Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

ANNUAL REVIEWS

*Annual Review of Clinical Psychology*

# Community Mental Health Services for American Indians and Alaska Natives: Reconciling Evidence-Based Practice and Alter-Native Psy-ence

Joseph P. Gone[1,2]

[1]Department of Anthropology, Harvard University, Cambridge, Massachusetts, USA; email: jgone@g.harvard.edu

[2]Department of Global Health and Social Medicine, Harvard Medical School, Boston, Massachusetts, USA

Annu. Rev. Clin. Psychol. 2023. 19:23–49

First published as a Review in Advance on January 9, 2023

The *Annual Review of Clinical Psychology* is online at clinpsy.annualreviews.org

https://doi.org/10.1146/annurev-clinpsy-080921-072950

Copyright © 2023 by the author(s). This work is licensed under a Creative Commons Attribution 4.0 International License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See credit lines of images or other third-party material in this article for license information.

ANNUAL REVIEWS CONNECT

www.annualreviews.org

- Download figures
- Navigate cited references
- Keyword search
- Explore related articles
- Share via email or social media

## Keywords

American Indians, Alaska Natives, community mental health services, evidence-based practice, alter-Native psy-ence, Indigenized therapies, postcolonial anomie

## Abstract

This review updates and extends Gone & Trimble's (2012) prior review of American Indian (AI) and Alaska Native (AN) mental health. First, it defines AI/AN populations in the USA, with an explanation of the importance of political citizenship in semisovereign Tribal Nations as primary for categorizing this population. Second, it presents an updated summary of what is known about AI/AN mental health, with careful notation of recurrent findings concerning community inequities in addiction, trauma, and suicide. Third, this article reviews key literature about AI/AN community mental health services appearing since 2010, including six randomized controlled trials of recognizable mental health treatments. Finally, it reimagines the AI/AN mental health enterprise in response to an "alter-Native psy-ence," which recasts prevalent mental health conditions as postcolonial pathologies and harnesses postcolonial meaning-making through Indigenized therapeutic interventions. Ultimately, AI/AN Tribal Nations must determine for themselves how to adopt, adapt, integrate, or refuse specific mental health treatments and services for wider community benefit.

OPEN ACCESS CC BY

Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

## Contents

OPENING ..... 24
ROUND ONE: WHO ARE AMERICAN INDIANS AND ALASKA NATIVES? .. 25
ROUND TWO: AMERICAN INDIAN/ALASKA NATIVE MENTAL HEALTH INEQUITIES ..... 26
Legacy Findings ..... 26
Recent Findings ..... 27
Summary ..... 29
ROUND THREE: AMERICAN INDIAN/ALASKA NATIVE COMMUNITY MENTAL HEALTH SERVICES ..... 29
The American Indian/Alaska Native Health System ..... 30
The American Indian/Alaska Native Mental Health System ..... 30
Treatment Seeking, Service Use, and Preferences ..... 31
Treatment Effectiveness ..... 32
Evidence-Based Practice in American Indian/Alaska Native Treatment ..... 36
Summary ..... 38
ROUND FOUR: REIMAGINING AMERICAN INDIAN/ALASKA NATIVE COMMUNITY MENTAL HEALTH ..... 38
Indigenous Cultural Psychology ..... 38
An Alter-Native Psy-ence ..... 40
Indigenizing Therapeutic Intervention ..... 40
Whither Evidence-Based Practice? ..... 41
CLOSING ..... 42

## OPENING

American Indians (AIs) and Alaska Natives (ANs) are the remnant peoples and communities in the present-day USA that descend from the millions of Indigenous inhabitants of the so-called New World prior to European arrival (Thornton 1987). The Indigenous peoples of North America have always been remarkably diverse with respect to population, language, culture, and religion, but what has come to unite us is the long and pervasive experience of colonial subjugation by European settlers. Colonization was first and foremost about European migration to and settlement in unfamiliar territories, which required the systematic eradication of Indigenous presence. Epidemic diseases brought from Europe decimated some 90% of Indigenous people following contact, making way for ruthlessly effective processes of violent dispossession. Colonization entailed first displacement and removal, and then containment and control, of Indigenous communities to enable settler establishment of a new nation. Collective AI/AN survival and resistance—or "survivance" (Vizenor 1999)—in response to pervasive Euro-American domination are living testimony to deep reservoirs of Indigenous strength, resourcefulness, and determination. Nevertheless, there have been many casualties in our communities.

The psychology literature attests to a raft of inequities and disparities in AI/AN mental health (MH), such as higher rates of addiction, trauma, and suicide, that indicate compromised well-being. Clinical psychology alongside the other MH professions has pioneered various treatments, interventions, and services to ameliorate these problems. In this article, my goal is to update and extend Gone & Trimble's (2012) review of AI/AN MH, which appeared in this journal more than a decade ago. To do so, I first define AI/AN populations in the USA. Second, I summarize

and update what is known about AI/AN MH status. Third, I review key literature from the past decade concerning MH services for AI/AN communities. Finally, I elucidate an alternative Indigenous vision that encompasses AI/AN MH concerns, alongside a consideration of several domains of innovation for MH services that follow from this alternative vision. The organization of this article is divided into four "rounds," paralleling the structure of the Indigenous ceremonial practice known as the sweat lodge ritual. A key feature of participation in the ritual (which has been widely incorporated into AI/AN-controlled MH services) is endurance, with the first and last rounds being transitional and therefore less intense than the middle rounds.

## ROUND ONE: WHO ARE AMERICAN INDIANS AND ALASKA NATIVES?

Gone & Trimble (2012) explicated the AI/AN population category in some detail. My goal here is to summarize and update this information. AIs originate from the lands of the lower contiguous states within the USA, while ANs originate from the lands now designated as falling within the state of Alaska. Indigenous peoples were and are distinguished from one another by culture and custom, including hundreds of diverse languages across more than 50 language families. Like all human communities over time, these societies sometimes incorporated and merged with neighboring peoples, and at other times separated from within and came to recognize new boundaries across families, territories, and ways of life. Such fluid mobility and interaction—continuing through recent centuries of engagement with immigrants from around the world—render modern AI/AN identity a complex designation. In this respect, AI/AN persons might alternately claim affiliation with AI/AN kin, descent from AI/AN ancestors, recognition by members of an AI/AN community, participation in AI/AN cultural and religious practices, solidarity with AI/AN causes, registry in government AI/AN records, or even exclusion by non-AI/AN people on the basis of discriminatory attributions of AI/AN status. AI/AN identity is thus variably conceived as kinship, ethnos, descent, race, biology, or citizenship.

In the 2020 US Census, 3.7 million people in the USA marked their race as AI/AN alone and 5.9 million marked their race as AI/AN in combination with one or more other races (NCAI 2021). This yields a total national AI/AN population of 9.6 million individuals representing approximately 2.9% of the total US population. Interestingly, this statistic reflects an 86.5% increase in the numbers of self-identifying AI/ANs since the 2010 US Census. Thus, recent census responses continue the decades-long trend of increases in AI/AN identification that cannot be explained by birth rates alone. Instead, these numbers reflect an undetermined combination of actual birth rates and a phenomenon that has been labeled "racial transit" (Sturm 2011), which refers to a shift in self-identification on surveys over time to AI from some other race. For example, some working-class Southerners who used to identify as White have decided to identify instead with real (or rumored, but almost always distant) AI ancestry. Additionally, immigrants (and their descendants) from Latin America used to identify their race as White but more recently have tended to declare their race as AI. Thus, racial transit in self-identification complicates any simple interpretation of AI designation or status.

One response to these trends is to acknowledge that AI/AN status is not only about which individuals claim to be AI/AN but also about which AI/AN communities claim that individual. Thus, the most straightforward way to clarify AI/AN status is to privilege tribal membership or citizenship. More than 570 AI/AN communities in the USA have been recognized by the federal government as possessing intrinsic rights of tribal sovereignty. Based on histories of international treaty-making, these tribal polities have been recognized as domestic dependent nations in key US Supreme Court decisions, preserving sweeping powers of autonomy and self-government. In consequence, not even the US Constitution applies to Tribal Nations except where Congress has

Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

explicitly clarified that it does (such as guaranteeing most, but not all, of the Bill of Rights to AI/AN citizens through the Indian Civil Rights Act of 1968). Thus, as Nations within the nation, federally recognized AI/AN communities maintain a distinctive relationship to the USA that exists for no other collectivity. A chief expression of tribal sovereignty is the determination of tribal citizenship. The criteria for citizenship vary among Tribal Nations but include direct descent from ancestral citizens, sometimes simple lineal descent but often also a set degree of ancestry (or "blood"). Thus, no one knows the total number of citizens of federally recognized Tribal Nations in the USA, but it is probably much closer to the 3.7 million individuals who identified as AI/AN alone on the recent US Census.

In this review, the general category of AI/ANs is conceived as the population of citizens of federally recognized Tribal Nations. Note that this definition prioritizes polity over other definitional criteria (e.g., race, culture). It is important, however, to recognize several caveats to this usage. First, not all of the research described in this review adopts this usage (or even defines how the term was used in a given study). Second, not all AI/ANs who count tribal citizens as their parents (or other kin) are eligible for citizenship and, thus, fall outside this categorization. Third, not all historically identifiable tribal communities have secured or maintained federal recognition (such as those that were decimated, scattered, and/or assimilated long ago). Fourth, many states have formally acknowledged or recognized tribal communities in their midst that are not recognized by the US federal government (though these polities cannot exercise sovereignty to the same degree as their federally recognized counterparts). Fifth, some descendants of ancestral tribal members—such as the Black Indian descendants of formerly enslaving Tribal Nations, including the so-called Five Civilized Tribes of Oklahoma—have been denied citizenship. Finally, many Chicano/as and other Latin Americans (and their descendants) in the USA possess AI ancestry but are not citizens of federally recognized Tribal Nations. Despite these several limitations, however, there is no other obvious way to define the category of AI/ANs such that the referent retains meaningful coherence.

## ROUND TWO: AMERICAN INDIAN/ALASKA NATIVE MENTAL HEALTH INEQUITIES

Although this review is more directly addressed to MH services for AI/AN communities, it is important to first appreciate what is known about the MH status of these populations. Gone & Trimble (2012) reviewed the literature on AI/AN MH disparities in depth, with special attention to major studies appearing through 2010. The most significant of these was the AI Psychiatric Epidemiology, Risk and Protective Factors Project (AI-SUPERPFP; Beals et al. 2003). As a replication of the National Comorbidity Survey (Kessler et al. 1994), this study remains the only instance of an ambitious modern attempt to formally characterize the MH status of entire adult AI populations that resided on or near their respective reservations. For this reason, these findings merit brief recapitulation here.

### Legacy Findings

Beals et al. (2005) administered the University of Michigan Composite International Diagnostic Interview to 3,084 AI respondents (ages 15–57) from two large tribal populations from 1997 to 2000 to assess lifetime and 12-month prevalence rates for nine disorders listed in the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition (DSM-IV) (Am. Psychiatr. Assoc. 1994). The rate for any lifetime disorder for the northern Plains reservation population was 44.5%, while the rate for the southwestern reservation population was 41.9%. These overall rates were roughly



Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

equivalent to national adult lifetime prevalence rates even as they subsume important diversity between these two settings and among genders.

In general, the AI-SUPERPFP demonstrated that these distinct tribal populations were

> 1.5 to 2.5 times more likely to report suffering from lifetime alcohol dependence than the adult U.S. population (with the exception of Southwestern AI women), between two and three times more likely to report suffering from [posttraumatic stress disorder], about equally likely to report suffering from drug dependence, and between one-half and two-thirds as likely to report suffering from major depression (with the exception of Southwestern AI men). (Gone & Trimble 2012, p. 138).

