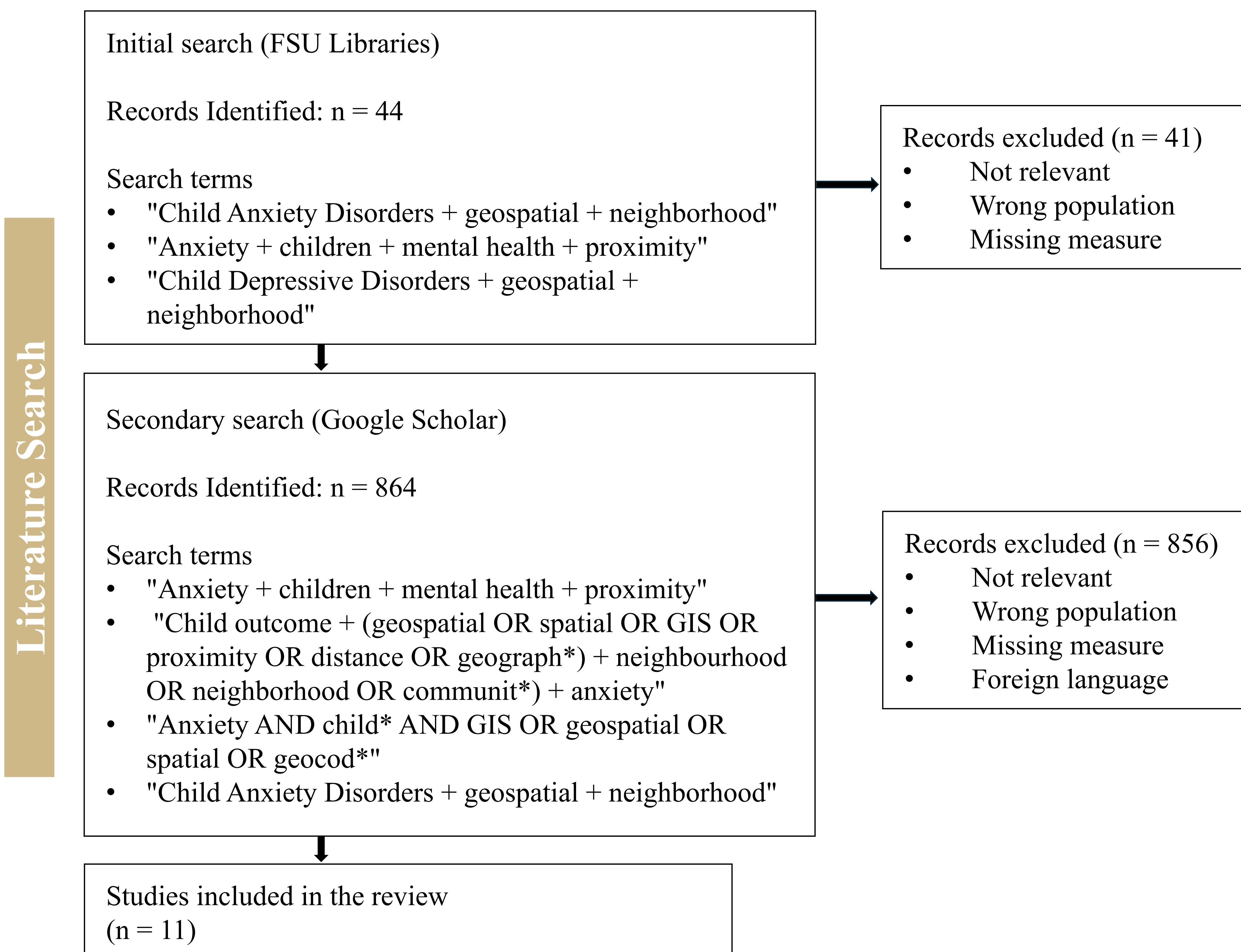


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Background

- The onset of anxiety often occurs during childhood & adolescence (Vine et al., 2012)
- Earlier research has primarily focused on adults & general internalizing symptoms (Oostenbach et al., 2022)
- GIS-derived contextual predictors account for unique environmental factors, but have rarely been used to study childhood anxiety (Furr et al., 2011)
- It is unclear how GIS domains of environmental exposures, socioeconomic context, health-related factors, & educational resources influence anxiety in children (Vine et al., 2012)

Methods



GIS Predictors by Location



The Current Study

Core Objective

The primary aim of this literature review was to assess studies investigating the relationship between GIS-based indicators & childhood anxiety.

Research Questions

- RQ1:** What is the association between GIS-derived contextual predictors & childhood anxiety outcomes?
- RQ2:** Does the association between GIS-derived contextual predictors & childhood anxiety differ across GIS domains?
- RQ3:** Across the studies, how is childhood anxiety measured?

Results

- RQ1:** 8/11 studies found a significant association between GIS-derived contextual predictors & childhood anxiety outcomes, with small to moderate effects.
- RQ2:** Environmental exposures showed the strongest associations with child anxiety. The NDVI (greenness) was the most common GIS measure used.
- RQ3:** The Spence Children's Anxiety Scale (SCAS) was the most common measure of anxiety used.

Discussion

- Significant associations were observed for greenness, urbanicity, air pollution, neighborhood disadvantage, neighborhood disorder, neighborhood income, & community violence exposure, suggesting that environmental exposures & socioeconomic context influence childhood anxiety.
- Non-significant findings may indicate that GIS-derived contextual predictors influence childhood anxiety differently across environmental conditions & populations.
- Variation in anxiety measures across studies may limit comparability of findings & account for inconsistencies in the literature.
- Future research should explore additional GIS domains such as health-related & educational contextual factors. Additionally, these associations should be explored in rural areas.

References & Acknowledgements



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