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Critical Commentary of *Grit: Perseverance and Passion for Long-Term Goals*

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Introduction

In 2016, Angela Duckworth wrote the book *Grit: The Power of Passion and Perseverance*. Duckworth wondered why some students were outperforming others. In trying to understand the reasoning for this, she compiled the IQ scores of her students and found that some of the best performers did not have the highest IQs; however, some of her best performers had lower IQs (Duckworth, 2016). This question brought her to investigate a construct called grit. Duckworth's work was originally based on her seminal research from Duckworth, Peterson, Matthews and Kelly (2007). Grit was a term coined by Duckworth et al. (2007) as passion and perseverance for long-term goals. It is the ability for an individual to persist and overcome challenges when facing significant obstacles and barriers. From the outset, Duckworth et al. proposed that higher levels of grit are required for higher levels of achievement. According to the research, this predictability is obvious through numerous statistical analyses and data treatments.

According to Duckworth et al. (2007), those with higher degrees of grit tended to have successes that resulted in higher cumulative GPAs, higher SAT scores, higher likelihood of completing university, graduate and post-graduate degrees and, successful completion of military school. Grit is measured by a 12-item survey with a Likert scale (Duckworth et al., 2007). Half the test questions comprised of a 'perseverance of effort' construct, while the other half focused on the 'consistency of interest' construct. These questions are not distinguished differently and are mixed. Once an individual completes the test in the context they are examining, the scores are averaged. Therefore, an individual who has a high grit score tended to have the highest likelihood of achievement within the context in which the grit test was surveyed.

Determining the Methodology of the Article

Often, the terms methodology and methods are confused and used interchangeably. Methodology refers to the philosophy of research, whereas method refers to the technical procedures applied to conduct research (Denzin & Lincoln, 2011; Grix, 2002; McGregor & Murnane, 2010). Duckworth et al. (2007) is not explicit in their methodology. Nowhere are the four axioms of ontology, epistemology, axiology and logic shared. However, one may dissect the language of their text to determine their philosophical approach. Based on Duckworth et al., it appears that the research focuses on a positivist methodology. This is evident through the shared positionality, what was counted as knowledge and, what assumptions were made.

The first piece of evidence had to do with the language utilized. Such language often used terms associated to positivism. These terms included hypothesis testing, cause-and-effect, reliability, validity and prediction. Another piece of evidence that substantiates this conclusion is through the types of data collected and the analysis used (Ercikan & Roth, 2006). Duckworth et al. (2007) often utilized statistical measures and made broad generalizations which support this methodological stance. Scott and Usher (1996) provide a list of assumptions that are espoused with positivists. They include: (1) “The world is objective in that it exists independently of knowers” (p. 12); (2) “There is a clear distinction or separation between subjects and objects” (p. 12); (3) “Different observers exposed to the same data (the underlying assumption here is that data are always the same) should be able to come to the same conclusion” (p. 12); (4) “The social world is very much like the natural world ... there is order and reason to the social world, social life is patterned and this pattern has a cause-effect form” (p. 12); (5) “Natural and social sciences share a common methodology of enquiry” (p. 13); and, (6) As long as “the right methodological procedures have been properly applied, questions of reflexivity need not be

considered” (p. 13). It was evident through the six studies conducted within Duckworth et al. that varying extents of these six assumptions were applied. Participants and researchers were always at arm’s length. Generalizations were made without the input of the research participants. Therefore, this provided me with the necessary clues to back up my claim.

Critiques of the Paper’s Methodology

While natural scientists and politicians often claim positivist research as the ‘gold standard’ for educational research (Denzin & Lincoln, 2011), there are several assumptions, contradictions and confusions that emerged by reviewing Duckworth et al.’s (2007) work. Due to the word count limitations, I share two. The first had to do with the claims of truth. Duckworth et al.’s work showed that high degrees of grit led to the likelihood of achievement. This is through the lens of a few variables. Schrag (1992) says, “The [positivist] paradigm tries to account for the rich and unpredictable complexity of human interactions by means of a few isolated variables. This reduces complex human dynamics to simplistic patterns” (p. 5).