On the basis of this research and findings from other major studies, Gone & Trimble (2012) provided two summary observations about AI/AN MH disparities. First, they observed that AI/ANs appear to suffer from high rates of certain mental disorders, such as alcohol and cannabis abuse and dependence, childhood conduct disorder, posttraumatic stress disorder (PTSD), and suicidal behaviors. Importantly, there were no disparities in other internalizing disorders, except that major depression was reported less frequently by AI/AN respondents in comparison to national surveys. Indeed, the overall AI/AN lifetime prevalence for any mental disorder may not differ significantly from national rates. Second, they observed that overarching AI/AN prevalence rates concealed substantial inter- and intratribal heterogeneity. For example, the overall high suicide rate reported for AN youths (44.5 per 100,000 population between 1996 and 1998) obscured variation across nine community health centers for which rates ranged between 17.0 and 72.4 per 100,000 (Alsk. Native Tribal Health Consort. 2001).

## Recent Findings

During the past decade, researchers have contributed new knowledge concerning AI/AN MH inequities. A handful of especially significant studies are highlighted here.

**National Epidemiologic Survey on Alcohol and Related Conditions.** Brave Heart et al. (2016) analyzed data for 701 AI/AN respondents in comparison to 24,507 non-Hispanic White (NHW) respondents in the 2001–2002 National Epidemiologic Survey on Alcohol and Related Conditions (NESARC). This study adopted the Alcohol Use Disorder and Associated Disabilities Interview Schedule–DSM-IV Version from the National Institute on Alcohol Abuse and Alcoholism to assess 23 disorders (not including PTSD) with a nationally representative sample. Thus, the high proportion of AI/ANs who do not reside on reservations were included in this research. Diagnostic findings were reported separately for men and women. For any psychiatric disorder, 70.09% of AI/AN men (1.44 times the prevalence for NHW men) and 62.90% of AI/AN women (1.51 times the prevalence for NHW women) met criteria for a lifetime disorder, while 50.88% of AI/AN men (1.70 times) and 46.55% of AI/AN women (1.57 times) met criteria for a past 12-month disorder. These inequities were most pronounced for any substance use disorder (SUD) (both lifetime and 12-month), including alcohol dependence (lifetime), nicotine dependence (lifetime and 12-month), and especially drug dependence (lifetime and 12-month), for both men and women. There was also an inequity for any mood disorder (both lifetime and 12-month), including major depression and bipolar I disorder for AI/AN men (lifetime and 12-month) and bipolar I (lifetime), bipolar II (lifetime and 12-month), and dysthymia (lifetime and 12-month) for AI/AN women. Additionally, there was an inequity for any anxiety disorder for AI/AN men (lifetime) and AI/AN women (lifetime and 12-month); AI/AN women reported higher rates of panic disorder (lifetime and 12-month) and a higher rate of social anxiety disorder (lifetime).

**Midwestern American Indian longitudinal study update.** Gone & Trimble (2012) reviewed findings from an impressive longitudinal study of AI youth from eight reservations/reserves in

Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

the midwestern USA and Canada that commenced in 2002 (Whitbeck et al. 2006, 2008). In the past decade, additional findings from this ongoing study have been reported (e.g., Whitbeck et al. 2014). Most recently, Walls et al. (2021) provided cumulative lifetime and 12-month prevalence rates for ten DSM-IV disorders (PTSD was not assessed) based on the ninth wave of longitudinal assessments with youth from these same eight reservations/reserves. The respondents were 450 young AI adults (with a mean age of 26.3 years), and diagnoses were based on assessments using the World Health Organization Composite International Diagnostic Interview. The cumulative lifetime prevalence (the sum of cases from previous waves, plus new cases) of any psychiatric disorder was 77.3% for this sample, with a past-year prevalence of 28.7%. Rates of two or more disorders for this sample were 56.4% (lifetime) and 6.7% (past year).

The cumulative lifetime prevalence of SUDs was 68.2% for this sample, including 24.4% for lifetime alcohol dependence, 22.7% for lifetime marijuana dependence, and 18.7% for other lifetime substance dependence. Interestingly, past-year rates for SUDs peaked at 16.2 years of age, with a notable exception for other SUDs that rose dramatically—for both men and women, but especially for AI women—during the most recent wave of assessment (past-year prevalence for other substance dependence was 6.0%). The authors attributed this finding to current trends in stimulant and opioid use and abuse. Cumulative lifetime prevalence was 24.0% for major depression (with AI women reporting significantly higher prevalence), 18.4% for attention-deficit/hyperactivity disorder, 15.6% for generalized anxiety disorder (with AI women again reporting significantly higher prevalence), and 5.6% for dysthymic disorder.

One benefit of reporting longitudinal diagnostic findings across multiple waves of assessment is the opportunity to disentangle retrospective and prospective prevalence rates. In comparing diagnostic findings across different assessment waves, Walls et al. (2021) determined that retrospective reports from the ninth wave underestimated the prevalence of any lifetime psychiatric disorder by 13.5% in comparison to cumulative lifetime rates. The authors noted other key implications of their findings. They observed that longitudinal trends in past-year SUDs indicated that AI respondents contended with earlier onset of these problems when compared with other non-AI populations but also exhibited greater rates of recovery by young adulthood. Moreover, the authors suggested that cumulative lifetime rates of internalizing disorders resembled prevalence rates from other longitudinal research, noting that AI rates for major depression may in fact be low in the context of greater life stressors and higher suicidality.

**Trauma and posttraumatic stress disorder.** Interestingly, neither of these studies assessed trauma or PTSD. Beals et al. (2013a) analyzed AI-SUPERPFP data for 1,967 AI respondents who reported trauma exposure. They determined that the conditional risk for lifetime PTSD in response to such trauma was 15.9%, a finding that was comparable to studies with non-AI respondents. The gender disparity in conditional risk, however, was smaller for these AI populations, suggesting that both men and women experience greater risk of trauma exposure, accounting for higher lifetime rates of PTSD. Beals et al. (2013b) further analyzed AI-SUPERPFP data to reveal that trauma assessment methods—that is, inquiring about the single worst trauma or three worst traumas for diagnostic purposes—altered conclusions about lifetime prevalence of PTSD: Adopting the three-worst-trauma strategy compared with the single-worst-trauma approach increased the prevalence of lifetime PTSD by 28.3%. Ehlers et al. (2013) administered the Semi-Structured Assessment for the Genetics of Alcoholism to 309 AI respondents from eight reservations in Southern California as part of a large family study. They found that more than 90% of both AI men and women reported trauma exposure, but the conditional risk for PTSD was 38% for AI women and 29% for AI men (driven by disparities in sexual trauma). PTSD was also comorbid with other internalizing disorders and substance dependence in this sample, though the direction of association (e.g., PTSD leads to substance dependence) could not be determined.



Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

**Additional studies.** Two other important studies have appeared since 2010. Warne et al. (2017) explored associations between adverse childhood experiences and adverse MH outcomes in a statewide survey in South Dakota. They found that AI respondents were much more likely to report such experiences (including childhood abuse, neglect, and household dysfunction) than non-AIs. Moreover, those reporting six or more such experiences increased the odds (based on screening surveys) for anxiety, depression, serious alcohol misuse, and cigarette smoking (but the impacts of these experiences on MH outcomes did not differ between AI and non-AI respondents). Suicide among AI/ANs has been a long-standing concern. Wexler et al. (2012) analyzed Suicide Reporting Forms from 2001 to 2009 that were obtained from the tribal health organization that served the northwest region of Alaska. For a regional AN population totaling 7,965 during this period, 38 suicide deaths and 510 suicide attempts were recorded. The resulting rate of fatal suicides was 60 per 100,000 person-years, including rates as high as 209 per 100,000 person-years for ANs aged 20–24. The authors concluded that the overall AN suicide rate for the region was 60 per 100,000, more than five times the rate for the USA in general (and for AN youth aged 15–19, the rate was 18 times higher).

**Systematic reviews.** Several informative systematic reviews have appeared since 2010. Kisely et al. (2017) conducted a systematic review and meta-analysis of 19 studies from the Americas—including ten studies from the USA—that reported comparative data for Indigenous and non-Indigenous samples with respect to prevalence of depression and anxiety disorders. Although they did not report separate findings for the US studies, they found that the 12-month rate of PTSD was higher for Indigenous samples, while 12-month rates for other anxiety and depressive disorders were comparable to those of non-Indigenous samples. Relatedly, the lifetime rate of social phobia was higher for Indigenous samples, while lifetime rates for generalized anxiety disorder, panic disorder, and depressive disorders were lower in comparison to non-Indigenous samples. Most systematic reviews have been unable to identify literature that lends itself to formal meta-analysis, however. Recent comprehensive overviews pertaining to AI/AN MH include a systematic review by Burnette & Figley (2016), who identified 51 articles concerning risk and protective factors for AI/AN youth wellness, and a systematic review by Ka'apu & Burnette (2019), who identified 38 articles concerning risk and protective factors for primary MH disparities among AI/AN adults. Finally, Fetter et al. (2022) published a systematic review of 45 studies that analyzed risk factors for AI/AN suicidal behavior, while Wiglesworth et al. (2022) published a systematic review of 17 studies that analyzed protective factors for AI/AN suicide attempts.

### Summary

All major studies of AI/AN MH have found striking inequities in certain psychiatric disorders. Higher prevalence of SUDs appears to be a consistent and long-standing finding, although recent shifts toward opioid and stimulant abuse are noteworthy. Higher rates of PTSD and suicidal behaviors are also commonly observed. The diagnostic prevalence of other disorders appears to vary somewhat by study, but internalizing disorders such as depression and anxiety may in fact be comparatively low for some AI/AN populations (which could be explained by either methodological limitations or true population diversity).

## ROUND THREE: AMERICAN INDIAN/ALASKA NATIVE COMMUNITY MENTAL HEALTH SERVICES

With respect to AI/AN MH services, Gone & Trimble (2012) reviewed (*a*) the availability of such services, including AI/AN service utilization and preferences as well as the ecology of the Indian Health Service (IHS), and (*b*) the effectiveness of these services, including outcome



Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

studies, treatment adaptations, and cultural competence. This section presents select background information and recent updates.

Like other Americans, AI/ANs are free to pursue MH care in keeping with their needs, preferences, availability, and affordability. As a proportionally small population, AI/ANs are visible throughout the USA only where they remain concentrated in larger numbers. This is the case for more than 325 AI reservations, as well as for certain cities with vibrant AI/AN communities. Thus, MH services that are overtly designated for AI/AN clients or patients are located within or proximal to these communities.

These services are almost always administered or funded by Tribal Nations, tribal health consortia, and/or the federal IHS. Briefly, owing to the history of treaties and of US colonial subjugation, the federal government maintains an ongoing trust responsibility (akin to that of a guardian to its ward) to provide for and protect the welfare of federally recognized Tribal Nations. On this front, the US Government has failed spectacularly throughout history; nevertheless, this trust obligation persists, accounting for federal funding, programs, and services designated for tribal citizens.

## The American Indian/Alaska Native Health System

Since 1955, the USA has provided for the health needs of AI/AN communities through the IHS, a branch of the US Public Health Service. As a health care system, the IHS is charged with an exceedingly complex mandate, contending with inadequate funding, pervasive understaffing, increasing tribal control of services, shifts in Medicaid and Medicare policy, requests for more culturally sensitive services, and challenges associated with novel health technologies (Kruse et al. 2022). Of special note is that, since the passage of the Indian Self-Determination and Educational Assistance Act of 1975, Tribal Nations have been able to assume direct administration and control of federal services—including health care services—for their own communities, receiving pass-through federal funding to do so. This AI/AN health care system comprises 170 service units across 12 regional administrative areas, but most IHS-supported facilities—funded by 60% of the IHS budget—are administered by Tribal Nations. The IHS-supported system is responsible for meeting the health care needs of 2.56 million eligible AI/ANs from more than 570 Tribal Nations in 37 states. It includes competing contracts and grants that support a network of more than 40 Urban Indian Health Programs (UIHPs) (IHS 2020). Given the massive decentralization of the IHS system, it is challenging to evocatively convey the contours of service delivery across these settings (but for two examples concerning a single northern Plains reservation, see Bylander 2017 and White 2013).

