THE GIFTED EDUCATION REVIEW



ARMCHAIR DOGMA

by Angela Novak, Ph.D.

first heard the term armchair dogma in relation to Leta Stetter Hollingworth's research on the variability hypothesis. In short, the hypothesis stated that males display a greater range in traits (variability) than women, particularly in cognitive and physical traits; thus, society did not expect women to have above -average intelligence or achieve eminence. This variability hypothesis, however, was based on armchair dogma rather than science. Hollingworth's published experimental studies disproved the variable hypothesis. In discussing the results of her research in a 1916 chapter, The Vocational Aptitudes of Women, Hollingworth stated the following:

The literature of opinion includes all written statements, made by scientific men and others, not based on experimental evidence... By the literature of fact is meant those written statements based on experimental data, which have been obtained under carefully controlled conditions, and which may be verified by anyone competent to understand and criticize them. (p. 224).

The literature of opinion was armchair dogma. The opinions and theories shared by white men wearing white lab coats or perhaps an appropriately expensive suit, seated in impressive armchairs with the uneducated masses at their feet. These masses dutifully listened and believed what was said by virtue only of the whiteness of the skin, the maleness of the individual, and the stature of the armchair.

Armchair dogma of the early 20th century is the pseudoscience of today,

GIFTED EDUCATION REVIEW

www.giftededucationreview.com

Editors

Laila Y. Sanguras, Ph.D. James Bishop, Ph.D. editor@giftededucationreview.com

Assistant Editors

Candace N. Davis, Ashley C. Hart, Alexa V. Rodriguez, and Kiera J. Wade

Advertising ads@giftededucationreview.com

Submissions

The Gifted Education Review welcomes submissions from teachers and academics in the field of Gifted and Talented Education. Please send queries or submissions to the editors at the address above.

In this issue:

Armchair Dogma: What It Is and Why We Believe by Angela Novak

Why Should Educators and Parents Care about the Replication Crisis in Psychology? by Erin M. Miller & Clarice J. Morris

> When Not to Trust Your Common Sense in Education by Jeb Puryear

> > Seven Questions for Scott J. Peters by James Bishop

Myths and Research Regarding the Socio-Emotional Needs of the Gifted by Celeste D.C. Sodergren & Yasmin C. Laird

> **Book Finds** by Sarah A. Chambers & Felicia Turner

and Hollingworth's definition of the literature of opinion is consistent (though pseudoscience now is not the sole domain of the white male): Concepts that are described to appear to be as science, but do not follow empirical criteria. An important distinction in this area is the difference between bad science and pseudoscience. If we draw a line between pseudoscience and science as following the scientific method, what about studies that do so poorly? Perhaps they use inaccurate sampling methods at best, or are fraudulent in their analysis at worst? I would hesitate to label these studies as pseudoscience, personally, but would opt for the extended categories of bad or fraudulent science, or even the popular "Fake News." For the record, fake news is falsified information intentionally spread by individuals or organizations to deceive and sway opinions. Distinct from armchair dogma and pseudoscience mainly due to intent, they can be grouped together when asking: Why is the literature of opinion, pseudoscience, fake news, and/or armchair dogma so easy to believe?

Literature of Fact Explanation 1: Naïve Realism and the Bias Blind Spot*

Social psychologists research a phenomenon called naïve realism, in which people believe they are naturally objective by nature in how they think and perceive the natural and social world. Thus, if what people hear fits in with their beliefs as objective thinkers, they believe it. Similarly, individuals tend to believe, based on their belief in their own objectivity, that they are less susceptible to bias than others. This "bias blind spot" is so strong that in studies when participants rated

a source used as biased and subsequently provided biased conclusions, they still indicated that they felt that they reached conclusions that were objective (Hansen et al., 2014). In a series of three studies, Stanford psychologists Drs. Emily Pronin, Daniel Lin, and Lee Ross (2002) found that "people do indeed expect that others will share their views. But, when these others fail to do so, people are likely to see those with whom they disagree as unreasonable and as unable to view things in an objective manner" (pp.378-379). You believe pseudoscience because it fits in with what you know. You're right, they're not.

Literature of Fact Explanation 2: Backfire Effect and Confirmation Bias

I'm going to explain this, but first, if you're so inclined, click on this link to read an Oatmeal cartoon; or this link to watch a narration of the cartoon. I'm not saying they will be better than my explanation. But certainly, more colorful and artistic, and yes, probably better! Self-deprecation aside, the backfire effect is a psychological principle based on the understanding that you already have set knowledge or beliefs. At some point, you are presented with information or facts that contradict what you already know or believe. Despite the evidence, proof, and/or persuasive commentary, not only do you not believe the new information, you double down on your original beliefs! In doing so, you sift through the facts, clinging only to your truths, those that confirm your initial bias and ignore all the newly presented information as wrong (bad science or fake news). The literature of fact for backfire effect comes from experimental psychology (see, for example: Silverman, 2011; Romm, 2014)

and even extends into neuroscience. Psychologists Festinger, Riecken, and Schachter (1956) conducted an early study on this phenomenon by examining a doomsday cult that believed that the world was ending in 1954; despite evidence to the contrary (life continuing in 1955) cultists continued to participate in the cult and extolled their beliefs in the faith. Neuroscience research involves experimental studies using brain scans in which scientists study the different areas of the brain and how the brain reacts to statements based on the individual's beliefs. Dr. Kevin Dunbar (2003) conducted a study at Dartmouth and found that areas of the brain that engaged when statements were in agreement with beliefs were areas typically associated with learning, while statements that contradicted beliefs caused effortful thinking and thought suppression areas of the brain to engage. You believe pseudoscience because your brain tries to suppress what doesn't fit into your beliefs.

