

Introduction

Attention-Deficit/Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder that involves chronic patterns of inattention and/or hyperactivity-impulsivity. Symptoms can severely hinder development and mental health, and even subclinical levels of ADHD have been associated with impaired psychological, academic, occupational and social functioning in adults.^{1,2,3}

Parental self-efficacy (PSE) refers to parents' beliefs about their ability to competently and satisfactorily perform the tasks of parenting.⁴ Higher PSE is associated with more positive parenting practices⁵ and, in turn, better socio-emotional and academic outcomes for the child.⁶

Parents of children with ADHD symptoms often report lower PSE than parents of control children.^{7,8} There is some evidence that maternal ADHD symptoms may also predict PSE, since higher ADHD symptoms in expectant mothers have been correlated with lower PSE.⁹ However, no research has yet examined whether child ADHD symptoms and maternal ADHD symptoms interact with each other to influence maternal self-efficacy (MSE).

The similarity-fit hypothesis suggests that mothers sharing similar levels of ADHD symptoms with their child may experience increased identification, empathy and affinity towards their child.¹⁰ In light of this theory, such mothers are expected to report higher MSE than mothers from dissimilar mother-child pairs.

As such, the present study aims to:

- 1) Confirm the predictive relationship between child ADHD symptoms and maternal self-efficacy.
- 2) Investigate the possible moderation effect of maternal ADHD symptoms on this relationship.

Methodology

Participants

84 biological mother-child pairs were recruited from the community. Demographic information was collected using a self-report questionnaire. On average, both male (46%) and female (54%) children were 3.5 years old ($SD = 5.51$ months).

Mothers were predominantly heterosexual (95%), Caucasian/white (77%), and reported having completed post-secondary education (92%). Most mothers (74%) also reported an annual household income of \$75,000 or greater.

Measures

The Adult ADHD Self-Report Scale (ASRS) Symptom Checklist. An 18-item measure of adult ADHD symptomatology showing good internal reliability and validity as a diagnostic screening tool. It consists of a Likert scale ranging from 0 (*Never*) to 5 (*Very often*).^{11,12}

The ADHD Rating Scale IV Preschool Version (ADHD-RS-IV). An 18-item parent-report measure of ADHD symptoms in children aged 3-5 years old showing good internal consistency (Cronbach's $\alpha = 0.86$ to 0.96) and concurrent validity (0.54 to 0.96). It consists of a Likert scale ranging from 0 (*Rarely or never*) to 3 (*Very often*).¹³

The Parenting Sense of Competence Scale (PSOC). A 17-item self-report measure of parental self-efficacy consisting of a Likert scale ranging from 1 (*Strongly Disagree*) to 6 (*Strongly Agree*).¹⁴

