5-2020

Barriers to Integrated Primary Care and Specialty Mental Health Services: Perspectives from Latinx and Non-Latinx White Primary Care Patients

Elizabeth A. Anastasia
University of Arkansas, Fayetteville

Barriers to Integrated Primary Care and Specialty Mental Health Services: Perspectives from Latinx and Non-Latinx White Primary Care Patients

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy in Psychology

by

Elizabeth A. Anastasia
University of Michigan
Bachelor of Arts in Psychology, and Spanish, 2012
University of Arkansas
Master of Arts in Psychology, 2014

May 2020
University of Arkansas

This dissertation is approved for recommendation to the Graduate Council.

_____
Ana J. Bridges, PhD
Dissertation Director

_____
Timothy Cavell, PhD
Committee Member

_____
James Lampinen, PhD
Committee Member

Abstract

High need, low access, and rising health care costs reveal the inadequacies of the current mental health system in the U.S. Racial/ethnic minorities, including Latinxs, face substantial disparities in accessing mental health treatment compared with non-Latinx Whites. Integrated primary care (IPC) offers an alternate model for meeting mental health needs by providing care in a way that is accessible to the general population. Though it has been suggested that IPC may reduce health disparities by decreasing barriers to mental health treatment, empirical data relevant to this question are limited. A series of three studies were conducted using a mixed methodology approach to better understand how the primary stakeholders in the mental health system, potential recipients, perceive barriers to accessing mental health treatment by setting (IPC or specialty mental health [SMH]) and whether this process varies by Latinx or non-Latinx White ethnicity. In Study 1, a sample of 95 IPC patients completed a brief structured interview regarding their perceptions of barriers to remaining in IPC for continued treatment versus receiving a referral to SMH. Results showed a main effect of setting, with fewer barriers ascribed to accessing IPC than SMH; a setting by ethnicity interaction revealed Latinx patients endorsed greater barriers to SMH than did non-Latinx White patients. In Study 2, a sample of 13 IPC patients participated in qualitative telephone interviews focused around their experience of barriers and care in IPC. The themes that emerged in the coding of qualitative data suggested patients found behavioral health treatment in IPC to be accessible, particularly for individuals with little knowledge of mental health services, maintained a positive impression of care received, and considered the practical elements of the IPC model of service delivery to be acceptable. However, some Latinx patients were more likely to express dissatisfaction with care related to interpersonal aspects of their interactions with behavioral health providers. In Study 3,

a sample of 97 non-treatment seeking participants were recruited from a local cultural festival and randomly assigned to complete a questionnaire regarding their perceptions of barriers to receiving mental health treatment in either the IPC or SMH setting. Non-treatment seeking individuals did not endorse a difference in barriers by setting, nor was ethnicity associated with a differing report of barriers to care. Overall, it appears IPC patients perceive behavioral health treatment delivered in primary care to be satisfactory, beneficial, and successful in reaching individuals with mental health need who otherwise may not receive care. Non-treatment seeking individuals, who may have lower mental health need and less experience attempting to access care, do not identify a difference in barriers between the IPC and SMH settings. Findings suggest delivering care in the IPC setting can be an effective method of service delivery with the potential to reduce barriers to care, although key elements of IPC may need to be addressed to increase acceptability across all population subgroups.

Keywords: integrated primary care (IPC), treatment barriers, health disparities

Table of Contents

Introduction

Barriers to Integrated Primary Care and Specialty Mental Health Services:

Perspectives from Latinx and Non-Latinx White Primary Care Patients

As the majority of people with mental health disorders in the U.S. are not able to access mental health treatment (e.g., Kessler et al., 2005; Walker, Cummings, Hockenberry, & Druss 2015; Wang et al., 2005a), it is necessary to consider alternative modalities of mental health service delivery. Since many individuals with mental health problems present to primary care for assistance, the integration of behavioral health services into the primary care setting is a promising option for better addressing mental health need (Kessler & Stafford, 2008; Robinson & Reiter, 2016). While initial evidence suggests integrated primary care (IPC) improves access to mental health care and reduces health disparities for racial/ethnic minorities (Bridges et al., 2014; Bridges et al., 2017), little is known about *how* IPC improves access to mental health treatment and whether this varies among different racial/ethnic groups. The current set of three studies proposes to examine perceptions of barriers to IPC versus specialty mental health (SMH) services in clinical and community samples of Latinx and non-Latinx White participants. Together, the studies will inform whether the promise of IPC for reducing barriers to accessing mental health care is consistent with the experiences of patients in IPC settings.

