Check for updates

Am J Community Psychol (2019) 64:146–158
DOI 10.1002/ajcp.12363

ORIGINAL ARTICLE

Substance Use Research with Indigenous Communities: Exploring and Extending Foundational Principles of Community Psychology

Dennis C. Wendt,[1] William E. Hartmann,[2] James Allen,[3] Jacob A. Burack,[1] Billy Charles,[4] Elizabeth J. D'Amico,[5] Colleen A. Dell,[6] Daniel L. Dickerson,[7] Dennis M. Donovan,[8] Joseph P. Gone,[9,10] Roisin M. O'Connor,[11] Sandra M. Radin,[12] Stacy M. Rasmus,[4] Kamilla L. Venner,[13] and Melissa L. Walls[14]

Highlights

- Indigenous Peoples are concerned with previous experience of substance use research as disempowering.
- Community psychology principles may inform ethical community-driven substance use research.
- We explore these principles through seven Indigenous substance use studies across the U.S. and Canada.
- Indigenous substance use research reflects, expands, and challenges community psychology principles.
- We discuss implications for Indigenous substance use research and community psychology.

© 2019 Society for Community Research and Action

✉ Dennis C. Wendt
dennis.wendt@mcgill.ca

1 Department of Educational and Counselling Psychology, McGill University, Montreal, QC, Canada

2 School of Interdisciplinary Arts and Sciences, University of Washington-Bothell, Bothell, WA, USA

3 Memory Keepers Medical Discovery Team - American and Rural Health Equity, Department of Family Medicine and Biobehavioral Health, University of Minnesota Medical School, Duluth Campus, Duluth, MN, USA

4 Center for Alaska Native Health Research, Institute for Arctic Biology, University of Alaska Fairbanks, Fairbanks, AK, USA

5 RAND Corporation, Santa Monica, CA, USA

6 Department of Sociology, School of Public Health, University of Saskatchewan, Saskatoon, SK, Canada

7 Department of Psychiatry and Biobehavioral Sciences, University of California, Los Angeles, Los Angeles, CA, USA

8 Department of Psychiatry and Behavioral Sciences, Alcohol and Drug Abuse Institute, University of Washington, Seattle, WA, USA

9 Department of Global Health and Social Medicine, Harvard Medical School, Boston, MA, USA

10 Department of Anthropology, Harvard University, Cambridge, MA, USA

11 Department of Psychology, Concordia University, Montreal, QC, Canada

12 Alcohol and Drug Abuse Institute, University of Washington, Seattle, WA, USA

13 Department of Psychology and Center on Alcoholism, Substance Abuse, and Addictions, University of New Mexico, Albuquerque, NM, USA

14 Department of Family Medicine and Biobehavioral Health, University of Minnesota Medical School, Duluth Campus, Duluth, MN, USA

Abstract Many Indigenous communities are concerned with substance use (SU) problems and eager to advance effective solutions for their prevention and treatment. Yet these communities also are concerned about the perpetuation of colonizing, disorder-focused, stigmatizing approaches to mental health, and social narratives related to SU problems. Foundational principles of community psychology—ecological perspectives, empowerment, sociocultural competence, community inclusion and partnership, and reflective practice—provide useful frameworks for informing ethical community-based research pertaining to SU problems conducted with and by Indigenous communities. These principles are explored and extended for Indigenous community contexts through themes generated from seven collaborative studies focused on understanding, preventing, and treating SU problems. These studies are generated from research teams working with Indigenous communities across the United States and Canada—inclusive of urban, rural, and reservation/reserve populations as well as adult and youth participants. Shared themes indicate that Indigenous SU research reflects community psychology principles, as an outgrowth of research agendas and processes that are increasingly guided by Indigenous communities. At the same time, this research challenges these principles in important ways pertaining to Indigenous–settler relations and Indigenous-specific considerations. We discuss these challenges and recommend greater synergy between community psychology and Indigenous research.

Keywords Indigenous Peoples · American Indians and Alaska Natives · First Nations · Substance use · Community psychology · Research ethics

Introduction

Indigenous communities have long been concerned about substance use (SU) problems among their people and have been eager to advance effective solutions for their prevention and treatment (see, e.g., Coyhis & White, 2006; Johnson, 2016; Willie, 1989). This concern is in the context of SU disparities among Indigenous Peoples generally (e.g., increased rates of SU disorders and related problems), albeit with tremendous variation between individuals and communities (Beals et al., 2006; Gone & Trimble, 2012). SU disparities among Indigenous Peoples are inextricably linked to the ills of European colonialism, such as epidemic disease, geographical dislocation, systematic attempts of cultural genocide, and ongoing oppression, violence, and discrimination. Given this context, the survival and cultural continuity of Indigenous Peoples in North America is a testament of their resiliency. At the same time, colonization has had an alarming impact on Indigenous Nations, resulting in entrenched poverty, intergenerational trauma, and health disparities (Blue Bird Jernigan, D'Amico, Duran, & Buchwald, 2018; Davis, Roscigno, & Wilson, 2016; Gone et al., 2019).

Substance use problems among Indigenous Peoples emerged after European contact, beginning with the introduction of grain alcohol and practices of heavy drinking that were not previously common among Indigenous communities (Beauvais, 1996; Mail & Johnson, 1993). With these problems emerged the "firewater myth," a term for the widely held theory of greater biological or genetic susceptibility to alcoholism among Indigenous individuals (Gonzalez & Skewes, 2016, 2018; Johnson, 2016). Although it has no scientific support, the belief may be associated with more deleterious SU outcomes, as well as greater attempts to avoid or reduce drinking among Indigenous communities and individuals (Gonzalez & Skewes, 2016, 2018). In recent decades, there has been increased recognition about the role of sociocultural factors (e.g., intergenerational trauma, poverty, and discrimination) in Indigenous SU disparities (Ehlers, Gizer, Gilder, Ellingson, & Yehuda, 2013; Gone et al., 2019). For example, a recent epidemiological study demonstrates that SU disparities among American Indians and Alaska Natives greatly diminish when controlling for socioeconomic factors (Brave Heart et al., 2016). Furthermore, limited treatment access, availability, and utilization among many Indigenous communities exacerbate SU problems (Gone & Calf Looking, 2011). Sociocultural vulnerabilities and limited treatment infrastructure have been a clear challenge for many Indigenous Nations in light of the recent opioid addiction epidemic, which has had a disproportionately negative impact on many Indigenous communities (Mack, Jones, & Ballesteros, 2017; Venner et al., 2018).

In light of the historical and ongoing attention to SU disparities among Indigenous Peoples, it is perhaps not surprising that behavioral research and interventions have disproportionately focused on addressing problematic SU (Beals et al., 2006; Gone & Trimble, 2012). For example, most of the low number of evidence-based psychotherapy interventions developed specifically for Indigenous individuals have focused primarily on SU problems (Gone & Trimble, 2012; Greenfield & Venner, 2012; Pomerville, Burrage, & Gone, 2016). Although isolating SU problems for research or interventions may be pragmatically useful in some cases, it poses the risk of perpetuating stigmatizing narratives while neglecting holistic health factors (including underlying or concomitant trauma and other mental health problems), broader sociocultural factors, and the legacy of European colonialism. Indeed, SU research is frequently guided by assumptions that are discordant with widespread sensibilities and priorities of Indigenous communities. It tends to frame problems and interventions in reductionist (vs. contextualist), biomedical (vs. socially and spiritually focused), problem-focused (vs. strengths-focused), and intrapsychic (vs. relational) ways (Kalant, 2010; Satel & Lilienfeld, 2014). As a result, Indigenous communities—already grappling with long-held stigma pertaining to SU—are understandably concerned about SU research that unintentionally maintains the status quo, stigmatizes their communities further, and ultimately disempowers individuals and communities (see, e.g., Mohatt et al., 2004).

