderstood and underappreciated.	"I was always written off as not very smart because I didn't care about STEM subjects and preferred to read and write instead" (2658MF2M) "It's hard to succeed in a world built for and by others" (2365MM4H) "It would be nice to see us getting the same kind of recognition and support without people believing we think we're better than them or rubbing their faces in our IQs." (755GF3M)

Note. Identifier = ID Number, Gifted Type (M=Mensa member [ever], G=Identified Gifted, H=High Test Score, S=Self-Identified), Gender (M=Male, F=Female, N=Nonbinary, O=Other), Age Group (1=18-24, 2=25-34, 3=35-49, 4=50-69, 5=70+), Class (L=Low Needs, M=Moderate Needs, H=High Needs).

Table 21

Additional Comment Themes

Additional Comments Theme	Description	Example Quotes
Challenges in Education and Testing	Participants expressed frustration with the educational system, particularly in catering to gifted individuals. They highlighted issues such as lack of challenge in school, feeling isolated in gifted programs, and the need for better support and resources.	"The public schools, especially at the elementary level, don't challenge gifted students. I scored in the 99th percentile in every category on the CTBS test in elementary school, but the LAUSD kept me in the same class and I felt like I was doing nothing all day" (3043MM3H) "I think the mind just can't be totally evaluated by a test. It takes much more than that" (3332GF4H) "The tearing down of gifted programming in public schools in the US is a DISGRACE" (371GF3L) "Their schools and teachers are unprepared to accommodate their asynchronous development in the classroom, and several have refused to acknowledge the special needs they require" (2360GF3H)
Emotional and Mental Health Struggles	Many respondents shared personal struggles with mental health, past traumas, and emotional regulation. They emphasized the importance of early support for gifted individuals and the impact of past experiences on their current well-being.	"I have experienced what I call 'background suicidal ideation' most of my life Although I've made the best of a difficult childhood, I do sometimes wonder what I could have become if I had the supports I needed as a young person." (495GF3M) "I felt that I was never really a child just a short adult." (87MF5M) "I often noticed growing up that I seemed to feel the emotions of others stronger than I felt my own emotions" (647MM3H) "I then worked as an executive assistant for 6 years before having to stop working entirely and apply for Social Security disability because my depression, anxiety, and ADHD resulted in psychogenic non-epileptic seizures" (2556GF2M) "My home life and developmental years were so traumatic and abusive, my story should have ended as a murder-suicide somewhere in my late teens" (2251MM3H)

Additional Comments Theme	Description	Example Quotes
Social Isolation and Relationships	Participants discussed feeling isolated due to their intelligence, struggling to relate to others, and facing challenges in forming meaningful relationships. They highlighted the need for understanding and support in social interactions.	"I have formed several close friendships with other neurodivergent females in Mensa, and my mental health is the best it's been, in part because my social needs finally are being met." (559MF4H) "Most people experience me as too abstract and too intense." (1114MF4M) "I never understood why I had so much difficulty relating to others" (1122MF3H) "As a member of the gifted community, I feel ostracized by our current social view of giftedness" (2360GF3H) "I was never good at random social interactions, specially with people older than me." (440SF2M)
Career and Life Reflections	Respondents reflected on their career paths, educational choices, and life decisions. They expressed regrets, frustrations, and hopes for the future, emphasizing the importance of support, opportunities, and personal growth.	"I have had a 30 year career with one company and retired on my own schedule with financial security" (3398MM5M) "I wish I could've been grouped with kids of my intelligence level during my entire student career" (859MF1M) "My life is rich and has meaning because I know who I am now. Nine years ago I wanted to die, and now I'm happy just to wake up every morning" (312GF4M) "I have developed a better understanding of myself, albeit it does not change my career distress" (2242MF3M) "I am happy that this life brought me to my wife and child. I am sad at all the lost opportunity in fulfilling the wishes and demands of others." (2286MO4M) "I chose the wrong career for the wrong reasons" (1156MF5L) "I had a satisfying career and life, even if not what it might have been with more support, especially early on" (1824MF5H)

Additional Comments Theme	Description	Example Quotes
Perceptions of Giftedness in society	Participants shared insights into societal perceptions of gifted individuals, experiences of being misunderstood or undervalued, and the need for societal change in recognizing and supporting giftedness.	"Our culture has gotten to the point where being gifted or exceptional is a detriment. Mediocrity is celebrated and intellect is frowned upon" (1440MF4H) "I have learned to hide my IQ or being a Mensa member as it has been more detrimental than helpful in my adult life." (60MF3M) "We need to introduce in society different mental model to accept different educational model." (1922SO3H) "As a member of the gifted community, I feel ostracized by our current social view of giftedness" (2360GF3H) "We need to get rid of the current education system in America. It is physically cruel and does not respond to the needs of any of the students who do not fit under the main portion of the bell curve (too smart or those who struggle with school)" (2966MM4M)
Desire for Better Opportunities and Support	Participants expressed a desire for more opportunities, better resources, and support systems for gifted individuals, especially in terms of education, career advancement, and mental health services.	"Early access to professional mental health services, along with training for my parents in how to teach me to manage my mental health and relationships, would have made a huge difference in my life" (3303MF4M) "The [state department of education] needs to allocate resources and increase the time that gifted students receive services in public schools" (2883SF3M)
Support and Mentorship	Participants highlighted the importance of support and mentorship in their educational journey, especially in programs tailored for gifted individuals.	"I got lucky at school: I had a biology teacher who saw who I was, she was a mentor, taught me a lot of things and offered more studying material and activities I enjoyed" (440SF2M) "Strict discipline wasn't always conducive to participation; encouragement was to fit in, rather than excel. (Exception was 5th grade- teacher was a mentor who valued students abilities)." (1259GF5M)

Additional Comments Theme	Description	Example Quotes
		"I think there is an opportunity for more mentorship not only from leaders, but peers as well. A course on discovering innate strengths and talents and helping individuals discover and understand how their natural skills can fit into a variety of roles within a corporation." (3080MF3M)
Call for Change and Advocacy	Individuals advocated for changes in educational systems, societal perceptions of giftedness, and the need for mentorship and support for gifted individuals. They emphasized the potential for positive impact through research and advocacy.	"More should be done by society to cultivate and reward gifted children with age-appropriate programs" (572MF4M) "I hope your studies make it better for future students" (360MF4H) "It is my hope that when the processing of all the information gathered from your opus is complete, you will disseminate some illuminating wisdom" (2111MM5H) "I admire the work of advocacy for the gifted youth and adults that some institutions are posed to bring about." (1891SF4M)
About the Present Survey and Research	Some participants provided feedback on the survey itself, expressing concerns about question clarity, response options, and the overall research approach. They highlighted the need for more nuanced questions and the importance of feedback and transparency in research. Others appreciated the survey and the opportunity for self-reflection.	"The questions were vague and general, and besides wasting my time, I suspect it's for disingenuous purposes or won't be used meaningfully at all." (1344MM2M) "This survey was too redundant and there was limited answer selections available to choose from" (3372SM4H) "I have completed so many surveys and interviews of this nature without ever receiving any feedback or other results from them" (1351MF5H) "This survey provoked insight into my origins and chosen path. It was great reflection time." (3065MF3M) "This was a lovely survey." (1270SM2L) "Thank you for doing this survey. It was a little heartwrenching to ponder the questions, but every day in the minds of many gifted people, there is a twinge of failure lurking, the sense that you should be doing more at a higher level

Additional **Comments Theme** Description **Example Quotes** with more success and impact. Any positive change you can bring about for future generations would be so welcome. I have two gifted kids and I often wonder if they have the same feelings I have. I fear that they do despite my best efforts so please help us find ways to support gifted young people in attaining a healthy sense of balance - accomplishment and success along with joy and peace and sense that they're enough no matter what life choices they make." (2749MF4H) "I must admit, I wasn't sure I was qualified to respond to this survey and had to see it referenced/linked to several times over a period of a week or two before I decided to even look at it, much less respond to it. In the end, I'm glad I did, and I feel less like an "impostor" at the end of it. I am grateful for your thoughtful design of this survey. I am strongly biased toward qualitative research and usually think surveys are a waste of time (I still do them because I like to support research!), but you did a good job with this and with giving us space to include our voice, so thank you. Well done." (2991SF3M)

Note. Identifier = ID Number, Gifted Type (M=Mensa member [ever], G=Identified Gifted, H=High Test Score, S=Self-Identified), Gender (M=Male, F=Female, N=Nonbinary, O=Other), Age Group (1=18-24, 2=25-34, 3=35-49, 4=50-69, 5=70+), Class (L=Low Needs, M=Moderate Needs, H=High Needs).

"I Had Too Much"

In some cases, participants reported that, rather than having the right amount or not having enough of the subject of an item, they had experienced too much. This response option was included to account for items that may produce a negative reaction when present. Table 22 includes the frequency of items that received *Too Much* responses from more than 5% of participants. Although all domains received at least a few Too Much responses, no College need items met this 5% criteria. Expectations from parents for outstanding performance received the highest number of Too Much responses. In the academic domain, many respondents felt their parents or teachers had expectations that were unrealistic (too much). Twenty percent of participants reported they needed less expectations from parents for outstanding performance. This percentage was lower among the members of the Low Needs class, but even some of them felt too much of this expectation for achievement.

Nearly 18% of participants reported too much expectation to choose a career path that was for someone else and not what they might have chosen. Many respondents felt too much expectation from others to perform at an outstanding level in their workplace. In the social/emotional domain, more than 12% of participants reported needing less ability to feel empathy for others. Being able to show that empathy or to consider the needs of others was experienced as too much for more than 5% of participants. During their young adulthood, numerous respondents reported experiencing others misinterpreting their high intelligence as mental illness.

Table 22
Highest Frequency Responses of "I had too much" Items

8 1 1 1								
	I had too much of this and needed less n	% of Total Sample	Low Needs Class	% of Low Needs	Moderate Needs Class n	% of Moderate Needs	High Needs Class n	% of High Needs
K-12								
Expectations from parents for outstanding performance	689	20.01%	75	9.21%	400	22.09%	214	26.16%
Expectations from teachers for outstanding performance	309	8.97%	36	4.42%	183	10.10%	90	11.00%
Confidence in my ability to achieve in school	204	5.93%	22	2.70%	129	7.12%	53	6.48%
Career								
Expectation to choose a career path to fulfill others' desires	633	18.39%	46	5.65%	351	19.38%	236	28.85%
Expectation from others for outstanding performance in the workplace	296	8.60%	16	1.97%	187	10.33%	93	11.37%
Social/Emotional								
Able to feel empathy for others	426	12.37%	41	5.04%	232	12.81%	153	18.70%
Able to show empathy for others	260	7.55%	16	1.97%	147	8.12%	97	11.86%

Able to consider the needs of others when problem solving	212	6.16%	13	1.60%	128	7.07%	71	8.68%
Mental Health								
Young - Others misinterpreting my abstract, creative, or deep thinking as mental illness	524	15.22%	29	3.56%	270	14.91%	225	27.51%
Middle - Others misinterpreting my abstract, creative, or deep thinking as mental illness	415	12.05%	12	1.47%	211	11.65%	192	23.47%

Parsing the Survey Sample

The purpose of the study was to explore unmet needs among highly intelligent individuals. Rather than focusing on heterogeneity by comparing demographic groups, a statistical technique offers a means of identifying patterns of need among the full sample which can be used to make comparisons. The top-rated items listed in Tables 3-8 are averages of the full sample, but would these averages be meaningful for all participants? To further explore patterns in the data, we chose a technique that analyzes responses to group participants according to their similar responses: Latent Profile Analysis (LPA). Within each domain, an average of all item responses was calculated to provide a score for academic (one for K12 and one for college), career development, social and emotional, and mental health needs. These five variables were the basis of the LPA. Incomplete cases were classified according to the average in the domains that contained data.

Model fit was tested for two to seven classes (see Table 23). Based on diminishing increases in the Akaike Information Criterion (AIC), the Bayesian Information Crieterion (BIC), the Sample-size Adjusted BIC fit indices, a 3-class solution is indicated. This was supported by a significant (p < .001) Lo-Mendell-Rubin adjusted likelihood ratio test. Although entropy for the 3-class model was low, at .68, Weller et al. (2020) recommend that this statistic not be used to make a decision regarding the final solution. Not only are the indicators positive for the 3-class solution, comparison of the classes on the variables of interest makes conceptual sense.

LPA results indicated three distinct classes: Low Needs (n = 814, 23.64% of the sample), Moderate Needs (n = 1811, 52.60%), and High Needs (n = 818, 23.76%). See Table 24 for total domain score means for each class. Table 1 includes demographic data for the Low, Moderate, and High Needs classes. Despite statistically significant differences in some demographic proportions, these are very minor. The charts in Figures 4-10 indicate the slight variability of demographic groups with statistically different proportions among the classes. Each need class contains members of every demographic and proportional differences are minor. Participants of all gifted types – Mensa members, and nonmembers identified as gifted, receiving high scores, or self/other identified – were classified into groups according to need. Mensa members were slightly less likely to appear in the High Needs class than expected (21.7% of Mensa members were in this class, but 23.7% were expected; χ^2 [6, N = 3442] = 21.24, p < .01). Non-Mensa

members who reported receiving high test scores were more likely to be in the High Needs class than expected. A third of those participants were in the High Needs class, when 23.7% were expected. There were 6.6% more high test scorers in the high needs class than expected.

Table 23

Domain Needs Latent Profile Model Comparison

Fit statistic	1 class	2 class	3 class	4 class	5 class	6 class	7 class
Log- likelihood	-15506.58	-13920.54	-13529.59	-13418.63	-13343.14	-13263.42	-13213.53
AIC	31033.17	27883.07	27123.18	26923.27	26794.28	26656.84	26579.07
BIC	31094.61	28012.10	27319.79	27187.46	27126.07	27056.20	27046.02
ABIC	31062.83	27945.37	27218.11	27050.83	26954.48	26849.67	26804.53
LMR		3137.08	773.26	219.46	149.31	157.69	98.67
LMR p- value		.000	.000	.070	.097	.456	.239
Entropy		0.71	0.70	0.68	0.62	0.62	0.65
Ns		1=1807 2=1636	1=814 2=1811 3=818	1=1390 2=588 3=1277 4=188	1=483 2=1227 3=948 4=517 5=268	1=286 2=729 3=262 4=1058 5=251 6=857	1=369 2=247 3=1211 4=49 5=414 6=928 7=225

Note. Bold numbers indicate optimal fit indices. AIC = Akaike Information Criterion; BIC = Bayesian Information Criterion; ABIC = Sample-size Adjusted BIC; LMR = Lo-Mendell-Rubin test; BLRT = Bootstrapped Likelihood Ratio Test. *N* = 3443.

Table 24

Latent Profile Analysis Class Mean Scores

	Low Needs Class Moderate Needs Class			High Needs Class			Total						
		Std.			Std.			Std.			Std.		
	Mean	Dev.	n	Mean	Dev.	n	Mean	Dev.	n	Mean	Dev.	N	
Academic K-12 Total	1.48	0.49	634	2.29	0.51	1639	3.11	0.36	791	2.33	0.73	3064	
Academic College Total	1.30	0.28	520	1.90	0.48	1515	2.78	0.51	718	2.01	0.68	2753	
Career Total	1.43	0.40	574	2.19	0.51	1536	2.86	0.49	741	2.21	0.69	2851	
Social/Emotional Total	1.57	0.50	648	2.35	0.58	1638	2.81	0.59	786	2.30	0.71	3072	
Mental Health Total	1.12	0.48	651	1.78	0.52	1656	2.21	0.57	774	1.75	0.64	3081	

Note. Range 1-4. All are significantly different ps < .01.

Age was also significantly disproportionately distributed among the classes, χ^2 (8, N=3442) = 99.80, p < .001. The youngest age group, 18-24 year-olds, were more than twice as likely to appear in the Low Needs class as expected (46.50% actual vs. 23.60% expected) and similarly disproportionately unlikely to appear in the two higher needs classes (Moderate Needs 44.10% actual vs. 52.60% expected; High Needs 9.40% vs. 23.70%). The age groups 35 and over were all significantly disproportionately in the two higher needs classes and were less likely than expected to be found in the Low Needs class. In the different gender categories, only males and females were disproportionately distributed, χ^2 (8, N=3443) = 42.58, p < .001. Males were slightly more likely to be found in the Low Needs class than expected (28.30% actual vs. 23.60% expected) and females were slightly less likely to be in the Low Needs class than expected (20.10% actual vs. 23.60% expected). LGBTQ+ participants were disproportionately more likely to be found in the higher needs groups, χ^2 (2, N=3428) = 11.58, p < .01, although this was a minor difference (Moderate Needs 54.10% actual vs. 52.60% expected; High Needs 28.00% vs. 23.80%).

Participants with disabilities of any kind were significantly more likely to be in the High Needs class, χ^2 (4, N=3410) = 69.26, p<.001 (30.80% actual vs. 20.70% expected) and less likely to be in the Low Needs class (16.00% actual vs. 26.90% expected). Participants who had earned a doctorate were disproportionately distributed among the classes, χ^2 (10, N=3382) = 36.18, p<.001. They were more likely to be in the Low Needs class and less likely to be in the High Needs class (Low Needs 31.30% actual vs. 23.50% expected; High Needs 16.70% actual vs. 23.90% expected). Participants were classified according to their combination of greatest interests and abilities (see Table 1). Those with science or math interests or abilities were more likely than expected to be in the Low Needs class (30.70% actual vs. 23.60% expected). Participants with a humanities-only focus were slightly more likely to be found in the Moderate Needs class than in the Low Needs class (Low Needs 18.90% actual vs. 23.60% expected; Moderate 55.90% actual vs. 52.90% expected). Participants reporting an interest or ability in both science/math and performance domains (art, music, athletics) had a similar underrepresentation in the Low Needs class (31.80% actual vs. 23.60% expected).

The important takeaway from the demographics of the three classes is the significant heterogeneity. While there are a few statistically significant differences in distribution, these are all relatively minor (see Figures 4-10). No group is grossly over- or underrepresented in any of

the classes. There are members of every demographic group who report a low level of unmet needs, a moderate level, and a high level.

Figure 4
Need Class Demographics Distributions - Age

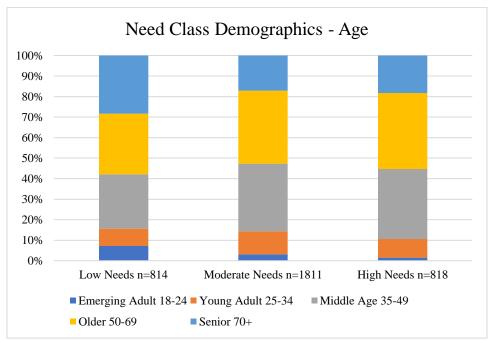


Figure 5

Need Class Demographics Distributions – Gifted Type

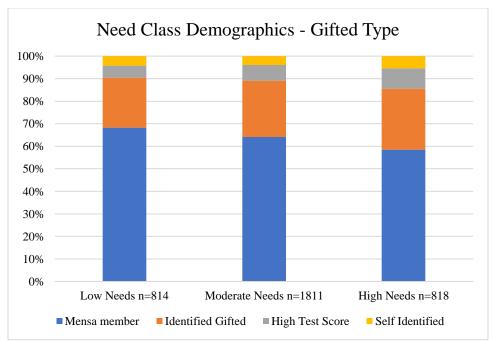


Figure 6
Need Class Demographics Distributions – Gender

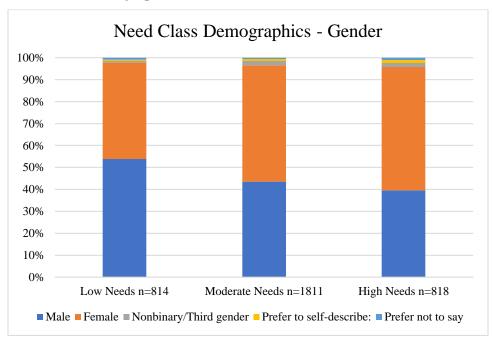


Figure 7

Need Class Demographics Distributions – LGBTQ+

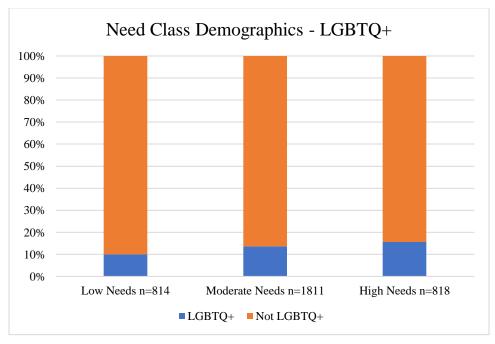


Figure 8

Need Class Demographics Distributions – Disability

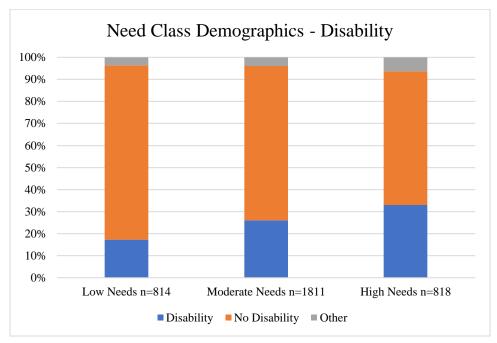
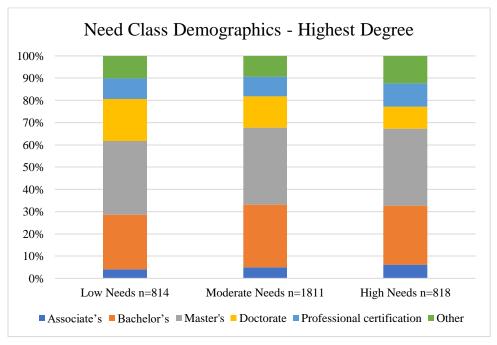


Figure 9

Need Class Demographics Distributions – Highest Degree



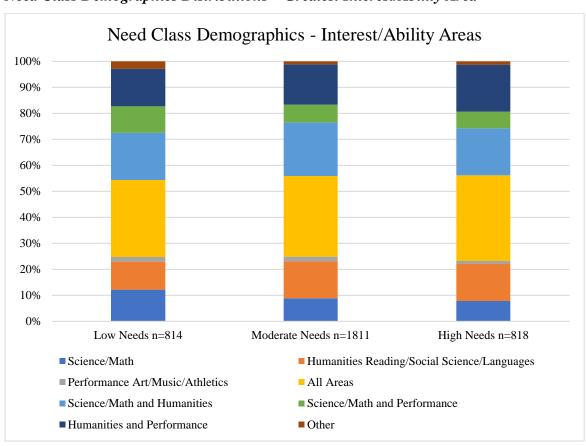


Figure 10

Need Class Demographics Distributions – Greatest Interest/Ability Area

Exploring Need Patterns

To facilitate analysis of the various needs, exploratory factor analysis (EFA) identified the structure of relationships among items in each domain. Each area of need had unique dimensions.

