ASSESSING THE INTEREST AND CULTURAL CONGRUENCE OF CONTINGENCY MANAGEMENT AS AN INTERVENTION FOR ALCOHOL MISUSE AMONG YOUNGER AMERICAN INDIAN ADULTS

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Abstract: A qualitative study was conducted to assess interest in contingency management (CM) for younger American Indian (AI) adults (18-29 years old), how to culturally and developmentally adapt CM for younger AI adults, and interest in CM relative to culturally grounded treatment approaches. We conducted a total of four focus groups with younger adults and families in two AI communities: a rural reservation and an urban Indian health clinic (n = 32). Four overarching themes emerged suggesting that offering prizes, cultural activities, and activities that capture the attention of younger adults integrated into the CM intervention is ideal for enhancing engagement.

INTRODUCTION

Many American Indian (AI) communities have high rates of alcohol abstinence with those residing on tribal lands abstaining more (60.3%) than those residing off tribal lands (47.0; National Institutes of Health, 2006; Park-Lee et al., 2018). Despite this, AI youth are at increased risk of alcohol use at a younger age (Whitesell, Beals, Big Crow, Mitchell, & Novins, 2012), highlighted by recent research indicating AI eighth graders are 70% more likely than non-AI eighth graders to have drank in their lifetime (Swaim & Stanley, 2018). Depending on age, the past-month rate of alcohol use can be twice as high among AI youth (36.7%) as among non-AI youth (14.8%; Stanley, Harness, Swaim, & Beauvais, 2014). Emerging adulthood, defined as ages 18-29 (Arnett, Žukauskienė, & Sugimura, 2014; O'Connell, Boat, & Warner, 2009), is important to consider because 50% of alcohol use disorders (AUDs) and mental health disorders are diagnosed before age 25 (Furstenberg, Kennedy, McCloyd, Rumbaut, & Settersten, 2003; Odgers et al., 2008). Therefore, AUD is thought of as a developmental disease, and emerging or young adulthood is

considered to be an important period in intervening in the trajectory of lifetime alcohol misuse (Catalano et al., 2012; Johnston, O'Malley, Miech, Bachman, & Schulenberg, 2016).

Over the last two decades, interventions have been developed with, by, and for AI people to address the need to effectively treat AUDs in AI communities. However, these interventions have mainly targeted adults and range from promising practices to community-defined efficacy. For example, Gathering of Native Americans (GONA) is a promising prevention practice developed in the 1990s through the Substance Abuse and Mental Health Service Administration (SAMHSA) Center for Prevention for Substance Abuse as a program to reduce alcohol and substance use in AI communities, including a component for youth. The curriculum emphasizes healing trauma and revitalizing traditional values, practices, and traditions in a conference format over a four-day period. Although GONA is one of the most widely implemented prevention interventions in AI communities (partially due to past funding support from SAMHSA and the Indian Health Service), it is not on evidence-based practice registries due to the lack of published outcome research (Nebelkopf et al., 2011; Wright et al., 2011).

The Alaska People Awakening is another example of a culturally-grounded intervention that has demonstrated promising results in successfully targeting suicide and co-occurring alcohol and other substance use among both adults and adolescents (Allen, Mohatt, Fok, & Henry, 2009; Rasmus et al., 2016). Practice-based and community-defined interventions for younger adults include White Bison/Wellbriety, which merges cultural spiritual teachings, teachings of the Medicine Wheel, and standard Alcoholics Anonymous support groups. Much of the evidence of effectiveness for this program comes from the wide-ranging utilization of the Wellbriety practice, which is commonly available to youth in many AI communities (Coyhis & Simonelli, 2008). Two treatment facilities in the United States are certified to deliver Wellbriety services: Volunteers of America Northern Rockies and the Native American Rehabilitation Association (NARA), an AI-owned and -operated residential treatment facility located in Portland, Oregon.

