

Exploring Gender Differences in Self Regulation Among Head Start and Non-Head Start Kids

Brittany Gilmore, Megan M. McClelland, Ph.D., Rob Duncan, M.S.

Abstract

- ❖ Children's self-regulation and socio-economic status are important factors in predicting later academic outcomes and kindergarten readiness.
- ❖ This study examined relationships between socio-economic status (SES), gender differences, and performance on the Heads-Toes-Knees-Shoulders (HTKS) self-regulation assessment.
- ❖ Using a diverse sample of 408 preschool children, results indicated:
 1. Low-income children in Head Start displayed significantly lower self-regulation than children not enrolled in Head Start.
 2. The gender gap in self-regulation was significantly larger in Non-Head Start children when compared to Head Start children.

Introduction

- ❖ Children's self-regulation skills can be defined as including the ability to have self-control, working memory, and cognitive flexibility.
- ❖ Self-regulation is important and has been found to predict later success in reading and mathematics throughout school. In one study, self-regulation predicted academic achievement in elementary school even after accounting for other factors such as child's IQ, ethnicity, parent education level, home literacy, entrance age, and amount of preschool experience. (McClelland, Morrison, & Holmes, 2000).
- ❖ Poverty plays a significant role in the ability of a child to demonstrate social competence and self-regulation. Up to 25% of children living in poverty experience negative social and emotional outcomes. It has also been found that low income is a risk factor for early onset of conduct problems and academic underachievement. (Webster-Stratton, Reid, & Stoolmiller, 2008).

- ❖ Children who come from socio-economically disadvantaged backgrounds show a decreased ability to regulate attention and behavior when compared to more advantaged children.
- ❖ It has also been found that boys are more likely to have poorer self-regulation than girls in elementary school. In addition, it is possible that disadvantaged families may uphold gender stereotypes and view boys as more active and aggressive than girls. (Morrison, Ponitz, & McClelland, 2010).

Study Design/Methods Used

- ❖ My URAP project was part of Dr. McClelland's *Touch Your Toes! Kindergarten Readiness Study*. Dr. McClelland's study tests the reliability and validity of the HTKS assessment as a tool for determining self-regulation and Kindergarten readiness.
- ❖ We analyzed the data collected on 408 children in the fall of the preschool year: 52% were males, the mean age was 56 months (SD = 4.08), 56% of the sample was low-income (enrolled in Head Start) and the average score on HTKS was 17.42 (SD = 17.18).

Goals of the Study

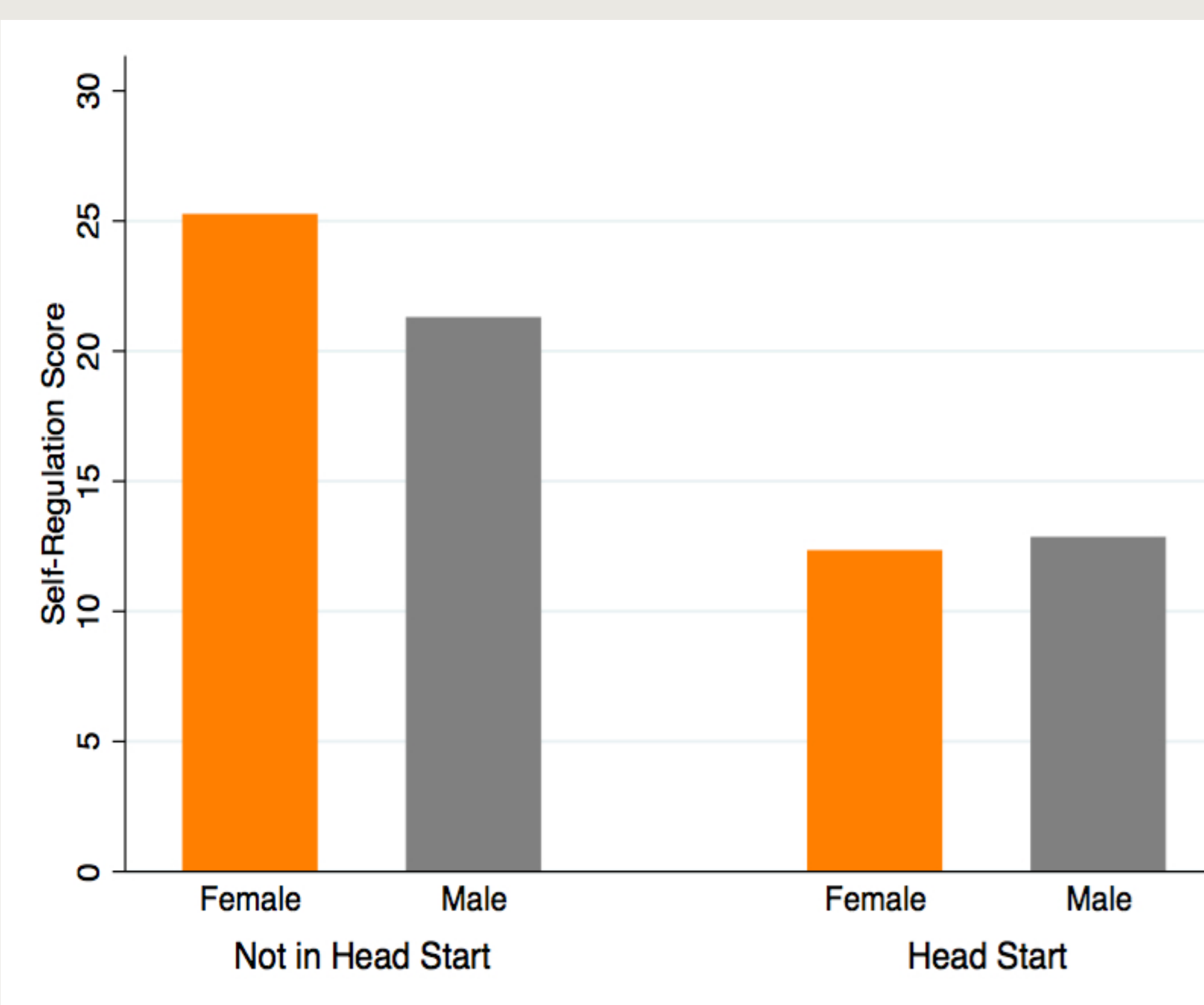
- ❖ The present study examined the following research questions:
 - ❖ 1. Is self-regulation in Head Start children significantly lower than self-regulation in Non-Head Start children?
 - ❖ 2. Is the magnitude of the gender differences in self-regulation similar for Head Start and Non-Head Start children?

