Blood, Sweat, and Net Worth: Grit as a Predictor of Financial Success in Young Adulthood

Loren Flood, Texas Tech University; The American College of Financial Services[1]
Miles Sharpe, Texas Tech University[2]

Introduction & Motivation

A child's domestic environment, relationship with their parent(s), education, social influences (Shim et al., 2009), and cognitive predisposition shape their financial literacy (Roa et al., 2019). As they mature, financial knowledge and attitudes evolve, influencing decisions about acquiring assets, spending, saving, and managing debt (Shim et al., 2010; Kim & Chatterjee, 2013). Positive financial behaviors are linked to perseverance, conscientiousness, agreeableness, and openness (Letkiewicz & Fox, 2014; Ozer & Mutlu, 2019), while conscientiousness is associated with financial literacy, net worth, and higher income (Exley et al., 2021).

Knowledge alone is not always a reliable indicator of positive financial behavior; Robb and Sharpe (2009) found financial knowledge to be ineffective and to correlate with higher credit balances among university students. Understanding how personality traits influence behavior helps explain why some individuals persist in the long-term pursuit of personal goals (Duckworth et al., 2007). The Grit framework identifies that the non-cognitive traits perseverance and passion toward long-term goals are associated with financial behaviors and outcomes (Campbell et al., 2023; Duckworth & Gross, 2014). In this study, we examine the moderating effect of Grit on different financial outcomes and behaviors at age 30.

Literature Review

Personality traits have a significant link with financial behavior (Ozer & Mutlu, 2019). Within the Big Five framework (John & Srivastava, 1999), conscientiousness and agreeableness are predisposed to competent management of personal finances (Pinjisakikool, 2018); self-discipline and conscientiousness influence higher savings and lower debt (Furnham & Cheng, 2019). Conscientiousness in young adults reduced the likelihood of expense and debt repayment delinquency by 2.1%, while neuroticism raised it by 1.6% (Letkiewicz & Heckman, 2019). Internal locus of control (Rotter, 1966) mirrors perseverance and consistency of effort, the core dimensions of the Grit Scale (Duckworth et al., 2007).

Grit (Duckworth et al., 2007) is a self-report scale measuring perseverance of effort (effort) and consistency of interest (interest) in achieving long-term goals. Gritty individuals possess strong executive function and are more likely to be leaders in both the private and public sectors (Jiang et al., 2024; Schimschal & Lomas, 2019). Studies indicate gritty individuals exhibit positive financial behaviors: students with higher Grit are more likely to reinvest in personal human capital (Ireland, 2024); entrepreneurs with high Grit manage setbacks and maintain conscientiousness in risk management (Sawitri et al., 2023); and young adults with high Grit are more likely to save than spend (König-Kersting & Trautmann, 2025). Graduates with greater Grit traits avoid high-interest loans and are disciplined in debt repayment (Yeboah, 2025), and Grit predicts a higher propensity to save tax refunds and accumulate liquid assets (Jabbari et al., 2024).

Theory & Hypotheses

Long-term goal perseverance, motivation, and passion are Grit attributes that relate to Goal-Content Theory (Kasser & Ryan, 1996) and are derived from Self-Determination Theory (Deci & Ryan, 1985). Consistent with Proposition 6 of GCT, Duckworth and Quinn (2009) found that grit is processed internally, creating personal, intrinsic commitments linked to well-being. The Theory of Planned Behavior (TPB; Ajzen, 1991) provides a complementary lens: although TPB overlaps with Grit traits such as

[1] Loren Flood (Loren.Flood@theamericancollege.edu), Directory of Curriculum and Assistant Professor, The American College of Financial Services
[2] Miles Sharpe (Miles.Sharpe@ttu.edu), Managing Partner, Fawley Wealth International

perseverance, it considers short-term intentionality in situational contexts, allowing for an alternative to Duckworth's long-term behavioral perspective.

H1: Individuals with higher Grit will have greater net worth (NW) at 30 than those with lower Grit.
H2: Individuals with higher Grit will have less debt (D) at 30 than those with lower Grit.
H3: Individuals with higher Grit will have more assets (A) at 30 than those with lower Grit.
H4: Individuals with higher Grit will have higher income (I) at 30 than those with lower Grit.

