Literature Review Notes: Research Papers by Theme

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Table of contents

Introduction	1
Gender Differences in Education and Labor Markets	2
Mathematics and STEM Performance	2
Teacher Influence and Bias	
Gender and Labor Market Outcomes	4
Family Structure and Child Development	7
Parental Influence	7
Family Structure Effects	9
Cognitive Development and Brain Science	12
Socioeconomic Status and Educational Achievement	15
Non-Cognitive Skills and Academic Success	17
Economic Models of Human Capital	21
Cultural and Environmental Influences	23
Theme Connections and Research Questions	26
Key Cross-Theme Questions	26
Connections Between Themes	
Reading Priority Plan	26

Introduction

This document organizes 72 papers into thematic categories and provides space for recording highlights, methodology notes, and personal insights for each paper.

Gender Differences in Education and Labor Markets

Mathematics and STEM Performance

Paper	Key Findings	Methodology	My Notes
Card, D., & Payne, A. A. (2021). High School Choices And The Gender Gap In STEM. Economic Inquiry, 59(1), 9–28.	Course selection in high school contributes to gender gaps in STEM		
Cimpian, J. R., et al. (2016). Have Gender Gaps in Math Closed? AERA Open, 2(4), 1–19.	Comparison of gender gaps across ECLS-K cohorts		
Fryer, R. G., & Levitt, S. D. (2010). An Empirical Analysis of the Gender Gap in Mathematics. American Economic Journal: Applied Economics,	No gender gap at school entry; develops in early elementary school		
2(2), 210–240. Hyde, J. S., & Mertz, J. E. (2009). Gender, Culture, and Mathematics Performance. PNAS, 106(22), 8801–8807.	Gender gaps in math related to cultural and social factors		

Paper	Key Findings	Methodology	My Notes
Lindberg, S.	Meta-analysis of gender		
M., et	differences in mathematics		
al. (2010) .	performance		
New Trends in			
Gender and			
Mathematics			
Performance:			
A			
Meta-Analysis.			
Psychological			
Bulletin,			
136(6),			
1123–1135.			

Teacher Influence and Bias

Paper	Key Findings	Methodology	My Notes
Carlana, M.	Teachers' implicit biases		
(2019).	affect students'		
Implicit	performance and choices		
Stereotypes:			
Evidence from			
Teachers'			
Gender Bias.			
The Quarterly			
$Journal\ of$			
Economics,			
134(3),			
1163 - 1224.			
Lavy, V., &	Long-term effects of		
Sand, E.	teacher gender bias on		
(2018). On the	educational attainment		
Origins of			
Gender Gaps			
in Human			
Capital: Short			
and			
Long-Term			
Consequences			
of Teachers'			
Biases.			
Journal of			
Public			
Economics,			
167, 263-279.			

Gender and Labor Market Outcomes

Paper	Key Findings	Methodology	My Notes
Autor, D., et al. (2019). Family Disadvantage and the Gender Gap in Behavioral and Educational Outcomes. American Economic Journal: Applied Economics, 11(3),	Boys are more adversely affected by family disadvantage than girls		
338–381. Bertrand, M., & Pan, J. (2013). The Trouble with Boys: Social Influences and the Gender Gap in Disruptive Behavior. American Economic Journal: Applied Economics,	Boys' behavior problems more influenced by family environment than girls'		
5(1), 32–64. Blau, F. D., & Kahn, L. M. (2000). Gender Differences in Pay. Journal of Economic Perspectives, 14(4), 75–99.	Overview of factors explaining gender wage differentials		

Paper	Key Findings	Methodology	My Notes
Blinder, A. S. (1973). Wage Discrimination: Reduced Form and Structural Estimates. Journal of Human Resources, 8(4), 436–455.	Introduced decomposition method for analyzing wage discrimination		
Ceci, S. J., & Williams, W. M. (2014). Women's Underrepresentation in Science: Sociocultural and Biological Considerations. Psychological Bulletin, 140(5),	Reviews evidence on biological and sociocultural factors in STEM gender gaps		
1120–1168. Mincer, J., & Polachek, S. (1974). Family Investments in Human Capital: Earnings of Women. Journal of Political Economy, 82(2), S76–S108.	Family investment patterns help explain gender earnings differences		

Paper	Key Findings	Methodology	My Notes
Oaxaca, R. (1973). Male-Female Wage Differentials in Urban Labor Markets. International Economic Review, 14(3), 693–709.	Introduced methodology for analyzing wage discrimination by gender		
Whitcomb, K. M., et al. (2020). A Mismatch Between Self-efficacy and Performance: Undergraduate Women in Engineering. arXiv preprint.	Women in engineering have lower self-efficacy despite higher grades		
Xie, Y., & Shauman, K. A. (2003). Women in Science: Career Processes and Outcomes. Harvard University Press.	Examines women's career trajectories in science		
Zajac, T., et al. (2025). Gender Pay Gaps Across STEM Fields of Study. Studies in Higher Education, 50(1), 126–139.	Analysis of gender pay gaps across STEM disciplines		

