

Introduction

Recent research has shown that university alcohol use continues to be a considerable problem (Young, Connor, Ricciardelli & Saunders, 2006; Murphy et al., 2006; Abbey, 2002; O' Malley & Johnson, 2002). Weschler et al. (1995, 2002) reported that 44% of college students engage in heavy drinking and 47% of heavy drinkers report experiencing drinking related problems. These episodes have been correlated with negative consequences from mild negative outcomes, such as being late for class, to severe negative outcomes, such as interpersonal aggression and sexual victimization (Abbey, 2002; Donovan & McEwan, 1995; Perkins, 2002; Presley, 1997). Professionals serving this population have the task of determining when alcohol use is normal, problematic or reaches clinical diagnostic criteria. The Rutgers Alcohol Problem Index (RAPI) has been identified as an appropriate measure for use with young adults because it quantifies both type and frequency of consequences with a degree of sensitivity that is more appropriate for the population due to the prevalence of heavy drinking among college students (Neal et al., 2006).

Currently, the RAPI is one of the most frequently used screening tools for assessing problem drinking in the college population (Carey, Kate & Correia, 1997; Bosari & Carey, 2000; Neal, Carey & Kate, 2004). The RAPI consists of 23 items which focus on negative consequences that may be attributed to alcohol use. The RAPI was designed for and validated using an adolescent sample which included over 1,300 subjects' ages 12, 15 and 18. Kahler, Strong and Read (2005) suggest that this sample representation did not allow for inclusion of items particularly relevant to the college population. This measure has not been evaluated with a college sample. The frequent use of the RAPI with the college population may suggest construct validity and generalizability to this group but little has been done to formally confirm these psychometric qualities with this population (Neal, Corbin & Fromme, 2006; Copley, 1999). White and Labouvie (1989) explain that the process of item selection and inclusion for the RAPI was guided by factor analytic techniques. The presentation of White and

Labouvie's (1989) factor structure analysis does not clearly identify the decision rule used for original factor inclusion.

Review of Relevant Literature

Despite the call for further validation made by White and Labouvie (1989) little has been done to further investigate or substantiate the psychometric qualities of the RAPI in the college setting (Neal, Corbin & Fromme, 2006; Copley, 1999). Miller et al. (2002) conducted a study of the differential test-retest reliability of the measure in a Web-based format. Results from the convenience sample of 255 college students indicated that the Web-based format had test-retest correlations of .89-.92. These results are in concordance with the original reports of test-retest reliability for the RAPI.

In a more thorough examination of the RAPI Neal et al.(2006) used item response theory models in an effort to validate the measure for use in high school and college settings. Item response models allowed for the examination of differential item functioning across gender and time points. The results indicated that high school and college students experienced different consequences associated with drinking. In response to these findings an 18 item version of the RAPI was constructed thereby eliminating items that were associated with differential performance among high school seniors and college freshmen. The revised version of the RAPI removed significant differences in results between males and females as well as differences across time points. However, these results are based on a small sampling of high school seniors and college freshman which minimizes the presence of developmental differences in the sample. The RAPI needs further validation to be generalizable to older college students.

The frequency of RAPI use with the college population and the prevalence and consequences of college student drinking suggest that the validation of the RAPI within this setting is vital. The present study utilizes Principle Components Analysis (PCA) to evaluate the factor structure of the RAPI when used with the college student population. The application of the Principle Components Analysis is a standard method for developing factor structure. Evaluation of the RAPI factor structure with a sample

representation comprised of college students will offer evidence of the RAPI generalizability to this population. Clarification of the RAPI factor structure when used with college students could provide valuable information to professionals serving this population.