## The American Indian/Alaska Native Mental Health System

With respect to MH services, more than 80% of IHS-funded facilities include some form of these specialty services (Levinson 2011). Tribal Nations directly administer more than 50% of MH programs and more than 80% of substance abuse programs supported by the IHS (2016). Nearly all UIHPs also provide or refer for such services (Urban Indian Health Inst. 2012). Importantly, many AI/AN communities regularly supplement these services through competitive receipt of community block grants from the US Substance Abuse and Mental Health Services Administration (Payne et al. 2018). Gone (2004) characterized the IHS-funded MH system in detail and included a local case illustration of the MH program on his home reservation in Montana. Anecdotally, it remained commonplace at the community level for MH appointments and providers to be in short supply. Many AI/AN help-seekers were not interested in more than a handful of service visits, and many providers did not offer formally structured treatments. Indeed, time-limited crisis management



Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

is the order of the day. With respect to MH services, this anecdotal profile illustrates numerous barriers at the community level.

Indeed, in a report commissioned for Congress by the Office of the Inspector General (Levinson 2011), a survey of 630 IHS-funded facilities revealed that more than 80% of those providing MH services do so for outpatients only. Barriers to service access at facilities included lack of resources (reported by 37% of facilities), lack of appointment availability (34%), and limited facility hours (25%). Of the 116 facilities that provided no MH services (half of which were in Alaska), explanations included geographical remoteness and inability to recruit and retain providers. Psychiatrists were employed at just 32% of surveyed facilities, but only 7% employed a full-time psychiatrist. Thus, of the facilities that provided MH services, only 46% offered pharmacotherapy. Finally, to help address these limitations, 17% of facilities adopted telemedicine for MH services. Beyond these structural challenges, even when MH services were available, 69% of facilities reported additional access barriers for AI/AN community members, such as transportation, work–life, and economic limitations.

With respect to IHS-funded MH services characteristics, Novins et al. (2016) surveyed a supervisor or senior clinician at 192 substance abuse treatment programs that served AI/AN clients (approximately 80% of these were situated at a "tribal location," though 25% operated outside of IHS or tribal control). Fewer than 25% of these programs were accredited substance abuse treatment facilities. Most programs provided outpatient (89.1%) or intensive outpatient (34.9%) services, with fewer offering residential (19.8%) or medically managed inpatient (2.1%) treatment. The mean number of frontline counseling staff was 5.6 per program, with staff possessing an average of 16.4 years of education. In terms of other qualifications, only 43.2% of programs reported that more than half of their staff were certified addiction counselors (29.7% of programs reported that more than half of their staff were in recovery from alcohol addiction). Only 38.5% of programs reported that more than half of their counseling staff identified as AI/ANs. Slightly more than half of the programs (51.6%) indicated that they struggle to recruit and retain providers.

MH services at UIHPs have also been profiled in the literature. Pomerville & Gone (2018) surveyed MH program directors (or equivalent staff members) at 11 (of 34 total, at that time) UIHPs about their services. In comparison to national data, these UIHPs reportedly provided a full range of treatments, exceeding national rates in offering seven out of ten treatments (but behavioral modification was a clear exception). Moreover, the largest treatment disparity was for dual-disorder treatment, with 72.7% of UIHPs versus 55.1% of programs nationally providing this service. Program directors for the 11 UIHPs reported employment of a total of 71 providers averaging 6.45 clinicians per site, with only three sites lacking a doctoral-level clinician and one site lacking a doctoral- or master's-level clinician. More than half of all providers were master's-level clinicians ($N = 37$), followed by doctoral-level clinicians ($N = 15$); the remainder held bachelor's or associate degrees (eight sites indicated that trainees were included among their clinicians).

## Treatment Seeking, Service Use, and Preferences

With respect to MH treatment, the nationally representative NESARC data (Brave Heart et al. 2016) revealed that AI/AN respondents were more likely than NHW respondents to seek treatment for lifetime alcohol disorder, and AI/AN women were more likely to seek treatment during the past 12 months for any psychiatric disorder and any anxiety disorder (16 other comparisons across diagnostic categories revealed no differences in treatment-seeking between AI/ANs and NHWs). As reviewed by Gone & Trimble (2012), the AI-SUPERPFP (Beals et al. 2005) revealed that reservation-based AIs were somewhat more likely to seek treatment for substance use problems than other Americans. Moreover, AI respondents sought help for MH concerns from

Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

traditional healers in addition to or instead of MH professionals (especially for the southwestern reservation). Gone & Trimble (2012) also reviewed the midwestern AI reservation youth data, in which Walls et al. (2006) found that 865 adult caregivers considered traditional informal services for MH problems as superior to formal medical services with respect to perceived effectiveness.

In more recent AI/AN research based on a convenience sample from South Dakota, Moon et al. (2018) surveyed 233 AIs and 502 White respondents aged 50 or older about MH service use. They found that AIs reported higher levels of adverse childhood experiences and a higher level of MH service use (despite also reporting more negative experiences from prior use of such services). Freitas-Murrell & Swift (2015) surveyed 126 AN college students using the 24-item Inventory of Attitudes Toward Seeking Mental Health Services. Half of the variance in such attitudes was predicted by therapy experience, social stigma, and especially self-stigma (concerning a respondent's own desire for seeking psychological help). Additional inclusion of White identification in the regression model revealed that "stronger levels of identification with the Caucasian culture were associated with more positive attitudes" among these AN respondents (Freitas-Murrell & Swift 2015, p. 29). In a convenience sample of 227 AI/ANs over age 50, Roh et al. (2015) found that respondents exhibited a mean score of 18 (out of a maximum of 30) for positive attitudes toward seeking MH services, reflecting mild openness to MH service use.

Stewart et al. (2013) surveyed 67 AN and 105 White college students from a large northwestern university to comparatively assess MH treatment preferences in response to experiences of significant psychological distress. Measures included ranked preferences for type of treatment and provider and an adapted version of the Preferred Counselor Characteristics Questionnaire. There were no significant differences in first choice of preferred treatment between groups, except for a comparative AN preference for acupuncture. For preferred provider type, both groups preferred confidants first, followed by therapists, when contending with distress, but AN students were significantly more likely to prefer support from a community elder, while White students were more likely to prefer support from a psychiatrist. For preferred provider characteristics, three significant mean differences were found among 16 attributes: AN students preferred a therapist of their same ethnicity, while White students were more averse to a provider with dissimilar personality and dissimilar attitudes than were AN students.

## Treatment Effectiveness

The efficacy and effectiveness of MH treatments are ideally assessed using controlled experimental methods to identify cause-and-effect relationships between interventions and outcomes. Because AI/ANs hail from distinctive historical, cultural, socioeconomic, and geographic contexts, randomized controlled trials (RCTs) to evaluate the effectiveness of specific MH treatments for these populations would be ideal. Unfortunately, due to a number of factors (including suspicion of researchers and research; Gone 2022b), AI/ANs have rarely participated in such studies. For example, in an early review that appeared in this journal (Miranda et al. 2005), outcome studies that featured in the development of treatment guidelines for four major mental disorders included only 671 patients of color out of a total of 9,266 patients, none of whom were AI/ANs. Gone & Trimble (2012) identified just four controlled outcome studies for MH interventions undertaken with AI/AN samples. These included two quasi-experimental studies of AI/AN-tailored curricula designed to prevent depression (Manson & Brenneman 1995) and suicide (LaFromboise & Howard-Pitney 1995), respectively, and two RCTs of mainstream substance abuse treatments that afforded subgroup outcome analysis for AI/ANs [evaluating naltrexone and sertraline as treatments for alcohol dependence with 68 ANs (O'Malley et al. 2008) and motivational enhancement therapy for alcohol dependence with 25 Southwestern AIs (Villanueva et al. 2007)]. Fortunately,

Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

this evidence base has expanded during the past decade. Wendt et al. (2022) recently identified six RCTs that adopted or adapted established treatment approaches for AI/AN MH problems.

**Randomized controlled trials with American Indian/Alaska Native adults.** McDonell et al. (2021) recruited 114 AI/AN adults on a northern Plains reservation who were contending with alcohol dependence and concurrent drug use to evaluate outcomes resulting from a 12-week contingency management intervention. The primary targeted outcome variable was alcohol and drug abstinence as measured by urinalysis. Three treatment conditions provided incentives for demonstrated abstinence from alcohol, the most frequently used drug, or both. The control condition provided incentives for submitting a urine sample only. Contingency management involved drawing chips for encouraging words or small ($1 value), large ($20 value), or jumbo ($80 value) prizes. Reinforcement was scaled up for sequential demonstrations of abstinence. All three treatment conditions produced superior outcomes for alcohol abstinence with large effects (odds ranged from 2.4 to 4.8 in comparison to the control condition). The treatment conditions both for drug use and for alcohol plus drug use indicated greater drug abstinence in comparison to the control condition, but once missing data were statistically accounted for, these treatment benefits were no longer significant. The treatment conditions both for drugs and for alcohol plus drugs indicated greater stimulant abstinence even when missing data were imputed.

Venner et al. (2021) recruited 79 adult AIs from a southwestern reservation treatment program who met criteria for SUDs to evaluate outcomes resulting from up to 20 1-hour therapy sessions featuring a culturally tailored treatment approach that combined motivational interviewing (MI) and the community reinforcement approach. For the treatment condition, therapy began with two to three sessions of MI. The primary targeted outcome at 12 months postbaseline follow-up was percent days abstinent on Form 90D (a semistructured interview containing timeline follow-back procedures for evaluating addiction treatment outcomes). A secondary outcome was other drug-related consequences, with substance use self-efficacy and AI spirituality included as possible treatment mediators. The comparison condition was treatment-as-usual in the reservation program. Both groups improved, with percent days abstinent from all drugs (except tobacco) shifting from 48.22% at baseline to 72.63% at 12 months for the treatment group and from 60.38% to 73.52% for the comparison group. All participants also reported lower severity and fewer negative consequences at posttreatment follow-up. Interestingly, no differences were observed between groups for any outcomes, and proposed mediators did not influence treatment effects.

Pearson et al. (2019) recruited 73 adult AI/AN women from the rural Pacific Northwest who were contending with PTSD symptoms and heavy drinking to evaluate outcomes resulting from up to 13 sessions of culturally adapted cognitive processing therapy. The primary targeted outcome variable were scores on the 17-item PTSD Symptom Scale Self-Report Version. Secondary outcomes included alcohol use, alcohol problems, SUD, and high-risk sexual behavior. The comparison condition was a waitlist control group. The treatment condition resulted in three beneficial outcomes for immediate intervention participants, including reduced PTSD symptom severity (Cohen's $d = 1.03$), reduced frequency of alcohol use ($d = 0.77$), and decreased sexual risk behaviors ($d = 1.02$). An additional analysis suggested that PTSD symptoms were largely unchanged during the waitlist period but decreased during the intervention phase of the study. As one example of the difficulty of undertaking rigorous controlled outcome research for AI/AN populations, only 21% of participants in this RCT provided complete assessment data and only 30% of participants completed nine or more sessions of therapy.

Brave Heart et al. (2020) recruited 52 adult AIs from two treatment settings (a northern Plains reservation and a southwestern urban clinic) who screened positive for depression to evaluate outcomes resulting from a 12-session historical trauma and unresolved grief intervention that was

Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

combined with group interpersonal psychotherapy. Content of the novel intervention included a focus on massive group trauma, attention to both historical and modern grief, and a Lakota "wiping of the tears" exercise. The primary targeted outcome was depression as measured by the Hamilton Depression Scale–24 and the Patient Health Questionnaire over time through week 20 postbaseline. Secondary outcomes included PTSD symptoms and group engagement. The comparison condition was 12 sessions of group interpersonal psychotherapy adapted from a version used in Ugandan villages. Both groups improved, with Hamilton scores dropping from 30.2 at baseline to 19.9 at week 20 for the treatment condition and from 30.2 at baseline to 16.7 at week 20 for the comparison condition. No differences were observed between groups on depression scores; however, the treatment group exhibited greater group engagement. Paradoxically, while the comparison condition significantly reduced PTSD symptoms, the trauma-enhanced treatment had the opposite effect, with 21% of the treatment group deteriorating with respect to PTSD symptoms.