The State of Mental Health Service Utilization

In the United States, access to treatment for mental health concerns is abysmal, with research suggesting as many as 60 to 70% of adults with psychological disorders do not receive any treatment (Kessler et al., 2005; Walker et al., 2015; Wang et al., 2005a). These findings pertain to use of mental health treatment options at their broadest level, including psychiatry, SMH services, general medical services, human services, and alternative medicine. Data from

the National Comorbidity Survey-Replication (NCS-R) suggest only 24% of individuals with a psychological disorder sought SMH services in the past year (10% with a psychiatrist and 14% from another mental health professional; Kessler et al., 2005). Rates of past-year SMH service use in nonclinical samples range from 5 to 13% (Alegría et al., 2002; Kessler et al., 2005; Wang et al., 2005a). Rates of mental health service use vary by psychological disorder and by demographic variables such as age, gender, race/ethnicity, socioeconomic status (SES), and level of education (e.g., Alegría et al., 2002; Howard et al., 1996; Mackenzie, Gekoski, & Knox, 2006; Mojtabai, 2005; Möller-Leimkühler, 2002; Young, Klap, Sherbourne, & Wells, 2001).

Of individuals who eventually make contact with mental health services, many do so after a considerable delay (e.g., 6-8 years for mood disorders, 9-23 years for anxiety disorders) and terminate services prematurely, often after only one or two sessions (Olfson et al., 2009; Wang et al., 2005b). Furthermore, many individuals who pursue mental health care are unlikely to receive evidence-based treatment or guideline-congruent care (e.g., Drake et al., 2001; McHugh and Barlow, 2010). Although the SMH system is ostensibly in place to treat the psychological concerns of the general population, primary care has become the "de facto" route of mental health service delivery, as people with psychological disorders are more likely to present to primary care than any other type of provider (e.g., psychiatrist, social worker; Kessler & Stafford, 2008b; Regier, Goldberg, & Taube, 1975; Wang, Berglund, & Kessler, 2000). Wang et al. (2005a) found that about 40% of individuals with a psychological disorder received some treatment in the past year, with just over 30% of treatment seekers receiving minimally adequate care (i.e., appropriate medication for two months and a minimum of four visits with a physician or at least eight visits with a health care provider, each lasting at least 30 minutes). Notably,

patients were more likely to receive minimally adequate care from SMH providers than medical providers.

While accessibility of mental health services is poor overall, extensive research documents worse access to mental health care for racial/ethnic minorities compared to non-Latinx Whites (e.g., Barona & Santos de Barona, 2003; Department of Health and Human Services, 2001; Mills, 2012). Latinxs, African Americans, and Asian Americans are less likely to receive needed SMH services than non-Latinx Whites (Alegría et al., 2002; Kimerling & Baumrind, 2005; Ojeda & McGuire, 2006). Even after controlling for poverty, insurance coverage, and level of education, ethnic minorities who meet criteria for a depressive disorder are less likely to have received any mental health treatment at all in the past year (including primary care) than their non-Latinx White counterparts (Alegría et al., 2008). The mental health system provides less care to Latinxs and African Americans than to non-Latinx Whites, after adjusting for differences in health status of these groups (i.e., prevalence of psychological disorders, physical disability; Cook, McGuire, & Miranda, 2007). Rates of premature termination are higher in Latinxs than in non-Latinx Whites and African Americans, and Latinxs who make contact with mental health services are unlikely to receive culturally appropriate care (e.g., Bernal & Domenech Rodríguez, 2012; Olfson et al., 2009). Among depressed primary care patients, Latinxs are less than half as likely as non-Latinx Whites to receive depression care or minimally adequate treatment for their depression (Lagomasino et al., 2005). Physicians are less likely to detect mental health problems in Latinx or African American patients than non-Latinx White patients (Borowsky et al., 2000). Latinxs who are poor (i.e., family income of less than $15,000 per year) have worse access to SMH care than poor non-Latinx Whites (Alegría et al.,

2002). Disparities in mental health care extend to ethnic minority youth (e.g., Garland et al., 2005; Kataoka, Zhang, & Wells, 2002).