In the context of these tensions, community psychology (CP) may offer conceptual and methodological tools for informing ethical and relevant SU research with Indigenous communities. These tools were developed in the context of CP's history of resisting and critiquing mainstream trends in mental health knowledge and practice (Nelson, Kloos, & Ornelas, 2014). To resist reductionism, for example, CP has advanced ecological models highlighting multiple, mutually constitutive levels of analysis for understanding mental health (Kelly, 1966, 2006); these models have informed the development of methods for capturing and representing salient features of context in both nomothetic (Luke, 2005) and idiographic (Banyard & Miller, 1998) fashion. As alternatives to emphasizing pathology in mental health, CP has charted "routes to psychological wellness" (Cowen, 2000), theorized community empowerment (Rappaport, 1981), and encouraged styles of thinking that foreground extra-personal systems and

structures shaping the lives of individuals and communities (Prilleltensky & Nelson, 2002). CP has also underscored the importance of community guidance in research to ensure its usefulness and attunement to issues of power and cultural difference (Prilleltensky, 2008; Trickett, 2011).

In an effort to codify a distinctively “community psychology” approach to human hardship, a task force was appointed in 2011 by two councils in the Society for Community Research and Action: the Community Psychology Practice Council, and the Council of Education Programs. This task force distilled five “foundational principles” of CP: (a) ecological perspectives, (b) empowerment, (c) sociocultural and cross-cultural competence, (d) community inclusion and partnership, and (e) ethical, reflective practice (see Dalton & Wolfe, 2012; Society for Community Research and Action, n.d.). Further consideration of these principles in contexts of contemporary SU research with Indigenous communities may afford insight into opportunities and challenges for beneficial reciprocal exchanges between CP and Indigenous community research partnerships related to addressing SU problems.

In this article, the five foundational CP principles will be explored and extended through reflection on seven active or recent SU research studies with Indigenous communities across the U.S. and Canada. The principal investigators of each study (roughly an even number of Indigenous and non-Indigenous researchers) are co-authors of this article. (We note that, with a few exceptions, community partners are not co-authors for this article; however, for each study team, community partners are active collaborators and co-authors of original research.) In preparation for this article, co-authors from each study team were asked to reflect on strengths and challenges of their study with respect to the five principles. We will present those reflections here in collective terms and highlight patterns across researcher descriptions to inform a discussion of their implications and recommendations for community-based SU research with Indigenous communities. In order to contextualize those findings, we first begin by briefly describing the seven research studies.

Community Settings

The seven Indigenous SU studies are diverse in purpose (e.g., understanding risk/protective factors, prevention, and treatment), scope (brief studies to longitudinal collaborations), methodology (ethnographic descriptions to randomized clinical trials; RCTs), Indigenous partners (American Indians, Alaska Natives, First Nations, Métis, and Inuit), locations (e.g., reservation/reserves; urban and rural settings; residential treatment centers), and participant characteristics (e.g., adolescents, adults, and women). Each study is described below; space constraints allow for only brief descriptions, though cited references provide more details.

Study 1: Prevention for Youth in Yup'ik Communities in Rural Alaska

Qungasvik (phonetic: qoo ngaz vik; tools for life) is an ongoing community-based participatory research (CBPR) study documenting strengths-based, community-level prevention efforts of Yup’ik communities in southwest Alaska (Allen & Mohatt, 2014; Allen, Rasmus, Fok, Henry, & Qungasvik Team, 2017). The study, which began in 1996, is a collaboration with researchers at the University of Alaska Fairbanks and has been funded by the U.S. Substance Abuse and Mental Health Services Administration, the State of Alaska, and three institutes within the U.S. National Institutes of Health: the National Institute on Alcohol Abuse and Alcoholism (NIAAA), the National Institute of Mental Health (NIMH), and the National Institute on Minority Health and Health Disparities (NIMHD).

The intervention promotes sobriety and reasons for life among rural Yup’ik adolescents using local expertise, high levels of community direction, and community-based staff for implementation. *Qungasvik* prevents co-occurring youth alcohol use and suicide risk, and ultimately, alcohol use disorders and death by suicide. The intervention and the underlying Yup’ik Indigenous theory of change promote growth in culturally based protective factors. The intervention is grounded in cultural practices and is adaptive to local cultural differences across rural Yup’ik communities. *Qungasvik* engages community members in the development of intervention modules, which consist of episodes of engagement with Yup’ik teachings and local cultural activities. Implementation uses the *Qasgiq* (phonetic: kuz-gik; communal house/encircling) model, which prescribes fidelity to traditional cultural practices. Sessions take place both inside (in community spaces and school buildings) and outside (on the land and water), and can last from a few hours to a few days (e.g., for camping) or across several discrete time episodes (e.g., returning to care for a winter fishing net installation over a month). Elders and community members who are cultural experts for the teachings associated with a particular module are nominated to contribute to planning and implementation. Modules are devised to each build two to four of 13 protective factors at the level of individual youth, their families, or the community, as identified through the team’s earlier research. Intervention outcomes focus on well-being (in contrast to psychopathology); measures were developed through discovery-based qualitative research to

tap outcomes of community priority and the Indigenous theory of change, and were validated for use with Yup'ik. In the process of change model, intermediate outcomes on individual, family, and community-level protective factors promote ultimate outcomes: reasons for life and reasons for sobriety.

Study 2: Longitudinal Study With American Indian Reservations and First Nations Reserves in the Great Lakes Region

Healing pathways is an ongoing CBPR panel study involving 746 American Indian and First Nations adolescents and their families at baseline. The study is a collaboration of over 15 years initially led by Les Whitbeck and researchers at the University of Nebraska, Lincoln, and is now administered at the University of Minnesota. The project has been funded by three NIH institutes: the National Institute on Drug Abuse (NIDA), NIMH, and NIMHD. Notably, the current principal investigator (Melissa Walls) was originally recruited from one of the partnering communities to be a graduate student research assistant. The study team includes over 20 tribally based interviewers and nearly 50 community members who serve on community research councils. These councils are co-producers of the research and are engaged in study design decisions, instrument selection and adaptation, implementation strategies, and data interpretation and dissemination. Each tribal community retains ownership of its specific data.

