Men and women tend to manifest distinct mental health outcomes. Specifically, women report higher levels of internalizing symptoms, such as depression and anxiety, whereas men report higher levels externalizing symptoms, such as alcohol abuse and aggression (Rosenfield, Lennon, & White, 2005; Rosenfield & Smith, 2010). However, it is unclear what other mechanisms are related to gender and mental health. This study explores how gender, education level, and self-esteem relate to both psychological distress and externalizing symptoms. This research helps us better understand the processes leading to different mental health outcomes for men and women and can further provide insights into reducing mental health problems in the United States.

Research Questions and Hypotheses

Q1) How gender, education level, and self-esteem relate to psychological distress and externalizing symptoms?

- H1: Psychological distress increases as education level decreases for both low and high self-esteem individuals. This effect will be larger for females than for males.
- H2: High self-esteem individuals with higher education level will have lower externalizing symptoms. Externalizing symptoms level stay the same across all education levels for low self-esteem individuals. This effect will be different for male than for female.

Sample & Measurements

This study used data from a 2015 nationally representative survey, National Health, Well-being and Perspectives Study, which includes over 1,000 adult’s respondents. The sample size is collected by randomly selecting United States postal addresses.

Dependent Variables

- Psychological Distress: entails depreessive and anxious symptoms experienced in the past 30 days such as “I felt that nothing could cheer me up” and “I felt tense”.
- Externalizing Symptoms: includes alcohol abuse and aggression manifest in the past 12 months such as “I had trouble controlling my drinking” and “I did something I later regretted because I had been drinking”.

Independent Variables

- Gender: Males & Females
- Education Levels: High school or less education level, Bachelor’s degree, & Beyond bachelor’s degree
- Self-Esteem Levels: 5-point agreement scale with statements about “I am confident in myself” and “I have a lot of good qualities”.

Discussion

The results from these analyses support portions of the research hypotheses. Research hypothesis 1 is partially supported because we found an interaction between gender, education level, and self-esteem level on psychological distress, as hypothesized. However, only portions of cell means comparisons support the pattern of our research hypothesis. As hypothesized, psychological distress increases as education level decreases when we compared low self-esteem males who had high school or less education level to either those with bachelor or beyond bachelor’s degree. Low self-esteem females who only had high school or less education level also showed higher psychological distress than those with bachelor’s degree. We found the same pattern in high self-esteem females where those with high school or less education level showed higher psychological distress than both bachelor or beyond bachelor’s degree’s individuals. Furthermore, this effect is larger for females than males only when we compared low self-esteem individuals who had high school or less education level with those who had bachelor’s degree. This effect is also true among high self-esteem individuals when we compared high school or less education level’s individuals to either bachelor or beyond bachelor’s degree’s individuals.

Further analyses found significant main effects of gender, self-esteem, and education level. Relationship between gender and both mental health outcomes in this research shows consistent pattern with previous studies, such that females showed higher psychological distress than males while males showed more externalizing symptoms than females (Rosenfield, Lennon, & White, 2005; Rosenfield & Smith, 2010). We also found a negative association between self-esteem and psychological distress, which is consistent with previous researches (Orth, Robins, & Roberts, 2008; Chao, Longo, Wang, Dasgupta, & Fear, 2012). Besides that, we found that education level and psychological distress are negatively associated, which supports previous studies (Zhang, Chen, & Feng, 2015).

Research hypothesis 2 where we expected to find an interaction between gender, education level, and self-esteem level on externalizing symptoms was not supported because results show no relationship between these groups.

References