An estimated 15% of U.S. residents live below the federal poverty level and struggle to access needed mental health treatment, despite their higher prevalence of psychological disorders compared to the general population (DeCarlo Santiago, Kaltman, & Miranda, 2012). Living in poverty is characterized by considerable stress and hardship, limited resources, and increased likelihood of experiencing trauma and violence (DeCarlo Santiago et al., 2012). Living in a socioeconomically disadvantaged neighborhood reduces the likelihood of having a usual source of medical care, despite increased probability of unmet health need (Kirby & Kaneda, 2005). In Latinxs, low SES has been linked with greater depression (Kouyoumdjan, Zamboanga, & Hansen, 2003). Andrulis (1998) argues that increasing access to health care is the most effective strategy for reducing socioeconomic health disparities.

Disease burden associated with unmet mental health need results in significant monetary cost and disability. Untreated psychological disorders are associated with substantial health care and legal costs, accidents, the loss of wages, decreased productivity, impairment in social and relationship functioning, and medical health problems (e.g., Kazdin & Blasé, 2011; Prince et al., 2007). Using NCS-R data, Kessler et al. (2008a) estimated a loss of $193 billion in personal earnings in the U.S. in the past year associated with serious mental illness; of the estimated figure, 75% was due to reduced earnings and 25% was due to reduced odds of employment. Much of the additional societal and personal cost accrued from untreated serious mental illness occurs indirectly through diminished labor supply, public income support payments, reduced educational attainment, incarceration, homelessness, and medical complications related to mental illness such as emergency room care, lung disease related to cigarette smoking, and early

mortality (Insel, 2008). Using data from the NCS-R, Druss et al. (2009) found that, compared to chronic medical conditions, mental disorders were associated with comparable impairment at work and greater impairment at home, in one's social life, and in close relationships.

Barriers to Specialty Mental Health Treatment

Barriers to SMH services are numerous and are intensified for members of traditionally underserved groups (e.g., ethnic minorities, low SES; e.g., Ojeda & McGuire, 2006). Presence and severity of psychological conditions correlate with structural and attitudinal barriers to mental health treatment (Mohr et al., 2006; Mojtabai, Olfson, & Mechanic, 2002). Data speaking to the relative importance of structural and attitudinal barriers to mental health treatment are conflicting, with some studies contending that structural barriers are more prohibitive than attitudinal barriers (Chen et al., 2013; Mohr et al., 2006; Substance Abuse and Mental Health Services Administration, 2013; Walker et al., 2015), while others suggest the reverse (Mojtabai et al., 2011; Sareen et al. 2007). The APA Presidential Task Force on Immigration (2013) classifies the myriad barriers to mental health treatment into contextual-structural, social-cultural, and clinical-procedural categories.

Contextual-structural barriers

Common structural barriers to mental health treatment are cost, insurance coverage, transportation, childcare, personal availability, and openings for new patients at sources of mental health care (Chen et al., 2013). Data from the National Health Interview Survey suggested increases in cost barriers to SMH treatment in the time period from 1997 to 2002, with 25% of individuals who used SMH services in the past year being unable to afford them (Mojtabai, 2005). Rowan, McAlpine, and Blewett (2013) also detected an increase in cost barriers to mental health treatment between 2009 and 2010. The degree to which cost is an

impediment to accessing mental health treatment is correlated with severity of psychological distress; in Mojtabai et al.'s (2011) study using NCS-R data, only 9% of participants with mild psychological disorders compared to 26% with severe psychological disorders identified financial barriers to treatment.