**Randomized controlled trials with American Indian/Alaska Native youth.** Gilder et al. (2017) recruited 69 AI adolescents (ages 13–20) who resided on or near eight reservations in Southern California to evaluate outcomes resulting from MI through a single 1.5-hour session to prevent underage drinking. Content of the treatment session was adapted depending on whether AI youth had already initiated drinking. The primary targeted outcome variable was drinking behavior (i.e., frequency and quantity) during the past 6 months as measured by the Adolescent Drinking Questionnaire. Secondary outcomes included alcohol-related problem behaviors assessed with the Student Self-Check (externalizing behavior and substance use behavior subscales were created for use in this study). The comparison condition was psychoeducation, consisting of a single 1.5-hour session dedicated to watching two informational videos followed by an open-ended discussion. Follow-up assessment occurred for 60 AI youth for an average of 2 years postintervention. For the 25 AI youth who were already drinking, participation in either group reported lower quantity and frequency of drinking and reduced problem behaviors. For the 35 AI youth who had not yet initiated drinking, drinking behavior increased (as 6 participants had initiated drinking) but problem behaviors did not. The only reported differences between treatment and comparison groups was for the youth who were already drinkers: AI boys in the treatment condition reported less drinking behavior and AI girls in the treatment group reported fewer depressive symptoms.

D'Amico et al. (2020) recruited 185 urban AI/AN youth (aged 14–18) across various cities in California to evaluate outcomes resulting from MI integrated with Indigenous traditional practices in three workshops provided to prevent alcohol and other drug use. The 2-hour intervention included 1 hour of MI targeting alcohol and drug use and 1 hour dedicated to traditional practices (e.g., beading and cooking, along with discussion of the pan-Indian symbol of the medicine wheel). The primary targeted outcome variable was substance use assessed with multiple measures (including Monitoring the Future items). Secondary variables included spirituality and cultural identification. The comparison condition was participation in existing monthly 2-hour AI community wellness gatherings addressed to well-being, healthy choices, Indigenous traditional practices, and cultural connection. All youth in the study participated in these gatherings, so the treatment group evaluated outcomes for participating in the three MI workshops in addition to the existing wellness gatherings. Follow-up assessment occurred for 89% of AI youth participants at roughly 3 and 6 months postintervention. There were no statistically significant differences on any outcome measures between the treatment and comparison groups, and alcohol and drug use remained stable across assessments. Importantly, only 57% of the treatment group was able to participate in all three workshops (18% attended no workshops).

**Other recent outcome studies.** Wendt et al. (2022) identified five recent uncontrolled outcome studies of psychotherapy treatment for AI/AN MH problems. One of them was a pilot study for a

Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

subsequent RCT of substance abuse treatment, described above (Venner et al. 2016). Two of them (Goodkind et al. 2010, Morsette et al. 2012) pertained to AI/AN community adaptations of the 10-week Cognitive Behavioral Intervention for Trauma in Schools (reviewed in Gone & Trimble 2012). One concerned adoption of dialectical behavior therapy in an IHS-operated residential treatment facility for AI/AN youth contending with SUDs (Beckstead et al. 2015), in which large posttreatment reductions in general adolescent life distress were found as assessed by the Youth Outcome Questionnaire (no other symptom- or disorder-specific measures were used).

Pomerville et al. (2016) conducted a systematic review of psychotherapy research with Indigenous populations, identifying only one other instance of a controlled outcome trial to assess treatment effectiveness for AI/ANs (not including the post hoc AI subgroup analysis reported in Villanueva et al. 2007; reviewed in Gone & Trimble 2012). This study was a small RCT involving 16 middle school AIs from a northern Plains reservation who screened positive for depression symptoms (Listug-Lunde et al. 2013). Half of these students participated in a 13-session, school-based course on coping with depression, while the other half were offered merely school-based or IHS counseling services. Both groups reported reductions in depressive symptoms as measured by the Children's Depression Inventory in postintervention follow-up, but there were no between-group differences.

Pham et al. (2021) conducted a recent systematic review of outcome studies for suicide interventions for AI/ANs. They identified 28 reports featuring 23 distinct interventions, only 11 of which directly measured changes in AI/AN suicide behaviors (the others assessed changes in posited correlates of suicide behavior). Of these, three were controlled studies, including two reports about the Zuni Life Skills Development curriculum (LaFromboise & Howard-Pitney 1994, 1995; reviewed in Gone & Trimble 2012). The third study, by Tingey et al. (2020), reported outcomes from an RCT of 394 AI youth (aged 13–16) from the White Mountain Apache Tribe that evaluated a 16-lesson (nonpsychotherapeutic) AI youth entrepreneurship program in comparison to sports participation. Suicide attempts decreased over the 24-month assessment period for both groups, but there were no significant between-group differences for suicide attempts (the intervention group did report a smaller increase in marijuana use over the assessment period).

**Psychotherapy process research.** In addition to treatment evaluations, Pomerville et al. (2016) identified three other categories of psychotherapy research in their systematic review of psychotherapy with Indigenous populations. Of ten publications classified as Therapy Expectations studies, three pertained to AI/ANs and were published after 2010. The Stewart et al. (2013) study is summarized above. Dickerson et al. (2012) conducted three focus groups with 18 AI/AN participants to determine that traditional drumming seemed a promising component of substance abuse treatment. Gilder et al. (2011) surveyed 36 tribal leaders from southern California reservations to learn that MI was likely to be an acceptable intervention for AI youth. Of seven publications classified as Client Experiences studies by Pomerville et al. (2016), one pertained to AI/ANs and was published after 2010. In a follow-up study with results similar to those of Evans et al. (2006) (reviewed in Gone & Trimble 2012), Dickerson et al. (2011) reviewed archived treatment records for 558 participants who entered substance abuse treatment in California and found that fewer AI/AN clients completed treatment than matched comparisons (18.8% versus 21.9%). Of seven publications classified as Clinician Perspectives studies by Pomerville et al. (2016), one (excluding a dissertation) pertained to AI/ANs and was published after 2010. Limb & Hodge (2011) surveyed 50 clinicians (including 42 AIs) to determine whether spiritual ecograms might be effectively incorporated into family therapy with AIs. The approach was found to be moderately consistent with AI culture, but changes to the tool could improve its utility.

Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

Three studies of psychotherapy process at UIHPs by a single research team have appeared more recently. In perhaps the very first study to adopt a psychotherapy process research instrument for use with AI/ANs, Beitel et al. (2018) recruited six therapists (including four AIs) from three UIHPs to rate one therapy session for each of 93 separate adult AI outpatients using the Multitheoretical List of Therapist Interventions (MULTI). The MULTI includes 60 items that measure therapeutic techniques for eight recognized psychotherapy theoretical orientations. The most endorsed technique by a wide margin was common factors, followed by person-centered, interpersonal, and dialectical behavioral techniques. The least endorsed were behavioral and process-experiential techniques. Therapists rated their use of behavioral and cognitive approaches at significantly lower rates than therapists in an existing normative sample. Unsurprisingly, the four cognitive behavioral therapy (CBT)-identified therapists endorsed more cognitive and behavioral techniques than their non-CBT-identifying colleagues, but they endorsed techniques from other theoretical orientations to an even greater degree than cognitive or behavioral ones. Finally, AI therapists were more likely to endorse behavioral and dialectical behavioral techniques and less likely to endorse common factors than their White colleagues.

In another groundbreaking study at a single UIHP by these researchers, Beitel et al. (2021) recruited eight therapists (including four AIs) to assess their working alliance with 112 separate AI clients using the 12-item Working Alliance Inventory–Short Form. This instrument measures three facets of the working alliance between therapists and their clients: bond, task, and goal. Mean ratings for all three domains were significantly higher than those of an existing normative sample (but the total score did not differ). Finally, on the basis of the same study, Myhra et al. (2023) reported ratings by these eight therapists for therapy sessions with 112 separate AI clients concerning session quality and impact using the Session Evaluation Questionnaire. This instrument includes 21 bipolar adjective scales to measure session evaluation (depth and smoothness) and post-session mood (positivity and arousal). Therapist session ratings exhibited equal depth but greater smoothness in comparison to existing samples. Therapist session ratings also reflected more positive feelings but less emotional arousal than the existing comparison sample. AI therapists rated their sessions as exhibiting greater depth, less positivity, and more emotional arousal than their White colleagues, findings that the researchers speculated might originate from disparate therapist attention to AI historical trauma.

## Evidence-Based Practice in American Indian/Alaska Native Treatment

The appearance during the past decade of RCTs of MH treatments for AI/ANs is promising, Nevertheless, experimental outcome research continues to be the exception rather than the rule. And yet, the promotion of evidence-based practice (EBP) in MH services is premised on the professional conviction that robust outcome evidence is an essential component of high-quality treatment (alongside clinician expertise and client characteristics; Am. Psychol. Assoc. 2006). One question that follows, however, is the degree to which MH advocates, gatekeepers, and professionals in AI/AN communities endorse this commitment to EBP in MH services. Gone & Alcántara (2007) summarized the controversy surrounding EBP in AI/AN MH services, observing that some experts believe that AI/AN communities already possess the necessary knowledge to remedy MH inequities (and simply require adequate funding to implement such knowledge) while others believe that identifying effective MH treatments for AI/ANs will require more (and more rigorous) treatment outcome studies (for an analysis concerning AI/AN substance abuse treatment specifically, see Novins et al. 2011). This dispute often hinges on the centrality of AI/AN culture for these efforts. Indeed, Gone (2015) recognized certain inherent tensions between the powerful professional mandates for EBP (which seeks to narrow and standardize clinical practice) and cultural competence (which seeks to expand and diversify clinical practice).

Fortunately, empirical investigations of attitudes concerning EBP among AI/AN MH service providers and administrators have appeared since 2010.

Moore et al. (2015) conducted 21 key informant interviews with clinical administrators and 10 focus groups with 55 frontline clinical staff at 18 IHS-funded substance abuse treatment facilities in both reservation and urban settings. Interview and focus group transcripts were thematically analyzed for definitions of evidence-based treatment (EBT) and attitudes toward such treatments. Almost half of the administrators and 80% of the focus groups offered reasonable definitions of EBT (though 19% of participants in these groups did not appear to recognize or understand the term). Attitudes toward EBTs included a mix of positive, neutral, and negative statements, but the most prevalent theme was concern about the cultural relevance of EBTs for AI/AN substance abuse clients. Other attitudinal themes comprised expressions of concern about external mandates for EBT adoption, Western standards used to designate EBTs, challenges of tailoring EBTs to clients, and the drain on scarce resources associated with adopting EBTs. Finally, of nine psychosocial and three psychopharmacological EBTs designated for treating substance abuse, MI, the matrix model, and CBT were the most recognized among respondents; however, only MI was widely used (as reported in 48% of interviews and 60% of focus groups).

In another phase of this research, Novins et al. (2016) surveyed an administrator or senior clinical staff member at each of 192 treatment programs that provided substance abuse services for AI/ANs (most but not all of which were tribally controlled or IHS funded) concerning their adoption of nine psychosocial and three pharmacological EBTs. More than 95% of programs reported use of a psychosocial EBT, and more than 50% reported use of medication treatments. The most commonly used EBTs (in more than 50% of the programs) were CBT, relapse prevention therapy, MI, and 12-step facilitation. With respect to implementation of EBTs, it was atypical for sites to report strict manual adherence (ranging from 10.8 to 27.1%) or rewriting the manual (0.8–11.4%) for the top five therapies, but more common to report using parts of the manual (31.2–53.9%) or using key EBT concepts (14.3–52.9%). Only two EBTs—MI and relapse prevention—were declared culturally appropriate for AI/ANs by more than 50% of program representatives. In general, 36.5% of these programs reported pressure to use these EBTs, 43.8% of programs reported a requirement that staff use EBTs, and 53.8% of programs reported that EBTs feature in their strategic planning.