Academic Need Dimensions

The academic need domains were analyzed separately for K-12 and College. Not all participants responded to items in the College section of the survey and, although both the K-12 and College sections were about academic needs, they represent very different time periods in one's life. The K-12 EFA resulted in four distinct factors (see Table 25): *K-12 Supportive School, K-12 Positive Peers, K-12 Family Support, K-12 Adequate Education*. Three items did not have a factor loading higher than .30 on any factors. These items were dropped from the analysis: "Comfortable asking questions at school," "Lessons in academic skill development

(e.g., time management, study skills, etc.)," "Mentor(s) in my areas of interest." The two latter items had the highest average mean scores in the K-12 Academic domain (see Table 3). Even though they did not have adequate loading on a factor, their significance will be explored at the item level.

The first factor, K-12 Supportive School, included items such as teachers appreciating participants' intellectual abilities; being warm, friendly, and knowledgeable about their subjects; and recognizing the participants' needs. This supportive school environment was associated with participants' confidence in their ability to achieve academically. The K-12 Positive Peers factor included items about their classmates, friendships, and feelings of belonging in school. Only two items fell under the K-12 Family Support factor: "Family support for my academic interests" and "Expectations from parents for outstanding performance." Needs related to participants' ability to work at their preferred pace, with the ability to make choices and options for learning related to their interests fell under the K-12 Adequate Education factor.

Academic needs in college appeared in three dimensions: *College Supportive Instructors*, *College Positive Peers*, and *College Options*. All items in this need area loaded adequately on at least one factor (see Table 26). The College Supportive Instructors factor represents participants' need for knowledgeable, accessible professors with high expectations who offered work at a level appropriate for participants' ability levels. Mentors at the college level was part of this factor, as well. The College Positive Peers factor includes items related to accepting classmates with similar interests and abilities and feelings of belonging in college. Confidence in one's ability to achieve in college was associated with classmates, whereas in K-12, confidence in ability to achieve was associated with positive teacher characteristics. The College Options factor represents one's options for affordability and the ability to choose a subject area for learning

Table 25

K-12 Academic Need Pattern Matrix^a

		Fac	tors	
Item	K-12 Supportive School	K-12 Positive Peers	K-12 Family Support	K-12 Adequate Education
Teachers who appreciated my intellectual abilities	0.893		**	
Expectations from teachers for outstanding performance	0.713			
Warm, friendly teachers	0.612			
Someone who recognized my talents or potential	0.546	-0.176	-0.164	
Teachers who were knowledgeable about their subject(s)	0.424			0.232
Confidence in my ability to achieve in school	0.333		-0.314	
Classmates who shared my academic interests		-0.869		
Friendships in school		-0.69		-0.124
Classmates with intellectual abilities similar to mine		-0.639		0.191
Feelings of belonging in school	0.102	-0.52	-0.113	
Family support for my academic interests			-0.743	
Expectations from parents for outstanding performance	0.115		-0.722	
Able to work at the pace I wanted to				0.718
Able to choose what I learned about				0.714
Schoolwork appropriate for my ability level	0.109			0.619
Access to the materials or equipment needed to learn in my areas of interest			-0.172	0.588
Outside-of-school learning opportunities		-0.116	-0.256	0.445
Adequate money to afford outside-of-school learning opportunities			-0.3	0.342

Note: Extraction Method *Maximum Likelihood*, Rotation Method *Oblimin with Kaiser Normalization*; Values below .10 suppressed ^aRotation converged in 11 iterations..

Table 26

College Academic Need Pattern Matrix^a

		Factors	
Item	College Supportive Instructors	College Positive Peers	College Options
Professors who were knowledgeable about their subject(s)	0.76	1 0015	Options
Expectations from professors for outstanding performance	0.65		
Coursework appropriate for my ability level	0.62		
Accessible professors	0.61		
Mentors in my areas of interest	0.38	-0.23	
College classmates who accepted me		-0.86	
Feelings of belonging in college		-0.76	
College classmates who shared my academic interests	0.23	-0.44	0.15
College classmates with intellectual abilities similar to mine	0.24	-0.39	0.14
Confidence in my ability to achieve in college	0.13	-0.32	0.10
Multiple options for colleges I could attend			0.73
Adequate money to afford the college I wanted to attend			0.61
Able to choose what I learned about in college	0.33		0.37

Note: Extraction Method *Maximum Likelihood*, Rotation Method *Oblimin with Kaiser Normalization*; Values below .10 suppressed

Career Need Dimensions

The EFA of the 18 career development items identified four factors, but four items did not load above .30 on any factor, so were dropped from the final EFA: "Autonomy in my work (able to make choices about what to work on, how, when)," "Expectation to choose a career path to fulfill others' desires," "Expectation from others for outstanding performance in the workplace," "Support from family and friends for my career choice." None of these items appear in the list of most highly rated items in the career domain (see Table 7). The resulting four factors were *Career Relatedness, Career Development, Career Satisfaction, and Career Skill Development* (Table 27). One item – "Someone who could provide career advice/guidance" – was cross-loaded on the first two factors. Its fit was conceptually appropriate under the Career Relatedness factor.

Relationships with others, including experienced people in the workplace who could aid their development or provide career guidance and others with whom they could be socially

^aRotation converged in 8 iterations.

connected, were represented in the Career Relatedness factor. Participants needs in learning about careers and being able to pursue the one they preferred appear in the Career Development factor. The Career Satisfaction factor includes items related to how satisfying and appropriate the fit of one's career was. The fourth factor, Career Skill Development, indicates the level of need in one's ability to be successful in their career: ability to learn the skills required to be successful, either through training, on their own, or through their education, and the confidence in their ability to be successful.

Table 27

Career Development Pattern Matrix^a

		I	Factors	
	Career Related- ness	Career Develop- ment	Career Satis- faction	Career Skill Develop- ment
Support from experienced people in my workplace to help develop my abilities	0.79			
Connections with people who could help me advance in my career	0.74			
Positive social connections with others in my career field	0.63			
Positive social connections with others at my workplace	0.54			
Someone who recognized my talents or potential early in my career	0.45		-0.23	
Someone who could provide career advice/guidance	0.42	0.40		
Information about different careers		0.84		
Formal lessons in career planning		0.75		
Able to pursue the career I wanted		0.54	-0.18	0.16
Able to pursue the many things I was interested				
in rather than being forced to choose only one		0.44	-0.14	0.17
Satisfied with my career achievements			-0.90	
Satisfied with the prestige I obtained in my career			-0.74	
Satisfied with my work environment	0.24		-0.44	
Able to pursue a career that is a good fit for my level of intelligence		0.19	-0.36	0.26
Training in the skills needed for the work in my chosen career				0.76

Able to learn on my own I what I needed to be successful in my chosen career		0.66
Prepared by my education to be successful in my career	0.13	0.63
Confidence in my ability to do the work required to be successful in my chosen		0.63
career		

Note: Extraction Method *Maximum Likelihood*, Rotation Method *Oblimin with Kaiser Normalization*; Values below .10 suppressed ^aRotation converged in 8 iterations.

Social/Emotional Need Dimensions

After eliminating three items that did not load sufficiently on any factors ("Able to engage with others in decision making," "Able to work through conflict with others," and "Able to work well in a group"), the EFA of the social and emotional needs items found five factors: *Perspective-Taking Abilities, Partner Skills, Opportunity for Interaction, Social/Emotional Learning*, and *Social Skills* (Table 28). The factor Perspective-Taking Abilities included items with an outward focus. Their need for abilities in understanding others – their emotions, behaviors, and perspectives – and to feel and show empathy for them is represented in this factor. The three items of the Partner Skills factor relate to developing and maintaining a relationship with a romantic partner. The Opportunity for Interaction factor indicates participants' need for opportunities to meet others with interests and abilities like theirs. Formal lessons in self-regulation, goal setting, and social skill development are represented in the Social/Emotional Learning factor. This factor also includes other aspects of self-understanding and ability to communicate with others. The ability to develop and maintain positive relationships with others, to be comfortable and make others comfortable in social interactions – these are important skills appearing in the Social Skills factor.

Table 28
Social/Emotional Pattern Matrix^a

			Factors		
	Perspective- Taking Abilities	Partner Skills	Opportunity for Interaction	Soc/Emot Learning	Social Skills
Able to understand others' emotions	0.86				
Able to understand others' perspectives	0.77				
Able to understand others' behaviors	0.76			0.12	
Able to show empathy for others	0.60			-0.12	-0.14
Able to feel empathy for others	0.60			-0.11	
Able to understand others with intellectual abilities different from mine	0.57				
Able to consider the needs of others when problem solving	0.49				-0.10
Able to develop a mutually satisfying romantic relationship		-0.97			
Able to maintain a long-term relationship with a spouse or romantic partner		-0.82			
Able to communicate well with a romantic partner	0.18	-0.55		0.13	
Opportunities to meet others with interests similar to mine			-0.94		
Opportunities to meet others with intellectual abilities similar to mine			-0.75		
Opportunities to meet others I find interesting			-0.72		
Formal lessons to develop my self-regulation (controlling emotions, planning, etc.)				0.79	

			Factors		
	Perspective-		Opportunity		
	Taking Abilities	Partner Skills	for Interaction	Soc/Emot Learning	Social Skills
Able to understand my emotions and how to control them	0.14			0.66	
Formal lessons in goal setting				0.66	
Able to set and achieve goals for myself				0.60	
Formal lessons to develop my social skills				0.47	-0.28
Able to communicate well with others	0.22			0.33	-0.26
Able to develop positive relationships with others					-0.84
Able to maintain positive relationships with others		-0.15			-0.76
Comfortable in social interactions	0.11		-0.10	0.11	-0.49
Able to make others feel comfortable in social interactions	0.33				-0.47

Note: Extraction Method *Maximum Likelihood*, Rotation Method *Oblimin with Kaiser Normalization*; Values below .10 suppressed ^aRotation converged in 8 iterations.

Mental Health Need Dimensions

During the study approval process, it was recommended to include multiple time frames within which to consider a person's mental health needs. A young person would likely have different health needs than someone at a later stage in life. This proved to be a prescient observation and the analyses of mental health needs during the three time periods included - as a young person (i.e., youth through college age), the years post-college age to 55 or so, and in the years after about age 55 – suggests a different pattern of mental health needs. Only among the 16 items of the first time frame (i.e., "as a young person") were there items that did not load on any factor. Two items, "Comfortable around others who were more advanced than me" and "Others misinterpreting my abstract, creative, or deep thinking as mental illness" did not load on any factor. Neither of these items was highly rated (see Table 7). Once these were eliminated, an EFA identified two factors: a relatively undifferentiated *Young Mental Health Needs* and *Young Trusted Other* (Table 29). The first factor, Young Mental Health Needs, included all items related to strategies, acceptance by others, a sense of self, and supports for mental health. It will provide an indication of general mental health needs. The Young Trusted Other factor indicates a need for helping professionals who could support them.

Mental health needs in the two older categories had practically identical factor structures (Tables 30 & 31). The three factors of *Strategies, Trusted Other*, and *Identity* were found in analysis of both middle years and age 55 and up items. Needs in the areas of dealing with frustration, anxiety, or other areas of mental health concern are represented in the Middle Years and 55+ Strategies factors. In both age-related sets, the item "Supports for mental health" cross-loaded on the first two factors. In keeping with the need for strategies as support mechanisms, this item was included with the first factor (Strategies) and not the second (Trusted Other). Finding someone who understands them and is trustworthy falls under the Trusted Other factor. Finally, identity issues were represented in the Identity factor. Being able to be oneself without fear of being misunderstood or rejected, a strong sense of self and comfort with others who understand them – these are the needs represented in the Identity factor.

Table 29

Mental Health as a Young Person Pattern Matrix^a

	Fac	etors
	Young Mental Health Needs	Young Trusted Other
Effective strategies for dealing with failures	0.80	
Effective strategies for dealing with distress or upset	0.77	
Effective strategies for dealing with anxiety or nervousness	0.75	
Effective strategies for dealing with frustration	0.73	
Able to avoid painful perfectionistic tendencies	0.63	
Effective strategies for dealing with depression	0.62	-0.19
Able to be myself without fear of rejection	0.60	
Able to be myself without fear of being misunderstood	0.57	
Supports for my mental health	0.55	-0.34
A strong sense for who I am (my identity)	0.52	-0.11
Effective strategies for dealing with boredom	0.51	0.11
A psychologist/counselor who understands me		-0.89
Able to work with a psychologist or counselor Someone I trusted to help me with my mental health		-0.84
concerns	0.36	-0.56

Note: Extraction Method Maximum Likelihood, Rotation Method Oblimin with Kaiser Normalization; Values below .10 suppressed

Table 30 Mental Health Middle Years Pattern Matrix^a

		Factors	
	Middle Years Strategies	Middle Years Trusted Other	Middle Years Identity
Effective strategies for dealing with distress or upset	0.85		
Effective strategies for dealing with failures	0.82		
Effective strategies for dealing with frustration	0.80		
Effective strategies for dealing with anxiety or nervousness	0.72		
Effective strategies for dealing with depression	0.61	-0.21	
Able to avoid painful perfectionistic tendencies	0.57		-0.13
Effective strategies for dealing with boredom	0.50		
Supports for my mental health	0.43	-0.41	
A psychologist/counselor who understands me		-0.98	
Able to work with a psychologist or counselor		-0.88	
Someone I trusted to help me with my mental health concerns	0.17	-0.68	
Able to be myself without fear of being misunderstood	-0.11		-0.95
Able to be myself without fear of rejection			-0.87
Others misinterpreting my abstract, creative, or deep thinking as mental illness	0.10		-0.39
A strong sense for who I am (my identity)	0.31		-0.38
Comfortable around others who were more advanced than me	0.23		-0.36

Note: Extraction Method Maximum Likelihood, Rotation Method Oblimin with Kaiser Normalization; Values below .10 suppressed ^aRotation converged in 8 iterations.

Table 31

Mental Health After 55 Pattern Matrix^a

		Factors	
	55+ Strategies	55+ Trusted Other	55+ Identity
Effective strategies for dealing with distress or upset	0.84		
Effective strategies for dealing with frustration	0.81		
Effective strategies for dealing with anxiety or nervousness	0.76		
Effective strategies for dealing with failures	0.76		
Effective strategies for dealing with depression	0.60	-0.20	
Effective strategies for dealing with boredom	0.59		
Able to avoid painful perfectionistic tendencies	0.57		-0.11
Supports for my mental health	0.41	-0.41	
A psychologist/counselor who understands me		-0.99	
Able to work with a psychologist or counselor		-0.87	
Someone I trusted to help me with my mental health concerns	0.17	-0.70	
Able to be myself without fear of being misunderstood.	-0.10		-0.98
Able to be myself without fear of rejection			-0.87
A strong sense for who I am (my identity)	0.28		-0.45
Comfortable around others who were more advanced than me	0.24		-0.33
Others misinterpreting my abstract, creative, or deep thinking as mental illness	0.18		-0.33

Note: Extraction Method *Maximum Likelihood*, Rotation Method *Oblimin with Kaiser Normalization*; Values below .10 suppressed

Need Factors Correlations

The academic, career, social/emotional, and mental health factors are associated with personality and subjective well-being (flourishing; see Tables 32-35). Significant correlations are generally negative, as high scores on each factor indicate a higher level of need (i.e., 1 = no need [I had this in the right amount], 4 = need [I did not have this and needed it]). For the academic

^aRotation converged in 8 iterations.

factors, the strongest significant correlations are between K-12 Positive Peers or College Peers and Emotional Stability (r = -.22 and r = -.20, respectively). Correlation coefficients closer to 1 or -1 are stronger in magnitude, meaning these relationships are fairly weak. Even so, the more emotionally stable, the less likely one is to have had high needs in their relationship with peers during both K-12 schooling and their college years. Flourishing, a measure of subjective well-being, was correlated with college peers (r = -.26). As there were fewer needs in relation to peers in college, participants had more positive attitudes about their general well-being.

All career factors were significantly correlated with Emotional Stability, with rs from - .22 to -.30. Being emotionally stable (calm, not anxious or easily upset) was associated with a lower level of need in one's career development. Being conscientious was associated, albeit weakly (r = -.22), with needs in the area of Career Skill Development – able to learn the skills required to be successful, either through training or independently. Lower need levels in all the career factors were associated with overall well-being (flourishing, rs from -.22 to -.36).

Several of the personality factors were correlated with social/emotional factors (see Table 32). For example, being more agreeable was associated with lower levels of need in perspective-taking ability (being able to understand others' emotions, feel empathy for others, etc.; r = -.29). Being able to develop and maintain relationships with others and being comfortable in social interactions – the Social Skills factor – was most strongly correlated with Extraversion (r = -.34). All social/emotional factors were negatively correlated with subjective well-being (flourishing; rs from -.23 to -.34). With lower needs in the social/emotional domain, one's well-being is greater. Finally, mental health needs were moderately correlated with Emotional Stability (rs from -.28 to -.46) and flourishing (rs from -.25 to -.42). These relationships highlight the importance of need satisfaction to overall psychological well-being.

Table 32

Correlations for Personality, Flourishing, and Academic Factors

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Extraversion	-												
2. Agreeableness	.056**	-											
3. Conscientious	0.00	.132**	-										
4. Emotional	.079**	.267**	.362**	-									
Stability													
5. Openness	.260**	.156**	004	.103**	-								
6. Flourishing	.279**	.314**	.310**	.388**	.211**	-							
7. K12 Supportive	038	071**	129**	160**	.102**	181**	-						
School													
8. K12 Positive	119**	068**	130**	216**	.061**	192**	.590**	-					
Peers													
9. K12 Family	013	046*	076**	111**	.097**	152**	.567**	.389**	-				
Support													
10. K12 Adequate	051**	070**	141**	156**	.100**	143**	.639**	.534**	.471**	-			
Educ													
11. College	.001	054**	078**	053*	.047*	099**	.497**	.331**	.345**	.391**	=		
Supportive													
Instruction													
12. College Peers	088**	078**	155**	200**	006	258**	.489**	.459**	.359**	.390**	.636**	-	
13. College Options	002	-0.03	081**	090**	.074**	092**	.408**	.301**	.399**	.509**	.467**	.461**	-

^{**}Correlation is significant at the 0.01 level (2-tailed); *Correlation is significant at the 0.05 level (2-tailed).

Table 33

Correlations for Personality, Flourishing, and Career Factors

Variable	1	2	3	4	5	6	7	8	9	10
1. Extraversion	-									
2. Agreeableness	.056**	=								
3. Conscientious	0.00	.132**	=							
4. Emotional	.079**	.267**	.362**	-						
Stability										
5. Openness	.260**	.156**	004	.103**	=					
6. Flourishing	.279**	.314**	.310**	.388**	.211**	-				
7. Career	118**	110**	135**	221**	.055**	332**	-			
Relatedness										
8. Career	056**	-0.023	136**	201**	.062**	216**	.537**	-		
Development										
9. Career	096**	112**	179**	298**	.055**	364**	.677**	.561**	-	
Satisfaction										
10. Career Skill	059**	060**	217**	260**	0.022	274**	.531**	.540**	.534**	-

^{**}Correlation is significant at the 0.01 level (2-tailed); *Correlation is significant at the 0.05 level (2-tailed).

Table 34

Correlations for Personality, Flourishing, and Social/Emotional Factors

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Extraversion	_										
2. Agreeableness	.056**	-									
3. Conscientious	0.00	.132**	-								
4. Emotional	.079**	.267**	.362**	-							
Stability											
5. Openness	.260**	.156**	004	.103**	=						
6. Flourishing	.279**	.314**	.310**	.388**	.211**	-					
7. Perspective	115**	292**	068**	194**	130**	232**	-				
Taking Ability											
8. Partner Skills	103**	106**	106**	193**	037	235**	.472**	-			
9. Opportunity for	167**	115**	083**	182**	.002	272**	.334**	.330**	-		
Interaction											
10. Social/Emot	138**	145**	305**	364**	-0.016	292**	.464**	.416**	.414**	-	
Learning											
11. Social Skills	344**	217**	138**	260**	136**	344**	.605**	.484**	.450**	.551**	-

^{**}Correlation is significant at the 0.01 level (2-tailed); *Correlation is significant at the 0.05 level (2-tailed).

Table 35

Correlations for Personality, Flourishing, and Mental Health (MH) Factors

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Extraversion	-													
2. Agreeableness	.056**	-												
3. Conscientious	0.00	.132**	-											
4. Emotional	.079**	.267**	.362**	-										
Stability														
5. Openness	.260**	.156**	004	.103**	=									
6. Flourishing	.279**	.314**	.310**	.388**	.211**	-								
7. Young MH	111**	.077**	247**	455**	.019	280**	-							
Needs														
8. Young Trusted	098**	.008	141**	279**	.041*	175**	.696**	-						
Other														
9. Middle Years	087**	117**	231**	406**	024	347**	.571**	.416**	-					
MH Strategies														
10. Middle Years	096**	071**	128**	193**	028	252**	.327**	.403**	.669**	-				
Trusted Other														
11. Middle Years	089**	112**	235**	373**	028	344**	.536**	.361**	.651**	.482**	-			
Identity														
12. 55+ MH	139**	194**	233**	425**	-	420**	.424**	.265**	.691**	.485**	.549**	-		
Strategies					.118**									
13. 55+Trusted	111**	084**	069*	176**	049	291**	.230**	.288**	.411**	.554**	.352**	.668**	-	
Other														
14. 55+ Identity	138**	121**	186**	380**	081*	373**	.409**	.284**	.540**	.409**	.726**	.664**	.473**	-

^{**}Correlation is significant at the 0.01 level (2-tailed); *Correlation is significant at the 0.05 level (2-tailed).