Some communities believe that traditional approaches are the most effective form of intervening in drug and alcohol misuse among AI people (Gone, 2011). In many tribal communities, there is an agreement that "culture is treatment" (Gone & Calf Looking, 2011). Consistently, AI people believe that it is a return to traditional practices and ceremony that will ultimately heal and lead to long-term recovery (Gone & Calf Looking, 2011). Among youth specifically, promising results in treating addiction were observed when sweat lodges, singing, drumming, storytelling, art, teachings of the Elders, cultural teachings about tribal history, fasting,

ceremonial feasts, natural and traditional medicines, and equine therapy were incorporated into treatment (Boyd-Ball, 2003; Dell et al., 2011; Dell & Hopkins, 2011; Rowan et al., 2014). This kind of holistic spiritual and cultural immersion is believed to improve outcomes because it enhances family, non-family, and cultural connectedness, all of which are protective factors correlated with enhancing psychological well-being among AI youth and young adults (Henson, Sabo, Trujillo, & Tuefel-Shone, 2017; Walls, Pearson, Kading, & Teyra, 2016).

In a culturally-grounded approach, Donovan and colleagues (2015) developed a curriculum for AI adolescents generated from the cultural values and traditions of three Pacific Northwest tribes to address drug and alcohol misuse with empirically supported increases in cultural protective factors of hope, self-efficacy, and optimism. In another study that adapted motivational interviewing for urban AI youth, Dickerson et al. (2015) determined that AI youth were interested in engaging in their culture and that the intervention provided an opportunity for cultural engagement.

The previous list of treatments and interventions are promising in terms of effectively treating AUDs and substance use disorders (SUDs) among AI youth and adults. However, to our knowledge, there are no published studies of interventions specifically targeting AI emerging adults. Currently our research group is conducting a study evaluating the effectiveness of a contingency management (CM) intervention among three AI communities in collaboration with tribal partners. CM is a behavioral intervention based in the theory of operant conditioning, where positive reinforcers (i.e., tangible prizes, gift cards) are provided when a specific targeted behavior has been met and assessed at every study visit (e.g., biochemically confirmed abstinence; McDonell et al., 2017; Lussier, Heil, Mongeon, Badger, & Higgins, 2006). The design of the trial has been previously published (McDonell et al., 2016). As part of the CM study, qualitative research was conducted to increase the cultural acceptability of the active clinical trial of CM for AUD among three tribal communities (Hirchak et al., 2018). However, the CM intervention was not optimized specifically for the AI emerging adult population using qualitative methods. Therefore, the current study examined AI emerging adults and family interest in CM as an add-on to treatment or as a standalone intervention, compared to other interventions and cultural practices, in addition to integrating cultural activities into the CM intervention. The results will inform future population- and developmentally-specific interventions for treating AUDs among younger AI adults.

METHODS

Research Setting

Four focus groups were conducted with 32 participants. Two focus groups at an urban Indian health center in the Northwest (primarily made up of 18-29 year-olds) and two in a rural reservation community (one only for 18-29 year-olds, the other including both 18-29 year-olds and family members). Inclusion criteria were self-identifying as an AI adult, being 18 years or older, residence, and desire to discuss alcohol treatment options available to AI younger adults. An average of 8 people participated in each focus group. Focus groups were approximately one hour long, and the average transcript page length was 16. The urban and rural sites assisted in increasing generalizability by obtaining a more heterogeneous sample of AI adults.

Focus Group Methods

We reimbursed focus group participants with $20 gift cards. Qualitative research methods and procedures followed the protocols of the parent CM clinical trial, informed by the Community Advisory Board. Focus groups were conducted by AI/AN researchers who were also members of the participating communities. Recruitment was conducted through referrals from service providers, flyers hung in key locations and posted to community members' Facebook pages, and through radio advertisements. Data were collected, organized, synthesized, critically analyzed, and interpreted, in addition to being examined for participant insight, in accordance with previously successful qualitative research practices among AI communities and within the communities in which the focus groups were conducted (Kovach, 2010). Data were then compared to the existing literature to determine similarities and differences in the findings. The study design was approved by the Washington State University and Rocky Mountain Tribal Institutional Review Board.