In a recent report from this study, Moullin et al. (2019) directly analyzed 192 AI/AN program representative scores from the 15-item Evidence-Based Practice Attitudes Scale (EBPAS). This scale assesses provider attitudes toward adoption and use of EBP across four domains: appeal of EBP, adoption of EBP when required, openness to new therapeutic practices such as EBP, and perceived divergence between EBP and usual therapeutic practice. For the 170 supervisors and 22 counselors who represented the treatment programs, scores on the openness and divergence subscales (the other two domains were not assessed) were significantly less indicative of pro-EBP attitudes than for a comparison group of supervisors and counselors representing non-AI/AN treatment programs. In contrast, when Pomerville & Gone (2018) administered the EBPAS to MH program directors at 11 UIHPs, they found that overall EBPAS scores were roughly equivalent to national norms. Subscale scores deviated somewhat more, with program directors scoring slightly higher on divergence and slightly lower on openness. The largest difference was in program director scores expressing a much higher likelihood of using EBP when required.

Finally, Pomerville et al. (2022) contextualized the challenges of providing evidence-based MH services to AI clients at UIHPs. A thematic analysis of responses from 28 individual interviews with administrators and staff and five focus groups with 23 administrators and staff at six UIHPs revealed the nuanced challenges of blending EBP and Indigenous cultural understandings to meet the needs of individual clients. The overarching commitment of these staff was delivery of

Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

client-centered treatment. First, client-centered treatment depended on clinician conceptions of compatibility between EBP- and AI-centered approaches for a given client. For example, providers consciously tailored MH services to blend them with AI cultural elements in response to the treatment preferences or perceived needs of the client. Second, client-centered treatment entailed incorporation of Indigenous cultural practices. Specifically, clients were regularly referred to a variety of AI cultural connections outside of therapy proper, and AI cultural education was employed as an important component of therapeutic intervention. In summary, UIHP MH staff reported conscious, complex, integrative, and ongoing efforts to harness elements of both EBP and AI cultural understandings to meet the therapeutic needs of their clients (for an in-depth ethnographic analysis of these processes, see Hartmann et al. 2020, 2022).

### Summary

MH services for AI/AN communities are organized primarily within a US Government–sponsored health care system that is complex, decentralized, dispersed, and insufficient. Despite the long-standing government-to-government relationship that exists between the USA and Tribal Nations, in which the federal government has incurred a trust responsibility to care for AI/AN citizens of federally recognized tribes, the IHS has been persistently and pervasively underfunded. Although MH and substance abuse services are available for AI/AN communities, the precise contours of treatment availability, access, and quality across the 570-plus Tribal Nations and large urban areas with UIHPs remain largely unknown. The most promising development since Gone & Trimble's (2012) review has been the publication of six RCTs that evaluated MH outcomes in response to established (often adapted) psychosocial treatments. Still, the prospects for realizing a conventionally robust EBP in AI/AN MH services seem elusive. The final round of this review offers a rationale and illustration for reimagining AI/AN community MH.

## ROUND FOUR: REIMAGINING AMERICAN INDIAN/ALASKA NATIVE COMMUNITY MENTAL HEALTH

The commitment to reimagine AI/AN community MH rests on instructive findings from Indigenous cultural psychology, professional recognition of a reigning parapsychiatric Indigenous MH framework, and responsive efforts to Indigenize therapeutic intervention in AI/AN communities.

### Indigenous Cultural Psychology

The disciplinary knowledge base in psychology has been built from research in WEIRD (Western, educated, industrialized, rich, and democratic) societies (Henrich et al. 2010). Variable-analytic studies of psychology with AI/AN samples can attest to the cultural differences that fuel anxiety about EBP in these communities [though such analysis can be complex (Walls et al. 2016)], but interpretive cultural psychology and psychological anthropology have documented certain facets of these cultural differences in much greater depth and detail. A few examples are briefly summarized here. In her linguistic analysis of the Eastern Cree language, Junker (2003) determined that thinking was conceived as a mental skill more than as a state of mind, but that exhibiting "good" or "bad" minds had little to do with skill and much to do with the interpersonal aim of such thinking (i.e., helping or harming others). As one of four components of Cree personhood, mind could be expressed through wish, which Cree speakers believed could bring about desired ends. They also recognized that thought could curse and even kill other people. Finally, Cree speakers attributed mind and thinking to both humans and nonhumans, and even referred to the "greater



Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

harmonious mind" of all of creation (Junker 2003, p. 188). Echoing these findings, Farnell (1995, p. 88) reported that Nakota concepts of mind are action-based rather than object-like, "more like a verb than a noun." Again, a "good mind" was characterized by its dispositional intent toward others. Witherspoon (1977) analyzed Navajo ritual songs to identify thought and speech as the key animating powers of the cosmos, the source of all creation, regeneration, and transformation. For example, when the Navajo ceremony for rain failed, ritual leaders declared, "How feeble-minded we have become!" (p. 28). Finally, Gone (2019) recognized similar vestigial properties of mind, thought, and wish among his own *Aaniiih*–Gros Ventre people of Montana.

These substantive cross-cultural variations in mind and mentality play out in AI/AN self, identity, and personhood as well. For example, Straus (1977, 1982) identified a fourfold conception of human selfhood among the Northern Cheyenne, in which body, soul, spirit, and heart emerge from an integration of the spiritual and earthly realms in human life. Humans are specially marked by the capacity for speech, which is necessary for interacting appropriately with others and especially for accessing life-power from nonhumans. Because humans are weak and vulnerable, longevity and prosperity in the life course depend on spiritual access to sacred life-power. The core of the individual is the heart, with attributes such as strength, size, and openness that express compassion and connection to others. Moreover, the heart's association with blood binds all Cheyennes together as "hearted alike" (Straus 1977, p. 333), a profound expression of cultural identity. Human development is cyclical from the arrival of spirit in the womb to its departure at death. During their time on earth, individuals travel through four developmental stages: childhood, youth, maturity, and old age. The central developmental opposition in the journey of life is between those who instruct (elders) and those who listen (young people). Northern Cheyennes recognize both humans and nonhumans as intentional moral agents who participate in social systems (i.e., as persons). Relationships with and reliance on nonhuman persons matter especially for pursuit of a good life through adherence to the Cheyenne way. It is important to recognize that Straus's characterizations of Northern Cheyenne life were solicited not during the 1870s but rather during the 1970s.

These examples are selected from a broader literature to support a simple observation: There are solid empirical grounds for imagining that potent AI/AN cultural differences surrounding many psychological constructs—including mind, thought, self, identity, motivation, emotion, autonomy, personhood, development, communication, relationships, and spirituality—are utterly missing from the (radically incomplete) psychological record. The degree to which such differences characterize individuals within AI/AN communities today undoubtedly varies, but most of our communities do in fact include traditionally minded or oriented persons with culturally distinctive outlooks. And yet, professional knowledge and activity that remain ignorant of these orientations and outlooks are irrelevant at best and alienating (or even assimilating) at worst [and clinical psychology has largely overlooked this source of potential harm (Wendt et al. 2015)]. It is this professional tendency or temptation to take consequential actions based on incomplete knowledge in the context of group-based histories of subjugation and oppression that drives calls to decolonize psychology (Adams et al. 2015, Bhatia 2018). Decolonization of the discipline has been advocated with specific reference to global Indigenous community psychologies (Ciofalo et al. 2022), AI/AN psychotherapy research (Gone 2021a), professional training for AI/AN MH services (Lewis et al. 2018), and the EBP system as it affects AI/AN community MH (Lucero 2011). Tuck & Yang (2012) cautioned, however, that for Indigenous communities, decolonization is not a metaphor but rather an ongoing struggle for return of dispossessed lands and associated territorial control. Perhaps the term Indigenization better captures the AI/AN emancipatory project for the field.

Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

## An Alter-Native Psy-ence

A primary example of this interest in Indigenizing MH knowledge and activity is the rise of a competing framework for conceptualizing these issues from within AI/AN communities. This framework or discourse can be regarded as parapsychiatric, addressing many of the same domains and issues of concern to MH professionals even while contesting and recasting them in noteworthy fashion. I have characterized this discourse as an alter-Native psy-ence (Gone 2021b). Alter-Native refers to the parallel yet distinctive Indigenous perspectives that inform this framework, while psy-ence calls attention to the historically contingent nature of authoritative professional knowledge that has emerged from the modern psy- disciplines (i.e., psychology, psychiatry, psychoanalysis, and psychotherapy). Indeed, it is precisely the authority of such professional knowledge that necessitates reflexive attention to politics, power, and ideology. I have explicated this alter-Native psy-ence across four domains: distress, well-being, treatment, and evaluation.

With respect to AI/AN distress, there is much less community interest in considering or diagnosing DSM-style mental disorders, but rather in designating the condition of concern as historical trauma. Historical trauma refers to the contemporary legacy of past colonial subjugation that was experienced collectively by entire communities, cumulatively across sequentially oppressive actions and events, and cross-generationally in ways that revisit ancestral suffering on current generations (Gone 2013, Gone et al. 2019, Hartmann et al. 2019). Importantly, historical trauma reframes individual psychopathology as a shared form of postcolonial suffering. With respect to AI/AN well-being, there is much less community interest in adapting or assimilating to forms of neoliberal individualism (in which free agents navigate free markets in pursuit of wealth and happiness), but rather in preserving and enhancing Indigenous relational selfhood (in which sociocentric selves are oriented toward caring for kin and community). Such sociocentric self-configurations might be augmented by ecocentric and cosmocentric self-configurations as well (Kirmayer 2007), which extend sociocentricity to caring for nonhuman relatives such as animals, plants, and spirits. Such self-orientations can lead to dramatic instances of environmental protection (Gone 2023).

With respect to treatment, there is much less community interest in adopting or refining EBTs, but rather in recovering and reclaiming Indigenous traditional healing. Traditional healing and other Indigenous therapeutic practices were among the first innovations observed in AI/AN substance abuse treatment programs once Tribal Nations began to assume administrative authority for these. For example, the sweat lodge ceremony appeared at nearly half of AI/AN-controlled substance abuse treatment programs by 1983 (Hall 1985) and is nearly ubiquitous in such treatment today. Finally, with respect to evaluation of interventions, there is much less community interest in initiating and deploying scientific outcome assessment, but rather in exploring Indigenous ways of knowing. The features of Indigenous knowledge traditions have been described using the acronym HOPES: holistic (as opposed to analytic), oral (as opposed to literate), personal (as opposed to general), experiential (as opposed to abstract), and storied (as opposed to propositional or declarative). These attributes diverge from scientific knowing in every way, with firsthand knowledge being traditionally prioritized as the most authoritative kind (including in judgments about therapeutic benefit; Gone 2012). Overall, then, this alter-Native psy-ence harbors important implications for Indigenizing MH service delivery in AI/AN communities.

## Indigenizing Therapeutic Intervention

Knowledge and practice in the MH professions are grounded in cultural assumptions that are rarely interrogated during clinical training or service delivery. And yet, most psychotherapies are premised to various degrees on client openness to consult a professional stranger and to engage in intimate processes associated with reflexive interiority, psychological mindedness,



Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

self-objectification, and expressive talk (Kirmayer 2007). But Indigenous therapeutic practices such as traditional healing have emerged from different cultural premises (Moorehead et al. 2015, Tribal Health Res. Off. 2019). In this respect, comparisons of therapeutic rationales between psychotherapy and Indigenous traditional healing are instructive (Gone 2016). For example, Gone (2010) observed that most EBTs can be characterized as secular, rational, and technical, while many forms of Indigenous traditional healing can be characterized as sacred, mystical, and relational. Thus, the preferential AI/AN interest in traditional healing compared with EBTs implies that Indigenizing therapeutic intervention will entail recasting psychosocial treatment (to greater or lesser degrees) as an Indigenous ceremonial endeavor. This is precisely a major contribution of Duran's (2019) "soul wound" psychotherapy for Indigenous people, which ceremonially marks therapy sessions with prayer and smudging and which construes emotional problems as living entities who should be ritually reengaged by clients in a more appropriate manner. This AI/AN commitment to Indigenizing therapeutic practices and programs is evident through a host of innovations that emerge whenever and wherever AI/AN communities assume administrative control of their services.