Need Factors Class Comparisons

Table 36 displays average scores for all need factors in each domain. The highest average scores for the full sample were the two mental health factors –Young Trusted Other and Young Mental Health Needs. Overall, there was a relatively high need for opportunities for interaction with similar or interesting others, social/emotional learning (e.g., self-regulation, goal setting, social skills development), and career development (e.g., information about careers and career planning and the ability to pursue desired careers). Table 37 displays average scores by class for the two top-rated K-12 academic needs – for mentors and lessons in academic skill development. These show the same pattern as seen in Table 36 – low need scores for the Low Needs class, high need scores for the High Needs class, with scores between these two for the Moderate Needs class.

While the average scores for the full sample are informative, identifying classes based on participants' needs in the four domains makes it clear that the averages do not apply to everyone. The Low, Moderate, High need distinction is statistically significant in all need areas. Individuals may have variability within the four domains of need, but members of the Low Needs class have lower scores in all need areas, while members of the High Needs class have higher scores in all need areas. The value of this classification is in recognizing that not all highly intelligent individuals experience high or low levels of unmet needs, despite popular mythology to the contrary.

Approximately a quarter of the sample exhibited high needs and another quarter low needs. Based on the proportions of each demographic characteristic for the three classes presented in Figures 4-10, it is evident that knowing an individual's demographic information will not be predictive of their areas of unmet needs. There were significant personality differences among the classes (Table 38), but the effect sizes in class comparisons suggests these are minor, with little practical significance. Although Low Needs class members were on average more extraverted, agreeable and conscientious than members in the other classes, these are negligible differences that might not be noticed. With its higher effect size, Emotional Stability, however, might be a more noticeable personality trait, with members in the High Needs class exhibiting more moodiness, upset, or anxiety than members in the Moderate or Low Needs classes. Subjective well-being (Flourishing) was also significantly higher in the Low Needs class. Satisfied needs are reflected in more positive well-being.

Table 36
Need Domain Factor Mean Comparisons by Class

		Total		Low Needs <i>n</i> =814			Mod	Moderate Needs <i>n</i> =1811			igh Need n=818	ls	
		Std.			Std.			Std.			Std.		
	Mean	Dev.	N	Mean	Dev.	n	Mean	Dev.	n	Mean	Dev.	n	ANOVA Results
K-12 Supportive School	2.21	0.84	2294	1.41	0.53	484	2.11	0.69	1197	3.04	0.54	613	F(2, 2291) = 971.57, $p < .001, \eta^2 = .46$
K-12 Positive Peers	2.51	0.92	2826	1.59	0.66	531	2.46	0.82	1533	3.25	0.59	762	F(2, 2823) = 790.94, $p < .001, \eta^2 = .36$
K-12 Family Support	2.07	1.10	2250	1.33	0.66	496	1.92	0.98	1190	3.02	0.97	564	F(2, 2570) = 479.42, $p < .001, \eta^2 = .30$
K-12 Adequate Education	2.65	0.85	2573	1.79	0.66	494	2.60	0.74	1372	3.35	0.52	707	F(2, 2570) = 801.35, $p < .001, \eta^2 = .38$
College Supportive Instruction	2.01	0.78	2325	1.36	0.41	432	1.88	0.62	1280	2.76	0.69	613	F(2, 2322) = 741.81, $p < .001, \eta^2 = .39$
College Peers	2.12	0.86	2452	1.30	0.38	455	1.98	0.70	1331	2.95	0.66	666	F(2, 2449) = 948.64, $p < .001, \eta^2 = .44$
College Options	2.08	0.89	2569	1.40	0.50	496	1.97	0.78	1402	2.81	0.82	671	F(2, 2566) = 544.18, $p < .001, \eta^2 = .30$
Career Relatedness	2.50	0.84	2573	1.63	0.59	471	2.48	0.73	1400	3.13	0.62	702	F(2, 2570) = 697.35, $p < .001, \eta^2 = .35$
Career Develop- ment	2.70	0.92	2548	1.79	0.69	503	2.69	0.82	1352	3.40	0.63	693	F(2, 2545) = 675.15, $p < .001, \eta^2 = .35$
Career Satisfaction	2.35	0.94	2578	1.48	0.63	485	2.32	0.85	1409	3.02	0.76	684	F(2, 2575) = 539.45, $p < .001, \eta^2 = .30$
Career Skill Develop- ment	2.04	0.88	2580	1.37	0.54	510	1.97	0.78	1382	2.69	0.84	688	F(2, 2577) = 455.62, $p < .001, \eta^2 = .26$
Perspective- Taking Abilities	2.16	0.83	2397	1.65	0.62	512	2.19	0.80	1275	2.51	0.85	610	F(2, 2394) = 171.56, $p < .001, \eta^2 = .13$

		Total		Low Needs n=814			Mo	Moderate Needs <i>n</i> =1811			igh Need n=818	ls	
	Mean	Std. Dev.	N	Mean	Std. Dev.	n	Mean	Std. Dev.	n	Mean	Std. Dev.	n	ANOVA Results
Partner Skills	2.51	1.04	2730	1.79	0.84	522	2.55	1.02	1479	2.97	0.94	729	F(2, 2727) = 228.44, $p < .001, \eta^2 = .14$
Opportunity for Interaction	2.73	0.96	2876	1.82	0.86	556	2.76	0.87	1553	3.34	0.65	767	F(2, 2873) = 560.41, $p < .001, \eta^2 = .28$
Soc/Emot Learning	2.73	0.81	2667	1.93	0.63	513	2.74	0.71	1438	3.28	0.61	716	F(2, 2664) = 604.92, $p < .001, \eta^2 = .31$
Social Skills	2.41	0.94	2772	1.62	0.67	550	2.45	0.88	1494	2.95	0.82	728	F(2, 2769) = 407.70, $p < .001, \eta^2 = .23$
Young Mental Health Needs	2.93	0.82	2226	1.99	0.73	385	2.97	0.70	1210	3.43	0.57	631	F(2, 2223) = 549.56, $p < .001, \eta^2 = .33$
Young Trusted Other	3.06	0.95	2546	2.22	0.90	401	3.09	0.91	1426	3.48	0.72	719	F(2, 2543) = 281.47, $p < .001, \eta^2 = .18$
Middle Years Strategies	2.38	0.86	2180	1.64	0.63	354	2.36	0.79	1195	2.85	0.77	631	F(2, 2177) = 286.06, $p < .001, \eta^2 = .21$
Middle Years Trusted Other	2.44	0.99	2455	1.80	0.77	374	2.40	0.97	1370	2.86	0.93	711	F(2, 2452) = 162.09, $p < .001, \eta^2 = .12$
Middle Years Identity	2.05	0.78	1516	1.46	0.48	285	2.02	0.68	842	2.57	0.82	389	F(2, 1513) = 215.04, $p < .001, \eta^2 = .22$
55+ Strategies	1.90	0.81	900	1.39	0.48	180	1.84	0.73	462	2.34	0.89	258	F(2, 897) = 90.02, p < .001, $\eta^2 = .17$
55+ Trusted Other	2.11	0.93	1010	1.75	0.70	184	2.00	0.88	540	2.54	1.00	286	F(2, 1007) = 52.67, p < .001, $\eta^2 = .10$
55+ Identity	1.66	0.68	750	1.31	0.35	161	1.61	0.58	406	2.09	0.87	183	F(2, 747) = 69.71, p < .001, $\eta^2 = .16$

Note. All class means are different, ps < .001; Range = 1-4

Table 37

Top-Rated K-12 Academic Need Items Mean Comparisons by Class

	Total			Low Needs			Moderate Needs			igh Need	ls	
	Std.			Std.			Std.			Std.		
Mean	Dev.	N	Mean	Dev.	n	Mean	Dev.	n	Mean	Dev.	n	ANOVA Results
3.08	1.05	2908	2.10	0.99	545	3.08	1.00	1578	3.77	0.53	785	F(2, 2905) = 556.11, $p < .001, \eta^2 = .28$
2.07	1 11	2024	2 16	1.07	569	2.08	1 07	1570	2 52	0.82	770	F(2, 2921) = 292.17, $p < .001, \eta^2 = .17$
	3.08 2.97	Mean Dev. 3.08 1.05	Mean Dev. N 3.08 1.05 2908 2.97 1.11 2924	Mean Dev. N Mean 3.08 1.05 2908 2.10 2.97 1.11 2924 2.16	Mean Dev. N Mean Dev. 3.08 1.05 2908 2.10 0.99 2.97 1.11 2924 2.16 1.07	Mean Dev. N Mean Dev. n 3.08 1.05 2908 2.10 0.99 545 2.97 1.11 2924 2.16 1.07 568	Mean Dev. N Mean Dev. n Mean 3.08 1.05 2908 2.10 0.99 545 3.08 2.97 1.11 2924 2.16 1.07 568 2.98	Mean Dev. N Mean Dev. n Mean Dev. 3.08 1.05 2908 2.10 0.99 545 3.08 1.00 2.97 1.11 2924 2.16 1.07 568 2.98 1.07	Mean Dev. N Mean Dev. n Mean Dev. n 3.08 1.05 2908 2.10 0.99 545 3.08 1.00 1578 2.97 1.11 2924 2.16 1.07 568 2.98 1.07 1578	Mean Dev. N Mean Dev. n Mean Dev. n Mean 3.08 1.05 2908 2.10 0.99 545 3.08 1.00 1578 3.77 2.97 1.11 2924 2.16 1.07 568 2.98 1.07 1578 3.52	Mean Dev. N Mean Dev. n Mean Dev. n Mean Dev. 3.08 1.05 2908 2.10 0.99 545 3.08 1.00 1578 3.77 0.53 2.97 1.11 2924 2.16 1.07 568 2.98 1.07 1578 3.52 0.82	Mean Dev. N Mean Dev. n Mean Dev. n Mean Dev. n 3.08 1.05 2908 2.10 0.99 545 3.08 1.00 1578 3.77 0.53 785 2.97 1.11 2924 2.16 1.07 568 2.98 1.07 1578 3.52 0.82 778

Note. All class means are different, ps < .001; Range = 1-4

Table 38

Personality and Flourishing Mean Comparisons by Class

		Total		L	ow Need	ls	Mo	derate No	eeds	Н	ligh Need	ls	
	Mean	Std. Dev.	N	Mean	Std. Dev.	n	Mean	Std. Dev.	n	Mean	Std. Dev.	n	ANOVA Results
Extraversion	3.69	1.76	3441	3.95	1.81	813	3.68	1.73	1811	3.46	1.76	817	F(2, 3438) = 16.35, $p < .001, \eta^2 =$.01
*Agreeableness	5.00	1.32	3441	5.18a	1.34	813	4.95 _b	1.32	1811	4.93 _b	1.28	817	F(2, 3438) = 9.92, p < .001, $\eta^2 = .01$
Conscientious	5.49	1.39	3441	5.81	1.22	813	5.46	1.40	1811	5.23	1.47	817	F(2, 3438) = 37.25, $p < .001, \eta^2 =$.02
Emotional Stability	4.84	1.58	3441	5.43	1.41	813	4.74	1.59	1811	4.47	1.57	817	F(2, 3438) = 86.03, $p < .001, \eta^2 =$.05
*Openness	5.82	1.09	3442	5.78c	1.11	813	5.80c	1.10	1811	5.92 _d	1.04	818	F(2, 3438) = 4.86, p = .008, $\eta^2 = .003$
Flourishing	5.67	0.93	3440	5.98	0.79	813	5.68	0.91	1811	5.36	1.00	816	F(2, 3438) = 95.17, $p < .001, \eta^2 =$.05

^{*} Same subscripts do not differ in post hoc comparisons. All others differ across classes. *Note.* Range = 1-7

Need Factors Age Group Comparisons

Needs tended to be highest in the mental health and social/emotional domains (see Table 36). Although several need factors were significantly different among the age groups (Tables 39-42), few differences were likely to be practically significant, based on the low effect sizes, which indicate the magnitude of differences. There were interesting age group trends, however. In the academic domain, participants in the youngest age group – 18-24 years old – tended to have more supportive environments, with more family support and autonomy in their education (e.g., ability to choose what they learned about, access to educational opportunities; see Adequate Education factor in Table 25) than participants aged 25-69 (Table 39). Seniors aged 70+ reported having more supportive academic environments compared with 35-69 year-olds. They also had a lower level of need for positive peers in their K-12 schooling than all other age groups. Seniors had lower levels of need in Career Relatedness (e.g., finding positive social connections and support from experienced co-workers; Table 40) than all other age groups. The greatest differences (highest effective size) in the career domain were in the Career Satisfaction factor. The Senior age group reported being satisfied with their career achievements, work environment and the prestige they had obtained. This was significantly less true of the other age groups.

In the social/emotional arena, the biggest differences (η^2 = .03) among the age groups was in the Opportunity for Interaction and Social/Emotional Learning factors (Table 41). Seniors reported some need for opportunities to meet similar or interesting others, but at a lower level than the other age groups. The highest needs reported for Social/Emotional learning (e.g., understanding and controlling emotions, goal setting) were in the 25-69 age groups. The Senior 70+ and Emerging Adult 18-24 groups were similar in their lower level of need in this factor.

The largest effect size ($\eta^2 = .08$) was in the comparison of mental health needs as a young person (i.e., youth through college age) among the age groups (Table 42). Adults aged 25-49 had the highest level of need in this area, with the Emerging Adult 18-24 year-olds and 50-69 year-olds reporting less need, but still a significant amount. The lowest level of mental health needs as a young person was reported by the Seniors 70+. As a young person, there was a significant level of need in all age groups for a psychologist or counselor who understood them and with whom they could work. These needs were highest among the participants aged 25-69. Seniors 70+ and Emerging Adults 18-24 were similar in their level of need. In their later years, there were no age group differences in the mental health factors.

Table 39

Academic Domain Factor Mean Comparisons by Age Group

Factors		rging A (18-24)	dult		ung Ad (25-34)			ddle Aş (35-49)	_	(Older (50-59)	ı		Senior (70+)		
	M	SD	n	M	SD	n	M	SD	n	M	SD	n	M	SD	n	ANOVA Results
K-12 Supportive School	2.01ª	.78	60	2.22 ^b	.85	200	2.28 ^b	.83	676	2.25 ^b	.83	833	2.59 ^b	.85	525	F (4, 2289) = 5.347, p < .001, η^2 = .009
K-12 Positive Peers	2.66 ^b	.91	86	2.57 ^b	.91	277	2.63 ^b	.89	868	2.51 ^b	.91	1016	2.28ª	.96	579	F(4, 2821) = 14.253, p < .001 $\eta^2 = .020$
K-12 Family Support	1.58ª	.91	71	2.07 ^b	1.10	185	2.16 ^b	1.10	646	2.08 ^b	1.10	831	1.99 ^b	1.08	517	F (4, 2245) = 5.541, p < .001 $\eta^2 = .010$
K-12 Adequate Education	2.49 ^a	.79	74	2.77 ^b	.78	250	2.79 ^b	.80	810	2.67 ^b	.86	915	2.36 ^a	.89	524	F(4, 2568) = 22.702, p < .001 $\eta^2 = .034$
College Supportive Instruction	1.94	.73	49	2.05	.76	225	2.03	.795	721	2.04	.792	836	1.94	.74	494	F(4, 2320) = 1671, p = .154 $\eta^2 = .003$
College Peers	2.16 ^a	.85	55	2.25 ^b	.79	246	2.20 ^b	.87	768	2.10 ^b	.87	867	1.96 ^b	.82	516	F (4, 2447) = 7.509, p < .001 $\eta^2 = .012$
College Options	1.88ª	.82	57	2.09 ^b	.84	244	2.15 ^b	.86	784	2.08 ^b	.92	921	2.01 ^b	.90	563	F (4, 2564) = 2.950, p = .019 η^2 = .005

^{*}Superscript letters indicate homogeneous subsets

Table 40

Career Domain Factor Mean Comparisons by Age Group

Factors		rging A (18-24)			ung Ad (25-34)			ddle A ₃ (35-49)	_	(Older (50-59)			Senior (70+)		
	M	SD	n	М	SD	n	M	SD	n	M	SD	n	M	SD	n	ANOVA Results
Career Relatedness	2.54 ^b	.92	39	2.57 ^b	.81	243	2.61 ^b	.82	824	2.53 ^b	.82	936	2.26ª	.85	531	F(4, 2568) = 15.059, p < .001 $\eta^2 = .023$
Career Development	2.38ª	.98	46	2.75 ^b	.84	240	2.80°	.89	811	2.74 ^b	.93	927	2.50 ^b	.97	524	F(4, 2543) = 10.508, p < .001 $\eta^2 = .016$
Career Satisfaction	2.41 ^b	.81	36	2.58 ^b	.92	238	2.53 ^b	.93	817	2.34 ^b	.93	936	1.99ª	.88	551	F(4, 2573) = 32.776, p < .001 $\eta^2 = .048$
Career Skill Development	2.09 ^b	.94	47	2.22 ^b	.80	242	2.15 ^b	.92	810	2.02 ^b	.87	934	1.84ª	.84	547	F(4, 2575) = 13.518, p < .001 $\eta^2 = .021$

^{*}Superscript letters indicate homogeneous subsets

Table 41
Social/Emotional Domain Factor Mean Comparisons by Age Group

Factors		rging A (18-24)			ung Ad (25-34)			iddle A ₃ (35-49)	_	,	Older (50-59)			Senior (70+)		
	М	SD	n	М	SD	n	М	SD	n	М	SD	n	М	SD	n	ANOVA Results
Perspective- Taking Abilities	2.19	.89	78	2.07	.85	214	2.16	.82	708	2.19	.84	870	2.12	.81	527	F(4, 2392) = 1.262, p = .283 $\eta^2 = .002$
Partner Skills	2.56 ^b	1.05	71	2.51 ^b	1.06	253	2.64 ^b	1.03	854	2.50 ^b	1.03	983	2.35 ^a	1.04	569	$F(4, 2725) = 6.797, p < .001$ $\eta^2 = .010$
Opportunity for Interaction	2.89 ^b	.93	97	2.78 ^b	.99	278	2.86 ^b	.93	905	2.76 ^b	.94	1012	2.43 ^a	.98	584	F(4, 2871) = 20.264, p < .001 $\eta^2 = .027$
Soc/Emot Learning	2.55 ^b	.83	92	2.86°	.79	253	2.87°	.76	843	2.70 ^b	.82	943	2.51 ^a	.82	536	F(4, 2662) = 20.441, p < .001 $\eta^2 = .030$
Social Skills	2.48	.92	97	2.45	.96	262	2.46	.92	861	2.44	95	977	2.28	.95	575	F(4, 2767) = 4.032, p = .003 $\eta^2 = .006$

^{*}Superscript letters indicate homogeneous subsets

Table 42

Mental Health Domain Factor Mean Comparisons by Age Group

Factors		ging A 18-24)			ung Ad (25-34)			ddle A (35-49)		(Older (50-59)			Senior (70+)		
	М	SD	n	М	SD	n	М	SD	n	M	SD	n	М	SD	n	ANOVA Results
Young Mental Health Needs	2.75 ^b	.86	61	3.15°	.73	225	3.16 ^c	.70	740	2.87 ^b	.84	795	2.52ª	.84	405	$F(4, 2221) = 49.637, p < .001$ $\eta^2 = .082$
Young Trusted Other	2.71a	.95	77	3.11 ^b	.91	264	3.23 ^b	.90	833	3.07 ^b	.94	904	2.78ª	.98	468	F(4, 2541) = 20.919, p < .001 $\eta^2 = .032$
Middle Years Strategies	2.35	1.0	10	2.43	.83	233	2.49	.85	747	2.39	.86	798	2.14	.82	392	F(4, 2175) = 11.417, p < .001 $\eta^2 = .021$
Middle Years Trusted Other	2.73ª	.85	11	2.39	1.03	255	2.50	1.0	829	2.48	.98	900	2.26	.93	460	F(4, 2450) = 5.491, p < .001 $\eta^2 = .009$
Middle Years Identity	2.27	.83	6	2.15	.78	143	2.19	.81	457	2.03	.76	579	1.86	.72	331	F(4, 1511) = 9.746, p < .001 $\eta^2 = .025$
55+ Strategies										1.93	.82	517	1.85	.80	383	F(1, 898) = 2.111, p = .147 $\eta^2 = .002$
55+ Trusted Other										2.12	.97	571	2.08	.88	439	F(1, 1008) = 0.438, p = .508 $\eta^2 = .000$
55+ Identity										1.71	70	414	1.61	.65	336	$F(1,748) = 3.492, p = .062$ $\eta^2 = .005$

^{*}Superscript letters indicate homogeneous subsets

Interview Analysis

The interviews of 10 Mensa members allowed us to go into greater depth on the subjects covered in the survey. Table 43 includes descriptions of the participants. The interview protocol is found in Appendix B. Interviewees described at length their areas of unmet need.

Table 43

Interview Subject Demographics

Interview ID	Gender	Age Group
01N1	Nonbinary	18-24
02F1	Female	18-24
03F2	Female	25-34
04F2	Female	25-34
05F3	Female	35-49
06M3	Male	35-49
07F3	Female	35-49
08F4	Female	50-69
09 M 4	Male	50-69
10F5	Female	70+

Nearly all the interviewees were lifelong learners, with several currently in graduate programs. Even the 70+ participant was pursuing a master's degree through an international fellowship. Participants differed in the resources available to them. They gave examples ranging from ample opportunities provided from generous parents to missed opportunities due to financial hardship. Three of the ten interviewees had attended military academies, which provided challenge and long-term opportunities to serve. The content of the interviews reflected much of what was seen in the survey data. The in-depth descriptions of their experiences in the four domains offer valuable insights.