Cost barriers to mental health treatment are heavily influenced by insurance coverage and national healthcare policy. Data from the National Survey on Drug Use and Health reveal that health insurance coverage predicts use of mental health services and is inversely related to perceptions of personal unmet mental health need (Walker et al., 2015). Uninsured people report more structural barriers and fewer attitudinal barriers to mental health treatment (i.e., outpatient counseling or psychotropic medication) than the insured. Seventy-five percent of the uninsured with a mental illness fail to receive treatment. Before the passage of the Patient Protection and Affordable Care Act of 2010 (ACA), individuals with mental health problems were significantly less likely than other individuals to have any insurance coverage (Walker et al., 2015).

The ACA (2010) was expected to expand mental health insurance coverage for over 60 million Americans due to the essential benefit health provision, which mandates coverage of mental health services at parity with general medical benefits and includes the option for states to expand Medicaid coverage (Beronio, Glied, & Frank, 2014). Preliminary results suggest 30 million Americans have gained health insurance coverage under the ACA (Blumenthal, Abrams, & Nuzum, 2015). One study found young adults who were eligible for the dependent coverage provision (ages 19-25 years) had higher reports of excellent mental health relative to the control group (ages 26-34; Chua & Sommers, 2014). Medicaid expansion enacted by 28 states resulted in expanded insurance coverage and lower out-of-pocket costs for mental health services for low-income adults (Blumenthal et al., 2015; Golberstein & Gonzales, 2015). After taking effect

in 2014, the ACA had a small immediate effect on reducing racial/ethnic disparities in insurance coverage, decreasing the uninsured rate for Latinxs by 7% and African Americans by 5%, compared to non-Latinx Whites by 3% (Buchmueller, Levinson, Levy, & Wolfe, 2016). While it remains unclear what will come of efforts to "repeal and replace" the ACA (e.g., Gostin, Hyman, & Jacobson, 2017), changes in insurance coverage will have significant implications for access to mental health care. Compared to individuals with low income living in other wealthy nations that offer nationalized health care (i.e., Canada, the Netherlands), low-income U.S. residents report greater financial barriers to mental health treatment (Sareen et al., 2007).

Several studies have examined various structural barriers to mental health treatment. Data from the National Survey on Drug Use and Health (N = 36,647) indicated that, among adults with mental illness who perceived unmet need for treatment, 51% experienced a cost barrier to treatment, 14% did not have enough time, and 12% were impeded by lack of insurance coverage (Walker et al., 2015). Mohr et al. (2006) found in a sample of primary care patients who returned a mail survey (N =290 out of 904 surveys mailed, 61% non-Latinx White, 7% Latinx) that participants identified cost (47%), time (18%), transportation (13%) and childcare or care of disabled family members (11%) as obstacles to receiving therapy. Somewhat fewer NCS-R participants (N = 5,962) identified structural barriers to mental health treatment, with 15% endorsing cost barriers, 13% limited availability, 10% inconvenience, and 6% inadequate transportation (Mojtabai et al., 2011). Unsurprisingly, samples comprised of less advantaged groups report more substantial structural barriers to treatment than samples with more advantaged groups. In a small but diverse sample (N = 105, 24% non-Latinx White, 31% Latina, 77% uninsured), Alvidrez and Azocar (1999) found that patients of a public women's clinic with any mental health symptoms had a high need for treatment (75% had a probable psychiatric

disorder), but 83% of these women with high need for treatment could not afford it, 46% did not have the time to spare, 33% did not have transportation, and 20% were unable to secure childcare in order to pursue treatment. Even with cost excluded, 70% reported at least one other structural barrier to accessing mental health treatment. All patients except for one indicated interest in receiving mental health treatment, though less than one third were interested in medication for depression or anxiety. In a sample of rural, older adults who responded to mailed flyers (N = 478; 81% non-Latinx White), 58% identified a cost barrier to participating in mental health treatment, 37% invoked distance to sources of mental health treatment as an obstacle, and 29% were discouraged from seeking treatment by limited access to providers who accept Medicare (Brenes, Danhauer, Lyles, & Miller, 2015).