Qualitative Methodology

We conducted qualitative data analysis utilizing qualitative description (Neergaard, Olesen, Andersen, & Sondergaard, 2009; Sandelowski, 2010). A comprehensive literature review and the Community Advisory Board of the CM clinical trial informed the development of questions and focus group processes. A complete list of focus group questions can be found in the Appendix. The focus group sessions consisted of an informational process, including a PowerPoint presentation. We played a short two-minute video about CM to begin the discussion, and the focus groups were audio

recorded for transcription. Following previous focus group procedures among AI communities, we facilitated focus groups as a sharing or talking circle (Lavallee, 2009). The circle process is customary in the regions where the focus groups were conducted and has been used among AI communities because it allows those in the circle to share their lived experience and viewpoints uninterrupted (Kovach, 2010; Lavallee, 2009). Talking circles are also important for creating a safe environment in a culturally appropriate manner (Kovach, 2010). Talking circles begin with one person talking at a time, moving around the circle in a clockwise direction. After everyone had shared their opinion, the focus groups were opened up to a larger discussion about each question until each question had been discussed at length, evidenced when participants began to repeat themselves or no one had anything else to add.

Two coders independently conducted thematic coding of focus group transcripts. Themes identified by both coders in each focus group also assisted with adapting the current CM intervention in the community. Theoretical saturation occurred when no new themes emerged from the data. Themes and sub-themes were identified when they occurred across at least two focus groups and when the content of a theme or sub-theme was discussed within a focus group for more than five minutes. We repeated this process of theme and sub-theme identification until consensus was reached between the coders (Johnson & Christensen, 2004). Themes identified across focus groups will inform CM adaptations across communities. Qualitative Data Analysis software was used by both coders (Qualitative Data Analysis Miner Lite, 2017). The software was used to reduce bias and assist in identifying themes between and within coders, identify frequency of words, in addition to overarching and sub-themes.

RESULTS

Focus Group Demographics and Data

Focus group characteristics are summarized in Table 1. The sample was made up of 32 individuals from 13 tribal nations. Participants were primarily male (62.5%), half were emerging adults (51.6%), with a high school education (50.0%), unemployed (82.2%), and living with family (43.8%) or renting (21.9%). Three focus groups contained emerging adults and family and one focus group was made up entirely of emerging adults. Additionally, all focus group participants self-disclosed actively using alcohol or were currently in recovery.

Focus Group Themes

Four overarching themes emerged with corresponding sub-themes (Table 2): a) an agreement of interest in CM for younger adults; b) culture, community, and activities; c) treatment barriers and retention; and d) marketing and outreach.

Table 1
Focus Group Demographics

Focus Group Characteristics	Mean	*SD*	%	Total
Age				
Urban Focus Group 1	27.8	6.7		
Urban Focus Group 2	27.5	9.6		
Rural Reservation Focus Group 1	43.2	13.8		
Rural Reservation Focus Group 2	20.8	3.2		
Emerging adults (18-29)			51.6	
Male			62.5	
Federally recognized tribes				13
Enrolled			90.6	
Education				
Less than high school			21.9	
High school			50.0	
Some college			28.1	
Unemployed			81.2	
Housing status				
Homeless			18.8	
Renting an apartment/house			21.9	
Lives with family			43.8	
Transitional housing/sober living			6.3	
Home owner			9.4	

Table 2
Overarching Themes

Overarching theme	Frequency counts
Interest in CM for younger adults	235
Culture, community support and activities	198
Treatment barriers and retention	101
Marketing and outreach	46

Interest in CM

Across the focus groups, and regardless of the age of the focus group participant, there was agreement that younger AI adults would be interested in a CM treatment option. The discussion

included the need for choice, offering practical prizes along with activities that were both cultural and engaging to younger adults. In addition, participants emphasized that recovery is a personal decision (Table 3). People believed that choice for younger AI people was the most important. To facilitate engagement in the CM intervention, younger adults suggested allowing for choice between prizes, cultural activities, and other activities aimed at emerging adults. Combining activities along with prizes was the most consistent recommendation for tailoring the CM intervention to younger AI adults.

Table 4 includes a list of prizes and activities recommended across the four focus groups. Participants in one of the rural reservation focus groups stressed the need for both practical prizes for participants' children, as well as prizes geared to supplement the income of intervention participants. In the rural reservation focus groups, participants underscored the economic struggle of being a parent on the reservation (approximately 60% of the reservation sample were parents). Participants reasoned that prizes for younger adults should focus on the practical, in addition to larger prizes such as electronics, for young adult parents. For the focus groups in the urban locations, participants noted issues around cultural engagement, but that greater economic opportunity available in a city was the tradeoff for a lack of cultural activities. All the focus groups believed that although CM would be a good treatment option for younger adults, changing behaviors was up to each individual. Participants highlighted the tension between the need for individuals to engage in available treatments with individual choice or desire to become sober and enter recovery (Table 3).