The study's overall goal is to identify trajectories and predictors of alcohol and drug use, psychiatric problems, and recovery and well-being among Indigenous Peoples. From 2002 to 2010, the study team engaged in annual survey interviews including diagnostic assessments with a sample of adolescents (10–12 years at baseline; Diagnostic Interview Schedule for Children, Revised) and at least one of their adult caregivers (University of Michigan version of the Composite International Diagnostic Interview). Results from the first eight waves reveal that the children had low rates of SU and problem behaviors early in the study (around age 10 years), but also experienced high levels of early-onset SU and mental health problems as they entered adolescence (Walls, Sittner Hartshorn, & Whitbeck, 2013). The study team identified several culturally relevant risk factors (e.g., historical trauma and losses, discrimination) and protective factors (e.g., enculturation; Walls, Whitbeck, & Armenta, 2016), along with within-sample variability in SU trajectories over time (Sittner, 2016). After a lapse in funding spanning several years, annual interviews with the original adolescent participants (now in their mid-20s) resumed in 2017, with plans for three total young adult assessments. The anticipated result is an unparalleled prospective dataset about risk and protective factors predicting early adult outcomes for Indigenous Peoples living on or near reservations or reserves.

Study 3: Youth Resilience in the Naskapi Nation in Northern Quebec

The aim of this school-based study is to develop and test a culture- and community-specific model of youth resilience against SU in a First Nations community in northern Quebec. This study is an extension of a 20-year collaboration between the Naskapi Nation of Kawawachikamach and researchers at McGill University (Jacob A. Burack) and Concordia University (Roisin O'Connor), focused on predictors of youth well-being and academic success (Burack et al., 2013; Flanagan et al., 2011). The ongoing study described here, funded by the Canadian Institutes of Health Research (CIHR), is focused on interactive effects of cultural connectedness and peer and familial factors on youth drinking and smoking risk and resilience. Mechanisms to be explored include attitudes about SU and internalizing problems (e.g., depression, anxiety). This is a multi-cohort prospective study, which permits model testing using cross-sectional and longitudinal designs. Each year, the students in grades 6–11 (approximately 11–18 years) of the only school in the community will complete a battery of self-report measures (including culturally based measures) pertaining to cultural connectedness, SU, attitudes about SU, peer influences, parent–child communication, and internalizing problems. In addition, each year selected teachers will complete a survey that assesses their perceptions of each student's internalizing and externalizing behaviors. As this project develops, community members and standing committees or bodies within the community (including the band council, education council, youth council, development corporation, and health and social services workers) will be invited to contribute to the program of research and to provide feedback.

Study 4: Experiences of Criminalized Indigenous Women at Treatment Centers in Canada

This study was a collaboration between researchers at the University of Saskatchewan, the Thunderbird Partnership Foundation, and National Native Alcohol and Drug Abuse Program treatment centers, concerning the experiences of criminalized women in treatment for problematic SU in six Canadian provinces. The principal investigator (Colleen Dell) was the Research Chair in Substance Abuse, funded by the University of Saskatchewan. The study described here was funded by CIHR and involved interviews with women in residential treatment and with

treatment providers (many of whom were in recovery from a SU problem). The study sought to understand the experiential paths of women in conflict with the law in the constitution and reconstitution of their self-identity (particularly in relationship to stigma associated with illicit drug use) prior to, during, and following specialty SU treatment. Of those interviewed, 85 were First Nations, Métis, or Inuit women. In addition, the study team interviewed 38 treatment staff (the majority of whom were First Nations), in order to understand their roles in women clients' healing journeys, including their influence on their self-identity (Fillmore, Dell, & Kilty, 2014).

Researchers partnered with Indigenous Elders, treatment center directors, treatment providers, community agencies working with criminalized Indigenous women, and women with a history of treatment for SU problems; the research team also consulted with three expert mentors in traditional Indigenous healing, SU treatment, and rehabilitation. This enlarged team consisted of mostly Indigenous women. The research team described their primary consideration to be "carrying out research with people who have been traditionally excluded from the production of knowledge and considering rights, beliefs, values, and practices of everyone involved in the research process" (Dell, Lyons, Grantham, Kilty, & Chase, 2014, p. 39). The study results underscored the importance of reclamation of a healthy self-identity as an Indigenous woman, as well as the important role of service providers within and outside treatment facilities in women's healing journeys (Dell, Gardipy, Kirlin, Naytowhow, & Nicol, 2014). Knowledge exchange was a key component of the study and included the development and large-scale distribution of a song and music video (Dell, Gardipy, et al., 2014) and the development of a 3-hour workshop for women in SU treatment on identity, stigma, and healing that continues to be offered at treatment centers across Canada (Fillmore et al., 2014).

Study 5: Culturally Adapted Treatment for a Southwestern American Indian Reservation

This study was a collaboration with a reservation-based tribal partner in the Southwestern U.S. and a study team at the University of New Mexico. The principal investigator (Kamilla Venner) met with the tribal council and director and staff of the reservation-based SU treatment agency in 2007 to discuss the study design and any tribal needs or requests. One year later, the tribal governor signed a memorandum of understanding specifying tribal data ownership and the necessity of tribal approval of any data results dissemination. The tribal partner requested that two SU treatment interventions—motivational interviewing (MI) and community reinforcement approach (CRA)—be adapted to be more culturally congruent and acceptable.

The aims of the NIDA-funded study were to culturally tailor MI and CRA and then conduct a pilot of this combined intervention (MICRA), followed by an RCT of MICRA vs treatment-as-usual ($N = 79$). The team hired tribal members who were bilingual for the two counselor and research assistant positions, and relied heavily on the tribal council and treatment agency staff to administer the study and guide cultural adaptations. Participants were adult tribal members with a SU disorder and who were seeking SU treatment. Primary outcomes included percent of days abstinent from alcohol, marijuana, and all drugs via self-report and an oral swab drug screen; spirituality was also measured over time. Pilot outcomes ($N = 8$) at 8-month follow-up yielded medium effect sizes for improvements in percent of days abstinent for alcohol, marijuana, and all drugs, as well as reductions in psychological distress (Venner et al., 2016) and increased spiritual behaviors and beliefs (Greenfield et al., 2015). Analyses of RCT data comparing MICRA to treatment-as-usual are underway.

Study 6: Cultural Treatment for American Indian and Alaska Native Adults in Los Angeles County

This study analyzes the potential effectiveness of Drum-Assisted Recovery Therapy for Native Americans (DARTNA), an intervention for problematic SU utilizing drumming as its main component of treatment. The study utilizes CBPR principles and is funded by NIAAA (principal investigator: Daniel Dickerson (Inupiaq), co-investigator: Elizabeth D'Amico). A feasibility pilot trial analyzing its effectiveness is currently being conducted among American Indian/Alaska Native men and women who are seeking SU treatment within an urban setting (Los Angeles County). Participants are randomized to either DARTNA ($n = 30$) or their usual care plus health and wellness education sessions ($n = 30$). Investigators will compare outcomes at the end of treatment and 3-months post-treatment, in order to gather data that can be used to determine the feasibility and design of a larger trial. This study is obtaining information on changes in problematic SU, mental health, physical health, spirituality, cognition, adoption of 12-step principles and practices, and cultural identification.

Drum-Assisted Recovery Therapy for Native Americans was initially developed and pre-tested in a prior study funded by NIH's National Center for Complementary and Alternative Medicine (Dickerson, Robichaud, Teruya, Nagaran, & Hser, 2012; Dickerson et al., 2014). To ensure that it was developed in a culturally appropriate manner, community-based perspectives were obtained through a series of focus groups from a community

advisory board, providers, and American Indians/Alaska Natives with histories of SU problems. The advisory board is comprised of American Indian/Alaska Native cultural leaders of descent within the Los Angeles area. These individuals are well-respected drummers, Elders, and/or community leaders with substantial knowledge and/or expertise regarding drumming traditions, and were recognized by the community for their understanding of SU problems among American Indians/Alaska Natives.