Perhaps the most revealing Indigenous therapeutic projects emerge from deep collaborations with AI/AN community partners. In this respect, Gone (2022a) summarized a program of research dedicated to privileging and promoting Indigenous therapeutic approaches for the treatment of AI/AN distress. One example was the formulation and pilot implementation of the Blackfeet Culture Camp (Gone & Calf Looking 2011, 2015). Briefly, I partnered with the staff of an accredited residential substance abuse treatment program on the Blackfeet reservation in Montana to collaboratively develop an alternative approach to their Minnesota-model treatment-as-usual for addiction that was instead grounded in Blackfeet therapeutic tradition. The staff quickly turned to Blackfeet traditionalists on the reservation who were dedicated to reviving the "old Blackfeet religion." These traditionalists advocated a seasonal Blackfeet cultural immersion camp for addiction clients that would orient them to ancestral facets of prereservation life: living in tepees, harvesting plants and berries, visiting their most holy site, and engaging in traditional spiritual practices. Importantly, this therapeutic intervention bore almost no resemblance to conventional professional treatment. Instead, the camp privileged activities designed to promote cultural identity and Indigenous spirituality in remedying addiction for these clients.

A second example involved a 7-year partnership with the UIHP in Detroit (Gone et al. 2017, 2020; Pham et al. 2022). Briefly, I was commissioned by the administrators and staff at this program to assist them with integrating traditional healing practices into their MH services. In phase one of this project, my research team interviewed UIHP administrators, providers, and traditional healers and conducted four focus groups with urban AI/AN community members. These consultations revealed several key tensions and trade-offs that necessarily shaped subsequent decisions about the development of integrative services (Hartmann & Gone 2012). In response, our partners charged us with creating an Indigenous spirituality curriculum that could engage community members in a structured fashion as they learned basic activities such as prayer, smudging, singing, and so forth. The culmination of this instruction was participation in the sweat lodge ceremony. Again, as a wellness intervention designed for AI/ANs contending with poverty, stress, and distress, the Urban American Indian Traditional Spirituality Program partook of minimal health messaging but instead prioritized socialization into Indigenous ceremonial practice, robust cultural identification, and supportive community relationships.

## Whither Evidence-Based Practice?

In summary, this approach to Indigenizing therapeutic intervention can yield programs and services that seem far afield from the approaches and rationales that characterize most EBTs in MH

Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

services. Moreover, rigorous evaluations of therapeutic outcomes for these interventions in AI/AN community settings is a fraught endeavor (Gone & Calf Looking 2015), typically involving small samples participating in adapted treatments for which randomization to condition and follow-up assessment are difficult to achieve. This explains why there are so few RCTs of AI/AN MH treatments in the scientific literature. What, then, are the grounds for confidence that Indigenized therapies might produce clinical benefits with respect to AI/AN MH problems? The answer depends on recognition of postcolonial anomie (Spencer 2000) as a key factor in AI/AN distress, which an early AI community interlocutor described to me as follows:

> The number one problem was the loss of [AI] identity. . . . If you don't know your own true oral history, your true oral traditions and customs and where you come from, and what's supposed to be important to you, well, you're gonna feel empty. You're gonna feel like you don't belong. (Gone 2007, p. 293)

This loss of identity, purpose, and belonging—driven by past Euro-American colonial subjugation through the establishment of a "Whiteman system"—is what gives rise to AI demoralization, addiction, depression, and suicide, according to this respondent. In some important sense, then, the most prevalent MH problems in AI/AN communities are properly construed as disorders of coloniality (or postcolonial pathologies).

For this reason, AI/AN-controlled treatment programs almost always intentionally introduce and promote Indigenous cultural practices in the effort to restore or enhance a robust Indigenous cultural identity and associated purposes for living (for an in-depth example, see Gone 2008, 2009, 2011). The therapeutic rationale for incorporation of Indigenous ceremonial practices or other sacred activities into treatment can be considered as twofold: affording religious access to sacred power that promotes life and prosperity on one hand and promoting psychological reorientations that transform individual purpose, meaning, motivation, peer associations, and social networks in dramatic fashion on the other hand. For a secular discipline, then, here lies a psychological mechanism for the proposed benefits of an Indigenization of therapeutic intervention, which is not actually mechanistic at all but rather meaningful in the sense of facilitating potent alterations in meaning-making. It remains an empirical question, of course, under what conditions Indigenized therapies are likely to improve or ameliorate these postcolonial pathologies in this fashion, but AI/AN communities (in keeping with traditional epistemic preferences for holism) seem dedicated to blending, merging, or integrating elements of psychotherapy and mainstream treatments—including EBTs—with aspects of Indigenous spiritual practices and ritual traditions. Given the host of constraints mentioned above, formal scientific outcome evaluation of these Indigenized therapeutic approaches is likely to remain rare, but attempts to keep track of outcomes in any available fashion in AI/AN MH service delivery are encouraged and warranted. Ultimately, AI/AN Tribal Nations must determine for themselves how to adopt, adapt, integrate, or refuse specific MH treatments and services for wider community benefit.

## CLOSING

The four symbolic rounds of this metaphorical ceremony, in which Gone & Trimble's (2012) review of AI/AN MH is updated and extended, are now complete. First, this article defines AI/AN populations in the USA, with an explanation of the importance of political citizenship in Tribal Nations as primary for categorization of this population. Second, it presents an updated summary of what is known about AI/AN MH, with careful notation of recurrent findings concerning community inequities in addiction, trauma, and suicide. Third, it reviews the key literature about AI/AN community MH services that has appeared since 2010, which now includes six additional RCTs of established MH treatments. Finally, it reimagines the AI/AN MH enterprise in response



Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

to an alter-Native psy-ence, which recasts prevalent MH conditions as postcolonial pathologies and harnesses postcolonial meaning-making as a promising mechanism for the effectiveness of Indigenized therapeutic interventions. As semisovereign, self-determining polities, AI/AN Tribal Nations will decide for themselves how best to remedy the community MH problems that afflict their own citizens. Though not of our own making, these problems may yet yield to innovative AI/AN-driven solutions born of integrative approaches to MH treatment and service delivery.

### SUMMARY POINTS

1. Given the distinctive health services ecology that has arisen around federally recognized Tribal Nations, the focus of this review is on American Indians and Alaska Natives (AI/ANs) as the citizens of these Tribal Nations.
2. Mental health (MH) inequities among AI/AN samples include disproportionately high rates of substance use disorders, posttraumatic stress disorder, adverse childhood experiences, and suicide (with possible lower rates of some internalizing disorders).
3. MH services for AI/ANs are principally funded through a US Government–sponsored health care system that is decentralized, dispersed, underfunded, and insufficient for remedying MH inequities in AI/AN communities.
4. Experimental outcome studies for MH interventions provided to AI/AN participants have expanded during the past decade, but the prospects for a robust evidence-based MH practice with these populations remain limited.
5. In response to Indigenous cultural psychology and efforts to Indigenize therapeutic intervention in AI/AN communities, an alter-Native psy-ence that contests and recasts key facets of professional knowledge in the psychiatric endeavor is reviewed.

Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

## DISCLOSURE STATEMENT

The author is not aware of any affiliations, memberships, funding, or financial holdings that might be perceived as affecting the objectivity of this review.

## ACKNOWLEDGMENTS

I am grateful to Dr. Rachel Wilbur for her assistance in formatting this article for publication.

## LITERATURE CITED

Adams G, Dobles I, Gómez LH, Kurtiş T, Molina LE. 2015. Decolonizing psychological science: introduction to the special thematic section. *J. Soc. Political Psychol.* 3(1):1–7

Alsk. Native Tribal Health Consort. 2001. *Alaska Native Mortality: 1980–1998*. Anchorage: Alsk. Native Tribal Health Consort.

Am. Psychiatr. Assoc. 1994. *Diagnostic and Statistical Manual of Mental Disorders*. Washington, DC: Am. Psychiatr. Assoc. 4th ed.

Am. Psychol. Assoc. 2006. Evidence-based practice in psychology. *Am. Psychol.* 61(4):271–85

Beals J, Belcourt-Dittloff A, Garroutte EM, Croy C, Jervis LL, et al. 2013a. Trauma and conditional risk of posttraumatic stress disorder in two American Indian reservation communities. *Soc. Psychiatry Psychiatr. Epidemiol.* 48(6):895–905

Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

Beals J, Manson SM, Croy C, Klein SA, Whitesell NR, Mitchell CM. 2013b. Lifetime prevalence of posttraumatic stress disorder in two American Indian reservation populations. *J. Trauma Stress* 26(4):512–20

Beals J, Manson SM, Mitchell CM, Spicer P. 2003. Cultural specificity and comparison in psychiatric epidemiology: walking the tightrope in American Indian research. *Cult. Med. Psychiatry* 27:259–89

Beals J, Manson SM, Whitesell NR, Spicer P, Novins DK. 2005. Prevalence of DSM-IV disorders and attendant help-seeking in 2 American Indian reservation populations. *Arch. Gen. Psychiatry* 62:99–108

Beckstead DJ, Lambert MJ, DuBose AP, Linehan M. 2015. Dialectical behavior therapy with American Indian/Alaska Native adolescents diagnosed with substance use disorders: combining an evidence based treatment with cultural, traditional, and spiritual beliefs. *Addict. Behav.* 51:84–87

Beitel M, Gone JP, Myhra LL, Cutter CJ, Barry DT. 2021. A first look at the working alliance in psychotherapy with American Indians. *Psychotherapy* 58(2):248–53

Beitel M, Myhra LL, Gone JP, Barber JP, Miller A, et al. 2018. Psychotherapy with American Indians: an exploration of therapist-rated techniques in three urban clinics. *Psychotherapy* 55(1):45–51

Bhatia S. 2018. *Decolonizing Psychology: Globalization, Social Justice, and Indian Youth Identities*. New York: Oxford Univ. Press

Brave Heart MYH, Chase J, Myers O, Elkins J, Skipper B, et al. 2020. Iwankapiya American Indian pilot clinical trial: historical trauma and group interpersonal psychotherapy. *Psychotherapy* 57(2):184–96

Brave Heart MYH, Lewis-Fernández R, Beals J, Hasin DS, Sugaya L, et al. 2016. Psychiatric disorders and mental health treatment in American Indians and Alaska Natives: results of the National Epidemiologic Survey on Alcohol and Related Conditions. *Soc. Psychiatry Psychiatr. Epidemiol.* 51(7):1033–46

Burnette CE, Figley CR. 2016. Risk and protective factors related to the wellness of American Indian and Alaska Native youth: a systematic review. *Int. Public Health J.* 8(2):58–75

Bylander J. 2017. Designing a health system that works for the tribe. *Health Aff.* 36(4):592–95

Ciofalo N, Dudgeon P, Nikora LW. 2022. Indigenous community psychologies, decolonization, and radical imagination within ecologies of knowledges. *Am. J. Community Psychol.* 69(3/4):283–93

D'Amico EJ, Dickerson DL, Brown RA, Johnson CL, Klein DJ, Agniel D. 2020. Motivational Interviewing and Culture for Urban Native American Youth (MICUNAY): a randomized controlled trial. *J. Subst. Abuse Treat.* 111:86–99

Dickerson DL, Robichaud F, Teruya C, Nagaran K, Hser YI. 2012. Utilizing drumming for American Indians/Alaska Natives with substance use disorders: a focus group study. *Am. J. Drug Alcohol Abuse* 38(5):505–10

Dickerson DL, Spear S, Marinelli-Casey P, Rawson R, Li L, Hser YI. 2011. American Indians/Alaska Natives and substance abuse treatment outcomes: positive signs and continuing challenges. *J. Addict. Dis.* 30(1):63–74

Duran E. 2019. *Healing the Soul Wound: Trauma-Informed Counseling for Indigenous Communities*. New York: Teach. Coll. Press. 2nd ed.