- Internal consistency = 0.77 to 0.80 .
- Factorial validity = 0.92 to 0.95 .¹⁵

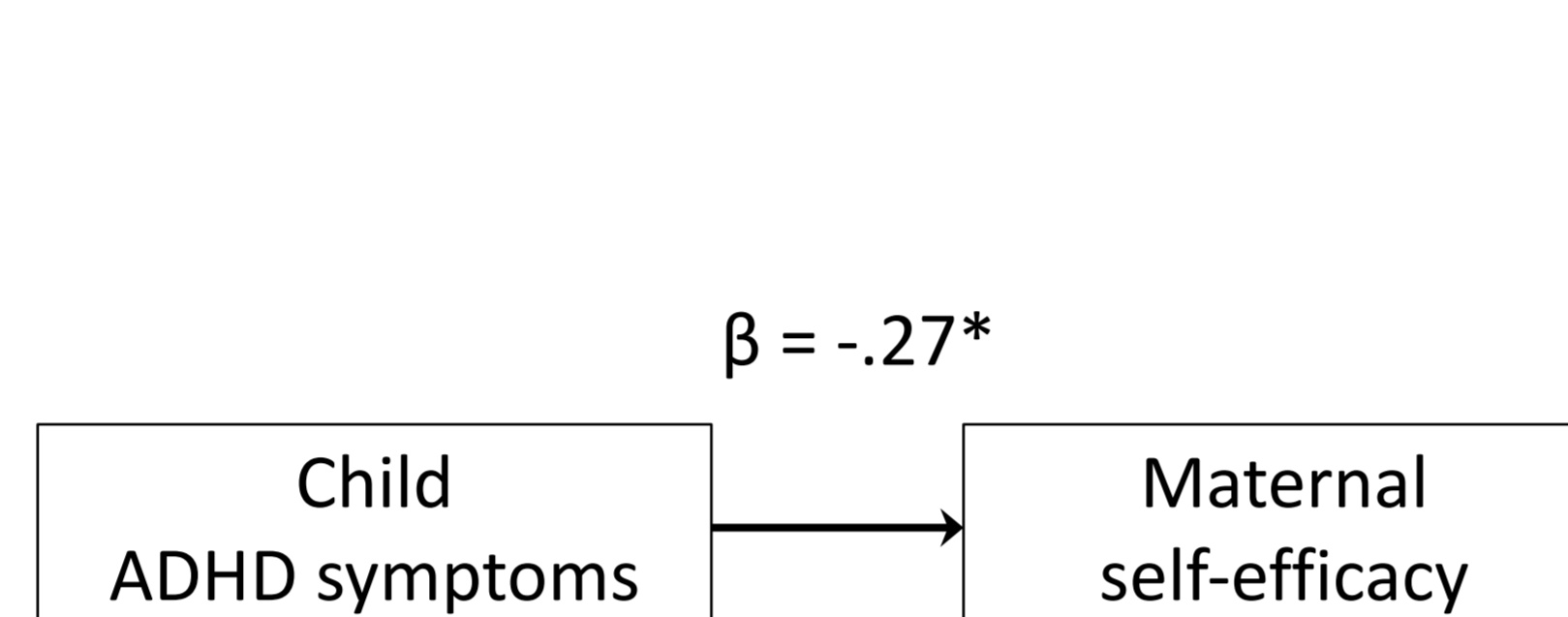
Results

Table 1

Mean Scores for Variables of Interest

Scale	$M(SD)$
ASRS Maternal ADHD Symptoms Scores	27.60(12.32)
ADHD-RS-IV Child ADHD Symptoms Scores	17.27(9.13)
PSOC Maternal Self-Efficacy Scores	72.39(11.11)

Model 1. Child ADHD symptomatology as a predictor of MSE



* $p < .05$

A simple linear regression analysis (Model 1) showed that child ADHD symptomatology is a statistically significant predictor of maternal self-efficacy, $F(1,82) = 6.68$, $p = .01$, $R^2 = .08$. However, multiple hierarchical analyses (Model 2) found that only child ADHD symptomatology was a significant predictor of maternal self-efficacy, $\beta = -.61$, $t(80) = -2.27$, $p < .05$. The interaction between child and maternal ADHD symptoms did not account for significantly more variance in MSE than child ADHD symptomatology by itself.

Model 2. Child ADHD symptomatology and its interaction with maternal ADHD symptoms as predictors of MSE