Table 3
Interest in CM for Younger AI Adults

Theme	Example Quote
Interest in CM	"I think once they really get into it [incentives] will keep them coming back and wanting to stay sober or quitting."
	"I think it would not only be beneficial to them but give them something to look forward to give them a little more incentive to work towards things, you know like their sobriety."
Incentives	"The incentives…a good way to treat yourself good. You're doing good. You know, you're thinking positive about addressing your problem."
Not everybody is the same	"I think that it depends on who they are. Like if they were going to take this program seriously… not everybody is the same. And I think that if they knew more about the program just instead of it being recovery. Kinda give them a better idea. It just kinda depends on the person."

Table 4
Prizes and Activities

Suggestion	Example Prize or Activity
Prizes	Gift cards, $20 gift cards, gift cards for electronics, DVD player, TVs, music, MP3 player, tablet, headphones, work towards bigger prize.
Practical prizes	Shampoo, tissue, washer and dryer, housing.
Practical prizes for participants' children	Diapers, clothes, school supplies, shoes
Cultural activities	Powwows, hand/stick games, horse culture, sweats, beading, tipi building, basket weaving, singing, drumming, Indian taco weekend, frybread making, serving Indian corn, bilingual activities to keep up the language, root/berry gathering.
Fun activities	Basketball, volleyball and video game tournaments, trips, outdoor activities, playing sports, see their friends and socialize, movie passes, cook-offs.

Culture, Community Support, and Activities

Focus group participants considered meaningful engagement in culture to be an important aspect of recovery for younger AI adults (Table 5). Sub-themes included cultural engagement and strengths, community support expressed as "help them, help themselves," and choice between culture and prizes, in addition to cultural activities and fun activities. The rural reservation focus groups cited culture as the source of a younger person's strength. Participants across locations agreed drinking alcohol and using drugs was incongruent with cultural engagement. All the focus groups underscored the importance of sobriety to participate in cultural activities (Table 5).

Table 6 highlights the interest in the CM intervention providing both cultural activities and fun activities for younger AI adults (e.g., basketball tournaments). There was agreement across the focus groups that it would be best for the intervention to provide transportation and opportunities to travel through playing sports, or transportation to other activities. People believed that younger adults would not be interested in participating if the CM intervention was located at a treatment center or directly related to treatment services. Focus groups suggested enhancing interest by housing the CM intervention at other organizations in the community, such as the Boys and Girls Club or an urban Indian center separate from treatment.

There were several cultural activities that focus group participants suggested (Table 6). Cultural activities included learning the AI language or providing the intervention in the AI language of the community. Participants expressed interest in participating in cultural activities such as beading classes and traditional crafts, in addition to attending hosted events including

powwows, singing, and drumming sessions. Focus group participants also suggested serving traditional foods, like Indian corn or having frybread cook-offs as a reward (Table 4).

Table 5
Culture and Community Support

Theme	Example Quote
Cultural engagement and strengths	"I think there's a thirst for culture in the younger Natives that weren't raised with it, these days."
	"That's where I go when I think I'm losing it.... that is where I find my strength."
	"You go to sweats and stuff keeps you sober. Keeps you out of trouble."
	"Everybody gets into their culture, eventually."
	"It recognizes that we are lost without our culture.... The medicine wheel constantly up there when we come in we see it and we get reminded that you know, we are human-beings and we need this."
Help them, help themselves	"Whoever like, seen you struggle and actually picked you up and helped you get back on your feet and where you are supposed to be at in life. ... For me, myself, it's my auntie that helped me. She's the one that got me at where I am today. So, she's my main support... whoever you was raised around. Who you feel comfortable about opening up to."
Choice between culture or prizes	"Have that choice of culture and gifts. Make it a way so that culture is involved but you're still getting an incentive."
	"Choice matters."
	"I would say prizes. I mean, like for me sweats are easy to find, working with horses is easy to find, powwows, practically everything is easy to find.... beading. I can always find that. But I can't find money, is the point. So, yeah I would say prizes."