Methodology

This study draws on data from the National Longitudinal Survey of Youth 1997 (NLSY97), administered by the Center for Human Resource Research at The Ohio State University. The NLSY97 has a sample size of 8,984 respondents born between 1980 and 1984 and employs sample weighting to adjust for oversampling. Four separate survey-weighted ordinary least squares (OLS) regressions were estimated, with dependent variables measured at age 30: household net worth, debt levels, financial assets, and household income. All dependent variables are continuous and were transformed using the inverse hyperbolic sine (IHS) function to address skewness and accommodate zero and negative values.

The key independent variable is a composite Grit score derived from eight self-assessed questions on a five-point Likert scale, based on Duckworth's (2017) Grit scale, originally collected in the 2013 wave (or 2015/2017 if missed in 2013). Positively phrased items were reverse-coded, and the grit composite was averaged, where higher values indicate greater Grit. Regressions were also run using composites of interest and effort for robustness. Control variables included demographics (sex, race/ethnicity, year of birth, marital status, household composition, education) and binary financial characteristics assessed at age 30 (homeownership, ownership of bonds/bills/CDs, stocks/mutual funds, pension or retirement plans, presence of student loans). The respondents were between 29 and 33 years old during the 2013 wave of the survey, so age 30 was the focus for the dependent variables. The 2013 dependent variable values were inflated to 2025 values. All analyses incorporated 2013 panel sample weighting, cross-sectional oversample controls, variance stratums, and variance by primary sampling units.

Diagnostic testing addressed linearity (acprplot, no transformations required), multicollinearity (average VIFs between 1.54–1.55, not exceeding 4.0), heteroskedasticity (White's test significant in all models, addressed through svy robust standard errors), and normality of residuals (non-normality detected but coefficients remain unbiased given the large sample size and Central Limit Theorem). The Ramsey RESET test was applied to the untransformed and IHS-transformed dependent variables, and all models were rejected. While the results suggest possible misspecification or omitted variables, the complexity of the survey-weighted dataset and theoretical justification of the predictors supported retaining the existing model structure. Cook's Distance identified some influential observations; however, removing them did not meaningfully change the results, so they were retained.

Results

The sample consisted of 8,984 respondents (51% male, 49% female; 52% non-Black/non-Hispanic, 26% Black, 21% Hispanic, 1% Mixed-race). More than half had a high school diploma or less (60%), followed by Bachelor's (20%), Associate's (11%), and Master's or greater (8%). The overall mean Grit score was 3.77 (SD = 0.57), suggesting the sample exhibits a moderately high level of passion and perseverance.

The regression results for all four models are located in Table 1. The findings of the study reveal that the Grit composite is statistically significant and positively associated with net worth, and marginally significant with greater financial assets and higher income at age 30. When grit subscales, effort, and interest were isolated and regressed in the models, the statistical significance remained consistent with the main models, but only interest was statistically significant with net worth at 30, while effort was significant for assets and income at 30. The results are located in the Robustness section at the bottom of Table 1.

Finally, an increase in grit level was also positively associated with the following financial behaviors at age 30: home ownership (NW, A, I), investing behavior in stocks/bonds (NW, D, A, I),

retirement plan participation (NW, D, A, I), and there was a strong relationship between grit and student loans at 30 (NW), where greater grit was negatively associated with having student loans.

Discussion

Compared with more established measures (Big Five, Myers-Briggs, DISC), Grit is still in its infancy, having been developed in 2007. To the authors' knowledge, this is the first study specifically examining the relationship between Grit and financial outcomes, including net worth, debt, assets, and income. The results are consistent with related work showing that individuals with higher Grit adhere to budgets, maintain emergency funds, and follow long-term investing strategies (Campbell et al., 2023; Duckworth & Gross, 2014); save more and spend less (König-Kersting & Trautmann, 2025); avoid high-interest loans (Yeboah, 2025); and save tax refunds (Jabbari et al., 2024). Collectively, these behaviors support the findings of this study, which is why Grittier individuals have more assets, income, and, consequently, greater net worth.

Educational attainment was negatively associated with net worth and positively associated with assets and income for those with a bachelor's degree or higher. From the perspective of Human Capital Theory (Becker, 1962), the negative net-worth relationship for degree-holders likely reflects the financial burden of student loans, while the positive relationship between income and assets represents the investment in human capital through education. Positive financial behaviors beyond saving and debt avoidance were also linked to Grit, including participation in a retirement plan and asset diversification.