Moving Forward: Ousting the Dogma from the Armchair

So, where does this leave us? Are we destined to believe what that stoic figure in the armchair decrees? Even when such dogma is nonsensical in the case of Hollingworth's fight against the variability hypothesis, or when it is against the best interests of our students, and research, literature of fact, confirms this to be true? Not necessarily: We just have to work around naïve realism and backfire effects. John Cook and Stephan Lewandowsky created the Debunking Handbook, first describing three different backfire effects and then detailing how to debunk a myth; similar steps can be followed in working against armchair dogma.

*Bias Blind Spot or Bias Blindness is the term provided in the psychology literature; the author acknowledges that using the term blind or blindness is ablest, and this is not the intention, however in referencing the studies, these are the only two terms used.



Debunking requires an emphasis on core facts with visuals when possible, a warning if the myth is repeated, and providing an alternative explanation so that the individual understands how the core facts deviate from the previous information believed as correct. One aspect that I particularly like about the Debunking Handbook is that it is based on literature of fact, and that the researchers continue to study this phenomenon. When a research study conducted by Lewandowsky did not fully support one of the assertions in the handbook, he wrote blog posts, one of which with amended handbook pages for the handbook. Literature of fact requires review and correction following the appropriate scientific process; otherwise, it falls into the other categories described earlier: fraudulent or bad science.

Conclusion

As a society, our ideals have told

us that we have moved beyond the image of father knows best, of listening to the sharply dressed white man sitting in the massive leather chair in the impressive book-lined mahogany office, and accepting his word as truth because of the singular picture and the assumptions and stereotypes it brings forth. But in reality, our schools are still over-shadowed by deeply rooted systemic misogyny, oppression, and racism. While not all instances of armchair dogma have their foundations in bias, as in the case of the variability hypothesis, the outcome of pseudoscience's stranglehold on beliefs are the systems and policies in the educational realm.

References

Cook, J. & Lewandowsky, S. (2011). *The Debunking Handbook*. University of Queensland. http://sks.to/ debunk

Festinger, L., Riecken, H.W. & Schact-

er, S. (1956). *When Prophecy Fails.* University of Minnesota Press.

- Hansen, K., Gerbasi, M., Todorov, A., Kruse, E., & Pronin, E. (2014).
 People claim objectivity after knowingly using biased strategies.
 Personality and Social Psychology Bulletin, 40(6) 691–699. DOI: 10.1177/0146167214523476
- Pronin, E., Lin, D.Y., Ross, L. (2002). The bias blind spot: Perceptions of bias in self versus others. *Personality and Social Psychology Bulletin, 28*(3) 369-381. DOI: 10.1177/0146167202286008
- Romm, C. (2014). Vaccine myth-busting can backfire. *The Atlantic.* https:// www.theatlantic.com/health/archive/2014/12/vaccine-myth-busting-can-backfire/383700
- Silverman, C. (2011). The backfire effect: More on the press's inability to debunk bad information. *Columbia Journalism Review*. https://archives.cjr.org/behind_the_news/ the_backfire_e fect.php



The Replication Crisis in Psychology

Why Educators and Parents Should Care

he core mission of both education and parenting is guiding children as they develop the knowledge and skills needed to make their way in the world. To fulfill this mission, we seek knowledge from across many different domains to make the best decisions. Chief among these domains is psychology. The field of psychology has undergone challenges in the last ten years related to the replication and reproducibility of well-known findings in psychology. Replication is when researchers use the same methods used in a previous study with a new set of participants to determine if the same results will occur. Reproduction is defined as when a new set of researchers analyze the same data to determine if they will come to the same results as prvious research. As more and more researchers began to focus on replication and reproduction, there have been

Erin M. Miller and Clarice J. Morris

many results that have implications for educators and parents. There are several reasons why a finding will not re licate. Some may be due to mistakes or malpractice on the part of the original researchers; much of the time, the reasons are not nefarious. The following discussion describes a reason that a finding may not replicate or why researchers cannot reproduce a relevant finding for other educators.

Some phenomena are true with some groups of individuals but are either less powerful or do not occur at all with other groups. This means that it is possible that a study will replicate with some groups but not others. Differences among groups are particularly significant when working with gifted kids. Mindset theory is one area where teachers and parents can see these differences. Studies to replicate and validate mindset theory have been variable, with large studies finding a negligible effect of having a growth mindset on achievement. However, the effect differed depending on ability level. For students who struggle in school, having a growth mindset rather than a fixed mindset makes a more significant difference than for average and high achieving students. This is in line with research with gifted children that did not find an effect of mindset and the idea that for gifted children having some aspects of a fixed mindset facilitates achievement in some situations. For example, if a gifted child is confident in their ability to excel at an academic challenge, then it can be helpful to be motivated by a desire to show that excellence to others.

Societal changes over time can affect how people behave. For example, all the work that has been done over the last 40 years to encourage



girls to enter STEM fields has changed beliefs. A well-known theory that has not fared well in replications is stereotype threat. Stereotype threat occurs when individuals believe they may conform to a stereotype such as "boys are better at math than girls." When reminded of this stereotype, research sustains that girls achieve at a lower level; however, this effect is diminishing over time, and researchers have found that they cannot replicate past studies. Stereotype threat requires that people believe the stereotype, and as the stereotype diminished, so did the effect.

The group of individuals who participated in the study may have been very small. With a small number of participants, there is more of a chance that random differences between people will affect the results. Because of the cost, studies of the brain often have small sample sizes. It is not unusual for studies using methods such as fMRI not to replicate. There is an allure of some recommendations that scholars style as "brainbased" can result in greater faith in the findings. However, patience is needed while a volume of convergent research accumulates. Otherwise, educators will be applying the results prematurely and may either waste their time or set children down the wrong path.

Sometimes researchers are un-

ing the results, and when researchers identify that factor, the results dissipate. One example is in the "The Marshmallow Test." Children are placed in a room with a marshmallow on a table. They are told that they can eat the marshmallow or wait, and they will receive two marshmallows to eat. Originally, the researchers found that children who could wait had higher academic achievement later in life. They interpreted the finding as indicating the importance of self-control on achievement. Replications found a similar effect, except there was an important addition. When researchers regarded student characteristics socioeconomic status as controls, the effect disappeared. The ability to not eat the first treat had more to do with economics and variables in home environments than self-control. The test was not measuring self-control as much as faith in future promises and resources. As many educators and parents know, children's home lives have a large influence on achievement. While a secure and loving home is enough to facilitate achievement (there is no need to be perfect), a challenging home can certainly lead to underachievement.

