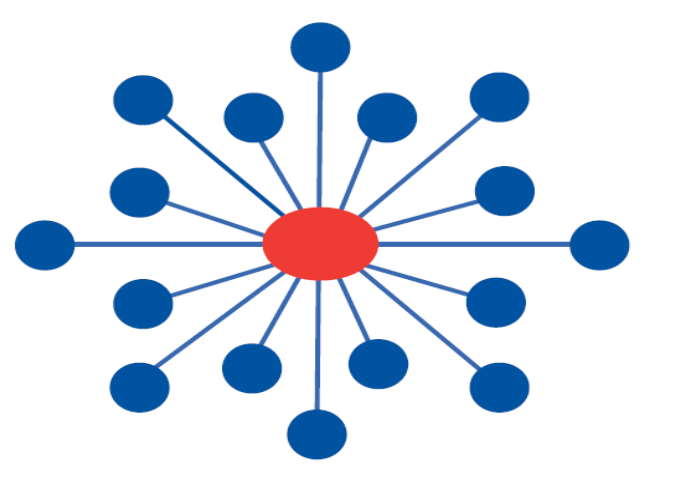


American Indian/Alaska Native Culture and Acceptability of a Web-Based Intervention for Substance Use Disorders



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ABSTRACT

The purpose of this study was to determine the relationship between cultural identity and acceptability of the Therapeutic Education System (TES; Bickel et al., 2008), a web-based version of the Community Reinforcement Approach (CRA; Budney & Higgins, 1998), among American Indian/Alaska Native (AI/AN) clients enrolled in outpatient substance abuse treatment. Pilot data indicate that TES has high acceptability in this sample (Campbell et al., 2012) for all 32 modules used in the study. AI/AN cultural identity was assessed using the Scale of Ethnic Experience (SEE; Malcarne et al., 2006), a self-report measure designed to capture ethnicity-related cognitive constructs. The SEE is comprised of four subscales: Social Affiliation, Ethnic Identity, Perceived Discrimination and Mainstream Comfort. Mainstream Comfort was the only cultural identity indicator related to acceptability of the TES module Self Management Planning, with lower comfort significantly related to lower acceptability ($F=4.78$; $p<.04$). At a trend level of significance ($p<.07$), low Social Affiliation was related to lower acceptability of two TES modules: Triggers for Risky Drug Use and Sexual Transmission of HIV/STIs. None of the other SEE subscales were significantly associated with acceptability of a select group of TES modules.