Table 6
Activities

Theme	Example Quote
Cultural activities	"Engage in cultural activities is kind of a prize, too...they probably want to do like sweats and be with a horse and stuff but like, because they probably grew up on it, but like drinking probably kept them away from their family and made them stop doing the stuff that they used to do. Probably would want to do that again."
	"A beading course, and if the beading course is a hit, continue with the beading until someone picks it up, or until you have a medallion...in-between let them take their beadwork home with them and work on it and if they have more questions come back on that second pee test get your incentives, plus finish working on the beadwork."
Fun activities	"It would be good for youths and adults...kicking butt and winning champions on basketball...volleyball tournaments...They would go traveling, too. They don't just stay on the reservation they go to different reservations and play against the other teams."
	"Have all these families interact. Do activities and then they would get rewarded for after the program, after what they all did. They would get rewarded."

Treatment Barriers and Retention

Focus group participants also highlighted engagement, retention, and barriers to treatment (Tables 7 and 8). With respect to available treatment, those in the urban focus groups highlighted a complete lack of access to treatment. This included a lack of both Western-based treatment and culturally grounded treatment in their community, but participants discussed going to cultural residential treatment centers in other areas away from home. Rural reservation participants mentioned outpatient options that incorporated the sweat lodge and horse culture. Both urban and rural locations discussed Alcoholics Anonymous and peer-support groups as an essential component of younger AI adults' recovery (Table 7 and 8).

Across regions, focus group participants agreed transportation was a major barrier to treatment engagement and retention (Table 7). Another factor included treatment providers. If providers were not relatable or did not provide genuine peer-support, focus group participants suggested that this would cause younger AI adults to dropout of treatment or the CM intervention. Other reasons for attrition were related to motivation. On the rural reservation, focus group participants suggested that it was easier to drink alcohol and use drugs than join in recovery activities. This was said to be due to being "lazy" or "stubborn" in ones' addiction. Lack of community resources and not addressing the "root cause" of drug and alcohol misuse are other factors in younger AI adults choosing to continue to drink alcohol and use drugs instead of pursuing recovery (Table 7).

Table 7
Barriers to Treatment

Theme	Example Quote
Recovery does have its negative connotations	"…Something that would be helpful to prevent relapse something that I've seen time and time again is people don't like dealing with the root issues. It's not just drugs and alcohol there is a deeper issue that's most of the time why people turn to drugs and alcohol to cover that pain and mask what's really going on."
	"Seeing their Elders and siblings go through it. And you get that criminal aspect that gets stuck with. You kind of look around see who is watching you come out of this building. Because people they do talk."
Transportation	"We try and help ourselves going to AA [Alcoholics Anonymous] that was helping us. Keeping us sober there for a minute. Then we couldn't find rides to go back then we fell off again, and literally just trying to find our way back, to go back to being sober."
	"Another reason for them to really not be attending all the time would be transportation."

Table 8
Treatment Retention

Theme	Example Quote
Motivate you to not want to drink	"Some treatments they allow your kids to go with you. And I would like to go and do something like that. To have my kids there."
	"I think one of the barriers would be maybe, just people are not accepting the truth. Not accepting their addiction or problem or not wanting to face it. Maybe going to a certain group or something will make them realize how bad they're into their addiction or their problems. And it would make them want to drop out and want to use again."
	"It really matters on your support system, I guess. Even if you don't call it that. Your circle. If they are positive, then they are going to motivate you to not want to drink."
Peer-support and genuine care	"If they are a strong member of the group, somebody should be appointed to call 'em up and say, 'Hey, are you doing ok? What's going on? Can we help you get back to group?' …Because once you do that, they are gonna say, "Well, they didn't care about me anyways. So, I'm not going back.'"
	"If you don't have the support I don't think they will go very far. …It's awesome you give out free gifts… but…if you don't have the support, it eventually will fade out."
	"If they don't got no support then incentives don't mean nothing to them."
	"Genuine care…. the concern. That doesn't cost any money."

Marketing and Outreach

The focus groups discussed how to market the CM intervention to capture the attention of younger people and increase participation and referral (Table 9). Focus groups in the rural reservation community were concerned with community visibility and social media. It was important for emerging adults that their family and others in the community know the positive activities they are involved in. Emerging adults recommended developing and hanging visually appealing posters in the community and posting them on social media. They emphasized the importance of creating a Facebook page, Instagram, and Snapchat accounts for engagement of younger people.