Interview Comments in the Academic and Career Development Domains

Many of the interviewees had positive experiences in their K-12 schooling, with gifted programming and supportive teachers. This was not true for all, however, as these quotes illustrate:

I think the main thing is that, you know, when you know, your IQ is like kind of high when you're kind of seeing things really quickly and people are kind of slow, you're just kind of drifting through, you know, instead of like, if you're a car, instead of just like, you should go in the fast lane instead of turning around. And I feel like I was turning around most of my life, you know, instead of just going to the fast lane. So I think it'd be nice for all the kids who are smart and have to be isolated, just, you know, change lanes. 03F2

Everyone there [in college] was a very high achieving person. And I realized when I got there what I had been missing before. My grade school was fine. Around middle school, it started to go south. And it got so bad that by senior year in high school, I really thought about taking a GED if they would let me and just go ahead and go to college, quit in school. My senior year in high school was pretty much a waste of time. And actually junior year was not too much better or sophomore. But luckily we had a very good public library and that's really where I got any of my education. 09M4

Academic and career planning were not evident in the interviews. Very few had career goals or a plan for their future. "Luck" carried them to good places. They did not see themselves as having played a role in prestigious college admissions or jobs that led to fulfilling careers, or they didn't recognize their role.

I actually walked into the door of the Merchant Marine Academy thinking that it had to be connected to the Marines somehow or something. All I knew was it was free and they had an engineering program. And I got in there and realized, oh my gosh, this was blind luck taking care of me once again. 09M4

I started in this industry 22 years ago almost 23 but it was like I say it was a complete accident. I came to visit one summer here and I was staying with my aunt and I was like well, if I'm gonna stay any longer, I need to get a job. And I got a job as a receptionist at a local newspaper. And then they were like, do you wanna go into sales? And I was like, no, and they're like, you'll make more money. And I was like, okay. So I started my sales career and I've just, that's what I've done. It wasn't a conscious, like, oh, I tell people, nobody's like, I wanna sell advertising when I grow up. But it's something that I love. I get a lot of fulfillment out of it. 07F3

Guidance was lacking for many. Some were first generation college students, with parents who did not know how to advise them.

So it took me a very long time to finish my degree, mainly because the money concerns, concerns about fitting in, kind of depression, and dealing with, you know, I wasn't sure if this is what I wanted to do. 02F1

This is my second semester of grad school. I think I'm going to graduate next year [in library science]. I'm not sure exactly when. (Interviewer: So you've decided library science is what you would like to do?) I kind of fell into it. So I graduated with an international studies major and a Spanish minor and I still didn't know what I wanted to do with my life. I applied to over 150 positions and I got rejected from all of them. I was really struggling because it seemed like I couldn't find a job in anything that I was remotely interested in. 04F2

It is important to be aware that any academic or career guidance offered to adolescents may be rejected by them, as this interviewee comments.

I think what I really needed was like a reality check, more or less. Because like everybody, everybody told me that I was kind of barking up the wrong tree a little bit, but I kind of didn't believe them, I guess. It would have been hard to convince a teenager sometimes. ... I guess my mind wasn't open enough at the time. 01N1

Mirroring the "Too Much" data from the surveys, expectations from parents and teachers was a problem for this interviewee:

Part of what made me struggle so much going forward was the feeling that, and this never left to a large extent, the feeling that of course you got an A, you're supposed to get an A. You know what? There was no room to be celebrated. It was only room to fail. You know? Heaven forbid I should get a B, even though I wasn't doing any work to speak of. Heaven forbid I should get a B. Because I'm smarter than that ...but there was never a celebration for anything that was good. 06M3

A few of the interviewees had been diagnosed with one or more disorders, which created problems for them in school.

I had ADHD as well, so I kind of didn't pay attention as much. And even though I could answer all the questions, the teacher didn't really like that I didn't pay attention to her. And so she made a big stink about it. They moved me to a self-contained classroom for a couple of years. 01N1

It was always like the people like turn the blind eye to like people's mental illnesses and stuff. Like it was hard for me, like I got diagnosed with bipolar and borderline so and I was just really confused and it's just kind of like people you know they're gonna blame you for having problems so it just was it was seen as like a flaw I had. 03F2

When I was a kid ADHD meant you couldn't sit still and you were, you know, a little boy that ran around the room screaming and throwing things at the wall and that wasn't me. That was never me. But my internal world was like a tornado. My thoughts are like, the best way I can describe it to people is, imagine walking into a crowded restaurant and your table is in the back and you know, they're leading you back to your table and you're hearing 15 conversations, but you can only hear a sentence of this one or a word from that one. And you can't grab onto any of them. That's what it was like in my head my entire life. And I thought that was normal. I thought that's how it was. I thought that's how everybody was. So getting on meds now and calming that down to like three voices, three conversations is a blessing....We late diagnosed people have to mourn the loss [of what] we might have had. 06M3

In one case, high intelligence allowed for skating through school, which led to problems in college.

I've got ADHD as well, which I didn't know until like two years ago. So all my work was done last minute, all of it was done when it was urgent. I'm sure that didn't help me any either. But that carried through high school. I didn't work on anything ahead of time. I skipped as much classes I could. I was an athlete and I was really smart and I was getting good grades so they let me get away with an awful lot. Yeah. And then college. I went to

West Point and immediately struggled there because I had not learned how to work or how to study or how to do any of those things ahead of time and all of a sudden all my time was occupied. All the time that I used to use to screw off until the last minute was all gone and I didn't know how to react to that and my academics my freshman year I think I came out of the year with like a 1.96 GPA. 06M3

Among the older interviewees, several had changed jobs and even careers. Young interviewees were sometimes struggling to find jobs or to settle on a career. One participant was hired for a position through a contact made through Mensa.

You know, I've tried to apply to a number of positions different fields that would interest me and I do not hear back from them ever. And so what happened is I was at a Mensa mixer.... I had applied actually to [a position] when I first came there as, like hey, it's a job [I can do]. I need money. Never heard back. I was talking to someone there [Mensa mixer] saying, you know, I was trying to break into the [workplace] and he knew a [person] who worked there and I got an informational interview with her. And she said you know what you seem like, you know what you're doing. I will vouch for you. She said resubmit your resume and I did and I let her know and I did it in the morning and then that noon I got a call asking for a phone interview. ...So I pass the phone interview, I pass the in-person interview, I get hired and I've been here ever since and I need health insurance and it's not bad. So I'm kind of rolling with it. Okay, this is my is this my first choice? No, but I couldn't get into my first choice or my second choice or my third choice. 04F2

Interview Comments in the Social/Emotional Domain

Some interviewees had strong social supports and mentors in their lives.

I have a great group of friends and family. I think people just being very accepting of who you are and giving you that room and grace and not trying to change you, I think has been very crucial as I've grown and developed. 07F3

I had one chief engineer who was a mentor. I mean, you learn things from everybody. But I had one guy who really kind of pulled me aside and said, okay, you know, quit messing around, do these things. And then it worked. 09M4

Well, that Mr. Harvard, who [hired me], we remained friends, he passed away about a month ago, and he was 91. And he was a wonderful mentor to many, many people. 10F5

Teachers were mentors to several of the interviewees.

I had a really good teacher. I had a math teacher who was super duper smart and he liked me. He saw something in me and so I learned a lot of math during school. ... He] and a few teachers wrote me letters of recommendation [for West Point]....He was like a dad to me. 05F3

Who supported me? Definitely like every single social studies teacher I had, I was in this like a law and order academy and I would stand up and talk like a lot. And they were always supportive of me. 03F2

Interviewees commented on their cognitive differences, which could impede mutual understanding with others.

If you have a brain that works a certain way, it's kind of on overdrive all the time and now you're dealing with people who don't have that, you have to understand that. You can't just think everybody thinks like you do and knows what you know because then you'll just be disappointed. 05F3

My head is always running, I think, and to keep it quiet is, is a bit of a challenge. So I don't know if that kind of goes along with the feelings and the emotions, but I keep it inside. I don't think too many people will notice that they say, Oh, you're always in a good mood and always happy.08F4

Social connectedness was a challenge for nearly all in their early years and for some even as adults. Even those who named numerous friends and social connections claimed they didn't fit in.

I think kids are able to tell when you're different. They may not know how or why you're different and what form that goes, but they can tell and depending on the kid they may decide to ostracize you for it because they don't understand you or you're weird. 04F2

I mean, kind of even before school, before I was in grade school, because I was reading, writing, and using the internet when I was three years old. And I didn't know that that was, that was not normal. So I used to talk about reading and I would doodle little stories and things. And my mom would be so proud. I just didn't get it. And then I would be in first grade and second grade and other kids didn't know how to read. So it felt immediately very alienating to me. And I used to get into a lot of trouble because I always finished my assignments early. ... I felt really lonely a lot of the time. 02F1

In school, I felt like I sort of ostracized myself, where I didn't seek out the opportunity to sort of bond with other people and do things that are interesting, go out of my comfort zone. 01N1

I would say most of my life actually I felt not accepted. It's only recently when I've learned to, you know, just go with the flow and try to, you know, get along with people, relax a bit. 08F4

I felt accepted because I was an athlete and I was on sports teams and I was often in a leadership position on those teams. So that's where all my friendships revolved around. I mean I was friends with the smart kids too, but that's a much smaller group and a much more difficult to navigate social experience than being the popular athlete type. But I had to live in both worlds. So I was never, to say accepted, I felt accepted in both, I think. but I never truly felt like I was a member of either. (Interviewer: You felt like an outsider?) Always, my whole life, wherever. And then at West Point, I'd never ever for one minute while I was there felt like I belonged, not once. 06M3

Being socially disconnected can be incredibly painful. In this example, early experiences of rejection had a lasting, damaging effect.

I think that's what I would wish...maybe like little groups or like all the gifted kids to be around each other without being pretentious. You know, just have them sit there, talk

about their lunches or something. Just having friends that were similar to me would be nice instead of people always knowing that they were people that were less intelligent than me and me feeling guilty for being more intelligent and sabotaging things. ...

Normal people don't understand that we were like made fun of our entire lives. We were like looked down upon. So it's like of course we're going to be egotistical and like malignant sometimes. I think it's just kind of an innate thing that a lot of smart kids don't want to, because they see each other as competition, right? So I think maybe for it to be like more of like a like a tribal bonding thing in the beginning of their lives would be better instead of being all like isolated and like competitive and like fighting each other for like the first place and stuff because I'm always going to be super competitive. I can't really do anything about it. I would love if I were like a peaceful person, but like I just always have wanted revenge for how people treated me like ever since I was little. Yeah because it's like I never got what those people got, if that makes sense. I never had this like sense of like belonging in anything and I think that makes me really resentful deep, deep down. 03F2

Social skills were a highly rated need in the survey and they were lacking among some of the interviewees.

What would have made it better? Gosh, just being able to have conversations. I was blessed because I have a mom who's amazing and I mean she didn't make it through college but she wasn't, you know, encouraged to do that back then. ... She's lived in Europe, and she knows a couple of languages, and she uses big words when she speaks. And so I had her to talk to. But I didn't have that at school. I couldn't have deep conversations with people because they just didn't have those. I think that would have helped. 05F3

One interviewee suggested that it may be quite difficult to teach social skills.

It's like how do you teach social skills and dynamics to a child? Like how do you tell them? Okay. So this kid will be individually nice to you when you're alone, but when they're surrounded by their friends, they're gonna be mean to you. And here's how you respond to that or here's how you are new to the school and here's how you go to a group

of people who've all been friends their entire lives and cheerleading practice and Girl Scout camp together and here's how you break into that. And one of them is going to be kind of weird to you and you have no idea why. Like there's no classes for that. 04F2

However, several provided examples that these skills can be learned.

I think that as an adult, and especially in the, you know, the [elite work] world, I had to work on my social filter. ... I do think sometimes, you know, that 2%, you say it so accurately and with precision and you sort through details and you sort through things in ways that sometimes are not socially filtered. I think that's the best way to say it. And it was something that I definitely had to work on. So you had to change your way of thinking, way of behaving – not your way of thinking, your way of behaving. Being a little more discerning as to what I said and what I didn't say. I had to make a conscious effort at it. And I would say that probably, you know, ... a lot of Mensans can be very blunt and they're so spot on and they're so smart and they're probably right. It's just that they probably shouldn't say [it]. 10F5

Maybe it would be good to teach gifted children, like, don't like conform to what other people are telling you, because like, they should know from the beginning that they're gonna feel kind of weird. They're gonna feel weird for their entire lives and it would be good, you know, just to be like, "This is why you feel weird and you're gonna have to feel weird forever, but it's fine." Because other people feel weird too, you know? This is like a little preface to existence or something, you know? And I didn't get that until I was 20 or 21 when I had to take the IQ test. 03F2

Interview Comments in the Mental Health Domain

The interviewees were asked directly "Do you think it would be hard to find a mental health professional who understands clients with a high level of intelligence?" Many believed it could be challenging. However, many of them had had counselors in the past and noted that it can be challenging for anyone to find a good fit. It is necessary to be open to changing counselors after giving the relationship an earnest effort.

Like, the only therapist that I found who works was like \$400 an hour. And I feel like a lot of people can't really afford that. And yeah, if you don't have a therapist who understands you, you're not going to be able to make one that doesn't understand you understand you. So you're going to have to pay a lot for therapy if you have a mental problem and you're intelligent. That's just the price we pay, because you're looking at the top 1% of doctors, and that's the baseline. So yeah, I think I've had two doctors. I had to pay a lot, but those two doctors were like the ones who understood me, and I think the ones who are kind of cheaper-ish, you're gonna have to really... you're gonna spend a lot of time explaining, and that's just gonna make you feel worse and like less understood and empty, because that's how I always thought when I would try to like try things out with the cheaper therapist because I thought it was more convenient. They just drain you of your energy. Like, they just make you feel weird. 03F2

I mean, I'm of the opinion that, okay, people can conceptualize other people's theories of mind. Like, you can know what a person is experiencing. You can know their troubles. But you can't really you can't really empathize with it unless you've had that experience. So that's akin to asking how many mental health professionals are within that subset of people who have had those experiences. So I would say, you know, proportionately, probably not a lot, probably only 2% of them. It's just that probably the type of person who's had that experience would not be easy to find. 02F1

I don't know because I've never sought out a therapist specifically for that [therapist who is highly intelligent]. That could be beneficial. I'm not really sure because I know it seems like most people have, at least initially, problems finding a therapist that works for them. It's not uncommon for people to meet with one or two or maybe even three therapists before finding one that works for them. So maybe that [high intelligence] would have been helpful or maybe not. 04F2

I suspect that a lot of the practitioners themselves are very intelligent and more of the challenge might be to find someone possibly in your own age group demographically to relate to. For example, if I'm coming in and saying, at this point in my career, this is what I've been through and relaying my entire experience of someone is of the millennial

generation 30, is he or she really gonna be able to understand someone older? I know academically, yes, but from life experience, I don't know. 08F4

I was talking to somebody about, they just tried a new therapist and they're like, well, I didn't like it. And I said, no, it's probably, you can't go to one appointment and be like, yeah, it's like a date, you know, you kind of have to try it out. So I think it's really, I think it's important that people recognize that just because they go to one therapist, it doesn't mean to say that it's not it. It's kind of finding that right person that can help you in the way that you need. 07F3

When I had to move up to a different therapist, I felt like, I'm not really sure. Like, it felt wrong, like, in the sense that, like, I guess he didn't really get me too much. And I couldn't put my finger on that at the time. So I kind of just stopped going at that point. And I'm back in it now. So like I'm working with it and I'm all I'm open minded about changing. 01N1

Therapists may find highly intelligent clients disagreeable and unwilling to accept any imperfection.

The times when I went to counseling for this, that or the other, I always felt that I had pretty good counseling. I never really, if I went to somebody and I really felt that it was like it really wasn't a match, then I would just not go back and find somebody else. Now my former husband, he has an IQ of 182. So, super high IQ. Definitely could use some social filtering, but a brilliant man....He would just burn, I mean, what [he] would do to mental health professionals was, I mean, he could just talk them into a ditch. And if you're trying to get therapy, I mean, you don't wanna talk your therapist into a ditch....So, I would say maybe I always felt that I could find people who were really helpful to me. I never felt that I couldn't find anybody, but my IQ is probably about 140.... At 182, it's just a whole different scenario. 10F5

Yeah, I think it'd be real hard [to find a mental health professional who would understand clients with a high level of intelligence]. Well, first of all, it's hard to find people who are good at their job, no matter what the job is, right? I mean, people have value, but some

people are just not good at what they're doing....So, but yeah, I think it is hard because I think people with high intelligence, they're talking to someone who says something incorrect or that isn't logical, you totally lose trust with that person. And a lot of people aren't as logical as like, Mensa-level people. And so it's really hard to find someone you trust. 05F3

Interview Summary

In addition to sharing their experiences in the four domains, interviewees shared their ideas for the Mensa Foundation to address unmet needs. They recommended mentorship programs, support groups, career advisors, think tanks, Mensa schools or outside-of-school programs, donor-funded projects, referral programs, parent guides, workshops, regular columns, publications that reach professionals, and more. Job boards and mental health professional referral databases were the most frequently mentioned recommendations.

The interviews confirmed the resilience and resourcefulness of Mensans, but also exposed vulnerabilities. Among Mensans, as in all groups, there is variation in their experiences. The heterogeneity in this population is vast. While there were some consistencies in their experiences, no single pattern will fit all Mensans. The interviews provided insight into their development and clarified areas of need.

Discussion

This study of unmet needs among highly intelligent individuals – members of Mensa, identified gifted individuals, those who have received high scores on a test of ability or achievement, and those who have self-identified as highly intelligent – provides evidence to guide possible directions for future Mensa Foundation supports and services. Unmet needs were disproportionately distributed across the sample of this study, as the classification of participants into Low, Moderate, and High Needs classes shows. A search for "characteristic needs" must consider this uneven distribution. High overall ratings of need were found in every domain, but not all participants experienced these similarly. The latent profile analysis identified a large portion of participants who did not have a high level of needs in any area and had low needs in at least one domain. Almost exactly one fourth of the sample were classified in the Low Needs class based on their low scores in at least one need domain. Another fourth of the sample had a

high level of needs in at least one domain. The largest proportion of the sample exhibited moderate scores on average. This suggests that not all highly intelligent individuals may be in need of support and some will be in greater need of support.

Unmet needs were correlated negatively with subjective well-being, meaning that more frequent unmet needs are associated with lower ratings of well-being. Correlations with the need domain factors were all negatively significant, but not at a very high level (*rs* from -.09 [College Options] to -.26 [College Peers]). As needs in every factor increased, subjective well-being (Flourishing) decreased. Although the three classes differed in the level of subjective well-being (Flourishing), average ratings were still relatively high (between 5 = "Slightly Agree" and 6 = "Agree"; see Table 38). This speaks to the resilience and optimism of this population. Members of the High Needs class, however, had significantly lower subjective well-being scores than that of their counterparts in the other classes. Addressing unmet needs can support the goals of the Mensa Foundation to make things "[go] right in life" (Peterson, 2006, p. 4) for highly intelligent individuals in all settings.

The study found differences in level of need among some of the age groups. Seniors age 70 and up reported a generally lower level of needs, although this was rarely a big difference. Subjective well-being was lowest in the youngest age group. Members of all age groups expressed a need for lessons in academic skill development, but Young Adults 25-34 and Middle Age 35-49 reported a greater need than Seniors 70+. Participants in all age groups reported a high need for mentorship in their K-12 years, with Seniors 70+ and Emerging Adults 18-24 having slightly lower levels of need than the other age groups.

Participants' self-reported personality characteristics were related to their ratings of unmet needs (see Table 32). As they were more emotionally stable and conscientious, they tended to have fewer unmet needs related to their career development. Being more agreeable was associated with fewer needs in the social and emotional domain. Interestingly, openness (e.g., open to new experiences, creative, complex), a personality characteristic that tends to be positively correlated with intelligence (e.g., Ackerman & Hegestad, 1997), was not related to unmet needs. Personality characteristics tend to be relatively stable across the lifespan, suggesting that it makes more sense to address issues in the environment than to attempt to change personality. A person who is not emotionally stable will benefit more from a supportive environment than from efforts to make them change their personality.

Recommendations

The evidence garnered from this study indicates areas in which the Mensa Foundation could provide supports. Participants themselves offered suggestions for solutions to the problem of unmet needs. The themes of their suggestions can be found in the "Recommendations" tables above: Tables 6, 9, 12, 14, and 19. The following recommendations utilize these suggestions along with research and experience in promoting well-being among highly intelligent individuals. Figure 11 offers a visual of the recommended action areas through which unmet needs can be addressed. Appendix D describes possible steps to be taken in each action area.

Figure 11

Recommended Actions to Address Unmet Needs



Support Academic Skill Development

The item "Lessons in academic skill development (e.g., time management, study skills, etc.)" received the second highest overall score, suggesting that many participants "did not have this and needed it." Participants commented on the negative impact of their lack of study skills. Although they could understand the content, not knowing how to apply their abilities to their schoolwork was inhibiting and the source of underachievement and lost opportunities. The transition from high school to college was a shock to students who had "skated by" (1863GM3M). One participant described this scenario:

I went to a high-ranked, demanding technical college straight from public high school, which I had skated through. I did not know how to properly do homework, and found college very overwhelming (and was in a major that was known for sleep-deprived students!). It was hell, and I never considered continuing on for a masters or doctorate: I wanted out as soon as I got my degree! Some coaching on study skills and timemanagement, and dealing with depression would have been so helpful. (860MF4M)

Highly intelligent students in relatively unchallenging settings often find they do not need study skills to be successful in school. Not only would formal training in study skills have benefited them when they did meet a challenging curriculum, it may have helped them to be more successful in school than they knew they could be. It is no sign of weakness to have to learn basic skills. The Mensa Foundation could support the academic development of youth by normalizing the need to learn these skills, regardless of how intelligent one may be. Providing workshops or training materials would be a major benefit to highly intelligent young people and older ones who never had to (or had the opportunity to) learn these skills.