Family Structure and Child Development

Parental Influence

Paper	Key Findings	Methodology	My Notes
Baker, M., & Milligan, K. (2016). Boy-Girl Differences in Parental Time Investments: Evidence from Three Countries. Journal of	Parents invest differently in boys vs. girls across different countries	Methodology	My Notes
Human Capital, 10(4), 399–441.			
Bowlby, J. (2008). A Secure Base: Parent-Child Attachment and Healthy Human Development. Basic Books.	Parent-child attachment is foundation for healthy development		
Brenøe, A. A., & Lundberg, S. (2018). Gender Gaps in the Effects of Childhood Family Environment: Do They Persist into Adulthood? European Economic Review, 109, 42–62.	Childhood environment effects on gender gaps persist into adulthood		

Paper	Key Findings	Methodology	My Notes
Downey, D. B. (1995). When bigger is not better: Family size, parental resources, and children's educational performance. American Sociological Review, 60(5), 746–761.	Resource dilution in larger families affects children's educational outcomes		
Endendijk, J. J., et al. (2016). Gender- Differentiated Parenting Revisited: Meta-Analysis Reveals Very Few Differences in Parental Control of Boys and Girls. PLoS One, 11(7), e0159193.	Few differences in parenting of boys vs. girls despite stereotypes		
Sarkadi, A., et al. (2008). Fathers' Involvement and Children's Developmental Outcomes: A Systematic Review of Longitudinal Studies. Acta Paediatrica, 97(2), 153–158.	Father involvement positively affects children's development		

Paper	Key Findings	Methodology	My Notes
Yeung, W. J., et al. (2002). How Money Matters for Young Children's Development: Parental Investment and Family Processes. Child development, 73(6), 1861–1879.	Economic resources affect child development through parenting and materials		

Family Structure Effects

Paper	Key Findings	Methodology	My Notes
Amato, P. R.	Changes in family		
(2005). The	structure affect children's		
Impact of	well-being through		
Family	multiple pathways		
Formation			
Change on the			
Cognitive,			
Social, and			
Emotional			
Well-Being of			
the Next			
Generation.			
The Future of			
Children,			
75–96.			

Paper	Key Findings	Methodology	My Notes
Augustine, J. M. (2014). Maternal Education and the Unequal Significance of Family Structure for Children's Early Achievement.	Maternal education moderates the effects of family structure on child achievement		
Social Forces, 93(2), 687–718.			
Carlson, M. J., & Corcoran, M. E. (2001). Family Structure and Children's Behavioral and Cognitive Outcomes. Journal of Marriage and Family, 63(3), 779–792.	Family structure affects behavioral and cognitive outcomes through multiple pathways		
Fomby, P., & Cherlin, A. J. (2007). Family Instability and Child Well-Being. American Sociological Review, 72(2), 181–204.	Family instability negatively affects child well-being		

Paper	Key Findings	Methodology	My Notes
Lee, D., & McLanahan, S. (2015). Family Structure Transitions and Child Development: Instability, Selection, and Population Heterogeneity. American Sociological Review, 80(4), 738–763.	Family transitions affect child development through multiple mechanisms		
Lundberg, S. (2017). Father Absence and the Educational Gender Gap. <i>IZA Discussion Paper</i> No. 10814.	Father absence contributes to educational gender gap		
McLanahan, S., & Sandefur, G. (2009). Growing up with a single parent: What hurts, what helps. Harvard University Press.	Single parenthood affects children through economic and parenting pathways		

Paper	Key Findings	Methodology	My Notes
McLanahan, S., Tach, L., & Schneider, D. (2013). The Causal Effects of Father Absence. Annual Review of Sociology, 39, 399–427.	Father absence has causal negative effects on multiple child outcomes		

Cognitive Development and Brain Science

Paper	Key Findings	Methodology	My Notes
Ansari, D. (2008). Effects of Development and Enculturation on Number Representa- tion in the	Cultural learning shapes neural representation of numbers	Mediodology	
Brain. Nature Reviews Neuroscience, 9(4), 278–291.			

