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A Meta-analysis on the Effectiveness of Trauma-informed Practice

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EFFECTIVENESS OF TRAUMA-INFORMED PRACTICE

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INTRODUCTION

This study analyzes various articles evaluating the effectiveness of trauma informed practice. This study is grounded on Adverse Childhood Experiences (ACEs) research. There are three main categories of trauma a child may undergo that could result in trauma to the mind and body. Those categories are abuse, neglect, and household challenges. Trauma may also begin with epigenetics or during the prenatal stage of pregnancy, depending on the mother's level of stress, and continues on as the child has adverse childhood experiences. These experiences disrupt neurodevelopment which in turn affects social-emotional cognition. These factors often result in adoption of health risk behaviors, disease, disability, and ultimately, an early death. There is sufficient research portraying the benefits of the trauma-informed approach as a theoretical framework; however, there is little research on whether it is effective as an intervention. Thus, we conducted a meta-analysis on 10 research studies testing the effectiveness of trauma-informed practice. Although two studies did not include all data in their articles, they were still included in our analysis due to the relevancy and final results of their research. **We hypothesized that, when combined, TIC studies would produce a large effect size**, establishing it as a concrete evidence-based practice.

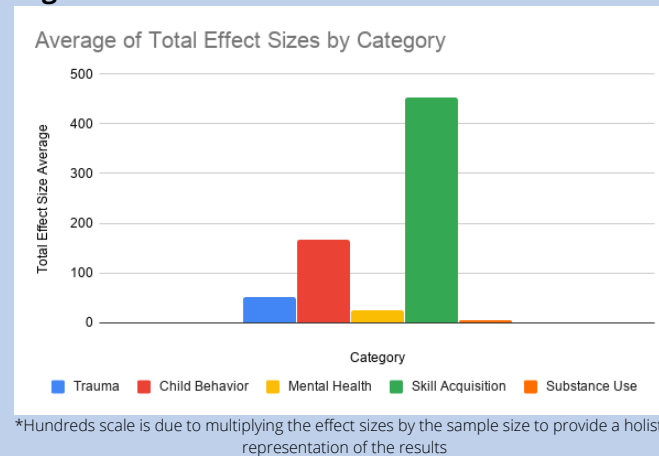
METHODS

Our methods for research include searching "trauma" and "trauma-informed" on various databases to locate scholarly articles with results from studies conducted on trauma-informed practice. The data was analyzed on an Excel spreadsheet, and Cohen's guidelines were used to calculate effect sizes. An effect size measures the magnitude of the study, .2 being a small effect size, .5 a medium, and .8 a large. We then compared effect sizes and performed a meta-analysis, a statistical procedure for combining data from multiple analysis to determine the overall effectiveness of trauma-informed practice.

RESULTS

The effect size for each study was calculated and multiplied by its sample size to determine the total effect size of the studies combined. The total combined effect size was .6267, a medium-large effect size. **Thus, the results demonstrate that trauma-informed practice interventions with varying populations are effective.** The variables in each study were then categorized into the following: Trauma, Child Behavior, Mental Health, Skill Acquisition, and Substance use. The average effect size of each category was calculated by averaging the total effect size of each pertaining variable. As shown in Figure 1, the results portray Skill Acquisition with the highest total effect size average (453.13), followed by Child Behavior reduction (166.18), Trauma Treatment (51.24), Mental Health Treatment (24.69), and substance use treatment (4.7).

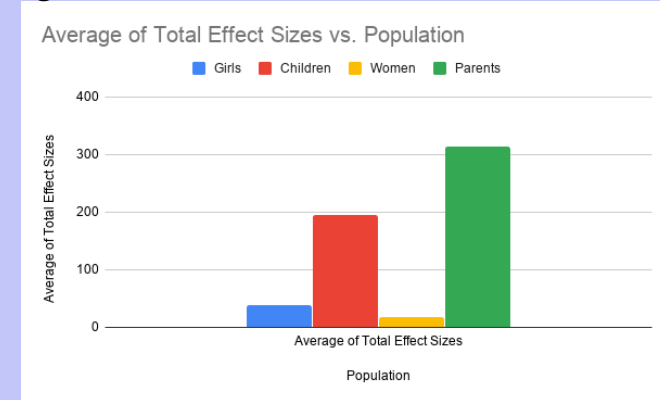
Figure 1



The data was also manipulated to calculate the effectiveness of Trauma-informed Care (TIC) interventions by population studied. The four populations included in the meta-analysis are: Girls (adolescents and children), Children (k-8), Women (in residential or substance use treatment), and Parents (of children with behavioral problems). The results were determined by calculating the average of the total effect size of the studies in each population category.

Figure 2 portrays the results with parents holding the highest average total effect size (314), followed by Children (195.19), girls (38.02), and women (17.53). However, it is important to note that only one study looked at the effectiveness of TIC with parents.

Figure 2



IMPLICATIONS

Based on our research, Trauma-informed practice is generally effective. It has shown to be more effective in the category of skill acquisition (i.e. teaching coping skills, overall child well-being, teaching trauma-informed parenting), $d=.65$. It has also portrayed effectiveness in improving child behavior $d=.72$ and in reducing behavior issues (i.e. social problems, disciplinary referrals). The populations TIC proved to be most effective with was with parents $d=1$ and children, $d=.7$, specifically those who have Post-Traumatic Stress Disorder (PTSD), behavior problems, are foster children, or in psychotherapy.

LIMITATIONS

A limitation of our study is the low number of research studies conducted on the effectiveness of Trauma-informed practice, since the theoretical framework was not introduced until 2005. Another limitation is that many studies withheld statistical information in their research article or did not provide sufficient statistics for us to include in our meta-analysis. Future research can focus on solidifying specific TIC interventions as effective.

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