Study 7: Cultural Intervention at a Residential Treatment Facility on the Blackfeet Indian Reservation in Montana

This study is an ethnographic description of an Indigenous alternative to residential treatment-as-usual for problematic SU on the Blackfeet Indian reservation in northwestern Montana (Gone & Calf Looking, 2011, 2015). The study was a collaboration between Joseph Gone at the University of Michigan, and the Crystal Creek Lodge—the Blackfeet Nation's residential SU treatment center, directed by Patrick Calf Looking. The study was funded by the Lodge and intramural faculty support from the University of Michigan. The resultant intervention, the Blackfeet Culture Camp, was created at the outset based on Blackfeet therapeutic traditions. Guided by the Lodge's designated cultural counselor, Danny Edwards, the project enlisted the participation and support of the grass roots Crazy Dog society, a traditional cultural organization dedicated to the revitalization of the "old Blackfeet religion." In 2012, the Crazy Dogs implemented the summer camp, which featured a daily roster of traditional activities (e.g., harvesting sacred plants, visiting sacred sites, crafting sacred objects) grounded in ceremonial practices (e.g., pipe ceremonies, sweat lodges, Crazy Dog rituals).

The proposed benefits of this approach were fourfold: (a) ceremonies were understood to circulate sacred life-power for therapeutic benefit, (b) clients were socialized into a relational network with sacred activities incompatible with substance abuse, (c) traditional activities bridged discontinuities in identity and practice, and (d) the camp potentiated the future realization of a self-determined Blackfeet Nation. As an instance of innovative program development, this research partnership involved the collaborative design, implementation, and assessment of the culture camp to establish "proof of concept" for delivery of such locally grounded services. The camp was piloted with a small number of clients, all adult men, who were interviewed following their participation to gauge their perspectives and experiences of the intervention in comparison to the Lodge's usual treatment. Although subsequent efforts to formally evaluate the program were unsuccessful, the camp was so compelling for staff and clients that the Lodge dedicated its own scarce resources to successive offerings of the program for increasing numbers of treatment clients of all genders during the following successive summers.

Community Psychology Foundational Principles

Reflective of how CP has come to understand and define itself, the five foundational principles introduced above (i.e., ecological perspectives; empowerment; sociocultural and cross-cultural competence; community inclusion and partnership; and ethical, reflective practice) serve as a useful launching point for explorations of CP ideals and how they are reflected to varying degrees in different projects, fields, or contexts. In preparation for this paper, authors drafted written responses to questions about the strengths, weaknesses, and lessons learned from their SU research collaborations in light of each principle. The first author then drafted summaries for each principle—reflecting common themes and examples—which after review and refinement by the authors resulted in the finalized summaries below.

Ecological Perspectives

The first CP principle refers to "the ability to articulate and apply multiple ecological perspectives and levels of analysis in community practice" (Dalton & Wolfe, 2012, p. 10). Study researchers emphasized the importance of research efforts being informed by local community perspectives. These perspectives generally involved the interconnection of multiple levels of analysis, including individual, family, community, and tribal/national systems for healing. Researchers also stressed the importance of contextualizing research in terms of sociocultural factors, including social determinants of health, the role of colonization (including historical trauma and ongoing discrimination and microaggressions), resiliency and protective factors, geographical location, and spirituality. Although all community partnerships were concerned with individual well-being, intra-personal factors were either minimally addressed or conceptualized holistically in light of ecological factors.

Through being guided by community perspectives, researchers would sometimes rethink their own theoretical formulations. For example, community perspectives led one research team to reformulate what is typically described as family, individual, and community levels as developmental levels of dependence, independence, and interdependence. Researchers also stressed the importance of listening to communities and their own conceptualizations of SU problems, as they may differ from academic

understandings. For example, one community emphasized a prevention strategy that linked to a broader developmental task in their community's way of life that focused on awareness of one's environment and the relational connections within it; one small part of this task includes awareness of risks and potential consequences of alcohol misuse.

All researchers highlighted academic-centered difficulties in regard to this principle. These difficulties included (a) disciplinary biases (imposed by grant requirements, SU publication outlets, and available measures) toward pathology, reductionism, and deficit models rather than the resiliency-framed, holistic, and spirituality models favored by communities; (b) pragmatic difficulties in terms of focusing on a SU problem while not losing perspective of holistic factors; and (c) limited funding, time, and support for developing measures and conducting analyses for ecological constructs and models (requiring potentially promising measures/models to be "squeezed in" or abandoned). One research team mentioned a difficulty in how academic constructs or formulations may not fit within community members' vocabularies or conceptual frameworks (e.g., "ecological perspectives" or "levels of analysis") or may tend toward deficit-based thinking (e.g., "colonization," economic arrangements, and health infrastructure). Another research team discussed the desire to move toward community-level indicators beyond self-reported measures (e.g., zip code level data; measurement development; multi-level data collection mediated by GPS or phone technology), but cited constraints with funding, resources, and interdisciplinary collaborations. In spite of these challenges, researchers across studies reflected on the ability of these projects to translate to meaningful community interventions for immediate goals, spearheaded by motivated community members and heavily influenced by community perspectives.

Empowerment

The second principle refers to "the ability to articulate and apply a collective empowerment perspective, to support communities that have been marginalized in their efforts to gain access to resources and to participate in community decision-making" (Dalton & Wolfe, 2012, p. 10). Researchers discussed community empowerment primarily in terms of a manifestation and/or byproduct of community members' involvement in the research process. Community involvement included governing councils at the outset and throughout the project, hired research assistants and clinicians, community co-presenters at conferences, and utilization of local processes for conducting and disseminating research. Community members also were empowered individually and collectively, in terms of learning more about the research topic, increasing participation in and value of traditional practices through interventions, and forging stronger social links. Empowerment was also evident in researchers' deference to Indigenous knowledge and governance. One research team discussed the importance of working within the community's own local Indigenous model of social organization and governance. Another spoke of how community empowerment resulted from the research privileging the knowledge, roles, and expertise of ceremonial leaders over professionally trained SU counselors. Finally, researchers discussed how within long-term collaborations, community empowerment was increasingly evident over the years, especially in terms of communities' own research capacity, governance, and management. For one long-term partnership, community members had been involved for many years as skilled interviewers, committee members, and research assistants.

For some studies, community empowerment and decision-making were limited. Reasons for these limits included difficulties reaching youth in light of intergenerational gaps, retention constraints within an RCT, relying too heavily on a small number of community leaders and administrators, insufficient linkages with Elders, and community polarization (especially in regard to diverse perspectives on Christianity, gender roles, and traditional healing). One research team commented on the struggle to expand decision-making to the broader community, beyond the agency context in which they were collecting data. Researchers also emphasized ongoing limits in community research capacity. Communities were not always able to act on recommendations of the research team, in terms of convening advisory councils, hiring researchers and assistants, or developing research ethics boards. Certain desired research skills could not always be fulfilled through available community members. One research team stated that the community's application of research findings would usually fall short of complete uptake, due to limited time and funding. Another mentioned how the long length of time to complete research (especially RCTs) can be disheartening, especially in light of urgent needs. Researchers recommended greater priority for funding for research that prioritizes community partnership and empowerment (including the need for increased skills and investment by researchers to advocate for such), as well as for researchers to be deeply engaged in communities in order to be aware of continually evolving changes in communities' research capacity.