Limitations

Several limitations should be noted. First, debate persists regarding the dimensionality and validity of the Short Grit Scale; Gonzalez et al. (2019) suggest that the Grit-S is unidimensional and that it overlaps with self-control. Second, existing research on Grit and financial outcomes is sparse, limiting the ability to make benchmark comparisons. Third, self-reported survey data are subject to self-report bias. Fourth, income information was missing for 2012 and 2014, lowering the sample size for individuals who were 30 years old in those years. Finally, even though the NLSY is a longitudinal survey, this study was treated cross-sectionally, as Grit questions were only asked in 2013 and did not assume that Grit is a stable trait.

Implications & Conclusions

Some people persistently save, budget, and exercise disciplined financial behaviors; others do not. The modest connection between Grit and financial outcomes—net worth, assets, and income—merits further exploration. In Grit, Duckworth (2016) asserts that Grit can be cultivated; if Grit is a "muscle" that can be strengthened to promote better financial habits, the implications are clear for financial counselors, educators, and financial institutions. Huston (2010) asserts that financial literacy rests on three elements: objective financial knowledge, experience, and confidence. Exploring Grit's association with financial behaviors and health more closely could inform how financial education is taught, with greater emphasis on perseverance and persistence.

Grit has been extensively studied among workers, athletes, teachers, and students (K-12 and college), but little research has examined its predictive strength for financial outcomes. The significant net-worth and assets results, alongside marginally significant income results, indicate that Grit may serve as a meaningful predictor of financial success and a complement to traditional explanations of positive financial outcomes. By incorporating Grit into research examining financial behaviors, researchers and practitioners can gain a deeper understanding of the psychological underpinnings of financial well-being.

References

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Becker, G. S. (1962). Investment in human capital: A theoretical analysis. *Journal of Political Economy, 70*(5, Part 2), 9–49.

Campbell, W., Exley, J., & Doyle, P. (2023). The big five personality traits (OCEAN) and financial planning: A narrative review and recommendations for advisors. *Financial Services Review, 31*(4), 228–245. https://doi.org/10.61190/fsr.v31i4.3178

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum Press.

Duckworth, A. (2016). *Grit: The power of passion and perseverance*. Scribner.

Duckworth, A. L., & Gross, J. J. (2014). Self-control and grit: Related but separable determinants of success. *Current Directions in Psychological Science, 23*(5), 319–325. https://doi.org/10.1177/0963721414541462

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. https://doi.org/10.1037/0022-3514.92.6.1087

Duckworth, A. L., & Quinn, P. D. (2009). Development and validation of the Short Grit Scale (Grit–S). *Journal of Personality Assessment, 91*(2), 166–174. https://doi.org/10.1080/00223890802634290

Exley, J., Doyle, P., Snell, M., & Campbell, W. K. (2021). OCEAN: How does personality predict financial success? *Journal of Financial Planning, 34*(10), 68–86.

Furnham, A., & Cheng, H. (2019). Factors influencing adult savings and investment: Findings from a nationally representative sample. *Personality and Individual Differences, 151*, Article 109510.

Gonzalez, O., Canning, J. R., Smyth, H., & MacKinnon, D. P. (2019). A psychometric evaluation of the Short Grit Scale: A closer look at its factor structure and scale functioning. *European Journal of Psychological Assessment*, 36(4), 646–657. https://doi.org/10.1027/1015-5759/a000535

Huston, S. J. (2010). Measuring financial literacy. *Journal of Consumer Affairs, 44*(2), 296–316. http://www.jstor.org.lib-e2.lib.ttu.edu/stable/23859793

Ireland, J. R. (2024). *Grit, resilience, well-being, and family structure's relationship with college attendance* [Doctoral dissertation, Walden University].

Jabbari, J., Jackson, J., Roll, S., & Grinstein-Weiss, M. (2024). Pinching pennies or money to burn? *Social Psychology*. 55(2), 101–115. https://doi.org/10.1027/1864-9335/a000545

Jiang, L., Khapova, S. N., Cai, W., & Gao, X. (2024). The employability consequences of grit: Examining the roles of job involvement and team member proactivity. *Chinese Management Studies*.

John, O. P., & Srivastava, S. (1999). The Big-Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 102–138). Guilford Press.

Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin, 22*(3), 280–287. https://doi.org/10.1177/0146167296223006

Kim, J., & Chatterjee, S. (2013). Childhood financial socialization and young adults' financial management. *Journal of Financial Counseling and Planning, 24*(1), 61–79.

König-Kersting, C., & Trautmann, S. T. (2025). Grit, discounting, & time inconsistency. *Journal of Risk and Uncertainty*, 1–23.