In addition, print news and other online media outlets could increase visibility of the CM intervention. The urban focus groups recommended making and posting videos on social media that involved the community to increase awareness and education around alcohol and drug misuse (Table 9). Urban focus group participants also suggested developing tee-shirts and other program materials to enhance visibility while also fostering social connectedness and a sense of belonging for the entire community.

Table 9
Marketing and Outreach

Theme	Example Quote
Capture their attention	"Advertising…kind of cool like seeing these kids…teaching them better things to do than just drugs and alcohol."
	"Advertisement has a lot to do with it because if it's not advertised you're not going to know where to go or what to do, for that matter."
	"Commercial[s]…for more Natives to come and go to that place."
Community visibility	"Posters, too…at stores. If their grandparents come through and see 'Oh, that's what you're doing.'"
	"You're struggling, we would like to hear about your struggle, you would be helping us and in return we would help you."

Distinct and Common Themes

There were notable differences between the regions, and some themes were divergent based upon location. These were related to culture, support of intertribal people in urban areas, well-being, motivations for staying in recovery, issues related to peers, and cumulative prizes as a bigger recovery goal. The rural reservation focus groups underscored the point that culture was accessible and mentioned no issues about cultural engagement. The urban focus groups highlighted barriers around cultural participation and were mainly concerned with the differences between tribes and respecting these differences by offering a variety of activities, with Elders and teachers from different AI cultural groups as facilitators.

In addition, it was important to reservation focus group participants that the meaning behind cultural ceremonies and cultural activities be explicit so that younger people understood the purpose of the activity. The rural groups emphasized the importance of the environment and the connection between culture and place. Another distinct topic in the rural focus groups was well-being. Both rural groups mentioned the importance of finding harmony and balance through living by the medicine wheel teachings. Rural reservation participants also mentioned that the motivation behind younger adults' recovery was their kids and family. The urban groups did not mention this, but the groups across regions did discuss at length the desire to learn traditional and cultural practices so that they could pass on that cultural knowledge to their children. Although shame was identified by one of the urban focus groups as a potential barrier to treatment retention or engagement, it was much more prominent among the rural reservation focus groups.

The rural reservation focus groups believed that peer influence, such as peer-pressure to drink alcohol and use drugs or feeling like peers were judging them for acting superior by entering

recovery, plays a significant role in treatment outcomes. In addition, one of the rural reservation focus groups was concerned about the marketing of the CM intervention. There was consensus that if not done appropriately, advertising the intervention might reinforce negative stereotypes of AI alcoholism or make younger adults feel like "guinea pigs." To ensure that this does not occur, the participants suggested framing the CM intervention as a "warrior society" or in positive terms of it helping individuals and communities with a sense of belonging and connectedness. Another distinct theme in the urban area was the interest in prizes being cumulative and a "bigger goal" to work towards. The participants in the city recommended offering practical items along with larger prizes that were something to look forward to, such as taking a trip. The reservation focus group participants did not mention providing larger cumulative prizes or offering a trip as a specific prize.

DISCUSSION

This is the first qualitative study that we are aware of to assess younger adults' interest in CM as a standalone intervention to address AUDs. We examined general interest in CM, in addition to whether younger AI adults would be interested in a culturally adapted version of CM. Results indicated four primary themes to consider when developing a CM intervention for AUDs among AI emerging adults. First, focus group participants agreed that 18- to 29-year-old AI adults would be interested in participating in a CM intervention for alcohol. Participants underscored the importance of choice within the CM intervention. Second, focus groups recommend providing practical and fun prizes. In addition, focus group participants suggested facilitating cultural activities and activities geared towards younger adults as part of the intervention to increase engagement and retention. Third, the analysis indicted there were issues related to access, including retention, and barriers to treatment such as transportation. Fourth, it was important to focus group participants that the intervention include marketing and outreach to increase community involvement and intervention visibility.

Within the analysis, the two coders identified common and distinct themes across the focus groups that were separate from the four overarching themes. These themes were related to cultural support in urban areas that highlighted issues around engagement; thoughts on well-being that were distinct between the rural and urban regions; motivation to stay sober, as well as influence of peers; and cumulative prizes as a bigger recovery goal, identified by the urban focus groups, but not within the rural area.