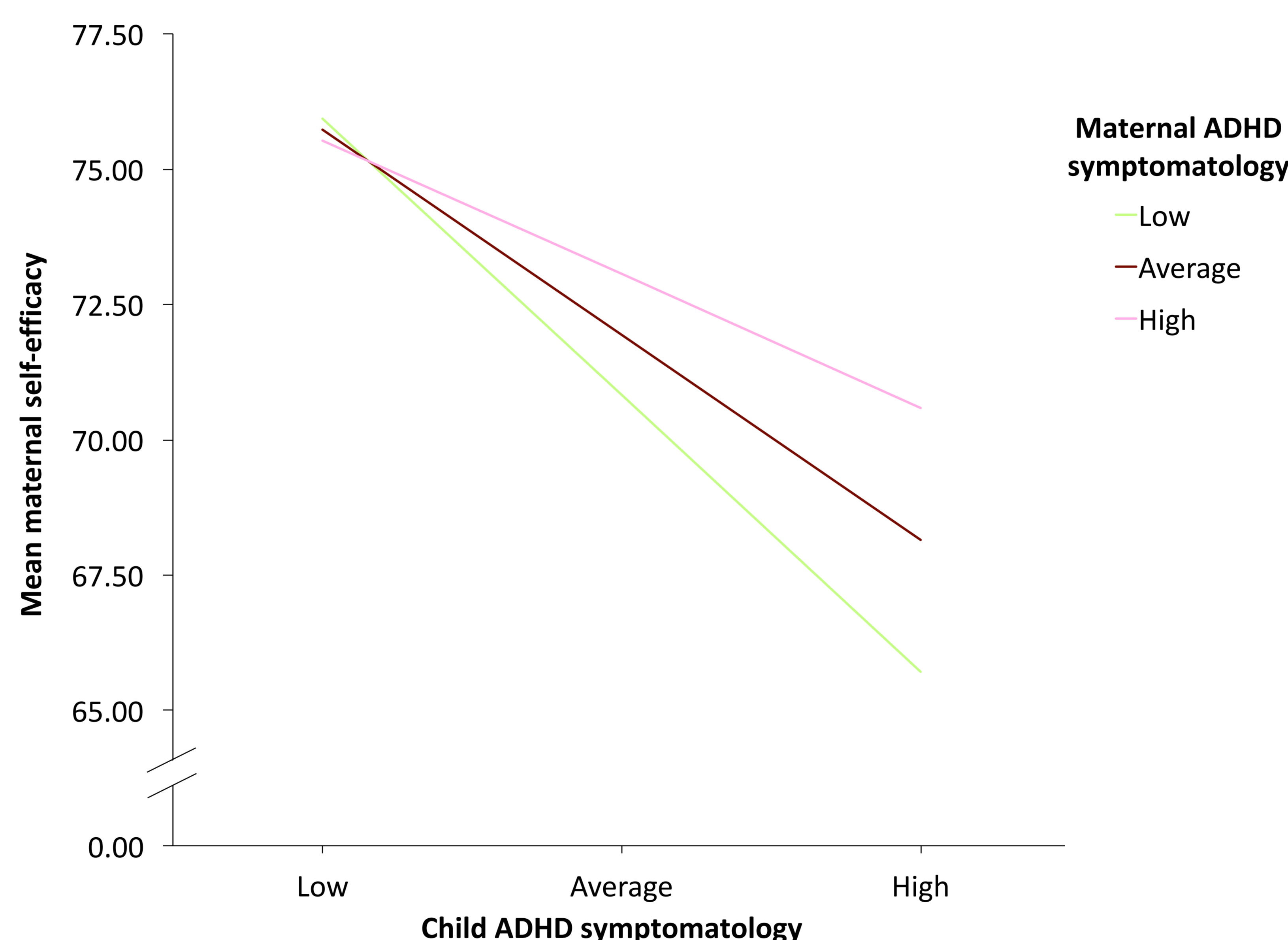
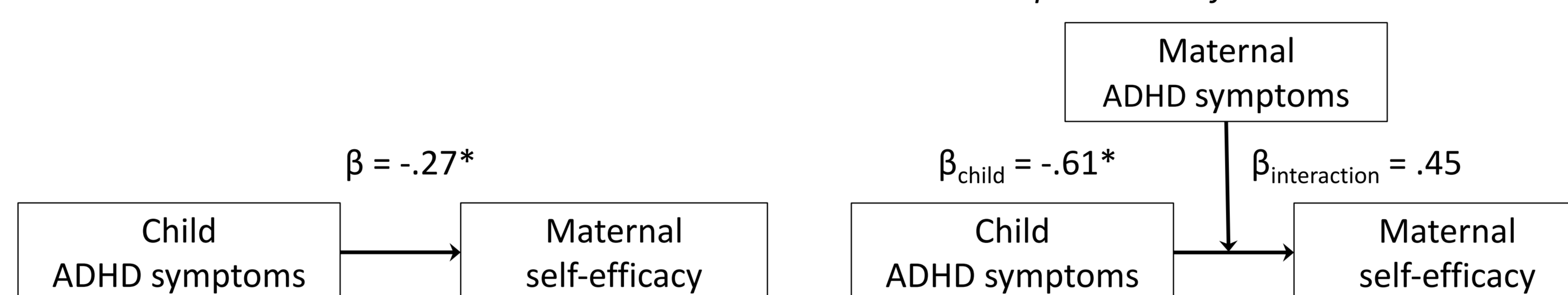