Sociocultural and Cross-Cultural Competence

The third principle refers to "the ability to value, integrate, and bridge multiple worldviews, cultures, and

identities" (Dalton & Wolfe, 2012, p. 10). Study researchers emphasized the importance of attending to sociocultural factors and cross-cultural differences. Sociocultural competence was sought through the community's involvement in or direction of the research process. One research team emphasized the importance of Elders in serving as a bedrock information source for devising culturally appropriate research approach and procedures. The principal investigators of several projects were Indigenous themselves (with one being from one of the collaborating communities) and co-investigators and key project leadership positions were frequently drawn from community leadership. For long-term projects, building cultural competence among non-Indigenous team members was time-consuming and sometimes emotionally difficult. Cultural competence was improved among researchers through involvement with the community before and outside of the research study, including attendance at community events; some research teams gathered with tribal staff for celebrations. Cultural competence also was improved in one collaboration through having a regular time scheduled to share and discuss cross-cultural clashes. We note that these processes were described as important for Indigenous researchers as well, each of whom was collaborating with communities that were not their own.

Researchers discussed communication and conceptualization challenges in terms of sociocultural competence. It was sometimes difficult to communicate about cultural concepts between researchers and community members (especially youth). Further, according to one research team, community partners were wary about sharing certain sacred beliefs and stories. In terms of conceptualization challenges, diverse perspectives within communities (e.g., across generations, geographies, and nations) sometimes posed difficulties for operationalizing culture and related constructs (e.g., enculturation and acculturation) within quantitative models and measures that are commonly used in the discipline for understanding cultural determinants of health. Researchers recommended qualitative methods as being helpful for understanding Indigenous worldviews and values for many topics (e.g., youth SU prevention, spirituality, family influence, and historical trauma). Finally, one research team discussed conceptualization difficulties with accommodating a wide diversity of tribes; however, they found that a basic template that can be subsequently adapted to specific Indigenous groups is workable and generally received well.

Community Inclusion and Partnership

The fourth CP principle refers to "the ability to promote genuine representation and respect for all community members, and act to legitimize divergent perspectives on community and social issues" (Dalton & Wolfe, 2012, p. 10). Study researchers stressed the importance of drawing upon diverse community perspectives, including intentional efforts to be inclusive of Elders, tribal/band councils, cultural educators, religious leaders, clinicians, human service workers, patients, youth, and other community members. This attention to diversity was sought through focus groups or the community's own local processes and was reflected (to varying degrees) at multiple stages of inquiry, including generating study ideas, study design, recruitment, adaptation of interventions, data analysis/interpretation, and implementation. Researchers stressed the importance of research being based in the community's own priorities and with as much of their participation as possible. For some studies, the research process was initiated by the community itself, who reached out to the research teams to address SU problems affecting their communities (e.g., devastating alcohol use accompanied with suicide). Each study involved some form of advisory council consisting of diverse community members, with the exception of one in which treatment staff and community members comprised the project team. For one study, community research councils were formed with the responsibilities of being liaisons between the community and the university, determining measurement targets for annual surveys, assisting with data dissemination, and striving to be informed by the community's needs and perspectives. Finally, one research team stressed the importance of ensuring that "lived experience" is at the forefront of the research, as this enables for greater community ownership and long-term relevance of study findings.

Although community leaders' viewpoints frequently guided the research, there were limitations in the extent to which these views were representative of all members in the community—in terms of heterogeneous cultural identities, religious beliefs, and individual practices. This diversity resulted in differing and sometimes conflicting visions for research priorities, especially surrounding the importance and role of traditional healing. One clearly emerging issue among some communities concerns differing perspectives on the role of medication-assisted treatment for opioid addiction. Another ongoing issue in some communities pertains to differing views on alcohol regulation (e.g., whether alcohol can be sold on a reservation/reserve), with tensions among community members about healthy drinking norms. One research team discussed difficulties with navigating inevitable factions and complex power dynamics within communities. Another spoke of the importance of building relationships among varying aspects of the community (e.g., parents, Elders, social service workers) even when research is focused on a single

population at a single site (e.g., youth at a public school). Researchers also noted difficulties for building trust and encouraging community inclusion in light of research constraints, particularly for large projects. One researcher discussed timeline expectations for grants and promotion, which do not accommodate the demanding time needed for research to be maximally inclusive. Others discussed challenges in long-term collaborations with balancing leadership from long-time community stakeholders and new voices.

Ethical, Reflective Practice

The final foundational CP principle refers to "a process of continual ethical improvement" in one's ability to (a) "identify ethical issues in one's own practice, and act to address them responsibly," (b) "articulate how one's own values, assumptions, and life experiences influence one's work, and articulate the strengths and limitations of one's own perspective," and (c) "develop and maintain professional networks for ethical consultation and support" (Dalton & Wolfe, 2012, p. 11). All of the research teams emphasized relational ethical processes in addition to the deontic (e.g., Belmont) principles that typically are reflected in university research ethics boards. Emphasized relational processes include partnership, reciprocity, humility (both cultural and personal), care, inclusion, and —perhaps most fundamental—recognition of the value of Indigenous knowledge. One research team discussed being guided by virtue ethics, which stresses a goal of being the most ethical one can be rather than meeting a standard. Another utilized a "two-eyed seeing" framework for addressing both professional and Indigenous-specific ethical issues (see Hall et al., 2015). For some studies, ethical frameworks were clearly situated within the community's own relational and explanatory frameworks. These frameworks ranged in their level of formality, with varied tasks including research governance, data ownership, memoranda of understanding, advisory boards, routine mechanisms for identifying ethical breaches, and periodic ethical guidance from Elders. For one research team, the community's wellness model was metaphorically used to conceptualize research ethics. The model represented a circle in which the research and researchers were in relation to Elders and other community members as well as other organizations—each of whom would impart information that may potentially be beneficial to the community. In this model, it was essential for researchers' resources, knowledge, and perspectives to be influenced and locally evaluated in relationship with community leaders and the local community's needs.

Researchers discussed how even with these relational processes and safeguards, there can be thorny ethical dilemmas. Some researchers expressed worries about replicating colonial relations through pursuing research framed by priorities of federal funders and academic institutions. One research team noted ethical tensions concerning their team's prioritization of a professional evidence-based practice paradigm, but which through cultural adaptation could help to foster greater use of Indigenous cultural practices. Relatedly, researchers identified a dilemma in terms of the slow pace of research within communities with urgent and severe (even epidemic) health needs in relation to problematic SU. Two research teams discussed community concerns about RCTs, in terms of the fairness of certain individuals being randomized to not receive a desired intervention; these concerns were mitigated through methodology adaptations (e.g., providing standard-of-care health information to the control group, or utilizing a dynamic wait listed, quasi-experimental design). Several researchers noted that research became more rapidly connected to relevant community needs over time, whether through adaptations in response to community needs, community members viewing the research process as more integral to community needs, and/or faster implementation due to team members working in community intervention programs for problematic SU.