There are quite a few lessons here for parents and educators who infl ence the lives of gifted children. First and foremost, be an educated skeptic. Although most core aspects of psychology apply equally to all children, including gifted children, consider the possibility that an effect (like mindset) may work differently in different groups. Inquire as to whether research has been completed with gifted children as part of the research participants. Societal attitudes towards academic excellence change over time. What researchers found true in the 1980's, might not necessarily apply in the 2020's. Question the number and type of individuals who participated in the research. Are they diverse? Is the sample large enough? Could another factor be at play? This is a particular challenge in research with gifted children as the numbers are by definition smaller and it is more difficult to get a wide range of types of gifted people as participants. A Russian proverb that gained popularity in the 1980's is "doveryai no proveryai" meaning "trust but verify." Nearly all researchers in both psychology and education are motivated by a sincere desire to provide the best guidance they can give. They have an obligation to adhere to best practices in research. At the same time, as parents and educators we have an obligation to critically examine ideas before implementing them with children who depend on adults for facilitating their development.



Common Sense in Education

s teachers, we would like to think the majority of what drives our classroom activities and student advocacy is based on the foundation of evidence gleaned from research. The environment we work in has an evergrowing research base on which it rests. When we sit through hours of professional development and see countless blurbs on the internet which distill this research base, we develop a common sense about what is or is not effective, and what is or is not research-based. However, we rarely question how accurate our common sense is and whether scholars effectively summarized the research base to get us to our default points of view.

Sanne Dekker and her colleagues (2012) were interested in these questions, and they devised a study to see which misconceptions are most prevalent among educators (see link). They asked their study participants whether or not a series of 32 statements were correct or incorrect. Some had a basis in research, and some were common misconceptions which they termed "neuromyths." You can find a full list

Jeb Puryear

in the link above. Dekker (2012) was interested in whether teachers could spot the neuromyths. I've used the list similarly in the classes I teach for pre-service teachers to drive home the importance of being research-driven, basically justifying the existence of my educational psychology and human development classes. Here I want to share the experiences with my students with the hope that it shines a light on some misconceptions you may have yourself and fan the embers of your own desire to use researchbased practices. I will share four of the most common misconceptions in the samples of Dekker and her colleagues: stimului- rich environments, motor-perception and literacy, right-brain vs. left brain, and learning styles.

Neuromyth 1: Environments that are rich in stimulus improve the brains of pre-school children

As teachers, we generally default to the position that more stimuli are better than mere activity and interactions make it possible for more connections in the brain, etc. In early childhood and lower-elementary settings, this is an even more pronounced view; however, while it's true that stimuli build connections, the stimuli still need to be appropriate. Teachers should prioritize building quality connections over the quantity of connections. We must also be mindful that over-stimulating environments (think of an elementary classroom with every bit of wall space covered) can be detrimental to overall attention and engagement, which may hinder student growth. In short, not all stimuli are created equal, and more isn't necessarily better.

Neuromyth 2: Exercises that rehearse coordination of motor-perception skills can improve literacy skills

Teachers of young children often see a connection between those students with greater motor skills and literacy skills, so a belief in this neuromyth is not terribly surprising. The problems with the statement lie primarily in misinterpreting correlation and causation.



That is, there is a research base for a correlation between the sets of skills, but that is primarily due to the latent, underlying development of the child --not because one skill improving caused the other to improve. Also, even the underlying correlation is somewhat problematic since there is the issue of how literacy is assessed. Obviously, if a student can physically hold a pencil, they will do better on a literacy assessment based on writing. A number of studies demonstrate that when controlling for these skills like holding a pencil, literacy differences largely disappear. In short, do activities to build motor skills and to build literacy skills, just don't expect them to influence each other directl .

Neuromyth 3: Differences in hemispheric dominance (left brain, right brain) can help explain individual differences amongst learners

As a creativity researcher, this one drives me crazy. The popular psychology notion that "left-brained" students act one way and "right-brained" students act another way is unfounded. It is true that certain parts of the brain have primary functions, but with very few exceptions, parts don't have sole functions. However, the prime reason this doesn't hold up is that a human used different areas of the brain constantly, no matter the task. Think about it: We talk about doing math problems in multiple ways so we can have students make multiple connections in the brain. We shouldn't think all those connections are made in the same part of the brain. Additionally, putting things in absolutes of left/right- brained is a miniscule step from some saying things like "some people are just creative and some are not." For me, those are fighting words, but they are fodder for a whole other piece. In short, students use (nearly) all their brain (nearly) all the time, and we shouldn't use the left/ right brain as code for whether or not students are creative.

Neuromyth 4: Individuals learn better when they receive information in their preferred learning style (e.g., auditory, visual, kinesthetic)

"When researchers have tried to identify learning styles, teach consistently with those styles, and examine outcomes, there is no persuasive evidence that the learning style analysis produces has more effective outcomes than a "one size fits all approach" (Strauss, 2013). Whenever I talk to pre-service or in-service teachers about learning styles, I always ask about the connection to multiple intelligences (MI). Without fail, the groups equate them, at least in principle. I then give this quote, and the cognitive dissonance ensues. There are problems with MI as well, but again that's fodder for a whole other piece. In short, the

body of research on learning styles offers three main conclusions: 1) students don't reliably identify their own learning styles; 2) even when students do identify a learning style, they don't use learning strategies to support that self-proclaimed style; and 3) even with a consistent style and student habits, there are no documented benefits academically.