Figure 1. Mean maternal self-efficacy as a function of the interaction between maternal ADHD symptomatology and child ADHD symptomatology. High and low values correspond to scores $\pm 1 SD$ from the sample average (M) for each respective variable ($n = 84$ mother-child pairs).

Acknowledgements

This study was made possible by the Undergraduate Research Opportunity Program. Special thanks to Dr. Rogers for my recruitment to the ADHD and Development Laboratory, and to Stacey Kosmerly for her invaluable supervision and guidance.

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Discussion

Results of the present analyses are consistent with previous research findings supporting child ADHD symptomatology as a predictor of parental self-efficacy.^{7,8} As child ADHD symptoms increase, maternal self-efficacy can be expected to decrease. However, maternal ADHD symptoms did not have a significant moderation effect on the relationship between child ADHD symptomatology and MSE.

Upon visual inspection of the data shown in Figure 1, however, the effect of child ADHD symptoms on maternal self-efficacy appears to decrease as maternal ADHD symptoms increase. In other words, the negative effect of higher child ADHD symptomatology on MSE seems to be less severe for mothers that also have higher levels of ADHD. As a result, mothers sharing higher levels of ADHD symptoms with their child seemingly report higher MSE than mothers that do not match their child's high ADHD symptoms. In contrast, when children's ADHD symptoms are low, mothers appear to experience high MSE regardless of their own level of ADHD symptomatology. As such, it would seem as though the similarity-fit hypothesis is partially supported by the data. However, it is important to emphasize that moderation analysis did not reveal this hypothesized trend to be statistically significant. Nevertheless, this may be grounds for further research since the present study was limited by a subclinical sample.

Limitations and Future Directions

The sample was mostly subclinical in nature, and is therefore not representative of mothers or children with clinically "high" ADHD symptoms. Instead, the entire maternal sample may have only represented a clinically "low" level of ADHD symptomatology. As for children, all participating preschoolers were too young for clinical assessment and diagnosis. Thus, given the trends proposed in the data, future research might benefit from using clinical samples—both maternal and paternal—and might find more support for the similarity-fit hypothesis in doing so.

The self- and parent-report nature of the data also presents some limitations. It is possible that PSE or parental ADHD symptomatology influence parents' perceptions of their child's ADHD symptoms. Future studies should therefore aim to include corroborative observational, clinical, or teacher-report measures of both child and parental ADHD symptoms.

Conclusion

Though results gave further support to the hypothesis that parental self-efficacy is a function of child ADHD symptomatology, they did not support the similarity-fit hypothesis that maternal ADHD symptoms and child ADHD symptoms would interact to affect mothers' PSE.

Nonetheless, the present research does support the development of applied interventions that would reinforce self-efficacy in parents of children with ADHD. Indeed, results showed that parents can experience troubles with PSE even when their child may not exhibit clinical levels of ADHD symptoms. This can then lead to more negative outcomes for the family.^{5,6}

References

Please see handout.