Ehlers CL, Gizer IR, Gilder DA, Yehuda R. 2013. Lifetime history of traumatic events in an American Indian community sample: heritability and relation to substance dependence, affective disorder, conduct disorder and PTSD. *J. Psychiatr. Res.* 47(2):155–61

Evans E, Spear SE, Huang Y-C, Hser Y-I. 2006. Outcomes of drug and alcohol treatment programs among American Indians in California. *Am. J. Public Health* 96(5):889–96

Farnell BM. 1995. Where mind is a verb: spatial orientation and deixis in Plains Indian sign talk and Assiniboine (Nakota) culture. In *Human Action Signs in Cultural Context: The Visible and the Invisible in Movement and Dance*, ed. BM Farnell, pp. 82–111. Metuchen, NJ: Scarecrow

Fetter AK, Wiglesworth A, Rey LF, Azarani M, Prairie Chicken ML, et al. 2022. Risk factors for suicidal behaviors in American Indian and Alaska Native peoples: a systematic review. *Clin. Psychol. Sci.* In press. **https://doi.org/10.1177/21677026221126732**

Freitas-Murrell B, Swift JK. 2015. Predicting attitudes toward seeking professional psychological help among Alaska Natives. *Am. Indian Alsk. Native Ment. Health Res.* 22(3):21–35

Gilder DA, Geisler JR, Luna JA, Calac D, Monti PM, et al. 2017. A pilot randomized trial of Motivational Interviewing compared to Psycho-Education for reducing and preventing underage drinking in American Indian adolescents. *J. Subst. Abuse Treat.* 82:74–81

Gilder DA, Luna JA, Calac D, Moore RS, Monti PM, Ehlers CL. 2011. Acceptability of the use of motivational interviewing to reduce underage drinking in a Native American community. *Subst. Use Misuse* 46(6):836–42

Gone JP. 2004. Mental health services for Native Americans in the 21st century United States. *Prof. Psychol. Res. Pract.* 35(1):10–18

Gone JP. 2007. "We never was happy living like a Whiteman": mental health disparities and the postcolonial predicament in American Indian communities. *Am. J. Community Psychol.* 40(3):290–300

Gone JP. 2008. The Pisimweyapiy Counselling Centre: paving the red road to wellness in northern Manitoba. In *Aboriginal Healing in Canada: Studies in Therapeutic Meaning and Practice*, ed. JN Waldram, pp. 131–203. Toronto: Aborig. Heal. Found.

Gone JP. 2009. A community-based treatment for Native American historical trauma: prospects for evidence-based practice. *J. Consult. Clin. Psychol.* 77(4):751–62

Gone JP. 2010. Psychotherapy and traditional healing for American Indians: exploring the prospects for therapeutic integration. *Couns. Psychol.* 38(2):166–35

Gone JP. 2011. The red road to wellness: cultural reclamation in a Native First Nations community treatment center. *Am. J. Community Psychol.* 47(1):187–202

Gone JP. 2012. Indigenous traditional knowledge and substance abuse treatment outcomes: the problem of efficacy evaluation. *Am. J. Drug Alcohol Abuse* 38(5):493–97

Gone JP. 2013. Redressing First Nations historical trauma: theorizing mechanisms for indigenous culture as mental health treatment. *Transcult. Psychiatry* 50(5):683–706

Gone JP. 2015. Reconciling evidence-based practice and cultural competence in mental health services: introduction to a special issue. *Transcult. Psychiatry* 52(2):139–49

Gone JP. 2016. Alternative knowledges and the future of community psychology: provocations from an American Indian healing tradition. *Am. J. Community Psychol.* 58(3/4):314–21

Gone JP. 2019. "The thing happened as he wished": recovering an American Indian cultural psychology. *Am. J. Community Psychol.* 64(1/2):172–84

Gone JP. 2021a. Decolonization as methodological innovation in counseling psychology: method, power, and process in reclaiming American Indian therapeutic traditions. *J. Couns. Psychol.* 68(3):259–70

Gone JP. 2021b. The (post)colonial predicament in community mental health services for American Indians: explorations in alter-Native psy-ence. *Am. Psychol.* 76(9):1514–25

Gone JP. 2022a. Re-imagining mental health services for American Indian communities: centering Indigenous perspectives. *Am. J. Community Psychol.* 69:257–68

Gone JP. 2022b. Researching with American Indian and Alaska Native communities: pursuing partnerships for psychological inquiry in service to Indigenous futurity. In *APA Handbook of Research Methods in Psychology*, Vol. 2: *Research Designs: Quantitative, Qualitative, Neuropsychological, and Biological*, ed. H Cooper, M Coutanche, LM McMullen, AT Panter, D Rindskopf, K Sher. Washington, DC: Am. Psychol. Assoc. 2nd ed. In press

Gone JP. 2023. Origins of antimining resistance in the life of a grassroots American Indian leader: prospects for Indigenizing psychobiography. *J. Personal.* 91(1):68–84

Gone JP, Alcántara C. 2007. Identifying effective mental health interventions for American Indians and Alaska Natives: a review of the literature. *Cult. Divers. Ethn. Minor. Psychol.* 13(4):356–63

Gone JP, Blumstein KP, Dominic D, Fox N, Jacobs J, et al. 2017. Teaching tradition: diverse perspectives on the pilot urban American Indian traditional spirituality program. *Am. J. Community Psychol.* 59(3/4):382–89

Gone JP, Calf Looking PE. 2011. American Indian culture as substance abuse treatment: pursuing evidence for a local intervention. *J. Psychoact. Drugs* 43(4):291–96

Gone JP, Calf Looking PE. 2015. The Blackfeet Indian Culture Camp: auditioning an alternative Indigenous treatment for substance use disorders. *Psychol. Serv.* 12(2):83–91

Gone JP, Hartmann WE, Pomerville A, Wendt DC, Klem SH, Burrage RL. 2019. The impact of historical trauma on health outcomes for Indigenous populations in the USA and Canada: a systematic review. *Am. Psychol.* 74(1):20–35

Gone JP, Trimble JE. 2012. American Indian and Alaska Native mental health: diverse perspectives on enduring disparities. *Annu. Rev. Clin. Psychol.* 8:131–60

Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

Gone JP, Tuomi A, Fox N. 2020. The urban American Indian traditional spirituality program: promoting Indigenous spiritual practices for health equity. *Am. J. Community Psychol.* 66(3/4):279–89

Goodkind JR, LaNoue MD, Milford J. 2010. Adaptation and implementation of cognitive behavioral intervention for trauma in schools with American Indian youth. *J. Clin. Child Adolesc. Psychol.* 39(6):858–72

Hall R. 1985. Distribution of the sweat lodge in alcohol treatment programs. *Curr. Anthropol.* 26(1):134–35

Hartmann WE, Gone JP. 2012. Incorporating traditional healing into an urban American Indian health organization: a case study of community member perspectives. *J. Couns. Psychol.* 59(4):542–54

Hartmann WE, Gone JP, Saint Arnault DM. 2020. Reconsidering rigor in psychological science: lessons from a brief clinical ethnography. *Qual. Psychol.* 7(2):169–84

Hartmann WE, Saint Arnault DM, Gone JP. 2022. Conceptualizing culture in (global) mental health: lessons from an urban American Indian behavioral health clinic. *Soc. Sci. Med.* 301:114899

Hartmann WE, Wendt DC, Burrage RL, Pomerville A, Gone JP. 2019. American Indian historical trauma: anticolonial prescriptions for healing, resilience, and survivance. *Am. Psychol.* 74(1):6–19

Henrich J, Heine SJ, Norenzayan A. 2010. The weirdest people in the world? *Behav. Brain Sci.* 33(2/3):61–83

IHS (Indian Health Serv.). 2016. *Behavioral health*. Fact Sheet, IHS, Rockville, MD. **https://www.ihs.gov/newsroom/factsheets/behavioralhealth**

IHS (Indian Health Serv.). 2020. *IHS profile*. Fact Sheet, IHS, Rockville, MD. **https://www.ihs.gov/newsroom/factsheets/ihsprofile**

Junker MO. 2003. A Native American view of the "mind" as seen in the lexicon of cognition in East Cree. *Cogn. Linguist.* 14(2/3):167–94

Ka'apu K, Burnette CE. 2019. A culturally informed systematic review of mental health disparities among adult Indigenous men and women of the USA: What is known? *Br. J. Soc. Work* 49(4):880–98

Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, et al. 1994. Lifetime and twelve-month prevalence of DSM-III-R psychiatric disorders in the United States. *Arch. Gen. Psychiatry* 51:8–19

Kirmayer LJ. 2007. Psychotherapy and the cultural concept of the person. *Transcult. Psychiatry* 44(2):232–57

Kisely S, Alichniewicz KK, Black EB, Siskind D, Spurling G, Toombs M. 2017. The prevalence of depression and anxiety disorders in Indigenous people of the Americas: a systematic review and meta-analysis. *J. Psychiatr. Res.* 84:137–52

Kruse G, Lopez-Carmen VA, Jensen A, Hardie L, Sequist TD. 2022. The Indian Health Service and American Indian/Alaska Native health outcomes. *Annu. Rev. Public Health* 5:559–76

LaFromboise TD, Howard-Pitney B. 1994. The Zuni Life Skills Development curriculum: a collaborative approach to curriculum development. *Am. Indian Alsk. Native Ment. Health Res.* 4:98–121

LaFromboise TD, Howard-Pitney B. 1995. The Zuni Life Skills Development curriculum: description and evaluation of a suicide prevention program. *J. Couns. Psychol.* 42(4):479–86

Levinson DR. 2011. *Access to mental health services at Indian Health Service and tribal facilities*. Rep. OEI-09-08-00580, Off. Insp. Gen., Dep. Health Hum. Serv., Washington, DC. **https://www.hhsoig.gov/oei/reports/oei-09-08-00580.pdf**

Lewis ME, Hartwell EE, Myhra LL. 2018. Decolonizing mental health services for Indigenous clients: a training program for mental health professionals. *Am. J. Community Psychol.* 62(3/4):330–39

Limb GE, Hodge DR. 2011. Utilizing spiritual ecograms with Native American families and children to promote cultural competence in family therapy. *J. Marital Fam. Ther.* 37(1):81–94

Listug-Lunde L, Vogeltanz-Holm N, Collins J. 2013. A cognitive-behavioral treatment for depression in rural American Indian middle school students. *Am. Indian Alsk. Native Ment. Health Res.* 20(1):16–34

Lucero E. 2011. From tradition to evidence: decolonization of the evidence-based practice system. *J. Psychoact. Drugs* 43(4):319–24

Manson SM, Brenneman DL. 1995. Chronic disease among older American Indians: preventing depressive symptoms and related problems of coping. In *Handbook on Ethnicity, Aging, and Mental Health*, ed. DK Padgett, pp. 284–303. Westport, CT: Greenwood

McDonell MG, Skalisky J, Burduli E, Foote A, Granbois A, et al. 2021. The rewarding recovery study: a randomized controlled trial of incentives for alcohol and drug abstinence with a rural American Indian community. *Addiction* 116(6):1569–79

Miranda J, Bernal G, Lau A, Kohn L, Hwang WC, LaFromboise TD. 2005. State of the science on psychosocial interventions for ethnic minorities. *Annu. Rev. Clin. Psychol.* 1:113–42

Moon H, Lee YS, Roh S, Burnette CE. 2018. Factors associated with American Indian mental health service use in comparison with white older adults. *J. Racial Ethn. Health Disparities* 5(4):847–59

Moore LA, Aarons GA, Davis JH, Novins DK. 2015. How do providers serving American Indians and Alaska Natives with substance abuse problems define evidence-based treatment? *Psychol. Serv.* 12(2):92–100

Moorehead VD, Gone JP, December D. 2015. A gathering of Native American healers: exploring the interface of Indigenous tradition and professional practice. *Am. J. Community Psychol.* 56(3):383–94

Morsette A, van den Pol R, Schuldberg D, Swaney G, Stolle D. 2012. Cognitive behavioral treatment for trauma symptoms in American Indian youth: preliminary findings and issues in evidence-based practice and reservation culture. *Adv. Sch. Ment. Health Promot.* 5(1):51–62

Moullin JC, Moore LA, Novins DK, Aarons GA. 2019. Attitudes towards evidence-based practice in substance use treatment programs serving American Indian native communities. *J. Behav. Health Serv. Res.* 46(3):509–20

Myhra LL, Gone JP, Barry DT, Cutter CJ, Faria AB, Beitel M. 2023. Session quality and impact in psychotherapy with American Indian clients. *Psychol. Serv*. 20(Suppl. 1):86–93