No doubt, as many of you read through these, your haunches get up, and you have thoughts of "But I thought ... " or "I know I read that ... " These are well-founded feelings given the way our field carries itself. Each of the neuromyths discussed above contains elements of researchbased truth, but they are instructive how extending ideas to their extreme makes their efficacy tenuous. As educators, we should aim to cling to the core elements of research and reasonably apply them. This course of action will be best for the growth of our students.

References

Strauss, V. (2013, October 16). Howard Gardner: 'Multiple intelligences' are not 'learning styles'. *The Washington Post.* https://www. washingtonpost.com/news/answer-sheet/wp/2013/10/16/howardgardner-multiple-intelligences-arenot-learning-styles/

FROM THE EDITOR

Several years ago I was taking doctoral classes at night while teaching English to gifted middle school students during the day. I distinctly remember the moment when my professor broke the news that there was little to no evidence that learning styles were effective in increasing academic achievement. I sat in my seat puzzled, because I had recently attended a conference where multiple sessions were offered on learning styles. I had participated in staff development, paid for by my district, that advocated that we "get to know" the learning styles of our students and were challenged to design our lessons to align to them.

From that point on, the hair on the back of my neck would stand up when I heard someone advocate for learning styles. I was completely befuddled. Why would all of these wellmeaning, intelligent individuals push educational activities that were not grounded in research? I was learning that research-based practices should be the foundation of our work in the classroom, yet I was hearing a very contradictory message.

This is why I am thrilled to share this issue of the *Gifted Education Review* with you. Angela Novak describes what it means to rely on "armchair dogma" and Erin M. Miller and Clarice J. Morris emphasize the importance of replication in psychological research. In two different articles, Jeb Puryear, Celeste D.C. Sodergren, and Yasmin C. Laird highlight additional myths that you may have heard (and what research actually tells us). We have also compiled a fascinating interview with Scott J. Peters and two different book reviews for you to explore further. We hope you enjoy and that these articles push you to a similar state of befuddlement that I found myself in years ago. From this point is where our conversation about the applicability of research can begin.

Laila Y. Sanguras, Ph.D. Co-Editor Gifted Education Review

Seven Questions with Scott J. Peters

Interview conducted by James Bishop

Scott J. Peters, Ph.D. is a professor of assessment and research methodology at the University of Wisconsin-Whitewater. His research work focuses on educational assessment, gifted and talented student identification, disproportionality within K-12 education, and educational policy.

In this brief interview, Dr. Peters tells the Gifted Education Review why the gifted and talented field should be concerned about pseudoscience and what we can do about it.

To begin with, what is your personal operating definition of pseudoscience?

Wow. That's tough. I guess I see pseudoscience as the same as truthiness, which is usually define

as something someone feels is true based on their own experience or a desire for it to be true, rather than based on any specific evidence

Do you feel like this has been more of a problem in recent years or are we making improvements?

I think a lot of it is access to social media. The bar to sharing content is much lower than it was twenty years ago. Even in "scholarly" journals - it's much easier now to "have" a journal that is fully online and seems legit. It's also easy for people to set up amazing websites and share content that isn't based on any empirical science. It's also about access. Even if a teacher wanted to, she can't get access to a research source unless she pays. But she can access all the



random pseudoscience websites in the world for free.

How prevalent a problem is pseudoscience in the GT field

I'd say it's a big problem, in part because we're dealing with this vague "gifted" concept. It's also a problem because people like parents and teachers can't access a lot of the information. It's paywalled or it's research speak, so they end up relying more on blogs or Facebook personal experiences instead of actual science.



What is the most egregious example of pseudoscience you have seen in our field

The worst example of pseudoscience might be overexcitabilities or the general idea that GT kids are at some heightened risk for social-emotional problems. There absolutely *are* GT kids with very severe social emotional and mental health problems, but the prevalence rates look pretty similar. And yet there are entire courses devoted to the unique social emotional needs of GT kids.

Why, in your estimation, are people so quick to accept pseudoscience?

People like concepts that are simple and intuitive and conform to their life experiences. They don't like to be wrong. Any time someone has a prior, ingrained belief, it's a very personal and uncomfortable task to admit that you're wrong or actually accept another person's argument/evidence.

Do you find that people are receptive in the gifted and talented field when efforts are made to point out that certain beliefs are not supported by science?

I think some people are receptive when confronted with evidence against their current view, but humans in general like to seek out information that supports what they already think. So it's not always an easy task. This is especially hard in the GT world where so many people are used to being under attack or having their concerns dismissed. It's hard to acknowledge their concerns and legitimize them, while also pointing out what is a systematic issue vs. one person's legit experience.

What can we do to minimize pseudoscience in our field

What can we do? Two things: First, we can make more good content available to a wider audience through things like open access journals, webinars, etc. Second, we can make more content that's actually for non-researchers. This is something I've started doing a lot more. Once I do a study or two on a topic, I try and write up a practitioner-friendly "how to" version of the piece. There are also copyright rules that allow people like me to post pre-print versions of articles on my faculty website so that I can share them more broadly. I think researchers just need to remember that sharing their work and helping people implement it is part of the job. If we don't do that, we can't complain when it doesn't get used.

Gifted Education Review is published by **The Passionate Mind Institute**, a nonprofit 501(c)3 charitable institution dedicated to research, education, and support in the fields of creativity, giftedness and talent, and the arts. Your tax-deductible donations make *The Gifted Education Review* and other valuable programs possible.

Make a contribution and learn more at <u>http://www.thepassionatemind.org</u>.



EST. 1999

BAYLOR UNIVERSITY'S

CENTER FOR GIFTED EDUCATION AND TALENT DEVELOPMENT



ANNUAL EVENTS HOSTED BY THE CENTER

- Fall GT Conference
- Spring GT Parent Conference
- University for Young People (June)



The Center provides:

- educational opportunities for gifted and talented students in Grades 1– 12;
- professional development for teachers, counselors, and administrators of gifted students and programs; and
- support for parents of gifted and talented students.