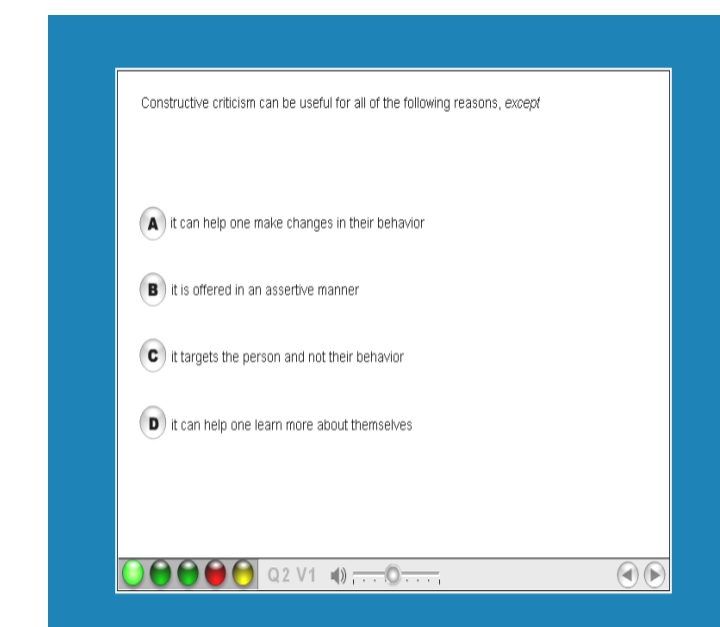
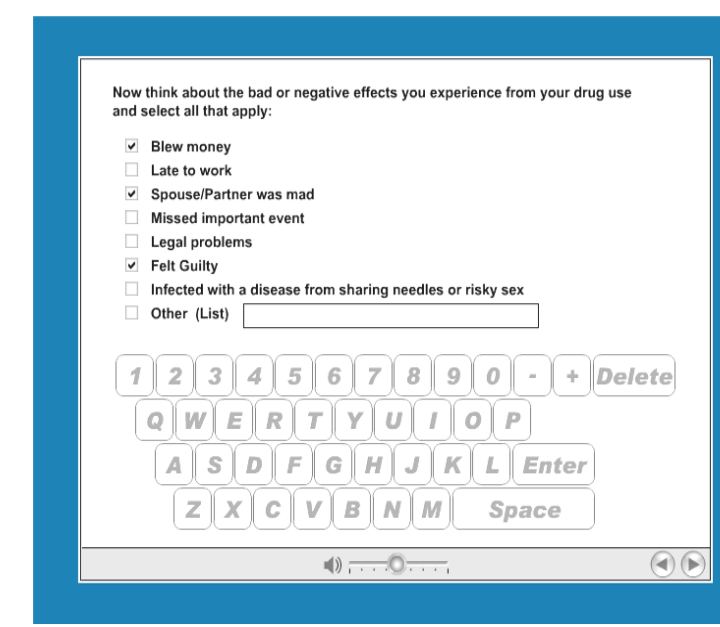
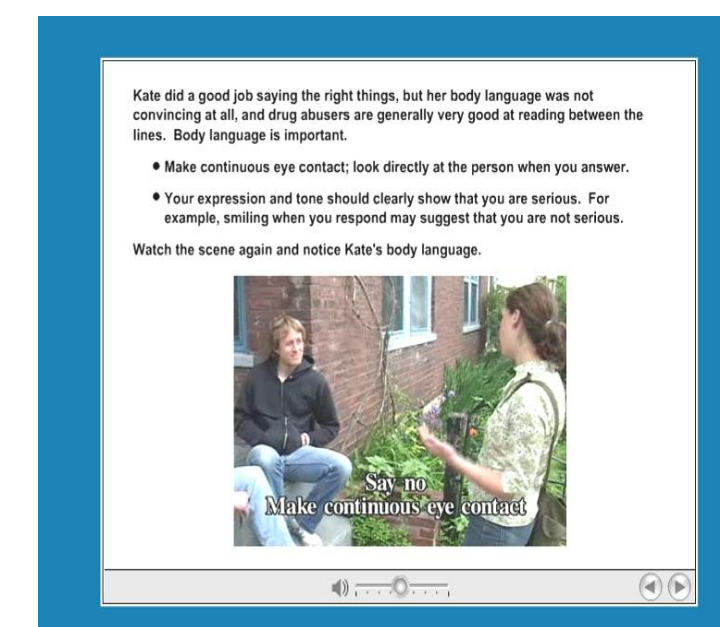
Given high rates of substance use and barriers to meeting treatment needs of AI/AN communities, a web-delivered intervention that is not at odds with cultural identity could increase the reach and utilization of addiction services. These findings indicate that AI/AN cultural identity may not be a significant barrier to the acceptability of this web-based intervention, and TES could be an appropriate treatment for AI/AN communities. Further work is needed to explore CRA among AI/AN treatment-seekers, especially in a larger sample

METHODS

The study was conducted in 2011 at two sites affiliated with NIDA's National Drug Abuse Treatment Clinical Trials Network (CTN). Sites were located in the Pacific Northwest (AI/AN-specific program) and Northern Plains (majority AI/AN clients). Forty participants (20 per site), who self-identified as AI/AN, completed a baseline assessment, including the SEE, 8 weeks of TES using onsite computers, and a 1-week follow-up assessment. Participants were asked to complete 4 TES modules per week (see example screen shots, above right) and rated each individual module on seven acceptability indices (e.g., relevance, usefulness) on the computer immediately following completion.

The SEE contains 32-items using 5-point Likert-type scales that measure the experience of ethnicity across four dimensions (Social Affiliation, Ethnic Identity, Perceived Discrimination and Mainstream Comfort). Higher scores on the subscales indicate greater endorsement of the construct. Internal consistency coefficients range from 0.82 to 0.89. The SEE was developed for administration with individuals of any ethnic background; in this study participants responded based specifically on their AI/AN cultural identity.