Paper	Key Findings	Methodology	My Notes
Blair, C., & Razza, R. P. (2007). Relating effortful control, executive function, and false belief understanding to emerging math and literacy ability in kindergarten. Child Development, 78(2), 647–663.	Executive function related to early academic abilities in kindergarten		
Casey, B. J., et al. (2005). Imaging the Developing Brain: What Have We Learned About Cognitive Development? Trends in Cognitive Sciences, 9(3), 104–110.	Brain development continues through adolescence with implications for behavior		
Deary, I. J., et al. (2007). Intelligence and Educational Achievement. Intelligence, 35(1), 13–21.	Intelligence strongly predicts educational achievement		

Paper	Key Findings	Methodology	My Notes
Dehaene, S. (2011). The Number Sense: How the Mind Creates Mathematics. Oxford University Press.	Mathematical cognition has evolutionary and neural bases		
Duncan, G. J., et al. (2007). School Readiness and Later Achievement. Developmental Psychology, 43(6), 1428–1446.	Early academic skills predict later achievement		
Knudsen, E. I., et al. (2006). Economic, Neurobiological, and Behavioral Perspectives on Building America's Future Workforce. <i>PNAS</i> , 103(27), 10155–10162.	Early investments in human capital most effective		

Paper	Key Findings	Methodology	My Notes
Luna, B., et al. (2010). What Has fMRI Told Us About the Development of Cognitive Control Through Adolescence? Brain and Cognition, 72(1),	Cognitive control develops into early adulthood		
101–113. Lupien, S. J., et al. (2009). Effects of Stress Throughout the Lifespan on the Brain, Behaviour and Cognition. Nature Reviews Neuroscience, 10(6), 434–445.	Stress affects brain development with timing-specific effects		
Shonkoff, J. P., et al. (2012). The Lifelong Effects of Early Childhood Adversity and Toxic Stress. <i>Pediatrics</i> , 129(1), e232–e246.	Toxic stress disrupts brain architecture with lifelong consequences		

Socioeconomic Status and Educational Achievement

Danan	Vor Findings	Mathadalagy	My Notes
Paper	Key Findings	Methodology	Wiy Notes
Bradley, R. H., & Corwyn, R. F. (2002). Socioeconomic	SES affects child development through multiple direct and indirect pathways		
Status and Child Development. Annual Review of Psychology,			
53(1), 371–399.			
Caro, D. H.,	SES affects academic		
et al. (2009). Socio-	trajectories from childhood through adolescence		
Economic	unough adolescence		
Status and Academic			
Achievement			
Trajectories from			
Childhood to			
Adolescence. $Canadian$			
Journal of			
Education,			
32(3), $558-590.$			
Chetty, R., et	Family income affects		
al. (2020). Income	college attendance and upward mobility		
Segregation			
And Intergen- erational			
Mobility Across			
Colleges In			
The United States. The			
Quarterly			
$Journal\ of$ $Economics,$			
135(3),			
1567 - 1633.			

Paper	Key Findings	Methodology	My Notes
Evans, G. W., & Schamberg, M. A. (2009). Childhood poverty, chronic stress, and adult working memory. PNAS, 106(16),	Childhood poverty affects adult working memory through stress pathways		
6545–6549. Sirin, S. R.	Meta-analysis of		
(2005).	socioeconomic effects on		
Socioeconomic Status and Academic Achievement: A Meta-Analytic Review of Research. Review of Educational	academic achievement		
Research,			
75(3), 417–453. Watts, T. W., et al. (2014). Achievement Gaps in the United States: Race, Poverty, and Interactions Over Ten Years. The Journal of Educational Research, 108(1), 17–26.	Achievement gaps by race and SES persist over time		

Non-Cognitive Skills and Academic Success

Paper	Key Findings	Methodology	My Notes
Alan, S., & Ertac, S. (2018). Fostering Patience in the Classroom: Results from a Randomized Educational Intervention. Journal of Political Economy, 126(5), 1865–1911.	Educational intervention improves patience in children with effects on academic outcomes		
Bandura, A., et al. (1996). Multifaceted Impact of Self-Efficacy Beliefs on Academic Functioning. Child Development, 67(3), 1206–1222.	Self-efficacy beliefs affect academic motivation, interest, and achievement		
Duckworth, A. L., & Seligman, M. E. (2005). Self-Discipline Outdoes IQ in Predicting Academic Performance of Adolescents. Psychological Science, 16(12), 939–944.	Self-discipline predicts academic performance better than IQ		

Paper	Key Findings	Methodology	My Notes
Durlak, J. A., et al. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. Child Development, 82(1), 405–432.	SEL interventions improve academic outcomes and social-emotional skills		
Masten, A. S., et al. (2005). Developmental Cascades: Linking Academic Achievement and Externalizing and Internalizing Symptoms Over 20 Years. Developmental Psychology, 41(5), 733–746.	Academic and behavioral problems linked in developmental cascades		