CONTACT

Website: baylor.edu/soe/gifted Email: centersupport@baylor.edu Phone:(254) 710-2171



Myths and Research Regarding the Socio-Emotional Needs of the Gifted

Celeste D.C. Sodergren and Yasmin C. Laird

n the education community, there are frequent disconnects between the findings of academic research and the practical application of those findings to the education of children. In fact, Howard-Jones (2014) described this as a disturbing trend that repeats itself over and over in the education field:

"We see new neuromyths on the horizon and old neuromyths arising in new forms, we see 'boiled-down' messages from neuroscience revealing themselves as inadequate, and we see confusions about the mind-brain relationship and neural plasticity in discussions about educational investment and learning disorders" (p.6).

The gifted and talented community is not immune to the spread of such myths, and many persist in spite of research which debunks them. One of the areas in which myths regarding gifted and talented students is most persistent is in regards to their socioemotional issues. Gifted students have been colloquially described as more likely to be depressed, more prone to social awkwardness, and at risk for developing anti-social behaviors. They have equally been described as needing no attention, as their giftedness is somehow supposed to alleviate the usual adolescent angst and elevate them to preternatural, Spock-like maturity (Cross & Frazier, 2009). Both cannot possibly be true, and in truth, neither is really true. The truth is much more complex, and requires an awareness not only of child development, but of how deviations in those typical development patterns may manifest in complex interactions and behaviors (Cross, 2001).

The reasons for focusing on the

correct interpretation of the socioemotional needs of gifted and talented students goes beyond a simple desire to understand. It behooves us as leaders, teachers, parents and researchers to focus the lens on these needs, as they play a significant role in the identity development of adolescents, and contributes to the overall success of gifted individuals throughout life (Zuo & Cramond, 2001; Cross & Frazier, 2009). Intelligence and academic achievement alone are not enough, according to Zuo & Cramond (2001) but "nonintellectual factors, such as force of character, perseverance, and motivation, played a part in the formula of success" (p.252). Cross and Frazier (2009) also found that there was a strong association between identity formation and vocational success, and called for the guidance of gifted students through the process of

developing their self-identity as a means for securing future success.

It is in the spirit of the alignment between research and practice, and in support of the proper guidance of identity development that this chart of myths and research about the socioemotional needs of the gifted and talented is presented in Table 1.

Based on the aforementioned fin ings presented on the chart of myths and research about the socio-emotional needs of the gifted and talented, it is clear that the gifted community has a lot of work to do. Not only must we ensure that we are speaking with one voice on these issues as a research community, but we must make sure our voice is reaching the ears and hearts of practitioners and parents responsible for educating and counseling gifted students.

Educational stakeholders who play a role in these students' lives must be better informed of the connection between theory and practice for the socioemotional development of students, as a focus on intelligence and achievement alone is insufficient, and perhaps even detrimental to the successful development of the whole child. As leaders, teachers, parents and researchers, a critical focus on these needs is essential in order to ensure genuine identity and overall success throughout life. There can be no doubt that in the gifted and talented community there are many myths that are perpetuated, especially those regarding the socioemotional issues of gifted and talented students. Despite the research which has debunked these myths, gifted students continue to be described in a variety of ways, ranging from depressed, socially awkward, and antisocial, to independent and preternaturally mature. The truth is much more complicated. The complex interplay of differential development and potential suggests that a more sophisticated exploration of child development is warranted. Before researchers can address crafting advice for parents and practitioners, it is crucial that they are aware of both the best of the research on the issue, and what prevailing myths reside in the gifted community.

References

- Altaras-Dimitrijević, A. (2012). A faceted eye on intellectual giftedness: Examining the personality of gifted students using FFM domains and facets. *Psihologija, 45*(3), 231–256. https://doi. org/10.2298/PSI1203231A
- Cross, T. L. (2001). Gifted children and Erikson's theory of psychosocial. *Gifted Child Today,* 24(1), 54-55, 61.
- Cross, T. L. & Frazier, A. D. (2009). Guiding the psychosocial development of gifted students attending specialized residential STEM schools. *Roeper Review, 32*(1), 32-41.
- Howard-Jones, P. A. (2014). Neuroscience and education: Myths and messages. *Nature Reviews Neuroscience*, 15(12), 817–824.
- Jones, T. W. (2013). Equally cursed and blessed: Do gifted and talented children experience poorer mental health and psychological well-being? *Educational* & *Child Psychology*, *30*(2), 44-66.
- 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*, 129–148. https://doi.org/10.1080/13598139.20 15.1108186
- Locicero, K. A., & Ashby, J. S. (2000). Multidimensional perfectionism in middle school age gifted students: A comparison to peers from the general cohort. *Roeper Review, 22*, 182–185. https://doi. org/10.1080/02783190009554030
- Margot, K. C., & Rinn, A. N. (2016). Perfectionism in gifted adolescents: A replication and extension. *Journal* of Advanced Academics, 27, 190-209.

https://doi.org/10.1177/1932202X16656452

- McCrae, R. R. (2010). The place of the FFM in personality psychology. *Psychological Inquiry, 21*, 57–64. https://doi.org/10.1080/10478401003648773
- Parker, W. D., & Mills, C. J. (1996). The incidence of perfectionism in gifted students. *Gifted Child Quarterly*, 40, 194–199. https://doi. org/10.1177/001698629604000404
- Parker, W. D., Portešová, S., & Stumpf, H. (2001). Perfectionism in mathematically gifted and typical Czech students. *Journal for the Education of the Gifted, 25*, 138–1152. https://doi. org/10.1177/016235320102500203
- Reis, S. M. & Renzulli, J. S. (2004). Current research on the social and emotional development of gifted and talented students: Good news and future possibilities. *Psychology in the Schools, 41*(1), 119-130.
- Sarouphim, K. M. (2011). Gifted and nongifted Lebanese adolescents: Gender differences in self-concept, self-esteem and depression. *International Education*, 41(1), 26–41.
- Shechtman, Z., & Silektor, A. (2012). Social competencies and difficultie of gifted children compared to nongifted peers. *Roeper Review*, 34, 63–72. https://doi.org/10.1080/02783193.20 12.627555
- Vuyk, M. A., Kerr, B. A., & Krieshok, T. S. (2016). From overexcitabilities to openness: Informing gifted education with psychological science. *Gifted and Talented International, 31*, 59–71. https://doi.org/10.1080/15332 276.2016.1220796
- Wiley, K. R. (2020). The social and emotional world of gifted students: Moving beyond the label. *Psychology in the Schools*, *57*(1), 1-14.
- Winner, E. (2000). The origins and ends of giftedness. *American Psychologist*, 55(1), 159-169.
- Zuo, L. & Cramond, B. (2001). An examination of Terman's gifted children from the theory of identity. *Gifted Child Quarterly*, 45(4), 253-259.

