

# Time Spent Outdoors and Resilience

## AN EXPLORATORY LOOK AT "NATURE DEFICIT DISORDER."

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### ABSTRACT

"Nature Deficit Disorder" is the phrase used by Richard Louv to describe the behavioral and psychological costs of minimal contact with nature (Louv, 2010). While this is not a clinical disorder, it creates questions about the connection between exposure to the outdoors and mental health, and inspired this study. There is a large body of research on resilience, the ability to "persevere and adapt when things go awry" (Reivich & Shatté, 2002). The link between time spent outdoors and resilience has not been explored in any depth. Most studies link nature deficit to pathologies, where this study examines substantial time in nature and its possible connection to flourishing, and is one of the first of its kind. This study investigated this possible relationship through use of an online survey containing two measures of resilience and questions about participants' time spent outdoors.

We expected to see a positive relationship between the amount of time spent of outside and degree of resilience. We used a t-test to determine whether this correlation exists.

### INTRODUCTION

In the past few decades increases in parental protectiveness of children, over-structuring of childhood activities, dwindling access to natural areas, increased reliance on technology, and certain school reforms have all been pointed to as factors that contribute to the steady decrease in the amount of time children are spending outdoors. The ramifications of this disconnect between children and nature have been demonstrated in the connections between lack of engagement with nature and vitamin D deficiency, myopia, and symptoms of attention deficit disorder (Louv, 2009).

The existing literature in this field has explored the detrimental effects of spending insufficient time outdoors. In response to this, the current study looks to this connection from a positive psychology perspective, exploring the possibility of a connection between increased time spent outside and greater psychological health, measured through resilience. Previous research has explored coping skills and connection to nature, but used qualitative data, whereas this study uses quantitative measures of the amount of time spent outside to circumvent this problem (Glassman, 1995). Other tangential research has explored perceived connection to nature and perceived resilience, and found promising results suggesting a positive relationship (Ingulli & Lindbloom, 2013). In contrast to prior studies that focused on pathology, we explored the possibility of time spent outdoors as a pathway to flourishing.

### METHOD

#### MEASURES

- Connor-Davidson Resilience Scale (2003)
  - 25 items on a 5-point Likert scale
- Wagnild-Young Resilience Scale (1933)
  - 25 items on a 5-point Likert scale