Letkiewicz, J. C., & Fox, J. J. (2014). Conscientiousness, financial literacy, and asset accumulation of young adults. *Journal of Consumer Affairs, 48*(2), 274–300.

Letkiewicz, J. C., & Heckman, S. J. (2019). Repeated payment delinquency among young adults in the United States. *International Journal of Consumer Studies, 43*(5), 417–428. https://doi.org/10.1111/ijcs.12522

Özer, G., & Mutlu, U. (2019). The effects of personality traits on financial behaviour. *Journal of Business, Economics and Finance, 8*(3), 155–164. https://doi.org/10.17261/Pressacademia.2019.1122

Pinjisakikool, T. (2018). The influence of personality traits on households' financial risk tolerance and financial behaviour. *Journal of Interdisciplinary Economics, 30*(1), 32–54.

Roa, M. J., Garrón, I., & Barboza, J. (2019). Financial decisions and financial capabilities in the Andean region. *Journal of Consumer Affairs, 53*(2), 296–323.

Robb, C. A., & Sharpe, D. L. (2009). Effect of personal financial knowledge on college students' credit card behavior. *Journal of Financial Counseling and Planning, 20*(1), 25–43.

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied, 80*(1), 1–28. https://doi.org/10.1037/h0092976

Sawitri, D. K., Iryanti, E., & Ramadhan, M. R. (2023). The grit of entrepreneurs: Their resilience needs in achieving success. *Proceedings of International Conference on Economics Business and Government Challenges, 6*(1), 260–265.

Schimschal, S. E., & Lomas, T. (2019). Gritty leaders: The impact of grit on positive leadership capacity. *Psychological Reports, 122*(4), 1449–1470. https://doi.org/10.1177/0033294118785547

Shim, S., Xiao, J. J., Barber, B. L., & Lyons, A. C. (2009). Pathways to life success: A conceptual model of financial well-being for young adults. *Journal of Applied Developmental Psychology, 30*(6), 708–723. https://doi.org/10.1016/j.appdev.2009.02.003

Shim, S., Barber, B. L., Card, N. A., Xiao, J. J., & Serido, J. (2010). Financial socialization of first-year college students: The roles of parents, work, and education. *Journal of Youth and Adolescence, 39*(12), 1457–1470. https://doi.org/10.1007/s10964-009-9432-x

Yeboah, C. (2025). *Effects of financial literacy education intervention on loan borrowing and debt management of undergraduate students in the Southeastern US: An experimental investigation* [Doctoral dissertation, The University of Southern Mississippi]. The University of Southern Mississippi Archive. https://aquila.usm.edu/dissertations/2332/

Acknowledgements

We wish to express our gratitude to Dr. Stuart Heckman for his guidance and direction on this paper.

Table 1

Survey-Weighted OLS Regressions of IHS-Transformed Financial Outcomes on Grit (NLSY97)