Myths and Research Regarding the Socio-Emotional Needs of the Gifted

Socio-emotional issues	Myths	What research says is accurate
Mental Health & Well-Being	Gifted students are more likely to have more negative mental health and well-being than non-gifted students.	Some researchers have found that gifted students are about the same as their peers in rates of depression (Reis & Renzuli, 2004). They may have additional sensitives and awareness, but they may also turn it into loyalty, and compassion. Others have found that gifted students actually experience more positive mental health and well-being than non-gifted students (Jones, 2013). This also includes students that are classified as exceptionally gifted (Jones, 2013). Jones (2019), suggests that delving more deeply into within-group differences reveals a more complex picture. Most of the studies done on giftedness and depression compared gifted to non-identified students, but a few studies on in group differences reveal that some groups of gifted students (those in juvenile detention, Hispanic students, and others) have greater risks of depression than their out-group identified peers.
Self-Concept	Gifted students may exhibit lower levels of self-concept due to their differences in academics, behaviors, and emotions in comparison to non-gifted students	Gifted students exhibit higher global self-concept, as well as in academic and behavior do- mains, though non-gifted students exhibit higher physical and appearance self-concept (Košir, 2016; Sarouphim, 2011; Shechtman & Silektor, 2012; Wiley, 2020).
The "gift" of giftedness	Giftedness is a special blessing, or bonus, that has only positive repercussions for students.	Giftedness is neurodiversity. Differences in brain development may cause asynchronicities that make navigating the typical classroom quite challenging (Winner, 2000). Just because a student is gifted in one area does not mean that he or she does not have problems that need to be addressed. Equally important is to frame the discussion around how we develop service models for gifted students. Rather than simply imagining accelerated services and enrichment, we must also consider how the student's particular gifted traits might impact them negatively. Gifted students often find that there are correlating problems with their development that are often missed. For example, Winner (2000) describes musical giftedness as correlated with autoimmune disorders, and giftedness in spatial reasoning is often correlated with an increased prevalence of dyslexia. In fact, only mathematical giftedness appears to leave students relatively untouched (or at least at no greater risk than for their peers).
Nurture vs. Nature	You are either born gifted or you are not, but there is not a lot you can do about it.	This debate between nature and nurture is controversial even within the gifted community. There is a great divide between those who believe giftedness is a physiological trait or difference in a young person, and those who believe giftedness can be nurtured through talent development. Probably the most that can be said is that the interaction between neuro- atypicality and environment is a complex interweaving of nature and nurture that combine to create the particular outcome. Neuro-diversity is a function of physiological atypicality, with true differences in brain development (Winner, 2000). Based on the research regarding social competence and mental health, it seems that there are significant structures contributing to the achievement (or underachievement) of potential. While a student will be born with some level of giftedness, whether his or her outworking of that giftedness is scorned or praised, supported with attention and affection, and scaffolded with skill development to navigate the complexities of finding true peers all has an impact on the realization of potential. Based on the research of Reis and Renzuli (2004) and Winner (2000), skill development is crucial to developing the perseverance necessary to realize potential.
Social Skills	Gifted students are socially awkward.	Research on the topic of social skills demonstrates that overall, gifted students are not much different than their non-identified peers (Wiley, 2020). According to some, some of the traits of gifted students act to counter their social differences. Non-identified students demonstrate less empathy than gifted students, and gifted students demonstrate greater assertiveness. Additionally, students who were accelerated academically actually had higher social aptitude than those who had not. This is directly counter to the fears of many parents and school leaders who believe that acceleration might put a student at risk of failure to develop socially. The research indicates that alignment with true peers (Jones, 2019; Wiley, 2020) is beneficial to the development of social competence and positive mental health. Wiley (2020) even suggested that if social problems persisted in gifted children, especially profoundly gifted children, then practitioners and parents should begin to question whether they are providing access to true cognitive peers. Implicit in this guidance is the suggestion that a student who is more intelligent than all those around them (perhaps even the adults) will be strengthened by finding a peer, even if that person is not the same age. It seems that being accepted and able to relate to another human being is more important than being arbitrarily grouped with humans of the same age and culture. As leaders of gifted students and encourage the discovery of and connection between intellectual peers. Indeed, since acceleration is one of the most effective and cost-efficient means for providing for the needs of gifted students academically, we should consider how to associate the benefits of socio-emotional development utilizing the same strategy.

