



# Native American Adolescent Motivation to Change Alcohol and Illicit Drug Use

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## INTRODUCTION

Individuals who abuse multiple substances may vary in their readiness to change both alcohol and illicit drug use. This is especially the case for adolescents who experience differential peer pressure to use alcohol and illicit drugs. The SOCRATES is one measure of readiness to change (Miller & Tonigan, 1996) that can be used in treatment planning. Most studies examine adult clients with either alcohol problems or drug problems. Because there is a high proportion of patients who abuse both alcohol and drugs, it is important to understand clients' motivation to change each drug class. This study compared the motivational structures of readiness to change alcohol use versus illicit drug use among Native American adolescents presenting for residential substance abuse treatment.

## METHODS

Data include 112 (39.3% female) consecutive residential treatment admissions of Native American adolescents. At intake, adolescents were administered two versions of the 19-item SOCRATES (Miller & Tonigan, 1996) whose sole difference was whether item-content specified alcohol or drugs. The SOCRATES has demonstrated reliability (Cronbach alphas .60-.96 and test-retest from .82-.94) and validity with adult samples (Miller & Tonigan, 1996). Three factorially-derived scales (ambivalence, problem recognition and taking steps) offer dimensions of readiness to change.

## RESULTS

After screening for outlier cases, confirmatory factor analyses indicated that: (1) two correlated ( $r = .57$ ) latent factors separately representing readiness to change alcohol and drug use provided the best model fit (opposed to a single factor of general readiness to change both alcohol and drug use), and (2) parameter estimates between the three SOCRATES subscales (readiness to change, ambivalence, taking steps) and their respective latent factors could be fixed to equality without a significant decrement in overall model fit,  $\chi^2(3) = 1.30, p < .73$ .

Table 1. Demographics

61% male  
15.6 yrs of age  
66% Alcohol Dependent  
72% Cannabis Dependent

Table 2. SOCRATES subscale means and standard deviations

Alc Subscales	M (sd)	Drug Subscales	M (sd)
Alc Ambivalence	15 (3.5)	Drg Ambivalence	15 (3.4)
Alc Recognition	25 (6.6)	Drg Recognition	26 (6.5)
Alc Taking Steps	33 (6.2)	Drg Taking Steps	33 (5.8)

Figure 1. Confirmatory Factor Analysis of Alcohol

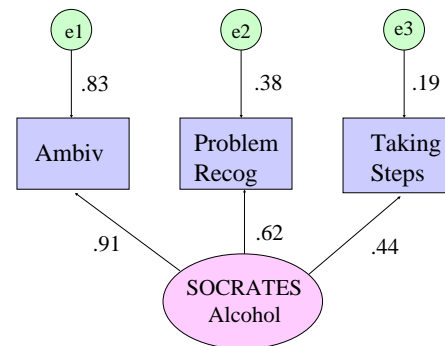
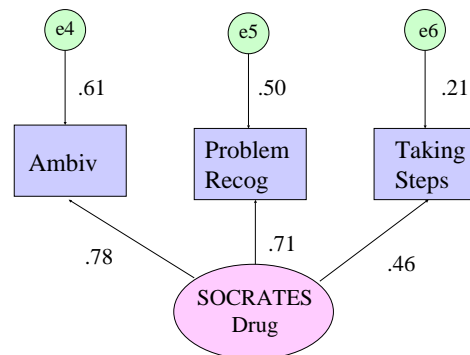


Figure 2. Confirmatory Factor Analysis of Illicit Drug



## SUMMARY

Confirmatory factor analyses revealed similar constructs of readiness to change behavior regardless of the target behavior (alcohol or illicit drug use) for adolescent clients. Thus, one can feel confident that each form of the SOCRATES can be interpreted similarly. However, measurement of one drug class is insufficient to infer readiness to change other substance use. When clients are abusing more than one type of drug, it is important to administer each form of the SOCRATES to guide treatment planning and goal setting. Often treatment programs tend to focus on one drug class – usually alcohol. These results suggest the importance of assessing client motivation to change consumption separately for each drug class and then planning treatment goals accordingly.

Limitations of this study include recruitment of consecutive admissions of one ethnic group of adolescents. These findings may not be generalizable to other adolescents of different ethnic backgrounds. Furthermore, these findings may not extend to other Native American adolescents because the sample is comprised of adolescents from various tribes.

An interesting next step would be to examine the extent that subscale scores might be related to treatment outcome. It appears acceptable to combine clients who abuse alcohol only with those who abuse multiple substances as Edens & Willoughby (1999) found the two groups rather similar across several clinical outcomes. For example there was no difference found in successful treatment completion between the alcohol dependent only and polysubstance dependent groups.

Future research recommendations include the need for cross-ethnic adolescent replications and determining the prognostic value of separately measuring readiness to change alcohol and drug use.

## ACKNOWLEDGEMENTS

Special thanks to NIAAA for grant support: K23 AA014207-01 and to the RTC staff and clients