Support Academic and Career Planning

Career planning is closely related to academic planning, as certain disciplines require specific educational foundations for a seamless trajectory. Identifying a career path, even a general domain of interest, at an early age can inform scholastic guidance. Students should be exposed to a wide variety of potential occupations, with practical information about steps that can be taken to pursue a career of interest. Highly intelligent youths may be particularly in need of early guidance, as Moon (2002) suggested.

Mentors are important in career planning. Many participants reported they had not received guidance that could have given them the direction they needed.

Career kind of just "happened", no guidance toward anything except parental guidance toward a different career I had no interest in. (2865MF4M)

No teacher or counselor from middle school onwards talked about college options - not a single one. No one explained financing education. When I did get fin aid form, my mother and step-father would not provide the necessary info. So, despite graduating k-12 at 16 I had zero support in school or at home in how to navigate getting into college. (1856MF4H)

No one explained what the SAT was and how it was important for college....no one helped me understand college majors as they related to real jobs....no one explained how to pick a university or how to apply" (329SF3H)

Advisors should be aware of issues that occur among IWGT, such as multipotentiality, which can complicate planning (Corwith & Olszewski-Kubilius, 2012; Sajjadi et al., 2001):

Too many options, and not enough guidance or help in determining which one would be best. When you are good in almost every subject, you hear, "You can be anything you want." It would have been nice to have someone help me find the right thing. (880MM4M)

Poor guidance can lead to wasted potential, as in this example:

Being aware of me actually being smart and knowing how to make use of my brain would have helped me staying on track and pursuing my career of choice. Instead I dropped out and chose something way below my ability which makes life much harder now. (482SF3H)

Or hardship, when no guidance is available to share information about financial support for educational opportunities, as this participant described:

[Frustrated by] money issues throughout my undergraduate degree; I would have benefited from internships and work experiences to learn how to use my degree. (1612MF4M)

The Mensa Foundation could support academic and career planning through coordinated mentorship networks. They could sponsor training or develop and disseminate materials intended to advise students in K-12 and college settings. School counselors should be prepared for students with exceptional ability, to adequately advise those who could pursue academic or career options far beyond what would be expected of their classmates.

Provide Financial Supports for Academic and Career Opportunities

Academic and career planning will be for naught to the highly intelligent individual who lacks resources to pursue options. Many participants were frustrated by missing out on opportunities when they did not have the financial means to participate. Providing scholarships, fellowships, or funding internships; all could be beneficial to highly intelligent individuals without adequate financial resources to pursue opportunities for talent development. This participant describes what would have helped him avoid academic frustration:

Free education, absent the financial barriers I faced would have enabled me to advance more rapidly. But the struggle to overcome barriers and find a path created the resilience and creativity and problem solving abilities I am known for now. Frustration can be a motivator for fruitful change. (2954MM5H)

Even though the lack of financial resources had a negative impact, he felt it was beneficial in the long term to have experienced that difficulty. Not all participants experienced the lack of financial resources that way:

Because of my parents' financial difficulties, I was not able to apply to university, so I had to choose a domain of interest only accessible in college. So I chose photography, the only course that picked [sic] my curiosity and artistic need for expression. Otherwise, psychology or sexology would have been a domain I would have dived and loved. But I couldn't afford many years of learning. Therefore, the great prodigy, to become a doctor, only became a photographer. I feel like my brain was rejected out of the system, when money decided what my brain could invest in... Could study in, could become... I feel this is a society's waste of my potential!

Anyone diagnosed as gifted, should have their education covered!!! That is a way to make our gift, a gift to humanity... (2536GO3H)

It was frustrating for some participants to be constrained by a career that was chosen purely for a salary. The need to pursue a career for financial reasons was often less than satisfying:

Making money to survive and have a family demands that one takes a job that pays. In a capitalist society high paying positions rarely coincide with meaning or usefulness to society, but are more determined by supply and demand. Thus any activity I would have considered challenging and meaningful didn't pay well. Anything that did, I didn't consider challenging or meaningful. It was important to have a certain amount of money

because I wanted a family and this puzzle was difficult to reconcile without taking jobs I didn't like. Once I had a family there was no turning back. As the years went on this challenge only got harder. (2570MM4M)

Not being able to do what I really wanted and had to focus on what was going to make money. (705MF4H)

There is no assurance that such efforts would have impacted many of the disaffected employees in this study, but it may be possible that providing financial support for entrepreneurial projects, small business startups, or other funding projects would help highly intelligent explore their creative ideas and find success in a more autonomous career path.

Foster Social Connectedness

Participants faced challenges with making social connections, often because others did not understand them, but sometimes because they did not know how to connect. They lacked social skills or felt too different. In some cases, they were not interested in connecting with others who did not value the same things they did. As is often the case when exceptional talents are developed, peers who were once similar will diverge as one becomes more proficient. Maintaining relationships requires skills and desire from both parties. At the K-12 level, highly intelligent students at every age could benefit from formal lessons in understanding the emotions and behaviors of others and themselves. Appreciation for diversity should include an appreciation for neurodiversity. The Collaborative for Academic, Social, and Emotional Learning (CASEL), provides a framework to advance SEL. Acceptance from peers requires all students to develop social skills, not only the highly intelligent ones. Based on participants' feedback, these lessons should continue beyond K-12 schooling and into the workplace. Developing and maintaining mutually satisfying relationships with romantic partners was a highly rated area of need. Training for social skills should include support for romantic partnerships.

These highly intelligent individuals struggle to find others with similar abilities or interests, as this participant describes:

They [others in a relationship] don't feel real to me unless they see things on a higher level. Other deep thinkers are hard to find but OH I just drink it up when we meet. It's

like I can finally stop being BORED by pointless talk about interpersonal BS or media consumption and take off the mask of mediocrity. (205MF3H)

Mensa already provides some support for social connections: "Attending Mensa meetings and gatherings is one of the best things for emotional support for me." (748MF4M). Another participant stated, "For all its flaws, Mensa has been my primary social group and brought me many new friends." (2125MF5M) Even so, participants reported not having enough "opportunities to meet others" with similar intellectual abilities, similar interests, or who "I find interesting." One participant commented, "I believe a lot of gifted people are socially awkward, which makes them difficult to meet" (394MM3M) – another reason to encourage social skills training. This seems like an excellent opportunity to explore networking technology. A dating app for Mensa members or an app to connect members with others who share interests (e.g., role-playing games, astronomy, meteorology, anything) may be well-received, especially by younger members.

It is important to better understand the items in each domain that received "I had too much of this and needed less" responses. Participants experienced too much pressure or too much awareness or feeling of others' needs or too much misinterpretation of their differentness by others. The unmet needs the Too Much responses allude to in Table 22 are those of acceptance and understanding, including an understanding of the self. Any efforts at fostering social connectedness should include helpful information to parents or teachers about the effects of pressure they apply. This does not mean they should not be demanding of highly intelligent individuals in their lives, but there must be a balance with responsiveness to that person's needs (Baumrind, 1971). Social skills training may help those who feel too much empathy, which can be exhausting. Being misunderstood by others who misinterpret cognitive engagement as mental illness can be addressed through education.

The highest rated of all needs was for "Mentor(s) in my areas of interest." Mentors were mentioned as a desired – and sometimes lacking – resource to offer guidance in every domain: academics ("A lack of counseling, mentorship, and guidance" [2718MN3H]), career development ("Career advice [mentoring, a workplace "rabbi"]" [1380MM5H]), social and emotional ("Well, I think a better social education and/or a proper mentor would have promoted personal growth in these areas." [1476MM5H]), and mental health ("I needed mentors who understood gifted and neurodiverse minds who weren't inclined to throw drugs or psychobabble

at me." [481GF3M]). In open-ended comments, participants lamented the lack of guidance they received from parents or other adults who could have advised them in academic planning, particularly college options. Workplace mentors could have offered advice, support, and direction. The Mensa Foundation seems particularly well-suited to creating a mentoring network in which more experienced members could advise younger ones.

Beyond SEL and mentoring, the Mensa Foundation could make a large-scale effort to change societal acceptance of highly intelligent individuals. A marketing campaign could be developed with the goal of improving perceptions of high intellectual ability. Rather than being rejected for outperforming their classmates or coworkers, acceptance and even celebration of excellence could be the norm. Positive strategies for maintaining relationships with someone who has less ability (in any domain, including intellectual) include friendly (prosocial) behaviors, such as complimenting, gift giving, doing favors, and helping (Zell et al., 2020). Helping is a strategy commonly reported by gifted students as a way of fostering relationships with peers (J. Cross et al., 2019; Swiatek, 2012). A marketing campaign could emphasize the positive aspects of including highly intelligent individuals in all sorts of activities that are considered desirable, from sports to entertainment, in addition to more esoteric pursuits. How can they be helpful to others? A model for this might be the Jed Foundation and Ad Council's <u>Seize the Awkward</u> campaign, which seeks to normalize discussing mental health. Strategies to foster acceptance of highly intelligent individuals into the broader community do not have to focus on others tolerating their differences, but can emphasize how they can contribute to the benefit of others.

Provide Mental Health Supports

Overall, one of the highest rated needs was for a trusted other to support one's mental health "as a young person (i.e., youth through college age)." Even including older people looking back on their younger years, participants across the board did not believe they had "A psychologist/counselor who understands me," "[the ability] to work with a psychologist or counselor," and "Someone [they] trusted to help [them] with [their] mental health concerns" at that time in their lives, at least to the extent that they needed them. As evidenced by the relatively high scores in undifferentiated mental health needs in one's early years, this seems to be a period when issues of mental health may be of particular importance. Ensuring there is someone for young highly intelligent individuals to talk with who can understand them and their concerns is

no easy task. This is a population at the top of the ability continuum and mental health professionals may have had little experience on which to draw to understand a highly intelligent individual's perspective and cognitions.

Perhaps the most important action the Mensa Foundation could do to support the mental health of highly intelligent individuals would be to provide training and materials to professionals in the field. Professional development for practicing professionals could emphasize the heterogeneity of this population and best practice in working with highly intelligent individuals. Counselor education programs should be encouraged to include coursework on how to support the mental health of highly intelligent individuals. The Mensa Foundation could incentivize such training by credentialing graduates of programs that include such coursework, for example. As an example, the *Handbook for Counselors Serving Students with Gifts and Talents*, co-edited by two of the authors of this report (Cross & Cross, 2021), contains 42 chapters written by experts in gifted education research covering a broad spectrum of topics related to the unique needs of highly intelligent individuals. Such a resource could be made available to practicing and preservice mental health professionals.

A common concern among participants was the difficulty of finding mental health professionals who could work with them effectively. The Mensa Foundation is in a good position to build a referral network. Professionals who have taken continuing education hours in best practice with highly intelligent individuals could receive a gold star of sorts in a database of recommended counselors, psychologists, or psychiatrists. Mensa membership or eligibility could also be indicated in the database. Mensa members or other highly intelligent individuals could provide referrals for mental health professionals who have been effective for them. With the proliferation of online mental health services, the professional's location will not be a limiting factor in access.

Not every mental health concern requires the help of a professional. Friends, family, and community members may be able to provide advice or support. They can certainly create an atmosphere of acceptance and understanding. Training or materials could be provided highlighting common strategies for dealing with someone in distress, such as active listening, validation, and knowing when to draw on professionals. It will be important to recognize when a situation that may not seem critical to the average person could be a crisis to someone with high levels of intelligence. Any training of a layperson should stress the need to acknowledge one's

limitations and the importance of identifying local resources when the mental health needs are severe.

Along the lines of the recommendation to improve attitudes toward highly intelligent individuals, the Mensa Foundation could explore opportunities to facilitate a sense of purpose among those with high intelligence. The research on purpose, "a stable and generalized intention to accomplish something that is at once meaningful to the self and of consequence to the world beyond the self" (Damon et al., 2003, p. 121), suggests it is an important contributor to well-being and identity development (e.g., Burrow et al., 2014; Sumner et al., 2015). Creating opportunities to serve others, perhaps in abstract and complex ways, could simultaneously benefit society and highly intelligent individuals.

Conclusion

The participants in this study were incredibly open, sharing their vulnerabilities along with their strengths. The sentiments articulated in their open-ended comments were sometimes heartrending, sometimes uplifting, and usually enlightening. A surprising number of participants described being neglected, rejected, or even abused by family. Some have experienced very real trauma. High intelligence does not make people immune to hardship. Not all experiences were directly related to intelligence, but there were many situations of need that had high intelligence at the core. Those who reported a low level of needs (Low Needs class) sometimes dismissed the value of a study of unmet needs, suggesting it was unnecessary, as people should just get over themselves:

Why was the assumption in this survey that people have a need to spend time with a Psychologist? People need to use what they have and keep learning. Keep seeking new information. Think about something other than themselves. I notice that people with messed up heads talk about little other than themselves. Then I meet people with so much less than the mopers who are full of energy, joy and hope. Maybe there should be a class to teach people to think of something or someone besides themselves. (3334MM5L)

Others expressed concern that there would be no real benefit from the survey, that it would amount to nothing: "...The questions were vague and general, and besides wasting my time, I suspect it's for disingenuous purposes or won't be used meaningfully at all." (1344MM2M). It

does not take more than a few minutes of reading participants' comments to recognize there is value in conducting this study:

"...I make myself smaller to fit in with people. I have even begged for the light of my understanding to go away so that I am not too much for people. I am always trying to fit myself in a box. It became exhausting...." (553SF2H)

I am happy that there has been a shift in the importance of mental health now. When I was growing up, the attitude was, "suck it up". Now we are realizing that mental health is just as important as physical health. (1878MM3M)

This survey was surprisingly cathartic! I hope my experiences will ultimately help others. (2925GF4M)

Here is just one of the many examples of hardship some of these highly intelligent individuals faced:

In my early 20s, when I had one toddler and one infant and an extremely isolated life at home, my anxiety became agoraphobia and [I] felt my life was on the brink of disaster nearly all the time. Church was my only refuge, but I never disclosed my mental illness to anyone there. Four years later, I began a slow, painstaking recovery when I returned to complete my bachelor's degree, begin my master's, and enter the career I had wanted from early childhood. Doing so without effective support and strategies as described in this survey was awfully hard at times and I stumbled, hard, repeatedly. (2824GF4M)

Many participants thanked us for exploring this issue, as they had important experiences in life that challenged their sense of well-being. There were many expressions of a desire that the difficulties participants experienced would not have to be repeated in future generations. Dealing with hardship can lead to strength, but many succumb to hopelessness in the face of great difficulty.

The Mensa Foundation cannot fix all the ills that have befallen highly intelligent people, nor can it right the wrongs in our educational or professional arenas. It can provide supports, however, to ameliorate some of the problems identified here. With commitment, strategic planning, and resources, the world can be a more hospitable place for highly intelligent individuals.

References

- Abdulla Alabbasi, A. M., A. Ayoub, A. E., & Ziegler, A. (2021). Are gifted students more emotionally intelligent than their non-gifted peers? A meta-analysis. *High Ability Studies*, *32*(2), 189-217.
- Abu Bakar, A. Y., & Ishak, N. M. (2014). Depression, anxiety, stress, and adjustments among Malaysian gifted learners: Implication towards school counseling provision. *International Education Studies*, 7(13), 6-13. https://files.eric.ed.gov/fulltext/EJ1071167.pdf
- Ackerman, P. L., & Heggestad, E. D. (1997). Intelligence, personality, and interests: Evidence for overlapping traits. *Psychological Bulletin*, *121*, 219–245. https://doi.org/10.1037/0033- 2909.121.2.219
- American Psychological Association. (2018). "Psychology". American Psychological Association Dictionary of Psychology. https://dictionary.apa.org/
- Aries, E., & Seider, M. (2007). The role of social class in the formation of identity: A study of public and elite private college students. *The Journal of Social Psychology, 147* (2), 137-157. https://doi.org/10.3200/SOCP.147.2.137-157
- Assouline SG, Colangelo N (2006) Social-emotional development of gifted adolescents. In F. A. Dixon & S. M. Moon (Eds.), *The Handbook of Secondary Gifted Education* (pp. 65–85). Prufrock Press.
- Aykutlu, H. C., Dereli, F., Turan, B., Türk Kurtça, T., & Dursun, O. B. (2024). Gifted children and psychiatric disorders: Is the risk increased compared with their peers? *Gifted Child Quarterly*, OnlineFirst. https://doi.org/10.1177/00169862241239649
- Azano, A. P., Callahan, C. M., Missett, T. C., & Brunner, M. (2014.) Understanding the experiences of gifted education teachers and fidelity of implementation in rural schools. *Journal of Advanced Academics*, 25, (2), 88–100. https://doi.org/10.1177/1932202X14524405
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497–529. https://doi.org/10.1037/0033-2909.117.3.497
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology*, *4*, 99–102. https://doi.org/10.1037/h0030372

- Betts, G. T., & Neihart, M. (1988). Profiles of the gifted and talented. *Gifted Child Quarterly*, 32(2), 248-253. https://doi.org/10.1177/001698628803200202
- Biswas-Diener, R., Diener, E., & Tamir, M. (2004). The psychology of subjective well-being. Daedalus, 133(2), 18-25. https://doi.org/10.1162/001152604323049352
- Blackhurst, A. E., & Auger, R. W. (2008). Precursors to the gender gap in college enrollment: Children's aspirations and expectations for their futures. *Professional School Counseling*, 11(3), https://doi.org/10.1177/2156759X0801100301
- Blustein, D. L., Chaves, A. P., Diemer, M. A., Gallagher, L. A., Marshall, K. G., Sirin, S., & Bhati, K. S. (2002). Voices of the forgotten half: The role of social class in the school-towork transition. *Journal of Counseling Psychology*, 49(3), 311-323. https://doi.org/10.1037//0022-0167.49.3.311
- Boulden, R., Stone, J., & Ali Raisa, S. (2021). Supporting the college and career needs of gifted and talented learners in rural elementary schools: Strategies for school counselors. *The Clearing house: a Journal of Educational Strategies, issues and ideas*, 94(5), 223-235. https://doi.org/10.1080/00098655.2021.1939248
- Bowman B. (2019). Programs, practices, and policies affecting diverse children and families. In B. H. Wasik, & S. L. Odom (Eds.), *Celebrating 50 years of child development research past, present, and future perspectives* (pp. 93–114). Brookes.
- Brown, E. F., & L. R. Wishney. (2017). Equity and excellence: Political forces in the education of gifted students in the United States and abroad. *Global Education Review*, 4(1), 22–33.
- Burrow, A. L., Sumner, R., & Ong, A. D. (2014). Perceived change in life satisfaction and daily negative affect: The moderating role of purpose in life. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, 15(3), 579–592. https://doi.org/10.1007/s10902-013-9436-9
- Byars-Winston, A. (2014). Toward a framework for multicultural STEM-focused career interventions. *The Career Development Quarterly*, 62(4), 340–57. https://doi.org/10.1002/j.2161-0045.2014.00087.x.
- Cacioppo, J. T., & Petty, R. E. (1982). The need for cognition. *Journal of Personality and Social Psychology*, 42(1), 116–131. https://doi.org/10.1037/0022-3514.42.1.116

- Castellano, J. A. (2011). Hispanic students and gifted education: New outlooks, perspectives, and paradigms. In J. A. Castellano & A. D. Frazier (Eds.), *Special populations in gifted education* (pp. 249 269). Prufrock Press.
- Clark, B. (2002). Growing up gifted (6th ed.). Merrill/Prentice-Hall.
- Coleman L. J., Cross T. L. (2000). Social-emotional development and personal experience. In Heller K., Mönks F. J., Sternberg R. J., & Subotnik R. S. (Eds.), *International handbook of giftedness and talent* (2nd ed., pp. 203–212). Pergamon.
- Coleman, L. J., & Cross, T. L. (2005). Being gifted in school. Prufrock Press.
- Coleman, L. J., Cross, T. L., & Cross, J. R. (2021). Lived experience, mixed messages and stigma. In T. L. Cross & J. R. Cross (Eds.) *Handbook for counselors serving students with gifts and talents*, 2nd ed. (pp. 427-450). Prufrock Academic Press.
- Coleman, L. J., Micko, K. J., & Cross, T. L. (2015). Twenty-five years of research on the lived experience of being gifted in school: Capturing the students' voices. *Journal for the Education of the Gifted*, 38(4), 358-376.
- Collaborative for Academic, Social, and Emotional Learning. (2024). Fundamentals of SEL. https://casel.org/fundamentals-of-sel/
- Colston, N., Thomas, J., Ley, M. T., Ivey, T. & Utley, J. (2017). Collaborating for early-age career awareness: A comparison of three instructional formats. *Journal of Engineering Education*, *106*(2), 326–44. https://doi.org/10.1002/jee.20166.
- Corwith, S., & Olszewski-Kubilius, P. (2012). Academic planning for gifted students. In T. L. Cross & J. R. Cross (Eds.), *Handbook for counselors serving students with gifts and talents* (pp. 477–493). Prufrock Academic Press.
- Cross, J. R., & Cross, T. L. (2017). Providing for the positive psychological development of students with gifts and talents. In J. R. Cross, C. O'Reilly, & T. L. Cross (Eds.) *Providing for the special needs of students with gifts and talents* (pp. 199-233). Dublin, Ireland: CTYI Press.
- Cross, J. R., Cross, T. L., O'Reilly, C. (2022). *Irish gifted students: Self, social, and academic explorations*. Report prepared for Centre for Talented Youth Ireland. https://doi.org/10.25774/ny41-t831
- Cross, J. R., Frazier, A. D., Kim, M., & Cross, T. L. (2018). A comparison of perceptions of barriers to academic success among high-ability students from high- and low-income