Socio-emotional issues	Myths	What research says is accurate
Girls vs. boys	Girls are more depressed and hide their giftedness more than boys.	Frequently we hear that girls are more likely to try to hide their giftedness to fit in and may suffer depression as a result, but Jones's (2019) found that the evidence gathered from a systematic literature review is contrary to this assertion, with girls demonstrating slightly more positive outcomes than boys.
Need for specialized services	Gifted students will be fine without support - they are really smart.	Not only do students need specialized services for the realization of academic potential, but they need support and encouragement at home as well. Specific skill development and structures to support and advocate for the needs of gifted students both at home and at school are crucial to healthy mental and social development. In fact, Winner (2000) found that many different types of giftedness are associated with particular learning problems. Spatially gifted students have higher rates of dyslexia, and students with very high IQ's often have significantly greater rates of autoimmune disease. Far from being "fine without help," gifted students often need a great deal of attention to both their learning strategies, organizational skills, and even physical health. Ignoring these problems means not only failing to properly serve identified gifted students, but even a tremendous potential for failing to identify gifted students in the first place. Many students are not identified because their disabilities mask their giftedness, and often they do not receive services for their disabilities because their giftedness counter-masks their disability. A twice exceptional student may go through life with only moderate success, even while doing a remarkable dance of self-therapy to overcome disabilities with advanced strategies. For students of different cultures and languages, services are both crucial and often insufficient. They may not be identified because their cultural norms are so different from the prevalent culture that signs of giftedness can be missed altogether. What looks like respect in one culture may come across as aggressiveness to another. This can also be problematic for students in the United States who do not speak English. Cultural and language, but service delivery in English is problematic. Even if they are identified, they will have to take their instruction and services in English (in many cases) and may not be able to benefit from the services.
Achievement	Gifted student under- achievement is due to a lack of trying or caring on behalf of the student.	Most students underachieve due to systemic problems repeated over time in their educational journey, and/or lack of supportive structures at home. Reis & Renzuli (2004) found that under- achievement is largely a result of unmet needs in gifted students. They cite Robinson's (2002) finding that "failure to address affective components that often help to develop talents in young people may compromise or thwart the actualization of their high potential" (Reis & Renzuli, 2004, p.121). In addition, the repetitiveness and boredom that gifted students face when teachers are unable to effectively differentiate the curriculum in mixed-ability peer classrooms can often lead students to negative outcomes, and cause them to lose interest in educational pursuits altogether. If we continue to bore them to death, eventually they will quit trying and just get through the day. Parents and gifted specialists should consider underachievement to be a red flag - but not necessarily representative of a problematic student behavior. It is a red flag of problematic adult behavior. If adults are unable to adapt and properly challenge gifted students in productive struggle, then the students will stop complying and become either detached from the system or openly defiant of it. In short, underachievement is indicative of the system failing the student, and not the student failing the system. Winner (2000) concludes that "we need to intervene for the happiness and mental health of gifted students. For their emotional well-being, students need an appropriate level of challenge. Otherwise, they are not only bored (which can lead to underachievement) but also socially isolated, and they feel different from everyone else (p. 166)."
Perfectionism	Gifted students are more likely to succumb to dys- functional and/or unhealthy perfectionism due to exter- nal labeling pressures.	Gifted students show fewer manifestations of perfectionism than their non-gifted peers (Loci- cero & Ashby, 2000; Parker & Mills, 1996; Parker et al., 2001). Rather, social prescriptions and demographic interactions qualitatively influence the perfectionistic outcomes (Margot & Rinn, 2016).
Overexcitability	Gifted students are more likely to experience phenomena more deeply than their peers (based on Dabrowski's 1964 Theory of Positive Disintegration).	Dabrowski's theory on overexcitabilities offers little wisdom and implications for gifted educa- tors. Overexcitability should be considered with caution. Instead, gifted educators should consider the five-factor model of personality, as many studies have shown an empirical relationship between intelligence and the Openness to Experience personality factor (Altaras- Dimitrijević, 2012; McCrae, 2010; Vuyk et al., 2016).





Delisle, J. (2006). Parenting Gifted Kids: Tips for Raising Happy and Successful Children. Waco, TX: Prufrock Press Inc.

Reviewed by Felicia Turner

If you have been searching for ways to genuinely connect with gifted children or children who may possibly be gifted, look no further. Dr. James Delisle's book, Parenting Gifted Kids: Tips for Raising Happy and Successful Children, takes parents on a fantastic journey through the world of giftedness. I should know firsthand because I devoured this book in one sitting. The author of this page-turner uses great storytelling, heartfelt personal experiences, and humor to equip parents with an arsenal of strategies that best support gifted children's learning. The book also offers a clear description of what defines giftedness, and it confronts issues that parents may often face when they are unsure of how to collaborate with their gifted child's school.

As I read, I was reminded of the many myths about gifted education. "Gifted children will do fine" and "Gifted children are happy, popular, and welladjusted in school" are just a few that exist and often prevent parents from genuinely understanding their child's uniqueness and schools from knowing how to advance students. Nonetheless, the author debunks these myths by providing the reader with tips that explore attitudes, behaviors, and new perspectives on how to reexamine ways that a parent sees their child's intelligence and challenges. If you are short on time and unable to read the book in its entirety, do not worry. The chapters are designed to be read in a non - sequential order. Readers can just select a chapter based on their individual needs or interest. Although the tips are expanded upon in the book, below you will find a snippet of each chapter that is sure to captivate your attention:

Parent Tip #1: Understand What Giftedness Is...and What It Is Not ~ When your child is identified as a gifted child, take time to explain to him or her, in your own words, what the term means.

Parent Tip #2: Know the Distinction Between "Better At" and "Better Than" ~ Avoid pinpointing children as paragons of perfect behavior and putting them on display in front of other kids, and for other adults. Parent Tip #3: Stop Paying Interest on a Bill You Never Owed ~ Do not ask your child to quiet his/her brain, emotions or imagination. When you do, you are ultimately saying that *"interest is due"* on their thoughts and that they must *"pay up"* by relinquishing their views.

Parent Tip #4: Take Charge of Your Child's Education ~ Remember that parenting is not a passive process. At school, advocate for your gifted child. Never go to the school to request a specific teacher, request a teaching style.

Parent Tip #5: Appreciate That Less Than Perfect Is More Than Acceptable ~ There is not enough time to be the best at everything. Accept that your gifted child is not going to excel at everything!

Parent Tip #6: Living the Nuanced Life ~ The "underachieving" gifted child really means "the understimulated" gifted child. All gifted children have a passion for something that highly stimulates their brain to think beyond the imaginable.