Structural barriers to mental health treatment are amplified for Latinxs. In the National Latino and Asian American Study (NLAAS), Latinxs who were born outside of the U.S., were monolingual Spanish-speakers, were younger than 12 years or older than 35 years at migration, had fewer years of residence in the U.S., and were first-generation immigrants were less likely to use mental health services than their counterparts (Alegría et al., 2007). As a group, Latinxs have lower incomes, full-time employment rates, years of formal education, and insurance coverage than non-Latinx Whites (e.g., Derose et al., 2007; Kouyoumdjan et al., 2003). In 2013, 41% of Latinxs were uninsured compared to 15% of non-Latinx Whites (Buchmueller et al., 2016). One study found 40% of ethnic minorities (including Latinxs) compared to only 12% of non-Latinx Whites reported loss of income as an obstacle to mental health service use (Ojeda & McGuire, 2006). In response to an open-ended question exploring barriers to service utilization in a Latinx sample, Bridges, Andrews, & Deen (2012) found 59% said services were too costly, 35% were deterred by lack of insurance, and 5% mentioned difficulties with transportation. In Mojtabai et

al.'s (2011) study, Latinxs were more likely to report structural barriers to mental health treatment than non-Latinx Whites among participants with mild or moderate mental illness. Focus group studies with Latinxs have consistently identified cost, insurance coverage, and transportation as significant barriers to mental health care for this group (Rastogi, Massey-Hastings, & Wieling, 2012; Uebelacker et al., 2012). Latinx focus group participants also identified a need for information about mental health resources to be better disseminated to members of their community and for mental health services to be available near neighborhoods where Latinxs live (Rastogi et al., 2012). Indeed, health insurance coverage, absence of self-reported economic strain, and knowledge of where to seek mental health treatment do facilitate mental health service use by Latinxs (Cabassa, Zayas, & Hansen, 2006). The strongest predictor of mental health service use is past use (e.g., Li, Dorstyn, & Denson, 2016).

Social-cultural barriers

Social and cultural factors also exert considerable influence on patterns of mental health service utilization. Nearly half of individuals with psychological disorders do not perceive the need for mental health treatment (Mojtabai et al., 2011). Those with milder psychological conditions are more likely to report not needing treatment than those with severe problems but, even so, over a quarter of participants with severe psychological disorders do not perceive a need for treatment. Female gender, younger or middle age, less insurance coverage, and higher education, emotional support, psychopathology, and health conditions are associated with higher perceived need for mental health services which, in turn, increases the likelihood of mental health service utilization (Edlund, Unutzer, & Curran, 2006; Li et al., 2016; Mojtabai et al., 2002).

In addition to perceived need, mental health literacy and positive attitudes toward mental health treatment predict mental health service use (Bonabi et al., 2016). Mental health literacy includes recognition of a developing psychological disorder and knowledge of help-seeking options and treatment and the requisite skills to do so; both low mental health literacy and limited knowledge of where to seek treatment have been identified as barriers to mental health care (Bridges et al., 2012; Chen et al., 2013; Gulliver, Griffiths, & Christensen, 2010; Jorm, 2012; Walker et al., 2015). In Brenes and colleagues' (2015) study, half of rural older adults reported concerns about not knowing where to seek treatment.

Studies with European samples find perceived ineffectiveness of mental health treatment to be quite common (endorsed by about one-third of participants in the European Study of Epidemiology of Mental Disorders; e.g., ten Have et al., 2010), while U.S. studies suggest between 8 and 20% of adults with mental health problems perceive mental health treatment to be unhelpful (Alang, 2015; Chen et al., 2013; Mojtabai et al., 2011). In qualitative interviews, Anderson et al. (2006) found that a sample of distressed mothers in disadvantaged communities seeking treatment for their children from community mental health centers were likely to view the causes of their distress as external rather than internal, believing therapy could not help, and perceiving potential negative consequences of seeking therapy (e.g., losing custody of their children).