- groups: Exposing poverty of a different kind. *Gifted Child Quarterly*, 62, 111-129. https://doi.org/10.1177/0016986217738050
- Cross, J. R., Vaughn, C. T., Mammadov, S., Cross, T. L., Kim, M., O'Reilly, C., Spielhagen, F. R., Periera Da Costa, M. & Hymer, B. (2019). A cross-cultural study of the social experience of giftedness. *Roeper Review*, 41(4), 224-242. https://doi.org/10.1080/02783193.2019.1661052
- Cross, T. L., Coleman, L. J., & Terhaar-Yonkers, M. (1991). The social cognition of gifted adolescents in schools: Managing the stigma of giftedness. *Journal for the Education of the Gifted*, 15, 44–55. https://doi.org/10.1177/016235329101500106
- Cross, T. L., & Cross, J. R. (2021). An ecological model of suicidal behavior among students with gifts and talents. *High Ability Studies*. *32*, 105-123. https://doi.org/10.1080/13598139.2020.1733391
- Cross, T. L., & Cross, J. R. (2022). From managing stigma to forming friendships: Introducing a model of friendship development. *Gifted Child Today*, 45(1), 58-61. https://doi.org/10.1177/10762175211050697
- Csikszentmihalyi, M., Rathunde, K. & Whalen, S. (1993). *Talented teenagers: The roots of success and failure*. Cambridge University Press.
- Dabrowski, K. (1964). Positive disintegration. Little, Brown.
- Damon, W., Menon, J., & Bronk, K. C. (2003). The development of purpose during adolescence. *Applied Developmental Science*, 7(3), 119–128.

 https://doi.org/10.1207/S1532480XADS0703_2
- Daniels, S., & Piechowski, M. M. (2009). Living with intensity: Understanding the sensitivity, excitability, and emotional development of gifted children, adolescents, and adults. Great Potential Press.
- Deci, E. L., & Ryan, R. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D. W., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97(2), 143–156. https://doi.org/10.1007/s11205-009-9493-y

- Duplenne, L., Bourdin, B., Fernandez, D. N., Blondelle, G., & Aubry, A. (2024). Anxiety and depression in gifted individuals: A systematic and meta-analytic review. *Gifted Child Quarterly*, 68(1), 65-83. https://doi.org/10.1177/00169862231208922
- Egeland J., Holmen T. L., Bang-Kittilsen G., Bigseth T. T., Vaskinn A., Engh J. A. (2017). Body language reading of emotion and outcome in schizophrenia. *Cognitive*Neuropsychiatry, 24(1), 54-64. https://doi.org/10.1080/13546805.2019.1568234
- Egeland, J. (2019). Emotion perception in members of Norwegian Mensa. *Frontiers in Psychology*, *10*, 409616.
- Eklund, K., Tanner, N., Stoll, K., & Anway, L. (2015). Identifying emotional and behavioral risk among gifted and nongifted children: A multi-gate, multi-informant approach. *School Psychology Quarterly*, 30(2), 97–211. https://doi.org/10.1037/spq0000080
- Emmett, J. D., & Minor, C. W. (1993). Career decision-making factors in gifted young adults. *The Career Development Quarterly*, 41(4), 350-366.
- Eren, F., Çete, A. Ö., Avcil, S., & Baykara, B. (2018). Emotional and behavioral characteristics of gifted children and their families. *Archives of Neuropsychiatry*, *55*(2), 105-112. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6060660/
- Eshelman, A. J., & Rottinghaus, P. J. (2015). Viewing adolescents' career futures through the lenses of socioeconomic status and social class. *The Career Development Quarterly*, 63(4), 320 332. https://doi.org/10.1002/cdq.12031
- Exline, J. J., & Lobel, M. (1999). The perils of outperformance: Sensitivity about being the target of a threatening upward comparison. *Psychological Bulletin*, *125*(3), 307-337. https://doi.org/10.1037/0033-2909.125.3.307
- Fanning J. R., Bell M. D., Fiszdon J. M. (2012). Is it possible to have impaired neurocognition but good social cognition in schizophrenia? *Schizophrenia Research*, 135, 168–171. https://doi.org/10.1016/j.schres.2011.12.009
- Flowers, A. M., & Banda, R. M. (2018). When giftedness and poverty collide and why it Matters: Gifted, poor, black males majoring in engineering. *Journal of African American Males in Education*, *9*, 71-93.
- Floyd, E. F., McGinnis, J. L., & Grantham, T. C. (2011). Gifted education in rural environments. In J. A. Castellano & A. D. Frazier (Eds.), *Special populations in gifted education* (pp. 27 46). Prufrock Press.

- Freeman, J. (2006a). The emotional development of gifted and talented children. *Gifted and Talented International*, 21(2), 20-28. https://doi.org/10.1080/15332276.2006.11673472
- Freeman, J. (2006b). Giftedness in the long term. *Journal for the Education of the Gifted*, 29(4), 384-403. https://doi.org/10.4219/jeg-2006-246
- Gaertner, M. N., & McClarty, K. L. (2015). Performance, perseverance, and the full picture of college readiness. *Educational Measurement: Issues and Practice*, *34*(2), 20-33. https://doi.org/10.1111/emip.12066
- Gagnon, D. J., & Mattingly, M. J. (2016). Advanced placement and rural schools. *Journal of Advanced Academics*, 27(4), 266–84. https://doi.org/10.1177/1932202X16656390
- Garland, A. F., & Zigler, E. (1999). Emotional and behavioral problems among highly intellectually gifted youth. *Roeper Review*, 22(1), 41-44.
- Ginsberg, A., P. Jordan, & H. Chang. (2017). Absences add up: How school attendance influences student success. *Attendance Works*. https://www.attendanceworks.org/absences-add-up/
- Gómez-Arízaga, M. P., Navarro, M., Roa-Tampe, K., Conejeros-Solar, M. L., Valdivia-Lefort, M., Martin, A., & Bravo Rojas, C. (2023). Career choice in gifted students with interests in STEM. *Gifted and Talented International*, *38*(1), 21-30. https://doi.org/10.1080/15332276.2023.2237556
- Gomez-Arizaga, M. P., Valdivia-Lefort, M., Castillo-Hermosilla, H., Hébert, T. P., & Conejeros-Solar, M. L. (2020). Tales from within: Gifted students' lived experiences with teaching practices in regular classrooms. *Education Sciences*, *10*(5), Article 137. https://doi.org/10.3390/educsci10050137
- Gore, J., Holmes, K., Smith, M., Southgate, E., & Albright, J. (2015). Socioeconomic status and career aspirations of Australian school students: Testing enduring assumptions.

 *Australian Educational Researcher, 42, 155-177. https://doi.org/10.1007/sl 3384-015-0172-5
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B., Jr. (2003). A very brief measure of the big five personality domains. *Journal of Research in Personality*, *37*, 504-528. https://doi.org/10.1016/S0092-6566(03)00046-1
- Grant, D. F., Battle, D. A., & Heggoy, S. J. (2000). The journey through college of seven gifted females: Influences on their career related decision. *Roeper Review*, 22, 251–260.

- Greene, M. J. (2003). Gifted adrift? Career counseling of the gifted and talented. *Roeper Review*, 25, 66–72.
- Greene, M. J. (2006). Helping build lives: Career and life development of gifted and talented students. *Professional School Counseling*, *10*, 34–42.
- Guignard, J. H., Bacro, F., & Guimard, P. (2021). School life satisfaction and peer connectedness of intellectually gifted adolescents in France: Is there a labeling effect? *New Directions for Child and Adolescent Development*, 2021(179), 59-74. https://doi.org/10.1002/cad.20448
- Hall, A. S., & Kelly, K. R. (2015). Identity and career development in gifted students. In F. A.Dixon & S. M. Moon (Eds.), *The handbook of secondary gifted education* (pp. 35–63).Prufrock Press Inc.
- Hébert, T. P. (2011). *Understanding the social and emotional lives of gifted students*. Prufrock Press.
- Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work*. (3rd ed.). Psychological Assessment Resources.
- Hollingworth, L. S. (1942). *Children above 180 IQ, Stanford-Binet: Origin and development.*World Book.
- Housand, A. M. (2021). In context: Gifted characteristics and the implications for curriculum. In K. R. Stephens & F. A. Karnes (Eds.), *Introduction to curriculum design in gifted education* (pp. 3-22). Routledge.
- Howard, K., E. Castine, & S. Flanagan. (2017). Promising career and workforce development practices in elementary school settings. In V. H. Solberg, S. R. Ali, V. H. Solberg, & S. R. Ali (Eds.)., *The handbook of career and workforce development: Research, practice, and policy* (pp. 163–179). Routledge.
- Hyman, J., Jackson, P. S., & Peterson, J. (2003). Depressive disorder in highly gifted adolescents. *Journal of Secondary Gifted Education*, *14*(3), 175-186. https://doi.org/10.4219/jsge-2003-429
- Jen, E., Wu, J., & Gentry, M. (2016). The social-affective concerns of high-ability adolescents-Lessons learned from students' perspectives. *Journal of Advanced Academic*, 27, 39–59. Jones, L. (1994). *Appalachian values*. Jesse Stuart Foundation.

- Jung, J. Y. (2013). The cognitive processes associated with occupational/career indecision: A model for gifted adolescents. *Journal for the Education of the Gifted*, *36*(4), 433-460. https://doi.org/10.1177/0162353213506067
- Jung, J. Y. (2019). The career decisions of gifted students and other high ability groups.

 Routledge.
- Jung, J. Y. (2020). The career development of gifted students. In *International handbook of career guidance* (pp. 325-342). Springer International Publishing.
- Jung, J. Y., & Young, M. (2019). The occupational/career decision-making processes of intellectually gifted adolescents from economically disadvantaged backgrounds: A mixed methods perspective. *Gifted Child Quarterly*, 63(1), 36-57.
- Kachel, S, Steffens, M. C, & Niedlich, C. (2016). Traditional masculinity and femininity: validation of a new scale assessing gender roles. *Frontiers in Psychology*, 7, 956. https://www.doi.org/10.3389/fpsyg.2016.00956
- Kanevsky, L., & Keighley, T. (2003). To produce or not to produce? Understanding boredom and the honor in underachievement. *Roeper Review*, 26, 20–28. https://doi.org/10.1080/02783190309554235
- Karpinski, R. I., Kolb, A. M. K., Tetreault, N. A., & Borowski, T. B. (2018). High intelligence: A risk factor for psychological and physiological overexcitabilities. *Intelligence*, *66*, 8–23. https://doi.org/10.1016/j.intell.2017.09.001
- Kerr, B. A. (2012). Developmental issues for the gifted and creative girl: Milestones and danger zones. In T. L. Cross & J. R. Cross (Eds.), *Handbook for counselors serving students with gifts and talents* (pp. 315–332). Prufrock Academic Press.
- Kerr, B. A., & Gahm, J. (2018). Developing talents in girls and young women. In S. I. Pfeiffer,
 E. E. Shaunessy-Dedrick, & M. Foley-Nicpon (Eds.), *APA handbook of giftedness and talent* (pp. 399–416). American Psychological Association.
- Kerr, B. A., & Robinson Kurpius, S. E. (2004). Encouraging talented girls in math and science: Effects of a guidance intervention. *High Ability Studies*, *15*, 85–102.
- Kerr, B. A., Vuyk, M., & Rea, C. (2012). Gendered practices in the education of gifted girls and boys. *Psychology in the Schools*, 49, 647–655.

- Kettler, T., Russell, J., & Puryear, J. S. (2015). Inequitable access to gifted education: Variance in funding and staffing based on locale and contextual school variables. *Journal for the Education of the Gifted 38*(2), 99–117. doi:10.1177/0162353215578277.
- Kitano, M. K. (2011). Issues in research on Asian American gifted students. In J. A. Castellano & A. D. Frazier (Eds.), *Special populations in gifted education* (pp. 3 25). Prufrock Press.
- Klimecká, E. (2023). Advantages and disadvantages of being 'gifted': Perceptions of the label by gifted pupils. *Research Papers in Education*, *38*(6), 902-923. https://doi.org/10.1080/02671522.2022.2065523
- Knight, J. L. (2015). Preparing elementary school counsellors to promote career development: Recommendations for school counselor education programs. *Journal of Career Development*, 42(2), 75–85. https://doi.org/10.1177/0894845314533745.
- Košir, K., Horvat, M., Aram, U., & Jurinec, N. (2016). Is being gifted always an advantage? Peer relations and self-concept of gifted students. *High Ability Studies*, 27(2), 129-148. https://doi.org/10.1080/13598139.2015.1108186
- Krauss, S. M., Pittman, K. J., & Johnson, C. (2016, March). Ready by design: The science (and art) of youth readiness. *Forum for Youth Investment*. https://forumfyi.org/wp-content/uploads/2019/06/readybydesign.pdf
- Lally, M., & Valentine-French, S. (2019). *Lifespan development: A psychological perspective* (4th ed.). Open Education Resource.

 https://www.clcillinois.edu/programs/psy/openeducation
- Lent, R. W., Brown, S. D., & Hackett, G. (2000). Contextual supports and barriers to career choice: A social cognitive analysis. *Journal of Counseling Psychology*, 47(1), 36-49. https://doi.org/10.1037/0022-0167.47.1.36
- Lewis, K. D., & Boswell, C. (2020). Perceived challenges for rural gifted education. *Gifted Child Today*, 43(3), 184-198.
- Little, C. A. (2012). Curriculum as motivation for gifted students. *Psychology in the Schools*, 49, 695-705.
- Long-Mitchell, L. A. (2011). High-achieving Black adolescents' perceptions of how teachers impact their academic achievement. In J. A. Castellano & A. D. Frazier (Eds.), *Special populations in gifted education* (pp. 99 123). Prufrock Press.

- Lowman, R. L. (1991). *The clinical practice of career assessment. Interests, abilities, and personality*. American Psychological Association .
- Lui, W. M., Ali, S. R., Soleck, G., Hopps, J., Dunston, K., & Pickett, T. R.(2004). Using social class in counseling psychology research. *Journal of Counseling Psychology*, *52*(1), 3-18. https://doi.org/10.1037/0022-0167.51.1.3
- Machů, E., & Červinková, H. (2014). Social intelligence of gifted pupils. *The New Educational Review*, *37*, 130-139. https://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.ojs-doi-10_15804_tner_14_37_3_10
- Mammadov, S., Cross, T. L., & Ward, T. (2018). Big Five personality traits as predictors of academic achievement in gifted students: Mediation by self-regulatory efficacy and academic motivation. *High Ability Studies*, 29, 111-133. https://doi.org/10.1080/13598139.2018.1489222
- Manor-Bullock, R., Look, C., & Dixon, D. N. (1995). Is giftedness socially stigmatizing? The impact of high achievement on social interactions. *Journal for the Education of the Gifted*, *18*(3), 319-338. https://doi.org/10.1177/016235329501800307
- Martin, L. T., Burns, R. M., & Schonlau, M. (2010). Mental disorders among gifted and nongifted youth: A selected review of the epidemiologic literature. *Gifted Child Quarterly*, *54*(1), 31-41. https://doi.org/10.1177/0016986209352684
- Maslow, A. H. (1987). Motivation and personality (2nd ed.). Harper & Row.
- Maxwell, M. (2007). Career counseling is personal counseling: A constructivist approach to nurturing the development of gifted female adolescents. *Career Development Quarterly*, 55, 206–224.
- Mendaglio, S. (2022). Overexcitability research: Implications for the theory of positive disintegration and the field of gifted education. *SENG Journal: Exploring the Psychology of Giftedness*, 1(2), 23-32. https://doi.org/https://doi.org/10.25774/16cy-5b24
- Mendoza, C. (2006). Inside today's classrooms: Teacher voices on no student left behind and the education of gifted children. *Roeper Review*, 29(1), 28-35.
- Mensa Foundation. (2023). Strategic plan. https://www.mensafoundation.org/about-the-mensa-foundation/foundation-strategic-plan/

- Miller, K., & Cummings, G. (2009). Gifted and talented students' career aspirations and influences: A systematic review of the literature. *International Journal of Nursing Education Scholarship*, 6(1). https://doi.org/10.2202/1548-923X.1667
- Mofield, E. L., & Parker Peters, M. (2015). The relationship between perfectionism and overexcitabilities in gifted adolescents. *Journal for the Education of the Gifted*, 38(4), 405-427.
- Moon, S. M. (2002). Counseling needs and strategies. In M. Neihart, S. M. Reis, N. M. Robinson, & S. M. Moon (Eds.), *The social and emotional development of gifted children: What do we know?* (pp. 213–222). Prufrock Press.
- Moon, S. M. (2009). Myth 15: High-ability students don't face problems and challenges. *Gifted Child Quarterly*, 53(4), 274-276. https://doi.org/10.1177/0016986209346943
- Mõttus, R., Allik, J., Konstabel, K., Kangro, E. M., & Pullmann, H. (2008). Beliefs about the relationships between personality and intelligence. *Personality and Individual Differences*, 45(6), 457-462. https://doi.org/10.1016/j.paid.2008.05.029
- Muratori, M. C., & Smith, C. K. (2015). Guiding the talent and career development of the gifted individual. *Journal of Counseling & Development*, 93(2), 173-182. https://doi.org/10.1002/j.1556-6676.2015.00193.x
- Nail, J.M., & Evans, J.G. (1997). The emotional adjustment of gifted adolescents: A view of global functioning. *Roeper Review*, 20(1), 18–21.
- Neff, K. D., Cooper, C. E., & Woodruff, A. L. (2007). Children's and adolescents' developing perceptions of gender inequality. *Social Development*, *16*, 682–699.
- Nevitt H (2001) Socio-emotional guidance and counseling. In M. Landrum, C. Callahan, & B. Shaklee (Eds.), *Aiming for excellence: Gifted program standards* (pp. 27–37). NAGC.
- Nylund-Gibson, K., & Choi, A. Y. (2018). Ten frequently asked questions about latent class analysis. *Translational Issues in Psychological Science*, *4*(4), 440–461. https://doi.org/10.1037/tps0000176
- Ogurlu, Ü., Sevgi-Yalın, H., & Yavuz-Birben, F. (2016). The relationship between social—emotional learning ability and perceived social support in gifted students. *Gifted Education International*, *34*(1), 76-95.

- Organization for Economic Co-operation and Development (OECD). (2023). PISA 2022 results: Factsheets United States. https://www.oecd.org/publication/pisa-2022-results/country-notes/united-states-a78ba65a/
- Pappano, L. (2015). First-generation students unite. *The New York Times*.

 https://www.nytimes.com/2015/04/12/education/edlife/first-generation-studentsunite.html? r=0
- Persson, R. S. (2007). The myth of the antisocial genius: A survey study of the socio-emotional aspects of high-IQ individuals. *Gifted and Talented International*, 22(2), 19-34. https://doi.org/10.1080/15332276.2007.11673492
- Persson, R. S. (2010). Experiences of intellectually gifted students in an egalitarian and inclusive educational system: A survey study. *Journal for the Education of the Gifted*, *33*(4), 536-569. https://doi.org/10.1177/016235321003300405
- Persson, R. S. (2014). The needs of the highly able and the needs of society: A multidisciplinary analysis of talent differentiation and its significance to gifted education and issues of societal inequality. *Roeper Review*, *36*(1), 43-59. https://doi.org/10.1080/02783193.2013.856830
- Peterson, C. (2006). A primer in positive psychology. Oxford University Press.
- Peterson, J. S. (2006). Addressing counseling needs of gifted students. *Professional School Counseling* 10 (1):43–51. doi: 10.1177/2156759X0601001S06.
- Peterson, J. S. (2009). Myth 17: Gifted and talented individuals do not have unique social and emotional needs. *Gifted Child Quarterly*, 53(4), 280-282. https://doi.org/10.1177/0016986209346946
- Peterson, J., Duncan, N., & Canady, K. (2009). A longitudinal study of negative life events, stress, and school experiences of gifted youth. *Gifted Child Quarterly*, *53*(1), 34-49. https://doi.org/10.1177/0016986208326553
- Plucker, J. A. (2013). Students from rural environments. In C. M. Callahan & H. L. Hertberg-Davis (Eds.), *Fundamentals of gifted education*, (pp. 301–314). Routledge.
- Preckel, F., Götz, T., & Frenzel, A. (2010). Ability grouping of gifted students: Effects on academic self-concept and boredom. *British Journal of Educational Psychology*, 80(3), 451-472. https://doi.org/10.1348/000709909X480716

- Reis, S. M. (n.d.). *Major turning points in gifted education in the 20*th *century*. https://gifted.uconn.edu/schoolwide-enrichment-model/major_turning_points/
- Reis, S. M., & Housand, A. M. (2008). Characteristics of gifted and talented learners: Similarities and differences across domains. In F. A. Karnes & K. R. Stephens (Eds.), *Achieving excellence: Educating the gifted and talented*, (pp. 62 81). Merrill/Prentice Hall.
- Rentzsch, K., Schütz, A., & Schröder-Abé, M. (2011). Being labeled nerd: Factors that influence the social acceptance of high-achieving students. *The Journal of Experimental Education*, 79(2), 143-168. https://doi.org/10.1080/00220970903292900
- Renzulli, J. S. (1978). What makes giftedness? Reexamining a definition. *Phi Delta Kappan*, 60, 180 184, 261.
- Renzulli , J. S. (1996). Schools for talent development: A practical plan for total school improvement . *School Administrator*, 53 (1), 20 22.
- Renzulli, J. (2021). Scales for rating the behavioral characteristics of superior students: Technical and administration manual. Routledge.
- Renzulli, J. S., Siegle, D., Reis, S. M., Gavin, M. K., & Reed, R. E. S. (2009). An investigation of the reliability and factor structure of four new scales for rating the behavioral characteristics of superior students. *Journal of Advanced Academics*, 21(1), 84-108.
- Richards, Z. J., & Stambaugh, T. (2015). National context of rural schools. In T. Stambaugh & S. Wood (Eds.), Serving gifted students in rural settings (pp. 1–22). Prufrock Press.
- Rimm, S. B., Siegle, D., & Davis, G. A. (2018). *Education of the gifted and talented* (pp. 233-236). Boston, MA: Pearson.
- Robinson, N. M. (2002). Introduction. In: M. Neihart, S. M. Reis, N. M. Robinson, & S. M. Moon (Eds.), *The social and emotional development of gifted children: What do we know?* (pp. xi–xxiv). Prufrock Press.
- Robinson, L., & B. Diale. (2017). Through the eyes of children: Exploring Grade 7 career aspirations. *South African Journal of Childhood Education*, 7(1), Article 500. https://doi.org/10.4102/sajce.v7i1.500
- Robinson, N. M. (2008). The social world of gifted children and youth. In *Handbook of giftedness in children: Psychoeducational theory, research, and best practices* (pp. 33-51). Springer US.

- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*(1), 68-78. https://doi.org/10.1037//0003-066x.55.1.68
- Sajjadi, S. H., Rejskind, F. G., & Shore, B. M. (2001). Is multipotentiality a problem or not? A new look at the data. *High Ability Studies*, *12*, 27–43.
- Sampson, J. P., & Chason, A. K. (2008). Helping gifted and talented adolescents and young adults: Make informed and careful career choices. In S. I. Pfeiffer (Ed.), *Handbook of giftedness in children: Psychoeducational theory, research, and best practices* (pp. 327–346). Springer-Verlag.
- Sharf, R. S. (2013). Applying career development theory to counseling. Cengage Learning.
- Shechtman, Z., & Silektor, A. (2012). Social competencies and difficulties of gifted children compared to nongifted peers. *Roeper Review*, *34*(1), 63–72.
- Silverman, L. K. (1993). Counseling the gifted and talented. Love.
- Sirgy, M. J. (2021). *The psychology of quality of life: Wellbeing and positive mental health*, 3rd ed. Springer. https://doi.org/10.1007/978-3-030-71888-6
- Smith, S. (2017). Responding to the unique social and emotional learning needs of gifted Australian students. *Social and emotional learning in Australia and the Asia-Pacific: Perspectives, programs and approaches*, 147-166.
- Soo Yeon, S., O. Adedokun, A. Wackerly, L. C. Parker, A. Mennonno, & S. San Miguel. (2015). Changes in elementary student perceptions of science, scientists, and science careers after participating in a curricular module on health and veterinary Science. *School Science & Mathematics*, 115(6), 271. https://doi.org/10.1111/ssm.12129.
- Stambaugh, T., and S. M. Wood. (2015). Serving gifted students in rural settings. Prufrock Press.
- Stark, J. G., Riddle, T., Sinclair, S., Warikoo, N. (2020). Teachers are people too: Examining the racial bias of teachers compared to other American adults. *Educational Researcher*, 49(4), 273–284.
- Steinhice, C. (2023). The Mensa Foundation in 2022-23: Turning ideas into reality. *Mensa Foundation Annual Report 2023*. https://www.mensafoundation.org/about-the-mensafoundation/annual-report/2023-annual-report/
- Sternberg, R. J., & Davidson, J. E. (Eds.). (2005). *Conceptions of giftedness* (2nd ed.). Cambridge University Press.

- Strobel, A., Behnke, A., Gärtner, A., & Strobel, A. (2019). The interplay of intelligence and need for cognition in predicting school grades: A retrospective study. *Personality and Individual Differences*, *144*, 147–152. https://doi.org/10.1016/j.paid.2019.02.041
- Suldo, S. M., Thalji-Raitano, A., Kiefer, S. M., & Ferron, J. M. (2016). Conceptualizing high school students' mental health through a dual-factor model. *School Psychology Review*, 45(4), 434–457. https://doi.org/10.17105/SPR45-4.434-457
- Sumner, R., Burrow, A. L., & Hill, P. L. (2015). Identity and purpose as predictors of subjective well-being in emerging adulthood. *Emerging Adulthood*, *3*(1), 46–54. https://doi.org/10.1177/2167696814532796
- Swiatek, M. A. (2001). Social coping among gifted high school students and its relationship to self-concept. *Journal of Youth and Adolescence*, *30*(1), 19-39. https://doi.org/10.1023/A:1005268704144
- Tardiff, T. Z. & Sternberg, R. J. (1988). What do we know about creativity? In R. J. Sternberg (Ed.), *The nature of creativity. Contemporary psychological perspectives* (pp. 429-440). Cambridge University Press.
- Tasca, I., Guidi, M., Turriziani, P., Mento, G., & Tarantino, V. (2022). Behavioral and socioemotional disorders in intellectual giftedness: A systematic review. *Child Psychiatry & Human Development*, 1-22. https://doi.org/10.1007/s10578-022-01420-w
- Terman, L. M. (1925). *Mental and physical traits of a thousand gifted children* (Vol. 1). Stanford University Press.
- Terman, L. M., & Oden, M. H. (1959). *Genetic studies of genius. Vol. 5. The gifted group at mid-life.* Stanford University Press.
- Treffinger, D. J., Young, G. C., Selby, E. C., & Shepardson, C. (2002). Assessing creativity: A guide for educators (RM02170). Storrs: University of Connecticut, The National Research Center on the Gifted and Talented.
- VanTassel-Baska, J. (2010). Curriculum development for low-income and minority gifted learners. In J. VanTassel-Baska (Ed.), *Patterns and profiles of promising learners from poverty* (pp. 193-218). Prufrock Press.
- VanTassel-Baska, J. (2011). An introduction to the Integrated Curriculum Model. In J. VanTassel-Baska & C. A. Little (Eds.), *Content based curriculum for high-ability learners* (2nd ed., pp. 9-32). Prufrock Press.

- VanTassel-Baska, J., & Stambaugh, T. (2005). Challenges and possibilities for serving gifted learners in the regular classroom. *Theory into practice*, *44*(3), 211-217.
- Vialle, W., Heaven, P. C., & Ciarrochi, J. (2007). On being gifted, but sad and misunderstood: Social, emotional, and academic outcomes of gifted students in the Wollongong Youth Study. *Educational Research and Evaluation*, *13*(6), 569-586. https://doi.org/10.1080/13803610701786046
- Wai, J., & Rindermann, H. (2017). What goes into high educational and occupational achievement? Education, brains, hard work, networks, and other factors. *High Ability Studies*, 28(1), 127–145. https://doi.org/10.1080/13598139.2017.1302874
- Watson, C. M., Quatman, T., & Edler, E. (2002). Career aspirations of adolescent girls: Effects of achievement level, grade, and single-sex school environment. *Sex Roles*, *46*, 323-335. https://doi.org/10.1023/A:1020228613796
- Watters, J. J. (2010). Career decision making among gifted students: The mediation of teachers. *Gifted Child Quarterly*, *54*, 222–238.
- Webb, J. T. (1993). Nurturing social-emotional development of gifted children. In K. A. Heller,
 F. J. Mönks, & A. Harry Passow (Eds.), *International Handbook of Research and Development of Giftedness and Talent* (pp. 525-538). Pergamon.
- Weir, K. (2016). Inequality at school: What's behind the racial disparity in our education system. *Monitor on Psychology*, 47(10), 44-47.

 https://www.apa.org/monitor/2016/11/cover-inequality-school
- Werner, E. E., Smithm R. S. (1992). *Overcoming the odds: High risk children from birth to adulthood*. Cornell University Press.
- Wimberly, G. L., & Noeth, R. J. (2005). *College readiness begins in middle school*. https://files.eric.ed.gov/fulltext/ED483849.pdf
- Wood, V. R., & Laycraft, K. C. (2020). How can we better understand, identify, and support highly gifted and profoundly gifted students? A literature review of the psychological development of highly-profoundly gifted individuals and overexcitabilities. *Annals of Cognitive Science*, 4(1), 143-165.
- Yeager D. S., Purdie-Vaughns V., Hooper S. Y., Cohen G. L. (2017). Loss of institutional trust among racial and ethnic minority adolescents: A consequence of procedural injustice and a cause for life-span outcomes. *Child Development*, 88(3).

- Yu, H. P., & Jen, E. (2021). The gender role and career self-efficacy of gifted girls in STEM areas. *High Ability Studies*, *32*(1), 71-87. https://doi.org/10.1080/13598139.2019.1705767
- Yu, H. P., & Lin, H. T. (2010). The effects of a mentoring curriculum on gender roles, career self-efficacy, and career development in a high school class for gifted girls in math and science. *Journal of Research in Education Sciences*, 55, 27–61.
- Zeidner, M., & Shani-Zinovich, I. (2011). Do academically gifted and nongifted students differ on the big-five and adaptive status? Some recent data and conclusions. *Personality and Individual Differences*, 51(5), 566–570. https://doi.org/10.1016/j.paid.2011.05.007
- Zell, A. L., Exline, J. J., & Lobel, M. (2020). Navigating the perils of outperforming others. In J. Suls, R. L. Collins, & L. Wheeler (Eds.), *Social comparison, judgment, and behavior* (pp. 280–308). Oxford University Press.
- Zettergren, P., & Bergman, L. R. (2014). Adolescents with high IQ and their adjustment in adolescence and midlife. *Research in Human Development*, 11(3), 186-203. https://doi.org/10.1080/15427609.2014.936182

Appendix A: Four Domains Needs Questionnaire

Online survey link: https://bit.ly/mensa_wm

The William & Mary Center for Gifted Education and the Mensa Foundation are teaming up to learn about the needs of gifted individuals in the four domains of education, career, social/emotional, and mental health. This questionnaire is designed based on psychological theory and research on giftedness. Our goal is to learn about areas where your needs were not being met, so we can make recommendations about potential supports. Your responses will be used to help create a better environment for highly intelligent individuals.

Are you or have you ever been a member of Mensa? Yes No

If No:

Were you formally identified as gifted in school? Yes No I do not know

Have you received a high score (e.g., top 10% of scorers) on a standardized test, like an IQ test, the SAT, or a school achievement test? Yes No I do not know

Do you consider yourself or do others consider you highly intelligent? Yes No I do not know

Do you consider yourself or do others consider you highly creative? Yes No I do not know

Do you consider yourself highly curious? Yes No

In which of these talent domains do you have the greatest interest and/or ability? (Choose as many as apply)

Science (e.g., biology, physics, etc.)
Mathematics
Reading/Writing/Literature
Social Sciences
Art
Music
Athletics
Other _____

Your sex Male Female Nonbinary Not Listed:
Prefer not to say
Do you identify as LGBTQ+? Yes No
Your Age
Race/ethnicity identity (check all that apply):
American Indian or Alaska Native (e.g., Navajo Nation, Blackfeet Tribe, Inupiat Traditional Gov't., etc.)
Asian or Asian American (e.g., Chinese, Japanese, Indian, Filipino, Korean, South Asian, Vietnamese, etc.)
Black or African American (e.g., Jamaican, Nigerian, Haitian, Ethiopian, etc.) Hispanic or Latino/a (e.g., Puerto Rican, Mexican, Cuban, Salvadoran, Colombian, etc.)
Middle Eastern or North African (e.g., Lebanese, Iranian, Egyptian, Moroccan, Israeli, Palestinian, etc.)
Native Hawai`ian or Pacific Islander (e.g., Samoan, Guamanian, Chamorro, Tongan, etc.)
White or European (e.g., German, Irish, English, Italian, Polish, French, etc.) My race or ethnicity is best described as: (Feel free to write in and/or you can simply select categories above.)
Prefer not to say
Please respond if you are comfortable sharing information regarding a disability. Have you ever been diagnosed with a disability? Yes/No If yes: Please describe
Do you live in the United States? Yes No
If yes, Region in the US: West: Pacific, Mountain (1) Midwest: West North Central, East North Central (2) South: East South Central, West South Central, South Atlantic (3) Northeast: Middle Atlantic, New England (4) (Include region map)

If no, Please indicate your geographic region.

Africa
Asia
Europe
Oceania
The Caribbean
North America
Central America
South America
would you describ
Rural
Small city or tow

How would you describe your community?

Rural
Small city or town
Suburb of a large city
Large city
Other

Did you graduate from high school? Yes No

Did you attend college? Yes No

Please choose the highest post-secondary degree obtained:

Associate's

Bachelor's

Master's

Doctorate

Professional certification (write in)

Other (write in)

Was your K-12 education primarily in the United States? Yes No

Was your college education primarily in the United States? Yes No

Are you currently employed? Yes No

If yes: Please describe your line of work _____ (or college major?)

Are you retired? Yes No

Your personality

Here are a number of personality traits that may or may not apply to you. Please indicate the extent to which you agree or disagree with that statement. You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other.

				Somewhat			
				agree/			
	Strongly		Slightly	Somewhat	Slightly		Strongly
I see myself as:	Disagree	Disagree	Disagree	disagree	Agree	Agree	Agree
extraverted, enthusiastic.							
critical, quarrelsome.							

dependable, self-disciplined.				
anxious, easily upset.				
open to new experiences,				
complex.				
reserved, quiet.				
sympathetic, warm.				
disorganized, careless.				
calm, emotionally stable.				
conventional, uncreative.				

Your current state/frame of mind

Below are 8 statements with which you may agree or disagree. Using the 1–7 scale below, indicate your agreement with each item by indicating that response for each statement.

	Strongly Disagree	Disagree	Slightly Disagree	Somewhat agree/ Somewhat disagree	Slightly Agree	Agree	Strongly Agree
I lead a purposeful and meaningful life.							
My social relationships are supportive and rewarding.							
I am engaged and interested in my daily activities.							
I actively contribute to the happiness and well-being of others.							
I am competent and capable in the activities that are important to me.							
I am a good person and live a good life.							
I am optimistic about my future.							
People respect me.							

Your Needs in Four Domains

The following items are designed to find areas where your needs were met or not met in school or college, along your career path, in your social and emotional experience, and for your mental health. We used theory and research to create the items in these areas and welcome your thoughts about other areas of need.

Please think carefully about the response options, which indicate nuances of need fulfillment.

Education

Thinking back to your K-12 experience...

		I had some			I had too	
		of this but	I did not	I did not	much of	l don't
	I had this in the right	needed more than I	have this and	have this and	this and needed	remember/ don't have an
	amount	had	that's ok	needed it	less	opinion
Able to choose what I						·
learned about						
Able to work at the						
pace I wanted to						
Comfortable asking						
questions at school						
Schoolwork						
appropriate for my						
ability level						
Lessons in academic						
skill development						
(e.g., time						
management, study						
skills, etc.)						
Confidence in my						
ability to achieve in						
school						
Access to the						
materials or						
equipment needed to						
learn in my areas of						
interest						
Outside-of-school						
learning opportunities						
Adequate money to						
afford outside-of-						

	I had this in the right amount	I had some of this but needed more than I had	I did not have this and that's ok	I did not have this and needed it	I had too much of this and needed less	I don't remember/ don't have an opinion
school learning						
opportunities						
Friendships in school						
Classmates who						
shared my academic						
interests						
Classmates with						
intellectual abilities						
similar to mine						
Someone who						
recognized my talents						
or potential						
Warm, friendly						
teachers						
Teachers who were						
knowledgeable about						
their subject(s)						
Teachers who						
appreciated my						
intellectual abilities						
Expectations from						
teachers for						
outstanding						
performance						
Mentor(s) in my areas						
of interest						
Feelings of belonging						
in school						
Family support for my						
academic interests						
Expectations from						
parents for						
outstanding						
performance						

Thinking about your college experience...

Option to skip this section if it does not apply

		Ihad				
		some of			I had too	
	I had this	this but needed	I did not have this	I did not have this	much of this and	l don't remember/
	in the right	more	and that's	and	needed	don't have an
	amount	than I had	ok	needed it	less	opinion
Multiple options for						
colleges I could						
attend						
Adequate money to						
afford the college I						
wanted to attend						
Able to choose what I						
learned about in						
college						
Coursework						
appropriate for my						
ability level						
Confidence in my						
ability to achieve in						
college						
College classmates						
who shared my						
academic interests						
College classmates						
with intellectual						
abilities similar to						
mine						
Accessible professors						
Professors who were						
knowledgeable about						
their subject(s).						
Expectations from						
professors for						
outstanding						
performance						
Mentors in my areas						
of interest						
Feelings of belonging						

Please describe your greatest frustration with your academic career.

What could have been different so this was not frustrating for you?

Career

Option to skip if does not apply

		اه م ما			اه م ما	
		I had some of			l had too	
		this but			much	
	l had	needed	I did not	l did not	of this	l don't
	this in	more	have	have this	and	remember/
	the right	than I	this and	and	needed	don't have
Formal lessons in career	amount	had	that's ok	needed it	less	an opinion
planning						
Information about different						
careers						
Able to pursue the career I						
wanted						
Able to pursue the many						
things I was interested in						
rather than being forced to						
choose only one						
Autonomy in my work (able						
to make choices about what						
to work on, how, when)						
Prepared by my education to						
be successful in my career						
Able to learn on my own I						
what I needed to be						
successful in my chosen						
career						
Training in the skills needed						
for the work in my chosen						
career						
Confidence in my ability to						
do the work required to be						
successful in my chosen						
career						
Able to pursue a career that						
is a good fit for my level of						
intelligence						
Satisfied with my work						
environment						
Satisfied with my career						
achievements						
Satisfied with the prestige I						
obtained in my career						

	I had this in the right amount	I had some of this but needed more than I had	I did not have this and that's ok	I did not have this and needed it	I had too much of this and needed less	I don't remember/ don't have an opinion
Someone who recognized	umount	Had	triacook	110000011	1000	аноринон
my talents or potential early						
in my career						
Positive social connections						
with others at my workplace						
Positive social connections						
with others in my career						
field						
Support from experienced						
people in my workplace to						
help develop my abilities						
Connections with people						
who could help me advance						
in my career						
Expectation from others for						
outstanding performance in						
the workplace						
Expectation to choose a						
career path to fulfill others'						
desires						
Support from family and						
friends for my career choice						
Someone who could provide						
career advice/guidance						

Please describe your greatest frustration in your career development.
What could have been different so this was not frustrating for you?

Social Emotional

		Lhod			Lhad	
		I had some of			l had too	
	I had	this but	I did not		much	
	this in	needed	have	I did not	of this	l don't
	the	more	this and	have this	and	remember/
	right amount	than I had	that's ok	and needed it	needed less	don't have an opinion
Formal lessons to develop my	amount	Hau	OK .	TICCUCU II	1033	аноринон
self-regulation (controlling						
emotions, planning, etc.)						
Formal lessons to develop my						
social skills						
Formal lessons in goal setting						
Able to understand my emotions						
and how to control them						
Able to set and achieve goals for						
myself						
Able to communicate well with						
others						
Able to communicate well with a						
romantic partner						
Able to understand others'						
behaviors						
Able to understand others'						
emotions						
Able to understand others'						
perspectives						
Able to understand others with						
intellectual abilities different from						
mine						
Able to engage with others in						
decision making						
Able to feel empathy for others						
Able to show empathy for others						
Comfortable in social interactions						
Able to make others feel						
comfortable in social interactions						
Able to develop positive						
relationships with others						
Able to maintain positive						
relationships with others						
				1		1

some of this but I did not this in needed have I did not of	had too nuch
I had this but I did not m this in needed have I did not of	nuch
this in needed have I did not of	
	fthis I Idon't
	and remember/
right than I that's and ne	eeded don't have
1 .6	less an opinion
Able to develop a mutually	
satisfying romantic relationship	
Able to maintain a long-term	
relationship with a spouse or	
romantic partner	
Able to work well in a group	
Able to work through conflict with	
others	
Able to consider the needs of	
others when problem solving	
Opportunities to meet others I find	
interesting	
Opportunities to meet others with	
interests similar to mine	
Opportunities to meet others with	
intellectual abilities similar to	
mine	

Please describe your greatest frustration in your relationships with others.
What could have been different so this was not frustrating for you?
Please describe your greatest frustration in the emotional support you have (or have not) received
What could have been different so this was not frustrating for you?

Mental Health

It is likely your mental health needs and resources differ throughout life. The following series of questions are **repeated** for different periods in your life.

Please think about your mental health **as a young person** (i.e., youth through college age). At that time in your life, did you have the following?

Please think about your mental health in the years **post-college age to 55** or so. At that time in your life, did you have the following? (24 AND UP SEE THIS)

Please think about your mental health in the years **after about age 55**. At that time in your life, did you have the following? (56 AND UP SEE THIS)

**Note that the survey will choose the age range options appropriate to the respondent's reported age at the time of the survey. For example, a 50-year-old respondent would not be presented with the third set of questions.

		I had			I had	
		some of			too	
		this but	I did not		much	
	I had	needed	have	I did not	of this	l don't
	this in	more	this and	have this	and	remember/
	the right	than I	that's	and	needed	don't have
	amount	had	ok	needed it	less	an opinion
Supports for my mental health						
Effective strategies for dealing						
with failures						
Effective strategies for dealing						
with distress or upset						
Effective strategies for dealing						
with boredom						
Effective strategies for dealing						
with frustration						
Effective strategies for dealing						
with anxiety or nervousness						
Effective strategies for dealing						
with depression						
Able to avoid painful						
perfectionistic tendencies						
A strong sense for who I am (my						
identity)						
Comfortable around others who						
were more advanced than me						

		l had			I had	
		some of			too	
		this but	I did not		much	
	I had	needed	have	I did not	of this	l don't
	this in	more	this and	have this	and	remember/
	the right	than I	that's	and	needed	don't have
0	amount	had	ok	needed it	less	an opinion
Someone I trusted to help me with						
my mental health concerns						
A psychologist/counselor who						
understands me						
Able to work with a psychologist						
or counselor						
Others misinterpreting my						
abstract, creative, or deep						
thinking as mental illness						
Able to be myself without fear of						
being misunderstood.						
Able to be myself without fear of						
rejection.						

Please describe your greatest frustration with mental health issues you may have experienced. This could have been at any stage in your life
What could have been different so this was not frustrating for you?
Is there anything else you would like us to know about unmet needs in your experience of the academic, career, social and emotional, or mental health domains?
Would you like to share any other comments?

Redirected survey 2

Thank you for taking the time to complete our Four Domains Needs Questionnaire. Please contact Dr. Jennifer Riedl Cross at <u>jrcross@wm.edu</u> with any questions or comments.

We appreciate your participation in this survey. The Mensa Foundation hopes to build supportive resources for the future and your responses are critical to the success of our efforts. You are welcome to choose among the following options as thanks for your participation.

- 4. Access to past Colloquium recordings. (\$199 value)
- 5. Entry into a drawing for one of four \$100 Amazon gift cards.
- 6. Entry into a drawing for a series pass to the Mensa Foundation Speaker Series (30 available) (valued at \$350).
- 7. No, thanks. I am happy to donate my time to the Mensa Foundation and support the mission to unleash intelligence for the benefit of humanity.