Discussion

This article describes seven diverse SU studies with Indigenous communities across the U.S. and Canada, and it explores five foundational principles of CP through themes generated from researchers' descriptions of these studies. Overall, CP's foundational principles were familiar to SU researchers working with Indigenous communities and fairly well-reflected in their collaborative projects. However, there are also indications that Indigenous SU research may expand and complicate these principles in important ways.

Indigenous SU Research Reflects CP Foundational Principles

Overall, the seven Indigenous SU studies reflected all five CP foundational principles. Researchers demonstrated an ability to apply multiple ecological perspectives, support community empowerment, engage with multiple worldviews and identities, seek representation among diverse community members, and articulate and address critical ethical issues. This attunement to CP principles occurred even though many of these researchers would not generally frame their approach to research in terms of CP per se—although several explicitly framed their research in terms of CBPR principles. Moreover, this reflection of CP

principles is notable given broader trends for SU research —including its funding sources and publication outlets— to heavily emphasize genetic, biomedical, and pharmacological approaches that minimize or even ignore social determinants and context (Kalant, 2010; Satel & Lilienfeld, 2014). The difference for contemporary SU research with Indigenous communities, we suspect, is a result of the increasingly apparent—and increasingly demanded— benefits of organizing collaborations to be guided by community stakeholders in pursuit of self-determined community interests and data sovereignty (Kukutai & Taylor, 2016; Smith, 2013). Indeed, a key aspiration for each of the seven studies was guidance by the particular needs and conceptual frameworks of partner communities, rather than starting with and relying upon academic constructs alone. This aspiration underscores the importance of community partnership and cultural humility among both Indigenous and non-Indigenous researchers (see Dickerson et al., 2018; Hartmann, Wendt, Saftner, Marcus, & Momper, 2014; Rasmus, Trickett, Charles, John, & Allen, 2019; Toombs et al., 2019).

In addition, Indigenous SU researchers described challenges to this work that closely resembled familiar frustrations among community psychologists with regard to community research and action. These challenges included disciplinary biases toward reductionism and deficit models (Cowen, 2000; Kelly, 2006), insufficient federal funds available to support innovative CP research (Rappaport, 2005), challenges with measuring ecological constructs and models (Kelly, 1990; Luke, 2005), and shortcomings of established professional ethical standards (Campbell, 2017; García & Tehee, 2014). Thus, Indigenous SU researchers are not only guided by similar principles, but they also share common frustrations with CP.

Indigenous SU Research Expands CP Foundational Principles

Although the seven studies reflected several features of CP's foundational principles, there are also ways in which Indigenous SU research might challenge common interpretations and applications of these principles in CP. In particular, the authors highlighted community interest and researcher attunement to features of Indigenous community contexts that receive little attention in the CP literature. These features include working with sovereign Nations, situating research within ecological perspectives that foregrounded historical and political contextualism in attention to colonialism, and situating research in relation to Indigenous–settler tensions while advancing anti-colonial or "decolonizing" initiatives. These distinctive emphases in partnership, ecological thinking, and political interest appear to be potentially compatible with CP principles. However, more work is needed to imagine how CP might accommodate diverse Indigenous epistemologies and perspectives—which may not be fully consistent with liberal individualist efforts to democratize decision-making, eliminate hierarchy, and promote public knowledge and transparency (see Gone, 2016, 2017). This work has been taken up in the health and social sciences internationally through the development of tribal participatory research (an adaptation of CBPR; Fisher & Ball, 2003), Indigenous research methods (Kovach, 2010; Wilson, 2008), decolonizing methodologies (Smith, 2013), and "two-eyed seeing" approaches (Hall et al., 2015). Bringing together these movements could be a promising contribution and opportunity for CP to become more culturally and politically useful to Indigenous Peoples.

Another growth opportunity for CP is to prioritize the development of theoretical and methodological tools for capturing features of context that are of particular interest to Indigenous Peoples. For example, the field of CP could be helpful through the development of measures of cultural continuity, community effects of colonization, and the role of spirituality in individual and community wellness, as well through the development of methods for analyzing small samples and innovative quasi-experimental research design alternatives to RCTs. It may also be useful to develop CP research guidelines for working with Indigenous Peoples in particular; we recommend, however, for guidelines to be flexible in order to emphasize and empower the leadership of diverse local communities (see Blue Bird Jernigan et al., 2018; Toombs et al., 2019). Finally, Indigenous SU studies could potentially benefit from a hallmark of ecological thinking in CP: greater attention to and advocacy for structural, systems-level change (e.g., Worton et al., 2018). Although Indigenous SU studies are generally exemplary in their attention to contextual factors, they are frequently limited in their attention to structural, systems-level changes that have a bearing on problematic SU (e.g., housing, poverty, child welfare, and SU policy). A more thorough synergy between CP and Indigenous SU research therefore would more intensively explore, measure, and intervene upon systems and structures contributing to SU problems in Indigenous communities.

Conclusion

Foundational principles of CP provide useful frameworks for informing ethical, community-driven SU research with Indigenous communities. We explored the use of these principles via seven diverse studies addressing SU problems with Indigenous communities throughout the U.S. and Canada. These principles are clearly familiar to these

SU researchers, as a reflection or outgrowth of their engagement in research agendas and processes (e.g., CBPR; strengths-based and resiliency models) that are increasingly led by sovereign Indigenous communities. At the same time, Indigenous SU research expands and challenges CP principles in important ways pertaining to Indigenous–settler relations and Indigenous-specific considerations. We hope that this article spurs greater synergy between CP and Indigenous research.

ACKNOWLEDGMENTS This research was supported by the U.S. National Institute on Drug Abuse (R01DA021672; R01DA039912; R01DA13580, R34DA040064; R34DA040831; UG1DA013035; UG1DA013714); U.S. National Institute on Alcohol Abuse and Alcoholism (R01AA020299; R01AA023754; R01AA11446; R21AA0016098; R21AA015541; R34AA024818); Canadian Institutes of Health Research (Project Grants 120535, 165014, 197500, and New Investigator Award 99375); U.S. National Center on Minority Health and Health Disparities (R24MD001626); U.S. National Institute of Mental Health (R01MH67281); U.S. National Center of General Medical Sciences (P20RR061430); Network for Aboriginal Mental Health Research (Small Grant); and Associate Professors Support Fund from the College of Literature, Science, and the Arts at the University of Michigan. With the exception of the first two authors, authors are listed in alphabetical order (indicating equal contribution).

Conflict of Interest

Kamilla L. Venner has received financial compensation for providing training and consultation for evidence-based treatments such as motivational interviewing and community reinforcement approach. Authors have no other conflicts of interest to disclose.

References

Allen, J., & Mohatt, G. V. (2014). Introduction to ecological description of a multi-level community based cultural intervention: Building prevention through collaborative field based research. *American Journal of Community Psychology*, *54*, 83–90.

Allen, J., Rasmus, S., Fok, C. C. T., Henry, D., & Qungasvik Team (2017). Multi-level cultural intervention for the prevention of suicide and alcohol use risk with Alaska Native youth: A nonrandomized comparison of treatment intensity. *Prevention Science*, *19*, 174–185.