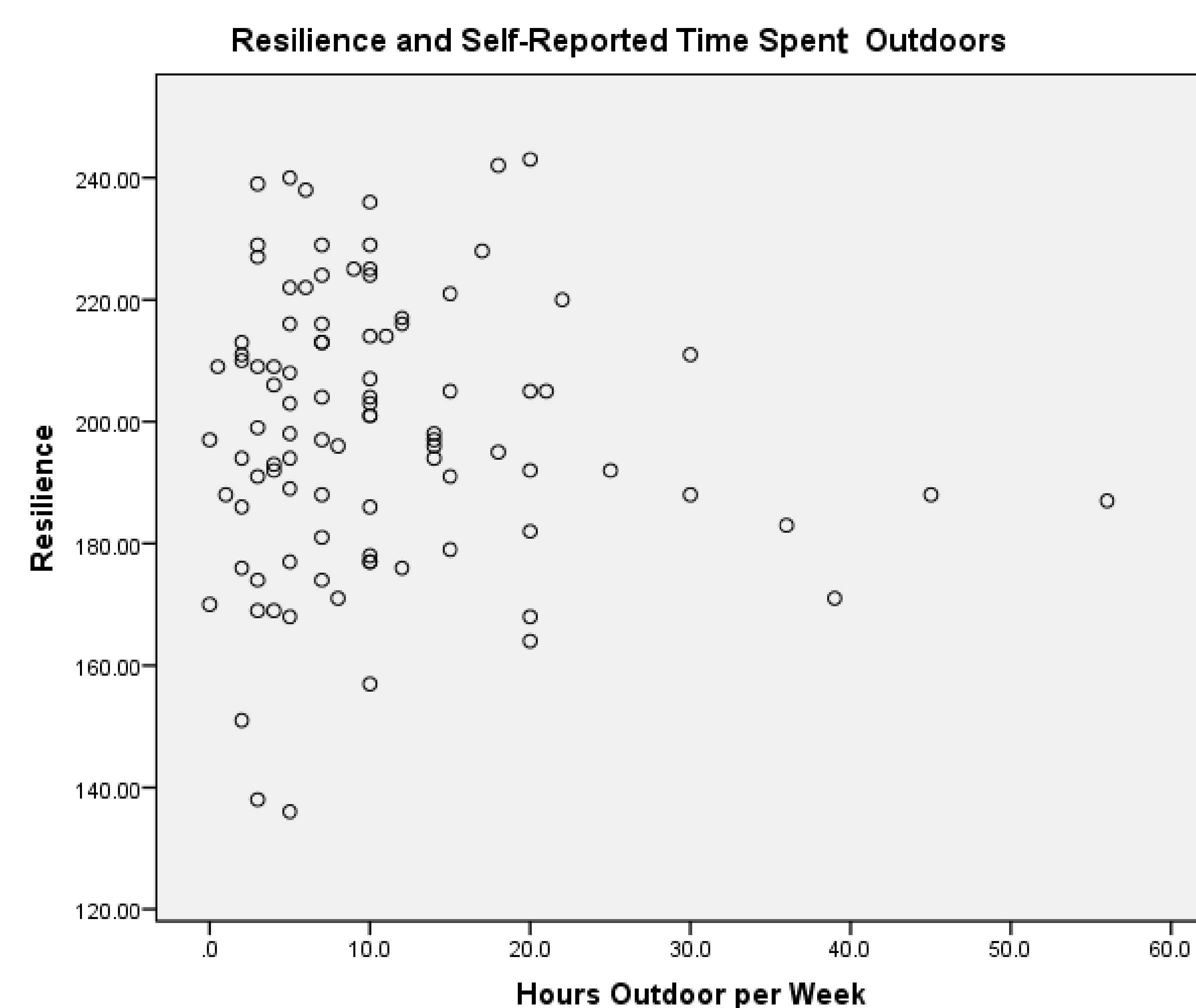
### PARTICIPANTS

- Convenience sample of 116 students enrolled at the University of Wisconsin – Eau Claire
- 11 participants' responses excluded due to incomplete measures
- At least 18 years of age; no upper age limit
- Recruited through online (SONA) participation system
- Participants self-identified as 75.3% Female, 23.7% Male, and 1% Gender Fluid/Non-Binary. 89.7% of participants self-identified their race as White, 6.2% as Asian or Asian-American, and 1% each as Black, Latino/a, American Indian, and Multi-Racial. Ages of participants ranged from 18 to 27 with 19,20, and 21 all accounting for about 25% of the sample each.

### PROCEDURES

- The survey was self-administered by volunteering participants through the University's survey administration (SONA) system.
- 67-item survey typically took respondents 8 to 17 minutes, as open answers differed greatly in thoroughness and length.
- After completing the survey, participants were debriefed about the goals of the study and the specifics of the research question.

### Results



- The relationship between the amount of time spent outside and resilience scores was  $-.047$ , and the results were not significant.

### DISCUSSION

#### LIMITATIONS

This study was limited by a number of factors, including the extremely homogenous sample, and the surveying occurring in winter, which presumably lowers the range of times spent outdoors.

There was no significant correlation between the amount of time spent outdoors and measures of psychological resilience; however a potential correlation can not be ruled out. Psychological resilience is developed and bolstered through multiple social and psychological resources.

#### GENERAL DISCUSSION

Resilience is built through multiple layers of resources and supporting structures, which include individual development (biology, motivation); family and household structures (support, stability, finances); neighborhood and social context (environment, social networks, services); and social policies (welfare, housing, education, employment, health) (Windle, 2011). While environment is included within the social context, it is clearly only one of a great number of contributors to overall resilience. This exploratory study suggests that time spent outdoors is not sufficient by itself to determine resilience in any significant way.

#### FUTURE RESEARCH

- Future research can take into account the amount of engagement of participants with the outdoors to explore whether active interaction with nature correlates to resilience.
- Future studies could be longitudinal to account for fluctuations in the amount of time spent outdoors due to seasonal changes in weather and temperature.
- Further research should be done using a more diverse population to vary experiences more.
- Finally, other components of environment, such as the built rather than natural environment, could be explored for contribution to resilience.

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