Through Schrag’s (1992) lens, this appears to be a problem because of the rigid framework used by Duckworth et al. (2007). As Duckworth et al. say, “As context for the current research ... [we] omit from our review situational factors and social and cultural variables that influence achievement” (p. 1088). Such a narrow set of assumptions brings their claims into question. Therefore, if one reads their research, it appears that the researchers chose the position of deficit ideology. Such an ideology espouses the achievement of individuals to be through mindsets, personality and, other issues like interest. While there is a body of research that shows how structural factors also impact educational attainment, this appears to be dismissed across the six studies Duckworth et al. provided. Therefore, these researchers introduced bias and

subjectivity while claiming objectivity, which substantiates Scott and Usher's (1996) description of the epistemological good grounds.

There is another issue regarding generalized claims. As Ercikan and Roth (2006) say, "Quantitative researcher has as its goal to make claims about an entire population of cases on the basis of a subset of the population" (p. 15). For example, one of the studies collected 1,545 surveys on grit from different age groups. The data appear skewed—with 73% women and 27% men. Another study, with 706 participants, reviewed a construct similar to grit. While 16 participants reported either having 'high school' or having 'partial completion of high school,' these individuals were removed from the interpretation without explanation. Finally, another study reviewed cumulative GPA among 139 undergraduates at an 'elite' university. The results from this university may not be generalizable with those at a 'non-elite' institution. These three subjective decisions may make one question the knowledge claims, generalization and predictions (Scott & Usher, 1996). This means "the results cannot be generalized beyond the range of data used in the analyses" (Ercikan & Roth, 2006, p. 15).

Suggested Design for Duckworth et al.'s (2007) Methodology

Assuming the role of Duckworth et al. (2007), I chose to identify this methodology section using the term "we." Therefore, in assuming this role, "we" will share the ontology, epistemology, axiology and logic associated to our work. In our research context, we believe in a single identifiable reality in which we can measure and study. The purpose of our research is to predict and control our variables, to understand how variables related to interest and perseverance tie into the construct of grit. Therefore, across our studies, we used large participant surveys to show that those with a high grit score will have a statistical likelihood of success in their respective circumstances—be it cumulative GPA, SAT scores, achievement from West Point

Academy, higher achieved rounds at the National Spelling Bee or, educational attainment. Our position is that success is deeply tied to the mindset, individual choices and personality of individuals.

Through this deductive lens, our research was designed objectively in order to obtain truth. Therefore, there was no need to interact with our research participants. If there was participant interaction with our research team, we would introduce subjectivity and bias, and such actions will likely not be generalizable to the entire population. The scientific method was foundational to our research method. We utilized different statistical measures to determine to what extent consistency of interest and perseverance of effort, as a whole score, impacted our construct of grit. This allows us to provide scientific laws in which we can generalize to the greater population. It is clear that our research focused on controlling different variables that may affect grit. This is apparent through our analysis of the Five-factor model of personality and, other constructs such as age, educational attainment, fitness levels and, cognitive capacities (e.g., IQ).

Conclusion

No research methodology is a perfect one as it has its strengths and its weaknesses. I attempted to highlight some of the deficiencies related to Duckworth et al.'s (2007) research as a means of thought and reflection. Having cited some of Duckworth et al.'s work at the beginning of my literature review, I thought it was free from flaws. However, through our 9002 course, I was able to have a different vantage point that I did not see. While positivist work can develop principles and general patterns, as Lin (1998) would show, other forms of qualitative research (e.g., interpretivism) can provide insight on how such patterns are looked at in practice. To that

end, I believe there is value in merging both constructs together. The unifying strengths between both methodologies has the potential to create significant changes to our world.

References

- Denzin, N., & Lincoln, Y. S. (2011). *The SAGE handbook of qualitative research* (4th ed.). Thousand Oaks, CA: Sage.
- Duckworth, A. (2016). *Grit: The power of passion and perseverance*. Collins.
- Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, 92(6), 1087-1101. <http://doi.org/10.1037/0022-3514.92.6.1087>
- Ercikan, K., & Roth, W. M. (2006). What good is polarizing research into qualitative and quantitative?. *Educational researcher*, 35(5), 14-23.
- Grix, J. (2002). Introducing students to the generic terminology of social research. *Politics*, 22(3), 175-186.
- McGregor, S. L., & Murnane, J. A. (2010). Paradigm, methodology and method: Intellectual integrity in consumer scholarship. *International Journal of Consumer Studies*, 34(4), 419-427.
- Schrag, F. (1992). In defense of positivist research paradigms. *Educational researcher*, 21(5), 5-8.
- Scott, D., & Usher, R. (Eds.). (1996). *Understanding educational research*. Psychology Press.