Banyard, V., & Miller, K. (1998). The powerful potential of qualitative research for community psychology. *American Journal of Community Psychology*, *26*, 485–505.

Beals, J., Novins, D. K., Spicer, P., Whitesell, N. R., Mitchell, C. M., & Manson, S. M. (2006). Help seeking for substance use problems in two American Indian reservation populations. *Psychiatric Services*, *57*, 512–520.

Beauvais, F. (1996). Trends in drug use among American Indian students and dropouts, 1975 to 1994. *American Journal of Public Health*, *8*, 1594–1598.

Blue Bird Jernigan, V., D'Amico, E. J., Duran, B., & Buchwald, D. (2018). Multilevel and community-level interventions with Native Americans: Challenges and opportunities. *Prevention Science*. https://doi.org/10.1007/s11121-018-0916-3

Brave Heart, M. Y. H., Lewis-Fernández, R., Beals, J., Hasin, D. S., Sugaya, L., Wang, S., . . . Blanco, C. (2016). Psychiatric disorders and mental health treatment in American Indians and Alaska Natives: Results of the National Epidemiologic Survey on Alcohol and Related Conditions. *Social Psychiatry and Psychiatric Epidemiology*, *51*, 1033–1046.

Burack, J. A., D'Arrisso, A., Ponizovsky, V., Troop-Gordon, W., Mandour, T., Tootoosis, C., . . . Fryberg, S. (2013). Friends and grades: Peer preference and attachment predict academic success among Naskapi youth. *School Psychology International*, *13*, 371–386.

Campbell, R. (2017). The stories we tell: Introduction to the special issue on ethical challenges in community psychology research and practice. *American Journal of Community Psychology*, *60*, 299–301.

Cowen, E. L. (2000). Community psychology and routes to psychological wellness. In J. Rappaport & E. Seidman (Eds.), *Handbook of community psychology* (pp. 79–99). Boston: Springer.

Coyhis, D. L., & White, W. L. (2006). *Alcohol problems in Native America: The untold story of resistance and recovery – "The truth about the lie"*. Colorado Springs, CO: White Bison.

Dalton, J., & Wolfe, S. (2012). Education connection and the community practitioner. *The Community Psychologist*, *45*, 7–13.

Davis, J. J., Roscigno, V. J., & Wilson, G. (2016). American Indian poverty in the contemporary United States. *Sociological Forum*, *31*, 5–28.

Dell, C., Gardipy, J., Kirlin, N., Naytowhow, V., & Nicol, J. J. (2014). Enhancing the well-being of criminalized Indigenous women: A contemporary take on a traditional and cultural knowledge form. In G. Balfour & E. Comack (Eds.), *Criminalizing women: Gender and (in)justice in neo-liberal times* (2nd edn, pp. 314–329). Black Point, NS, Canada: Fernwood.

Dell, C., Lyons, T., Grantham, S., Kilty, J., & Chase, W. (2014). Researching with respect: The contributions of feminist, Aboriginal and community-based research approaches to the development of our study of First Nations women's healing from problematic drug use. In R. Berman (Ed.), *Corridor talk: Canadian feminist scholars share their stories of research partnerships*. Toronto, ON, Canada: Innana.

Dickerson, D. L., Baldwin, J., Belcourt, A., Belone, L., Gittelsohn, J., Kaholokula, K., . . . Wallerstein, N. (2018). Encompassing cultural contexts within scientific research methodologies in the development of health promotion interventions. *Prevention Science*. https://doi.org/10.1007/s11121-018-0926-1

Dickerson, D. L., Robichaud, F., Teruya, C., Nagaran, K., & Hser, Y.-I. (2012). Utilizing drumming for American Indians/Alaska Natives with substance use disorders: A focus group study. *American Journal on Drug and Alcohol Abuse*, *38*, 505–510.

Dickerson, D. L., Venner, K. L., Duran, B., Annon, J. J., Hale, B., & Funmaker, G. (2014). Drum-Assisted Recovery Therapy for Native Americans (DARTNA): Results from a pretest and focus groups. *American Indian and Alaska Native Mental Health Research*, *21*, 35–58.

Ehlers, C. L., Gizer, I. R., Gilder, D. A., Ellingson, J. M., & Yehuda, R. (2013). Measuring historical trauma in an American Indian community sample: Contributions of substance dependence, affective disorder, conduct disorder and PTSD. *Drug and Alcohol Dependence*, *133*, 180–187.

Fillmore, C., Dell, C. A., & Kilty, J. M. (2014). Ensuring Aboriginal women's voices are heard: Toward a balanced approach in community-based research. In J. M. Kilty, S. C. Fabian & M. Felices-Luna (Eds.), *Demarginalizing voices: Commitment, emotion, and action in qualitative research* (pp. 38–61). Vancouver, BC, Canada: UBC Press.

Fisher, P. A., & Ball, T. J. (2003). Tribal participatory research: Mechanisms of a collaborative model. *American Journal of Community Psychology*, *32*, 207–216.

Flanagan, T. D., Iarocci, G., D'Arrisso, A., Mandour, T., Tootoosis, C., Robinson, S., & Burack, J. A. (2011). Reduced ratings of physical and relational aggressions for youths with a strong cultural identity: Evidence from the Naskapi People. *Journal of Adolescent Health*, *49*, 155–159.

García, M. A., & Tehee, M. (Eds.) (2014). Commentary on the American Psychological Association's (APA) Ethical Principles of Psychologists and Code of Conduct. Society of Indian Psychologists. Available from: https://www.aiansip.org/ [last accessed July 23, 2019].

Gone, J. P. (2016). Alternative knowledges and the future of community psychology: Provocations from an American Indian healing tradition. *American Journal of Community Psychology*, *58*, 314–321.

Gone, J. P. (2017). “It felt like violence”: Indigenous knowledge traditions and the postcolonial ethics of academic inquiry and community engagement. *American Journal of Community Psychology*, *60*, 353–360.

Gone, J. P., & Calf Looking, P. E. (2011). American Indian culture as substance abuse treatment: Pursuing evidence for a local intervention. *Journal of Psychoactive Drugs*, *43*, 291–296.

Gone, J. P., & Calf Looking, P. E. (2015). The Blackfeet Indian culture camp: Auditioning an alternative indigenous treatment for substance use disorders. *Psychological Services*, *12*, 83–91.

Gone, J. P., Hartmann, W. E., Pomerville, A., Wendt, D. C., Klem, S. H., & Burrage, R. L. (2019). The impact of historical trauma on health outcomes for indigenous populations in the USA and Canada: A systematic review. *American Psychologist*, *74*, 20–35.

Gone, J. P., & Trimble, J. E. (2012). American Indian and Alaska Native mental health: Diverse perspectives on enduring disparities. *Annual Review of Clinical Psychology*, *8*, 131–160.

Gonzalez, V. M., & Skewes, M. C. (2016). Association of the firewater myth with drinking behavior among American Indian and Alaska Native college students. *Psychology of Addictive Behaviors*, *30*, 838–849.