Parent Tip #7: Deep Roots, Long Branches: Using the Past to Understand the Present ~ Look in the mirror. Parents of gifted children share similar intensities and personalities.

Parent Tip #8: Write Your Dreams in Pencil ~ Remember to have patience, pride, and persistence with your gifted child. Allow them to write their goals in pencil because at any given point the slate may need to be wiped clean for a fresh new start.

Parent Tip #9: Make a Life, Not Just a Living ~ Teach your gifted child to not live a life of hollowness. Help your child find meaning in the smallest acts of kindness. There is excitement in *"being"* and excitement in *"doing"*.

Parent #10: Life Is Not a Race to See Who Can Get to the End the Fastest ~ Help your gifted child understand how to take each day as it comes and see triumph and disappointment as stepping stones to the many tomorrows that lie ahead.

All in all, it is difficult not to like the author with his unpretentious writing style. Profoundly, the author of Parenting Gifted Kids: Tips for Raising Happy and Successful Children says what others want to say but do not always feel they can articulate about parenting gifted children. Dr. Delisle's candor is appreciated. The structure of the text is polished and provides excellent insight for parents and teachers. It would make a good book club discussion for parents and teachers. Parents will also appreciate the extensive gifted resources that are provided at the end of the book. It includes journal articles, website addresses, contact information for key officials at various state associations, gifted education centers, etc. However, while the author answers many questions, he invites even more. How, for example, do we as teachers and leaders partner with parents to support the growing needs of their gifted children?

WHAT TO EXPECT when you're expected to TEACH GIFTED STUDENTS



Lockhart, K. (2019). What to expect when you are expected to teach gifted students: A guide to the celebrations, surprises, quirks, and questions in your first year teaching gifted students. Waco, TX: Prufrock Press Inc.

Reviewed by Sarah A. Chambers

If you are a new teacher or looking to start a Gifted and Talented Program, What to Expect When You Are Expected to Teach Gifted Students: A Guide to the Celebrations, Surprises, Quirks, and Questions in Your First Year Teaching Gifted Students is the primer you need to get started on the right track. New teachers learn that gifted education is more than just projects and logic puzzles. Through thoughtfully organized chapters, Lockhart takes readers on a journey of understanding the what and why of gifted education. This book seeks to help teachers understand the framework of a gifted and talented program by explaining theories as well as providing practical application through best practices. From understanding curriculum and student identification to building relationships and supporting the social-emotional needs of students, as well as everything in between, each chapter is laden with priceless information and key takeaways to help the most novice of educators to be successful.

Through careful use of examples that teachers will see in their classrooms, Lockhart provides an understanding of the inner workings of the gifted child. Showcasing the real world of behavior, self-esteem, motivation, and failure, she highlights the misnomer that high intellect or ability equals high levels of self-awareness or self-regulation and offers insight into how to teach these skills explicitly. Noting that professional development is key to the success of learners, Lockhart devotes a whole chapter to encourage teachers to think about their personal development by discussing the feedback cycle, modeling, reflection, and utilizing encouragement in the classroom. She uses examples from her professional experience to promote open lines of communication and collaboration with stakeholders to build. review, and revise programs that meet the needs of all gifted learners. What to Expect When You Are Expected to Teach Gifted Students is a must-read for any teacher who is stepping into the role of teaching gifted learners. Lockhart does not shy away from the fact that building a well-rounded program that meets the needs of all gifted learners can be a daunting task, but she encourages her readers to "eat the elephant one bite at a time" and provides plenty of support in doing so.

The Authors

James Bishop, Ph.D. LPC NCC is a licensed professional counselor and the executive director of the Passionate Mind Institute. His clinical practice focuses on serving the needs of gifted youth and adults.

Sarah A. Chambers is a doctoral student at Baylor University in the Leadership and Organizational Change program. She currently serves as an elementary school leader and Gifted and Talented Coordinator in Dallas, Texas. She also provides consultancy services to schools serving Northern Plains Tribal Nations focusing on school reform and leadership coaching.

Yasmin C. Laird is a graduate assistant and doctoral student at Baylor University. Her research interests in- clude gifted English language learn- ers and bilingualism. She has taught in various PK-12 settings, ranging from elementary bilingual classrooms to AP Spanish.

Erin M. Miller, Ph.D. is an Associate Professor of Psychology at Bridgewater College. Her work in gifted education focuses on parenting high ability children and issues of conceptual foundations such as theories of intelligence. Her overarching work is in the analysis of causal networks involved in cognition.

Clarice J. Morris is a middle school language arts teacher at Montevideo Middle School in Penn Laird, VA.

Angela Novak, Ph.D., is an assistant professor in Elementary and Middle Grades Education at East Carolina University in Greenville, NC. She teaches undergraduate and graduate courses in education, focusing on assessment practices and gifted education.

Celeste D.C. Sodergren is the Coordinator of Continuous Improvement in Manor ISD, and a doctoral student at Baylor University. She is an advocate for equity of identific tion and services in gifted education, the importance of making connections between research and practice, and for strengthening the role of the gifted coordinator in district administration. Her research interests include accountability in gifted education, leadership development, equitable practices, and she practices both qualitative and quantitative research. She is the parent of two grown gifted children, and the passionate advocate for 975 diverse gifted young people in Manor ISD.

Jeb Puryear, Ph.D. is an assistant professor of Gifted Education and the University of Montana. His research focuses on creativity and metacognition.

Felicia Turner specializes in working with other educators to find innovative and sustainable ways to improve teaching and learning. She has been serving urban youth as both a teacher and an educational leader for the last 20 years. Currently, she is a doctoral student at Baylor University. When she is not buried in doctoral studies, she serves as an instructional and leadership coach for the International Center for Leadership in Education (ICLE), who travels all over the world to various school districts and presents at numerous local, regional, and international conferences, where audiences enjoy her humor and wit. For fun, she can be found indulging in children's literature, black cherry sodas, Crossfit, and an array of artwork.