In a recent qualitative study that examined increasing the cultural acceptability of a CM intervention for alcohol among AI/AN adults, Hirchak et al., (2018) also noted that participants were interested in both practical and material prizes, in addition to experiential activities offered as a part of the CM intervention. In both studies, participants recommended offering activities that included the entire community as well as intervention participants' families, to increase participation and create an alternative to alcohol use.

Hirchak and colleagues (2018) also found that participants agreed Elders and community champions would be important to successfully implementing the CM intervention in the community. Results from the current study did not find this specifically, perhaps due to the sample which did not include community providers as participants, but younger AI adults did highlight the importance of who delivered the intervention. This included providers that were relatable and that peer-support was important to successful treatment outcomes. One of the urban focus groups suggested the Elders or cultural teachers that facilitate the activities be from diverse backgrounds to enhance inclusion. Lastly, unlike findings in previous studies of CM (Hirchak et al., 2018), none of the focus groups brought up the concern that emerging adults might try to sell or trade the gift cards or prizes for alcohol or drugs.

Our findings support previous research on AI youths' interest in cultural engagement as part of alcohol and drug interventions. Similar to our findings, the analysis in Donovan et al. (2015) identified interest among AI youth to engage in cultural activities and traditions to enhance cultural identity and address substance misuse in the community. In addition, our results support the findings of Dickerson and colleagues (2015) that urban focus group participants were concerned about the diversity of "inner-city" AI communities and the need to respect differences and find commonalities to increase participation in the intervention among tribes in larger areas. Our findings also identified barriers to participation, mainly a lack of transportation and limited opportunities to engage in cultural activities in an urban setting (Dickerson et al., 2015).

Given the heterogeneity of tribal communities, limitations of this study include the fact that the findings are from two AI communities and may therefore not generalize to AI emerging adults from other regions. In addition, we assembled the focus groups through purposive sampling, which included family members, in addition to those in the targeted age range. Future research should attempt to include only younger AI adults to enhance understanding of the interest level in CM among younger AI adults. Strengths of this study include the relatively large sample size among AI communities (Guest, Namey, & McKenna, 2017; Rink et al., 2016).

In addition, focus groups were in urban and rural regions to increase external validity and highlight potential similarities and differences between areas that may be useful in adapting a CM intervention for AI emerging adults. Focus group participants were also actively using alcohol or were currently in recovery, which increases community and researcher knowledge in better understanding those that may be seeking treatment and the treatment needs and preferences of AI adults residing in urban and rural locations. These findings may be used to culturally adapt future CM interventions among younger AI adults or could be important factors to consider when developing or implementing other treatment services among younger AI cohorts.

CONCLUSION

This qualitative study suggests that AI emerging adults would be interested in CM to address AUDs. Offering prizes, cultural activities, and activities that capture the attention of emerging adults is ideal for enhancing CM intervention engagement. Across sites, participants recommended marketing the intervention on social media and increasing community visibility and engagement through the development of videos and posters designed for emerging adults. Barriers to access and retention among AI emerging adults included transportation and environmental factors, underscoring the need for continued research in how to better meet the treatment needs of younger AI adults.

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APPENDIX

Appendix A: Qualitative Research Questions

Interest/Potential Concerns with CM for AI Younger People:

- If contingency management were available for young people, do you think they would want to participate? Would they be interested compared to what else is available in their community? Would their friends? Why/why not?
- What alcohol treatments are available in your community?
- What are barriers to accessing CM if it were available? What are reasons why people might dropout of CM?
- Would you rather be rewarded with prizes or engage in cultural activities? What kinds of cultural activities would be a good reward (learning about horses, language, harvesting/wildcrafting)?
- To what extent is culture included in the available alcohol treatments and how could culture be incorporated into the CM intervention?

Questions about Culture:

- Are there aspects of your culture that could help promote well-being among people your age?

Questions about Support/Social Networks:

- Who do you think are the most supportive people in your life/a younger persons' life? Who do you/younger people go to for help/when they are struggling?

General Questions about Community Environment:

- What do you see as the strengths of your community (culture, Elders, programs, organizations, etc.)? What makes you proud about your community?