Gonzalez, V. M., & Skewes, M. C. (2018). Association of belief in the “firewater myth” with strategies to avoid alcohol consequences among American Indian and Alaska Native college students who drink. *Psychology of Addictive Behaviors*, *32*, 401–409.

Greenfield, B. L., & Venner, K. L. (2012). Review of substance use disorder treatment research in Indian country: Future directions to strive toward health equity. *The American Journal of Drug and Alcohol Abuse*, *38*, 483–492.

Greenfield, B. L., Hallgren, K. A., Venner, K. L., Hagler, K. J., Simmons, J. D., Sheche, J. N., … Lupee, D. (2015). Cultural adaptation, psychometric properties, and outcomes of the Native American Spirituality Scale. *Psychological Services*, *12*, 123–133.

Hall, L., Dell, C. A., Fornssler, B., Hopkins, C., Mushquash, C., & Rowan, M. (2015). Research as cultural renewal: Applying two-eyed seeing in a research project about cultural interventions in First Nations addictions treatment. *International Indigenous Policy Journal*, *6*, 1–15.

Hartmann, W. E., Wendt, D. C., Saftner, M. A., Marcus, J., & Momper, S. L. (2014). Advancing community-based research with urban American Indian populations: Multidisciplinary perspectives. *American Journal of Community Psychology*, *54*, 72–80.

Johnson, H. R. (2016). *Firewater: How alcohol is killing my people (and yours)*. Regina, SK, Canada: University of Regina Press.

Kalant, H. (2010). What neurobiology cannot tell us about addiction. *Addiction*, *105*, 780–789.

Kelly, J. G. (1966). Ecological constraints on mental health services. *American Psychologist*, *21*, 535–539.

Kelly, J. G. (1990). Changing contexts and the field of community psychology. *American Journal of Community Psychology*, *18*, 769–792.

Kelly, J. G. (2006). *Becoming ecological: An expedition into community psychology*. New York: Oxford University Press.

Kovach, M. (2010). *Indigenous methodologies: Characteristics, conversations, and contexts*. Toronto, ON, Canada: University of Toronto Press.

Kukutai, T., & Taylor, J. (Eds.) (2016). *Indigenous data sovereignty: Toward an agenda*. Acton, ACT, Australia: ANU Press.

Luke, D. (2005). Getting the big picture in community science: Methods that capture context. *American Journal of Community Psychology*, *35*, 185–200.

Mack, K. A., Jones, C. M., & Ballesteros, M. F. (2017 October 20). Illicit drug use, illicit drug use disorders, and drug overdose deaths in metropolitan and nonmetropolitan areas—United States. *Morbidity and MortalityWeekly Report (MMWR), Surveillance Summaries*, *66*, 1–12.

Mail, P. D., & Johnson, S. (1993). Boozing, sniffing, and toking: An overview of the past, present and future of substance use by American Indians. *American Indian and Alaska Native Mental Health Research*, *5*, 1–33.

Mohatt, G. V., Hazel, K. L., Allen, J., Stachelrodt, M., Hensel, C., & Fath, R. (2004). Unheard Alaska: Culturally anchored participatory action research on sobriety with Alaska Natives. *American Journal of Community Psychology*, *33*, 263–273.

Nelson, G., Kloos, B., & Ornelas, J. (Eds.) (2014). *Community psychology and community mental health: Towards transformative change*. New York: Oxford University Press.

Pomerville, A., Burrage, R. L., & Gone, J. P. (2016). Empirical findings from psychotherapy research with indigenous populations: A systematic review. *Journal of Consulting and Clinical Psychology*, *84*, 1023–1038.

Prilleltensky, I. (2008). The role of power in wellness, oppression, and liberation: The promise of psychopolitical validity. *Journal of Community Psychology*, *36*, 116–136.

Prilleltensky, I., & Nelson, G. (2002). *Doing psychology critically: Making a difference in diverse settings*. New York: Palgrave Macmillan.

Rappaport, J. (1981). In praise of paradox: A social policy of empowerment over prevention. *American Journal of Community Psychology*, *9*, 1–25.

Rappaport, J. (2005). Community psychology is (thank God) more than science. *American Journal of Community Psychology*, *35*, 231–238.

Rasmus, S. M., Trickett, E., Charles, B., John, S., & Allen, J. (2019). The qasgiq model as an Indigenous intervention: Using the cultural logic of contexts to build protective factors for Alaska Native suicide and alcohol misuse prevention. *Cultural Diversity and Ethnic Minority Psychology*, *25*, 44–54.

Satel, S., & Lilienfeld, S. O. (2014). Addiction and the brain-disease fallacy. *Frontiers in Psychiatry*, *4*, 141.

Sittner, K. J. (2016). Trajectories of substance use: Onset and adverse outcomes among North American Indigenous adolescents. *Journal of Research on Adolescence*, *26*, 830–844.

Smith, L. T. (2013). *Decolonizing methodologies: Research and Indigenous Peoples* (2nd edn). London: Zed Books.

Society for Community Research and Action (n.d.). Competencies for community psychology practice. Available from: http://www.scra27.org/what-we-do/practice/18-competencies-community-psychology-practice/ [last accessed July 23, 2019].

Toombs, E., Drawson, A. S., Chambers, L., Bobinski, T. L., Dixon, J., & Mushquash, C. J. (2019). Moving towards an Indigenous research process: A reflexive approach to empirical work with First Nations communities in Canada. *The International Indigenous Policy Journal*, *10*.

Trickett, E. (2011). From “water boiling in a Peruvian town” to “letting them die”: Culture, community intervention, and the metabolic balance between patience and zeal. *American Journal of Community Psychology*, *47*, 58–68.

Venner, K. L., Donovan, D. M., Campbell, A. N., Wendt, D. C., Rieckmann, T., Radin, S. M., . . . Rosa, C. L. (2018). Future directions for medication assisted treatment for opioid use disorder with American Indian/Alaska Natives. *Addictive Behaviors*, *86*, 111–117.

Venner, K. L., Greenfield, B. L., Hagler, K. J., Simmons, J., Lupee, D., Homer, E., . . . Smith, J. E. (2016). Pilot outcome results of culturally adapted evidence-based substance use disorder treatment with a Southwest Tribe. *Addictive Behaviors Reports*, *3*, 21–27.

Walls, M., Sittner Hartshorn, K., & Whitbeck, L. B. (2013). North American Indigenous adolescent substance use. *Addictive Behaviors*, *38*, 2103–2109.

Walls, M. L., Whitbeck, L., & Armenta, B. (2016). A cautionary tale: Examining the interplay of culturally specific risk and resilience factors in Indigenous communities. *Clinical Psychological Science*, *4*, 732–743.

Willie, E. (1989). The story of Alkali Lake: Anomaly of community recovery or national trend in Indian Country? *Alcoholism Treatment Quarterly*, *6*, 167–174.

Wilson, S. (2008). *Research is ceremony: Indigenous research methods*. Black Point, NS, Canada: Fernwood.

Worton, S. K., Hasford, J., Macnaughton, E., Nelson, G., MacLeod, T., Tsemberis, S., & Richter, T. (2018). Understanding systems change in early implementation of Housing First in Canadian communities: An examination of facilitators/barriers, training/technical assistance, and points of leverage. *American Journal of Community Psychology*, *61*, 118–130.