Variable	Net Worth at 30 n= 7,741	Debt at 30 n= 8,042	Assets at 30 n= 7,899	Income at 30 n= 5,952
Grit (Composite)	1.070*** (0.278) [0.52, 1.62]	-0.142 (0.133) [-0.41, 0.12]	0.156† (0.080) [-0.00, 0.31]	0.085† (0.045) [-0.01, 0.17]
Owns Home (Yes)	3.802*** (0.349) [3.11, 4.49]	0.320† (0.170) [-0.02, 0.66]	0.946*** (0.108) [0.73, 1.16]	0.140† (0.075) [-0.01, 0.29]
Earned Income 2013 (Yes)	-0.029 (0.462) [-0.94, 0.89]	1.319*** (0.230) [0.86, 1.77]	1.042*** (0.171) [0.70, 1.38]	0.968** (0.289) [0.40, 1.54]
Marital Status (ref: Single)				
Married	-0.275 (0.398) [-1.06, 0.51]	1.372*** (0.172) [1.03, 1.71]	0.697*** (0.084) [0.53, 0.86]	0.269*** (0.070) [0.13, 0.41]
Separated/Divorced	-0.591 (0.655) [-1.89, 0.71]	0.256 (0.311) [-0.36, 0.87]	-0.669** (0.190) [-1.05, -0.29]	0.080 (0.118) [-0.15, 0.31]
Widowed	4.826* (2.244) [0.38, 9.27]	-2.338 (2.235) [-6.76, 2.09]	-0.305 (1.398) [-3.07, 2.46]	-0.330 (0.207) [-0.74, 0.08]
Education (ref: HS Diploma / GED or less)				
Associate / Junior College	-0.667 (0.503) [-1.66, 0.33]	0.478† (0.264) [-0.04, 1.00]	1.012*** (0.151) [0.71, 1.31]	0.133 (0.100) [-0.07, 0.33]
Bachelor's	-0.995* (0.446) [-1.88, -0.11]	0.106 (0.218) [-0.33, 0.54]	1.541*** (0.119) [1.31, 1.78]	0.334*** (0.080) [0.18, 0.49]
Master's and Above	-3.141*** (0.576) [-4.28, -2.00]	0.029 (0.283) [-0.53, 0.59]	1.688*** (0.135) [1.42, 1.96]	0.481*** (0.077) [0.33, 0.63]
Pension/Retirement Plan (Yes)	2.762*** (0.347) [2.08, 3.45]	0.982*** (0.152) [0.68, 1.28]	3.161*** (0.084) [3.00, 3.33]	0.386*** (0.053) [0.28, 0.49]
Children Under 18 in HH (ref: 0 kids)				
1–2 kids	-0.238 (0.376) [-0.98, 0.51]	0.250† (0.143) [-0.03, 0.53]	-0.246* (0.122) [-0.49, -0.01]	-0.086 (0.065) [-0.21, 0.04]
3+ kids	0.390 (0.531) [-0.66, 1.44]	-0.006 (0.213) [-0.43, 0.42]	-0.432* (0.166) [-0.76, -0.10]	-0.221* (0.107) [-0.43, -0.01]
Female (*ref: Male*)	-0.451 (0.303) [-1.05, 0.15]	0.274† (0.144) [-0.01, 0.56]	-0.301** (0.095) [-0.49, -0.11]	-0.471*** (0.064) [-0.60, -0.34]
Race/Ethnicity (ref: Non-Black / Non-Hispanic)				
Black	-0.728† (0.384) [-1.49, 0.03]	-0.773*** (0.172) [-1.11, -0.43]	-1.225*** (0.149) [-1.52, -0.93]	0.036 (0.069) [-0.10, 0.17]
Hispanic	0.033 (0.408) [-0.78, 0.84]	-0.229 (0.199) [-0.62, 0.17]	0.059 (0.141) [-0.22, 0.34]	0.103 (0.065) [-0.03, 0.23]
Mixed Race (Non-Hispanic)	1.194 (1.382) [-1.54, 3.93]	-0.634 (0.656) [-1.93, 0.67]	0.126 (0.403) [-0.67, 0.92]	0.359** (0.120) [0.12, 0.60]
Bonds/Bills/CDs at 30 (Yes)	1.737*** (0.467) [0.81, 2.66]	-0.297 (0.325) [-0.94, 0.35]	1.018*** (0.142) [0.74, 1.30]	0.072 (0.079) [-0.08, 0.23]
Stocks/Mutual Funds at 30 (Yes)	3.775*** (0.440) [2.90, 4.65]	-1.260*** (0.217) [-1.69, -0.83]	1.388*** (0.094) [1.20, 1.57]	0.218*** (0.049) [0.12, 0.32]
Student Loans at 30 (Yes)	-5.799*** (0.415) [-6.62, -4.98]	3.336*** (0.163) [3.01, 3.66]	-0.112 (0.086) [-0.28, 0.06]	-0.042 (0.052) [-0.14, 0.06]
Robustness: Grit Subscales (composite replaced; controls unchanged)				
Grit — Consistency of Interest	0.603** (0.214) [0.18, 1.03]	-0.167† (0.091) [-0.35, 0.01]	-0.040 (0.073) [-0.18, 0.10]	-0.005 (0.041) [-0.09, 0.08]
Grit — Perseverance of Effort	0.435† (0.259) [-0.08, 0.95]	0.072 (0.127) [-0.18, 0.32]	0.254** (0.080) [0.10, 0.41]	0.115** (0.043) [0.03, 0.20]

Note. Each cell reports β, (linearized SE), and [95% CI]. Dependent variables are transformed using the inverse hyperbolic sine. All models incorporate 2013 panel sample weights, linearized robust standard errors, and primary sampling unit/stratum adjustments. The composite Grit measure in the main regressions is replaced by its two subscales (Consistency of Interest and Perseverance of Effort) in the robustness specification; all controls are unchanged.

†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .0001$