- ❖ I predicted that self-regulation in low-income Head Start children would be significantly lower than self-regulation in Non-Head Start children.
- ❖ I also predicted that the magnitude of gender differences (favoring girls) would be significantly bigger in the Head Start group of children than in the Non-Head Start group.

Results

- ❖ For the first research question:
 - ❖ Data analysis revealed statistically significant differences in self-regulation between Head Start and Non-Head Start children, where children in Head Start had significantly lower self-regulation.
 - ❖ In contrast to my hypothesis, results of regressions indicated that there was a trend towards girls having significantly higher self-regulation than boys in the *Non-Head Start* group compared to children in the *Head Start* group of children (see Figure 1 below).

Figure 1.



Summary/Conclusion

- ❖ Results indicated that Head Start children tend to display less self-regulation than Non-Head Start children. This indicates an increased need to help low income children with self-regulation.
- ❖ Since the regression indicated a trend towards girls displaying significantly more self-regulation than boys in the Non-Head Start group, we might want to pay closer attention to gender differences in Non-Head Start families.

References

1. McClelland, M. M., Morrison, F. J., & Holmes, D. L. (2000). Children at risk for early academic problems—the role of learning-related social skills. *Early Childhood Quarterly, 15*(3), 307-329.
2. Morrison, F. J., Ponitz, C. C., & McClelland, M. M. (n.d.). Self-regulation and academic achievement in the transition to school. 203-224.
3. Wanless, S. B., McClelland, M. M., Lan, X., Son, S. H., Cameron, C. E., & ... Sung, M. (2013). Gender differences in behavioral regulation in four societies: The United states, taiwan, south korea, and china. *Early Childhood Research Quarterly, 28*, 621-633.
4. Webster-Stratton, C., Reid, M. J., & Stoolmiller, M. (2008). Preventing conduct problems and improving school readiness: evaluation of the incredible years teacher and child training programs in high-risk schools. *Journal of Child Psychology and Psychiatry, 49*(5), 471-488.

Acknowledgements

- ❖ I would like to thank the College of Public Health & Human Sciences and the Undergraduate Research Award Program for support and funding for this study.
- ❖ I would like to thank Rob Duncan and Dr. Megan McClelland for their advice, support, and guidance throughout this research experience.
- ❖ I would also like to thank the team of research assistants who have volunteered their time and contributed to the Touch your Toes! Kindergarten Readiness Study.
- ❖ Thank you to the teachers, parents and children who are involved and have been part of the study.