Associations between the mean acceptability of the three highest and three lowest rated TES modules with the high/low median splits of SEE subscales were analyzed using analysis of variance F-tests in SPSS (v. 18).



RESULTS

Sample Characteristics

- Mean age 36 years
- 53.2% female
- 24.4% < HS; 58.5%=HS/GED; 16.7% >HS
- Primary Substance: alcohol 72.3%, methamphetamines 10.6%, cannabis 8.5%, opiates/heroin 8.5%
- 73.2% lived on a reservation (at some point)
- 48.8% familiar with their Native language
- 53.7% accessed internet in month prior to study

Module Acceptability (range 1-10; lowest to highest)

Highest: Drug Use, HIV and Hepatitis	M=9.39	SD=1.2
Triggers for Risky Drug Use	M=9.25	SD=1.4
Sexual Transmission HIV/STIs	M=9.25	SD=1.4
Lowest: Functional Analysis	M=7.84	SD=1.6
Coping w/ Thoughts about Using	M=7.81	SD=2.0
Self-Management Planning	M=7.76	SD=1.8

Scale of Ethnic Experience (range 1-5)

Internal Consistency Reliability (Sample): $\alpha = 0.72$ to 0.82

Ethnic Identity	M=3.78	SD=0.7
Perceived Discrimination	M=3.44	SD=0.6
Mainstream Comfort	M=3.35	SD=0.7
Social Affiliation	M=3.06	SD=0.7

Table 1. Associations between high/low ethnic identity on 4 subscales of the Scale of Ethnic Experience and overall means of acceptability on 6 TES modules, three highest and lowest scoring modules

Module Name	N	Social Affiliation		Ethnic Identity		Perceived Discrimination		Mainstream Comfort		F	M	M	F
		High	Low	High	Low	High	Low	High	Low				
Drug Use, HIV, and Hepatitis	8	9.59	8.00	1.90	9.43	9.33	.01	9.03	10.00	1.43	9.60	9.05	.40
Triggers for Risky Drug Use	8	9.59	6.86	5.61 [†]	9.43	8.95	.20	8.80	10.00	1.49	9.37	9.05	.09
Sexual Transmission of HIV/STIs	8	9.57	7.00	5.03 [†]	9.40	9.00	.15	8.83	9.95	1.38	9.37	9.05	.09
What is Functional Analysis?	33	7.88	7.80	.02	8.01	7.62	.48	8.09	7.51	1.12	8.05	7.57	.74
Coping with Thoughts about Using	31	7.78	7.86	.01	7.75	7.89	.04	7.46	8.37	1.62	7.55	8.12	.64
Self-Management Planning	32	7.96	7.43	.55	8.03	7.32	.97	7.67	7.89	.10	8.44	7.00	4.78*

M=Mean; F=f test; *p < .05. † p < .10

DISCUSSION & CONCLUSIONS

- ▢ Few significant relationships emerged between AI/AN cultural identity and the acceptability of TES. This may in part be due to the overall high acceptability across modules, limited sample size and limited responses to each module.
- ▢ AI/AN clients gave the highest ratings of acceptability to TES modules that included HIV/STI information and managing triggers for risky sex and drug use. Modules with lower ratings were related to relapse prevention strategies, specifically functional analysis, managing thoughts about using and managing urges to use.
- ▢ Among the three highest and three lowest rated TES modules, acceptability of Self Management Planning was significantly related to higher Mainstream Comfort, i.e., feeling assimilated into American culture. The acceptability of the modules Triggers Related to Drug Use and Sexual Transmission of HIV/STIs were related to higher Social Affiliation, i.e., preference to interact with one's own ethnic group at a trend significance level.
- ▢ The Scale of Ethnic Experience had good internal consistency reliability in this AI/AN sample, comparable to that in African American, Caucasian American, Filipino American and Mexican American groups who participated in scale development (Malcarne et al., 2006).
- ▢ Results suggest that future studies should examine how greater affiliation with one's cultural identity might affect outcomes in empirically based treatments or might enhance the acceptability of specific components of substance abuse treatment with AI/AN clients.

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