Paper	Key Findings	Methodology	My Notes
McClelland, M. M., et al. (2007). Links between behavioral regulation and preschoolers' literacy, vocabulary, and math skills. Developmental Psychology, 43(4), 947–959.	Behavioral regulation linked to early academic skills		
Raver, C. C. (2002). Emotions matter: Making the case for the role of young children's emotional development for early schooling success. Social Policy Report, 16(3), 1–20.	Emotional development fundamental to early academic success		
Yeager, D. S., et al. (2019). A National Experiment Reveals Where a Growth Mindset Improves Achievement. Nature, 573(7774), 364–369.	Growth mindset intervention improves academic achievement		

Economic Models of Human Capital

Paper	Key Findings	Methodology	My Notes
Becker, G. S. (1964). Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education. University of	Framework for analyzing education as investment in human capital		
Chicago Press. Black, S. E.,	Review of recent research		
& Devereux,	on intergenerational		
P. J. (2011).	educational and income		
Recent developments	mobility		
in intergenera-			
tional			
mobility.			
$Handbook\ of$ $Labor$			
Economics,			
4B,			
1487–1541.			
Card, D.	Reviews causal evidence on returns to education		
(1999). The Causal Effect	returns to education		
of Education			
on Earnings.			
Handbook of			
Labor $Economics, 3,$			
1801–1863.			
Cunha, F., &	Skill formation model with		
Heckman, J.	dynamic complementarities		
(2007). The Technology of	and critical periods		
Skill			
Formation.			
American			
Economic $Review, 97(2),$			
31–47.			

Paper	Key Findings	Methodology	My Notes
DiNardo, J., et al. (1996). Labor Market Institutions and the Distribution of Wages, 1973-1992: A Semiparametric Approach. Econometrica, 64(5), 1001–1044.	Semi-parametric approach to wage decomposition		
Heckman, J. J. (2006). Skill Formation and the Economics of Investing in Disadvantaged Children. Science, 312(5782), 1900–1902.	Early childhood is critical period for skill development interventions		
Heckman, J. J., et al. (2006). The Effects of Cognitive and Noncognitive Abilities on Labor Market Outcomes and Social Behavior. Journal of Labor Economics, 24(3), 411–482.	Non-cognitive skills affect labor market and social outcomes		

Paper	Key Findings	Methodology	My Notes
Hsieh, CT., et al. (2019). The Allocation Of Talent And U.S. Economic Growth. Econometrica, 87(5), 1439–1474.	Reduced discrimination and improved talent allocation increases growth		

Cultural and Environmental Influences

Paper	Key Findings	Methodology	My Notes
Eccles, J. S., et al. (1990). Gender role stereotypes, expectancy effects, and parents' socialization of gender differences. <i>Journal of Social Issues</i> , 46(2), 183–201.	Parents' gender stereotypes affect children's skill development		
Eccles, J. S., & Roeser, R. W. (2011). Schools as Developmental Contexts During Adolescence. Journal of Research on Adolescence, 21(1), 225–241.	Schools provide important developmental context during adolescence		

Paper	Key Findings	Methodology	My Notes
Guiso, L., et al. (2008). Culture, Gender, and Math. Science, 320(5880), 1164–1165.	Cross-country variation in math gender gaps related to gender equality		
Legewie, J., & DiPrete, T. A. (2014). The High School Environment and the Gender Gap in Science and Engineering. Sociology of Education, 87(4), 259–280.	School environment affects gender gap in science and engineering		
Nollenberger, N., et al. (2016). The Math Gender Gap: The Role of Culture. American Economic Review, 106(5), 257-61.	Cross-country evidence on cultural influences on math gender gaps		

Paper	Key Findings	Methodology	My Notes
Penner, A. M. (2008). Gender Differences in Extreme Mathematical Achievement: An International Perspective on Biological and Social Factors. American Journal of Sociology, 114(S1), S138–S170.	Gender differences in math achievement vary internationally		
Pianta, R. C., & Stuhlman, M. W. (2004). Teacher-child relationships and children's success in the first years of school. School Psychology Review, 33(3), 444-458.	Teacher-child relationships predict academic success		
Spencer, S. J., et al. (1999). Stereotype Threat and Women's Math Performance. Journal of Experimental Social Psychology, 35(1), 4–28.	Stereotype threat negatively affects women's math performance		

Theme Connections and Research Questions

Use this section to document emerging research questions and connections between papers across different categories.

Key Cross-Theme Questions

- 1.
- 2.
- 3.

Connections Between Themes

Connection	Related Papers	Notes
SES and gender interactions		
Cognitive and non-cognitive skills		
Family structure and educational outcomes		
Cultural influences on development		

Reading Priority Plan

Use this table to organize your reading schedule and priorities.

Priority	Paper	Theme	Deadline	Status
1				
2				
3				
4				
5				