To claim the option of your choosing, please share your contact information on the next screen. Note that your survey responses will be maintained separately from your contact information.

The Mensa Foundation is interested in pursuing further studies related to your experiences. For example, one study currently being planned will examine how you have applied your exceptional abilities.

Are you willing to be contacted for future studies? Yes No (If yes, collect contact information in a separate survey.)

Would you like a brief report of the study's findings? Yes No

Your name:

Your email address:

Full survey

https://wmsas.qualtrics.com/jfe/form/SV_9zYdxiTYRScknCC (https://bit.ly/mensa_wm) https://wmsas.qualtrics.com/jfe/form/SV_9zYdxiTYRScknCC Contact survey https://wmsas.qualtrics.com/jfe/form/SV_4ZKJ9x6coJ8pqZg

Appendix B: Interview Protocol

The Mensa Foundation is seeking to identify ways in which it can support the development of individuals with exceptional abilities or potential – highly intelligent, gifted, genius, bright, whatever the term used. Specifically, we want to learn about unmet needs in the following domains:

- 1. education,
- 2. career development,
- 3. social and emotional support, and
- 4. mental health.

We would like you to share with us information about your experiences in each of these domains.

Academics

- 1. Can you describe for me briefly your academic history and any frustrations you experienced?
- 2. If you are not satisfied with the education you received, what would have made it better?
- 3. Do you think there are things Mensa could do to support its members' academic development?

Career Development

- 4. Tell me about your career path. What do you do? How did you get here? How did you decide to pursue this particular occupation?
- 5. Is this a satisfying career for you? Why or why not?
- 6. If you could change one thing about your career trajectory, what would it be?
- 7. Do you have any thoughts about how Mensa could support its members in finding or being successful in their careers?

Social and Emotional

8. Can you tell me about people who were important to becoming who you are today? Who supported you along this path? How did they support you?

- 9. Did you feel accepted or not accepted at different points in your life? Can you tell me about those experiences? What could have made them better?
- 10. One of the needs we identified from survey responses was related to formal lessons in understanding emotions and controlling them. Does this resonate with you as a need?
- 11. Are there things Mensa could do to support its members in their social and emotional development?

Mental Health

- 12. Mental well-being is so important to development. There are both psychological and biological components to mental health. What supports have been there for your mental health over the years?
- 13. Do you think it would be hard to find a mental health professional who understands clients with a high level of intelligence?
- 14. What do you think Mensa can offer to support the mental health of its members?

Incentives: As thanks for your participation, the Mensa Foundation is offering access to their Colloquium recordings **or** an entry into a drawing for a 2-year subscription to the *Mensa Research Journal*. Are you interested in one of these rewards?

Appendix C: Qualitative Analysis Procedure

- From the main dataset the 12 qualitative questions were copied along with the following: Response ID, Are you or have you ever been a member of Mensa?, Are you a current member of Mensa?, Please indicate your Mensa membership history. Selected Choice, Gender you most identify with Prefer to self-describe: Text Do you identify as LGBTQ+?, Your age
- The 12 questions were:
 - AcadFrusText: Please describe your greatest frustration with your academic career (K-12 or college).
 - o AcadDiff: What could have been different so this was not frustrating for you?
 - CarFrusText: Please describe your greatest frustration with your career or career planning.
 - o CarDiffText: What could have been different so this was not frustrating for you?
 - SERelFrusText: If you would like to share more, please describe your greatest frustration in your relationships with others.
 - o SERelDiff: What could have been different so this was not frustrating for you?
 - SEEmotFrusText: If you would like to share more, please describe your greatest frustration in the emotional support you have (or have not) received
 - o SEEmotDiff: What could have been different so this was not frustrating for you?
 - MHFrust: If you would like to share, please describe your greatest frustration with mental health issues you may have experienced. This could have been at any stage in your life.
 - o MHDiff: What could have been different so this was not frustrating for you?
 - OcommentElse: Is there anything else you would like us to know about unmet needs in your experience of the academic, career, social and emotional, or mental health domains?
 - o CommentOther: Would you like to share any other comments?
- Answers to 12 questions that had open-ended comments were separated into 12 different sheets in Excel.
- Filter was used for the main question in all Excel sheets to remove the blank cells.
- For 'CommentElse' and 'CommentOther' the responses like "No", "Nope", "No, Thank you", "That's all", etc. were removed as well.
- At this point, all the sheets had the respective demographic information and the comments from the participants.
- Now, 12 folders for each of the 12 questions were created.
- Within each of the folders, a definite number of MS Word files were created, which would contain chunks of 150 responses to the question from the participants (without any repetitions). Here is the number of MS Word files created for each of the questions.
 - o AcadFrusText: 15

AcadDiff: 14
CarFrusText: 14
CarDiffText: 13
SERelFrusText: 12
SERelDiff: 11

SEEmotFrusText: 8
SEEmotDiff: 7
MHFrust: 12
MHDiff: 11
CommentElse: 7

 CommentOther: 5
 (the last file for each of these chunks may have either less than 150 responses, or a little more than 150 responses)

- After creating the blank MS Word files, only the comments in the set of 150 were copied to each file for the respective questions.
 - The response ID or any other information was not kept with the comments in these files to avoid cluttering the data that might have confused AILYZE. Moreover, if we needed demographic information or further information for the specific comment, it was easy to find from the main Excel file since all responses were unique.
- Once these MS Word documents with the 150 response chunks were ready, a folder containing the output from AILYZE for each of the 150 response chunks was created containing the same number of files. Each of these files for AILYZE also had the instructions and prompts provided to AILYZE.
- After, this preparation for the data analysis, I went to the AILYZE website (https://www.ailyze.com/) which complies with General Data Protection Regulation (GDPR), California Consumer Privacy Act (CCPA) and Health Insurance Portability and Accountability Act (HIPAA) (https://www.ailyze.com/data-security). Specifically, the following link was used to analyze the data: https://www.ailyze.com/ailyze
- Each of the files with 150 responses was imported to the website one at a time. "Upload 1 file" was selected. After it was uploaded, the "conduct thematic analysis" option was chosen. Within the optional instructions, "length of responses," "long" was chosen, and "instructions regarding your desired response" were inputted from the prepared AILYZE files. Finally, I clicked on "Send". Instructions provided for each question are as follows:
 - AcadFrusText: Write the emerging themes with respect to frustrations in points along with quotes.
 - AcadDiff: Write the emerging themes with respect to solutions in points along with quotes.
 - CarFrusText: Write the emerging themes with respect to frustrations in career along with quotes.
 - CarDiffText: Write the emerging themes with respect to solutions in points along with quotes.

- SERelFrusText: Write the emerging themes with respect to frustrations in relationships in points along with quotes and explanations.
- SERelDiff: Write the emerging themes with respect to solutions in points along with explanation and quotes.
- SEEmotFrusText: Write the emerging themes with respect to frustrations in emotional support in points along with explanation and quotes.
- SEEmotDiff: Write the emerging themes with respect to solutions in points along with explanation and quotes.
- o MHFrust: Write the emerging themes with respect to frustrations in mental health in points along with quotes. Explain the themes as well.
- o MHDiff: Write the emerging themes in points, explaining them and along with quotes.
- CommentElse: Write the emerging themes in points, explaining them and along with quotes.
- CommentOther: Write the emerging themes in points, explaining them and along with quotes.
- Once AILYZE provided the response, it was copied as it is in the AILYZE Word
 document file prepared in the folders. It was decided that, to confirm that AILYZE
 provides similar types of responses each time, every 150 sets of data responses would be
 run three times through AILYZE. This process was considered similar to 'inter-rater
 reliability' at the AI level. Hence, each AILYZE Word document file had three sets of
 responses from AILYZE.
- This process was done for all created responses chunk documents in the 12 folders.
- After completing running the data through AILYZE for each folder (one at a time), I manually looked at all the responses that were provided by AILYZE to look for emerging themes in the data and cross-checked the following them:
 - Whether the quotes really exist in the data
 - Whether the quotes provided by AILYZE and the theme illustrated by it matches
 - o Whether the explanation of the theme matches the quotes and theme
- After this check in the first step, I collated all the themes provided by AILYZE in the Excel sheets of each question beside the responses by looking at each AILYZE Word document at a time. The same or similar themes were combined. Some themes that were combined into one by AILYZE were separated out. Sometimes, I went to the data and looked for more representative quotes for a theme with the help of keywords. The explanations of the themes were also reworded based on the condensed data/ patterns represented by the theme. After completing this process, I looked at all the AILYZE Word documents again to recheck if I missed any themes or if all themes were represented in the condensed themes created in the Excel sheets.
- This step was followed for all the 12 questions.

Appendix D: Actions to Address Unmet Need

Possible Actions That Can be Taken by the Mensa Foundation to Address Unmet needs

- 1. Action: Improve Attitudes toward high intelligence
 - a. Create a working group to prioritize activities to include in a marketing campaign
 - b. Make visible the hard work so many people put into their learning
 - c. Normalize a love of learning
 - d. Needs to be tasteful, sensitive to issues of social comparison
 - e. Helpful to show benefits to society, without making those with average ability feel "less than"
 - f. Focus on helping what do Mensans do for others?
 - g. Create educational resource database freely available (see <u>European Talent Support Network</u> for a model)
- 2. Action: Provide K-12 Academic supports
 - a. Provide training and materials in self-advocacy for students whose academic needs are not being met
 - b. Educational outreach develop partnerships with professional organizations that support highly intelligent students (e.g., NAGC, CEC-TAG)
 - c. Sponsor or provide teacher professional development
 - d. Support research on multiple exceptionalities and find ways to share information about their needs
- 3. Action: Provide Services for Academic Planning
 - a. Parent and student workshops
 - b. Integrate with career planning
 - c. Involve Mensans to share experiences/wisdom as speakers, mentors
- 4. Action: Provide Services for Career Planning and Guidance
 - a. Provide Mensa career planning workshops, guidebooks, materials
 - b. Lobby legislatures for more career planning/guidance at earlier ages
 - c. Build a mentorship network around careers
 - d. Provide guidance in STEM and non-STEM career planning
 - e. Create an online jobs board for positions of interest to highly intelligent individuals

- f. Involve Mensans to share experiences/wisdom as speakers, mentors
- 5. Action: Provide Financial Supports for Academic and Career opportunities
 - a. Identify areas of need
 - b. Develop funding mechanisms for scholarships, fellowships
 - c. Provide funding for early out-of-school educational experiences
 - d. Explore options to support business startups
- 6. Action: Foster Social Connectedness
 - a. Support emotional skill development (e.g., understanding and controlling emotions, self-regulation, goal setting)
 - i. Parent outreach
 - 1. Training/workshops for parents of highly intelligent children
 - 2. Sponsor parent support network
 - 3. Provide specialist referral list (see <u>ETSN</u> for possible model)
 - ii. Create trainings
 - 1. Involve counselors to ensure professional perspective
 - 2. Provide training for various age groups all children need these skills
 - 3. Include adult training many will not have received emotional skills support in early years. Consider age cohorts to build connections with peers who grew up in similar eras.
 - 4. Include specialized training for 2e/multiple exceptionalities
 - iii. Support SEL in schools for all students
 - b. Target connectedness in K-12 schools, college, workplace, and romantic partnerships
 - i. Sponsor skill development workshops, training, materials
 - ii. Opportunities for interaction
 - 1. Dating app for highly intelligent individuals
 - 2. Increase visibility/desirability of Mensa get-togethers, especially for young people
 - 3. Share social/emotional tips in Mensa publications (column?)
 - 4. Sponsor/Provide training to develop In-school programs
 - 5. Create outside-of-school programs for children

- iii. Use helping as a strategy; train children/adults to be tutors, create programs based on values emphasizing helpfulness. It's not all about you.
- iv. Provide training in code-switching, social information processing to help them fit in
- v. Advocate/Lobby for SEL in schools
- 7. Action: Provide Mental health supports
 - a. Support K-12 mental health efforts
 - b. Work with mental health professionals to develop and offer training materials about mental health strategies (workshops, workbooks).
 - c. Conduct outreach to mental health professional organizations (e.g., American Psychological Association, American School Counselors Association). Present research and informational sessions at their conferences; publish in their journals
 - d. Train counselors to work with highly intelligent clients (school counselors and clinicians)
 - e. Develop a certification program for counselors who have been through Mensa training
 - f. Create network of recommended counselors share this information widely
 - g. Consider including counselors for specific age cohorts
 - h. Identify supports for individuals with multiple exceptionalities
 - i. Have regular mental health column in Mensa publications or on website
 - j. Develop a resource of highly intelligent mental health professionals, either within the membership or through member recommendations
 - k. Support efforts to build a sense of purpose among highly intelligent individuals.
 Strong research base on positive effects on well-being when engaged in activities that benefit others. Mensa service organization?
 - 1. Share the *Handbook for Counselors Serving Students with Gifts and Talents*.

Appendix E: Approvals and Consent PDFs

Subject: STATUS OF PROTOCOL EDIRC-2024-03-06-16930-jrcross set to active

Date: Sunday, March 10, 2024 at 3:34:27 PM Eastern Daylight Time

From: Compliance <compli@wm.edu>

To: Cross, Jennifer <jrcross@wm.edu>, Cross, Tracy <tlcross@wm.edu>, edirc-l

<edirc-l@wm.edu>

This is to notify you on behalf of the Protection of Human Subjects Committee (PHSC) that protocol EDIRC-2024-03-06-16930-jrcross titled Mensa Foundation Study of Unmet Needs of the Gifted has been approved through the EXPEDITED review process with a start date of 2024-03-15.

This protocol must be submitted for annual renewal on 2025-03-15 at which time the PI will be asked to indicate whether the protocol will continue as active or should be set to inactive.

Should there be any changes to this protocol during the project period or if you wish to continue the protocol after this expiration date, please submit your request to the committee for review using the Protocol and Compliance Management application (https://compliance.wm.edu).

Please add the following statement to the footer of all consent forms, cover letters, etc.:

THIS PROJECT WAS APPROVED BY the W&M PROTECTION OF HUMAN SUBJECTS COMMITTEE (Phone 757-221-3966) ON 2024-03-15 AND EXPIRES ON 2025-03-15.

You are required to notify Dr. Jennifer Stevens, Chair of the PHSC at 757-221-3862 (jastev@wm.edu) if any issues arise with participants during this study.

Good luck with your study.

COMMENTS
----No comments available

BASIC INFO

Title: Mensa Foundation Study of Unmet Needs of the Gifted

Start Date: 2024-03-15

Year Number: 1
Years Total: 1
Campus: Main
Committee(s): EDIRC

Cc: Emails:

PI INFO

W&M UserID: jrcross Full Name: Cross, Jennifer

Role: Faculty

Department: Center for Gifted Education

Day/Work Phone: 7572212414

Ext:

Alternate Phone:

W&M UserID: tlcross **Full Name:** Cross, Tracy

Role: Faculty

Department: Center for Gifted Education

Day/Work Phone: 7572212210

Ext:

Alternate Phone:

Protocol modified by tjward on 2024-03-10 15:34:21

Subject: Invitation to use American Mensa members as subjects

Date: Tuesday, April 2, 2024 at 5:35:15 PM Eastern Daylight Time

From: Jean BECKER < jeankbecker@icloud.com>

To: Cross, Tracy <tlcross@wm.edu>, Cross, Jennifer <jrcross@wm.edu>

CC: Steinhice Charlie <steinhice@gmail.com>, Nguyen Suzi

<suzin@americanmensa.org>, Beckham Jill <jillb@mensafoundation.org>

You don't often get email from jeankbecker@icloud.com. Learn why this is important

Dear Dr.s Tracey and Jennifer Cross,

I am happy to relay approval to use AML members in your proposed research "Mensa Foundation Study of Unmet Needs of the Gifted". The committee was unanimous and it is a pleasure to review such a well crafted project.

We are all excited to watch the progress and read your results. I am sure the Mensa Bulletin will also welcome followup articles as many members will also be curious about what you learn.

I will mention two things noted by committee members for your consideration, although any changes are completely voluntary.

—It was noted many 70 year olds today may bristle at being called "elderly". They might call themselves older members or seniors or some more "modern" term.

—One committee member noted that American Mensa would be curious to know if there is a significant difference between what members in their first year of membership report, versus members who have chosen to renew their membership at least once. Predicting what members seek in joining Mensa and whether they are finding it, and choose to renew after finding out more about Mensa, is always of prime interest to AML.

Please do not hesitate to contact me if I can be of further assistance at 810.229.2113 or <u>Jeankbecker@icloud.com</u>.

Jean K. Becker, Ph.D.

Chair, American Mensa Research Review Committee

Study Title: Mensa Foundation Study of Unmet Needs of the Gifted

Informed Consent Form

1. Invitation to Participate in a Research Study

You are invited to participate in this research study, titled the Mensa Foundation Study of Unmet Needs of the Gifted, a project funded by the Mensa Foundation. It is being conducted by Tracy L. Cross, Ph. D. and Jennifer Riedl Cross, Ph.D. at William & Mary in collaboration with the Mensa Foundation.

2. Why is this research being done?

The Mensa Foundation aims to provide effective, targeted supports for the gifted across the various ages and stages of life. As an initial step, this study surveys individuals who fit that description, including members of American Mensa and allied organizations to identify their experiences of unmet needs in the domains of education, career, social and emotional, and mental health.

3. Who is eligible to participate in this study?

Participants must be age 18 or over. Additionally, there should be some indication that they meet the criteria for being gifted, either through Mensa membership, high test scores, or some other means, including self-identification.

4. What will happen if you join this study?

Participation in this study involves completing an online questionnaire that will take approximately 45 to 60 minutes. The questionnaire does not have to be completed in one sitting. It can be revisited on the same device with the same browser for up to one week. It is important that you refrain from clearing your cache or deleting your browsing history during the duration of your participation in this study. Doing so may disrupt your ability to return to the questionnaire seamlessly.

5. What are the risks of participating in the study?

There are no anticipated risks to your participation in the study. Your information will contribute to the Mensa Foundation's ability to support others who may experience unmet needs similar to those you report.

6. Are there benefits to being in the study?

Upon completion of the questionnaire, you will have the opportunity to choose a token of appreciation for your time and contribution. Rewards include:

- o Entry into a drawing for one of four \$100 Amazon gift cards.
- o Access to the Mensa Foundation Colloquium recordings (valued at \$199).
- o Entry into a drawing for a series pass to the Mensa Foundation Speaker Series (30 available) (valued at \$350).

The survey is anonymous, so upon completion of the questionnaire, you will be directed to a brief questionnaire requesting your reward selection and contact information.

7. What are your options if you do not want to be in the study?

You are not required to participate in this study. If you agree to participate, but later decide not to, you may drop out at any time. You can skip any questions you do not wish to answer on the questionnaire. There are no penalties or consequences of any kind if you decide not to participate.

8. How will the confidentiality of your data be protected?

The online questionnaire is entirely anonymous, meaning no identifying information will be collected or retained. Your responses will solely be utilized to inform the Mensa Foundation's service plans and may potentially be included in publications upon study completion. As the questionnaire is anonymous, participants cannot be identified in any published material. The William & Mary Institutional Review Board (IRB) may examine study records, focusing solely on the researchers and not on participants' responses or involvement. The IRB ensures the safety of participants in research studies.

9. Do you have any questions?

We will be happy to answer any questions you have about this study. If you have further questions about this project or if you have a research-related problem, you may contact Tracy L. Cross at (757) 221-2210 or tlcross@wm.edu, Jennifer Riedl Cross at (757) 221-2414 or jrcross@wm.edu, or the William & Mary IRB representative Tom Ward at tjward@wm.edu.

The general nature of this study entitled "Mensa Foundation Study of Unmet Needs of the Gifted," conducted by Dr. Tracy L. Cross and Dr. Jennifer Riedl Cross, has been explained to me. I understand that I will complete a survey of approximately 45 to 60 minutes in duration. I understand that my responses will be anonymous and that my name will not be associated with any results of this study. I know that I may refuse to answer any question asked and that I may discontinue participation at any time. Potential risks resulting from my participation in this project have been described to me. I am aware that I may report dissatisfactions with any aspect of this study to Tom Ward, Chair of the School of Education Internal Review Committee at tjward@wm.edu or by phone at (757) 221-2358. I am aware that I must be at least 18 years of age to participate.

I have read the information describing this study. By selecting "Yes" below, I am agreeing that I meet the qualifications and am participating voluntarily.

- o Yes, I will participate
- o No, I will not participate

Online Participant Informed Consent

The purpose of this study, entitled "Mensa Foundation Study of Unmet Needs of the Gifted: Interviews," conducted by Drs. Tracy L. Cross (tlcross@wm.edu) and Jennifer Riedl Cross (jrcross@wm.edu) at the William & Mary Center for Gifted Education, is to explore the educational, career, social/emotional, and mental health needs of highly intelligent adults.

The interview should take approximately 60 minutes. There are no anticipated risks to you from participation in the interview. The primary benefit of participating in this study is the opportunity to contribute to Mensa's understanding of how it can best support the development of highly intelligent individuals. As thanks for your participation, the Mensa Foundation is offering access to their Colloquium recordings or an entry into a drawing for a 2-year subscription to the *Mensa Research Journal*. The interview will be recorded and transcribed to be analyzed by the researchers. Your identity will be kept confidential and only known by the researchers. You may request a brief report of the study's findings by emailing Dr. Jennifer Cross at jrcross@wm.edu. You may refuse to answer any question asked and may discontinue participation at any time without affecting your relationship with the Mensa Foundation, William & Mary, or the Center for Gifted Education. If you have any questions or concerns about your rights as a research subject, or to report dissatisfaction with any aspect of this study, you may contact the William & Mary IRB representative, Tom Ward (tjward@wm.edu, 757-221-2358). You must be at least 18 years of age to participate.

THIS PROJECT WAS APPROVED BY the W&M PROTECTION OF HUMAN SUBJECTS COMMITTEE (Phone 757-221-3966) ON 2024-03-15 AND EXPIRES ON 2025-03-15.

I have read the information describing this study. By selecting "Yes" below, I am agreeing that I meet the qualifications and am participating voluntarily.

Response options: Yes, I will participate No, I will not participate