NCAI (Natl. Congr. Am. Indians Policy Res. Cent.). 2021. *Research policy update: a first look at the 2020 Census American Indian/Alaska Native redistricting data*. Data Overview, NCAI, Washington, DC. **https://www.ncai.org/policy-research-center/research-data/prc-publications/Overview_of_2020_AIAN_Redistricting_Data_FINAL_8_13_2021.pdf**

Novins DK, Aarons GA, Conti SG, Dahlke D, Daw R, et al. 2011. Use of the evidence base in substance abuse treatment programs for American Indians and Alaska natives: pursuing quality in the crucible of practice and policy. *Implement. Sci.* 6:63

Novins DK, Croy CD, Moore LA, Rieckmann T. 2016. Use of evidence-based treatments in substance abuse treatment programs serving American Indian and Alaska Native communities. *Drug Alcohol Depend.* 161:214–21

O'Malley SS, Robin RW, Levenson AL, GreyWolf I, Chance LE, et al. 2008. Naltrexone alone and with sertraline for the treatment of alcohol dependence in Alaska natives and non-natives residing in rural settings: a randomized controlled trial. *Alcohol Clin. Exp. Res.* 32(7):1271–83

Payne HE, Steele M, Bingham JL, Sloan CD. 2018. Identifying and reducing disparities in mental health outcomes among American Indians and Alaskan Natives using public health, mental healthcare and legal perspectives. *Adm. Policy Ment. Health Ment. Health Serv. Res.* 45(1):5–14

Pearson CR, Kaysen D, Huh D, Bedard-Gilligan M. 2019. Randomized control trial of culturally adapted cognitive processing therapy for PTSD substance misuse and HIV sexual risk behavior for Native American women. *AIDS Behav*. 23(3):695–706

Pham TV, Fetter AK, Wiglesworth A, Rey LF, Prairie Chicken ML, et al. 2021. Suicide interventions for American Indian and Alaska Native populations: a systematic review of outcomes. *SSM Ment. Health* 1:100029

Pham TV, Pomerville A, Burrage RL, Gone JP. 2022. An interview-based evaluation of an Indigenous traditional spirituality program at an urban American Indian health clinic. *Transcult. Psychiatry*. In press. **https://doi.org/10.1177/13634615221076706**

Pomerville A, Burrage RL, Gone JP. 2016. Empirical findings from psychotherapy research with Indigenous populations: a systematic review. *J. Consult. Clin. Psychol.* 84(12):1023–38

Pomerville A, Fetter AK, Gone JP. 2022. American Indian behavioral health treatment preferences as perceived by Urban Indian Health Program providers. *Qual. Health Res.* 32(3):465–78

Pomerville A, Gone JP. 2018. Behavioral health services in urban American Indian health organizations: a descriptive portrait. *Psychol. Serv.* 15(1):1–10

Roh S, Brown-Rice KA, Lee KH, Lee YS, Yee-Melichar D, Talbot EP. 2015. Attitudes toward mental health services among American Indians by two age groups. *Commun. Ment. Health J.* 51(8):970–77

Spencer DJ. 2000. Anomie and demoralization in transitional cultures: the Australian Aboriginal model. *Transcult. Psychiatry* 37(1):5–10

Stewart TJ, Swift JK, Freitas-Murrell BN, Whipple JL. 2013. Preferences for mental health treatment options among Alaska Native college students. *Am. Indian Alsk. Native Ment. Health Res.* 20(3):59–78

Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

Straus AS. 1977. Northern Cheyenne ethnopsychology. *Ethos* 5(3):326–57

Straus AS. 1982. The structure of the self in Northern Cheyenne culture. In *Psychosocial Theories of the Self*, ed. B Lee, pp. 111–28. Boston: Springer

Sturm C. 2011. *Becoming Indian: The Struggle over Cherokee Identity in the Twenty-First Century*. Santa Fe, NM: Sch. Adv. Res.

Thornton R. 1987. *American Indian Holocaust and Survival: A Population History Since 1492*. Norman: Univ. Okla. Press

Tingey L, Larzelere F, Goklish N, Rosenstock S, Mayo-Wilson LJ, et al. 2020. Behavioral and mental health outcomes from an RCT of a youth entrepreneurship intervention among Native American adolescents. *Child. Youth Serv. Rev.* 119:105603

Tribal Health Res. Off. 2019. *U.S. National Institutes of Health 2019 Traditional Medicine Summit report: maintaining and protecting culture through healing*. Rep., NIH, Bethesda, MD. **https://dpcpsi.nih.gov/sites/default/files/NIH-THRO-2019-Traditional-Medicine-Summit-Report.pdf**

Tuck E, Yang KW. 2012. Decolonization is not a metaphor. *Decolonization* 1:1–40

Urban Indian Health Inst. 2012. *A profile of urban Indian health organization program planning to support behavioral health*. Rep., Urban Indian Health Inst., Seattle, WA. **http://www.uihi.org/wp-content/uploads/2012/08/BH-Capacity-Report-COMBINED_22August12.pdf**

Venner KL, Greenfield BL, Hagler KJ, Simmons J, Lupee D, et al. 2016. Pilot outcome results of culturally adapted evidence-based substance use disorder treatment with a Southwest tribe. *Addict. Behav. Rep.* 3:21–27

Venner KL, Serier K, Sarafin R, Greenfield BL, Hirchak K, et al. 2021. Culturally tailored evidence-based substance use disorder treatments are efficacious with an American Indian Southwest tribe: an open-label pilot-feasibility randomized controlled trial. *Addiction* 116(4):949–60

Villanueva M, Tonigan JS, Miller WR. 2007. Response of Native American clients to three treatment methods for alcohol dependence. *J. Ethn. Subst. Abuse* 6(2):41–48

Vizenor GR. 1999. *Manifest Manners: Narratives on Postindian Survivance*. Lincoln: Univ. Neb. Press

Walls ML, Johnson KD, Whitbeck LB, Hoyt DR. 2006. Mental health and substance abuse services preferences among American Indian people of the northern Midwest. *Community Ment. Health J.* 42(6):521–35

Walls M, Sittner KJ, Whitbeck LB, Herman K, Gonzalez M, et al. 2021. Prevalence of mental disorders from adolescence through early adulthood in American Indian and First Nations communities. *Int. J. Ment. Health Addict.* 19(6):2116–30

Walls ML, Whitbeck L, Armenta B. 2016. A cautionary tale: examining the interplay of culturally specific risk and resilience factors in Indigenous communities. *Clin. Psychol. Sci.* 4(4):732–43

Warne D, Dulacki K, Spurlock M, Meath T, Davis MM, et al. 2017. Adverse childhood experiences (ACE) among American Indians in South Dakota and associations with mental health conditions, alcohol use, and smoking. *J. Health Care Poor Underserved* 28(4):1559–77

Wendt DC, Gone JP, Nagata DK. 2015. Potentially harmful therapy and multicultural counseling: bridging two disciplinary discourses. *Couns. Psychol.* 43(3):334–58

Wendt DC, Huson K, Albatnuni M, Gone JP. 2022. What are the best practices for psychotherapy with Indigenous peoples in the United States and Canada? A thorny question. *J. Consult. Clin. Psychol.* 90(10):802–14

Wexler L, Silveira ML, Bertone-Johnson E. 2012. Factors associated with Alaska Native fatal and nonfatal suicidal behaviors 2001–2009: trends and implications for prevention. *Arch. Suicide Res.* 16(4):273–86

Whitbeck LB, Hoyt D, Johnson K, Chen X. 2006. Mental disorders among parents/caretakers of American Indian early adolescents in the northern Midwest. *Soc. Psychiatry Psychiatr. Epidemiol.* 41:632–40

Whitbeck LB, Sittner Hartshorn KJ, Crawford DM, Walls ML, Gentzler KC, Hoyt DR. 2014. Mental and substance use disorders from early adolescence to young adulthood among indigenous young people: final diagnostic results from an 8-year panel study. *Soc. Psychiatry Psychiatr. Epidemiol.* 49(6):961–73

Whitbeck LB, Yu M, Johnson KD, Hoyt DR, Walls ML. 2008. Diagnostic prevalence rates from early to mid-adolescence among indigenous adolescents: first results from a longitudinal study. *J. Am. Acad. Child Adolesc. Psychiatry* 47(8):890–900

Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

White T. 2013. Almost without hope: seeking a path to health on the Rosebud Indian reservation. *Stanford Med.* 30(3):34–39. **https://sm.stanford.edu/archive/stanmed/2013fall/article9.html**

Wiglesworth A, Rey LF, Fetter AK, Prairie Chicken ML, Azarani M, et al. 2022. Attempted suicide in American Indian and Alaska Native populations: a systematic review of research on protective factors. *Clin. Psychol.* 29(3):205–18

Witherspoon G. 1977. *Language and Art in the Navajo Universe*. Ann Arbor: Univ. Mich. Press

Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

Annual Review of
Clinical Psychology

Volume 19, 2023

# Contents

A Clinical Psychologist Who Studies Alcohol
*Kenneth J. Sher* ..... 1

Community Mental Health Services for American Indians and Alaska Natives: Reconciling Evidence-Based Practice and Alter-Native Psy-ence
*Joseph P. Gone* ..... 23

Culturally Responsive Cognitive Behavioral Therapy for Ethnically Diverse Populations
*Stanley J. Huey Jr., Alayna L. Park, Chardée A. Galán, and Crystal X. Wang* ..... 51

What Four Decades of Meta-Analysis Have Taught Us About Youth Psychotherapy and the Science of Research Synthesis
*John R. Weisz, Katherine E. Venturo-Conerly, Olivia M. Fitzpatrick, Jennifer A. Frederick, and Mei Yi Ng* ..... 79

Evaluation of Pressing Issues in Ecological Momentary Assessment
*Arthur A. Stone, Stefan Schneider, and Joshua M. Smyth* ..... 107

Machine Learning and the Digital Measurement of Psychological Health
*Isaac R. Galatzer-Levy and Jukka-Pekka Onnela* ..... 133

The Questionable Practice of Partialing to Refine Scores on and Inferences About Measures of Psychological Constructs
*Rick H. Hoyle, Donald R. Lynam, Joshua D. Miller, and Jolynn Pek* ..... 155

Eating Disorders in Boys and Men
*Tiffany A. Brown and Pamela K. Keel* ..... 177

Mental Health of Transgender and Gender Diverse Youth
*Natalie M. Wittlin, Laura E. Kuper, and Kristina R. Olson* ..... 207

Behavioral Interventions for Children and Adults with Tic Disorder
*Douglas W. Woods, Michael B. Himle, Jordan T. Stiede, and Brandon X. Pitts* ..... 233

Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.

The Garrett Lee Smith Memorial Act: A Description and Review of the Suicide Prevention Initiative
*David B. Goldston and Christine Walrath* ..... 261

Racism and Social Determinants of Psychosis
*Deidre M. Anglin* ..... 277

Developmental Consequences of Intimate Partner Violence on Children
*G. Anne Bogat, Alytia A. Levendosky, and Kara Cochran* ..... 303

Psychoneuroimmunology: An Introduction to Immune-to-Brain Communication and Its Implications for Clinical Psychology
*Julienne E. Bower and Kate R. Kuhlman* ..... 331

Racial, Ethnic, and Cultural Resilience Factors in African American Youth Mental Health
*Enrique W. Neblett Jr.* ..... 361

Acculturation and Psychopathology
*Gail M. Ferguson, José M. Causadias, and Tori S. Simenec* ..... 381

Posttraumatic Stress Disorder in Refugees
*Richard A. Bryant, Angela Nickerson, Naser Morina, and Belinda Liddell* ..... 413

Risk and Resilience Among Children with Incarcerated Parents: A Review and Critical Reframing
*Elizabeth I. Johnson and Joyce A. Arditti* ..... 437

Supernatural Attributions: Seeing God, the Devil, Demons, Spirits, Fate, and Karma as Causes of Events
*Julie J. Exline and Joshua A. Wilt* ..... 461

**Errata**

An online log of corrections to *Annual Review of Clinical Psychology* articles may be found at http://www.annualreviews.org/errata/clinpsy

Annu. Rev. Clin. Psychol. 2023.19:23-49. Downloaded from www.annualreviews.org
Access provided by 66.234.196.250 on 07/08/23. See copyright for approved use.