In Latinxs and non-Latinx Whites, greater belief in treatment efficacy and less embarrassment are associated with use of general medical services for mental health difficulties (Gonzalez, Alegría, Prihoda, Copeland, & Zeber, 2011). Stigma is an identified attitudinal barrier to mental health service seeking, with a small but reliable effect (Clement et al., 2015; Corrigan, 2004). Stigma can be public (negative views of mental illness held collectively by members of a

society) or personal (how the individual would view and treat people with mental illness) and can be harmful to the self-esteem of people with mental health difficulties (Corrigan, 2004; Pedersen & Paves, 2014). Ethnic minorities, youth, men, and individuals in the military or health services are less likely than their counterparts to seek mental health services due to concern about stigma (Alang, 2015; Clement et al., 2015). Eisenberg, Downs, Golberstein, and Zivin (2009) found in a sample of college students (N = 5,555) that personal stigma was higher in young, male, Asian American, international, religious, and poor college students than their counterparts, and was negatively associated with measures of help-seeking including medication, therapy, and nonclinical support, whereas public stigma was unrelated to help seeking. Student ratings of perceived public stigma were higher than of personal stigma. Beyond the role of stigma in mental health service utilization, some individuals prefer to resolve their psychological problems on their own, without the aid of mental health services, and believe they will be able to do so satisfactorily (e.g., Chen et al., 2013; Mojtabai et al., 2011).

A few studies have examined multiple attitudinal barriers to accessing mental health treatment. In Mojtabai et al.'s (2011) NCS-R sample of adults with a psychological disorder, 73% reported low perceived need of treatment, 45% preferred to handle the problem on their own, 16% doubted the effectiveness of therapy, 11% thought the problem would get better on its own, and 9% were concerned about stigma. Adults with unmet mental health needs who participated in the National Survey on Drug Use and Health (N = 2,654, 73% non-Latinx White) identified failure to perceive a need for formal treatment (25%), stigma (23%), and doubts about treatment effectiveness (8%) as reasons for not seeking mental health treatment (Alang, 2015). In Mohr et al.'s (2006) mail survey study assessing primary care patients' attitudes toward psychotherapy (N = 290, 61% non-Latinx White, 7% Latinx), some respondents expressed

discomfort discussing private topics with a stranger (8%) or talking about personal issues (6%), and concern about what others would think (4%) or of being seen while emotional (4%). Depressed individuals were more likely to endorse these emotional barriers to treatment than those who were not depressed.

Perceptions of the utility and feasibility of seeking mental health services are informed by cultural factors. Standard conceptualizations and measures of mental health literacy tend to reflect the Western scientific worldview, which may be at odds with the beliefs and perceptions of some Latinxs, depending on their degree of acculturation. Some studies have suggested low general health literacy and mental health literacy for problems such as depression and psychosis in Latinx samples (e.g., Cabassa, Lester, & Zayas, 2007; Coffman & Norton, 2010; Lopez et al., 2009). Some Latinxs may be reluctant to use a mental health label and instead describe psychological symptoms somatically (e.g., Barona & Santos de Barona, 2003; Kouyoumdjan et al., 2003; Shattell, Hamilton, Starr, Jenkins, & Hinderliter, 2008). Latinxs' patterns of service utilization also suggest they are likely to perceive a need for services in times of psychological crisis, often presenting to the emergency room, but not returning to treatment when the crisis resolves (Antshel, 2002; Wells, Lagomasino, Palinkas, Green, & Gonzalez, 2013).

Specific cultural values have implications for how Latinxs view mental health problems and their treatment. Overall, Latinxs tend to have a strong family orientation and those with a large support network are less likely to seek mental health treatment than to seek support from close family and friends (Andrés-Hyman et al., 2006). Common adherence to traditional masculine values (*machismo*) may amplify unmet mental health needs for Latino men, consistent with the low rates of mental health service use for men of various racial/ethnic groups (Andrés-Hyman, Ortiz, Añez, Paris, & Davidson, 2006; Antshel, 2002; Li et al., 2016). *Marianismo*

reflects the expectation for women to devote themselves to caring for family members, generally prioritizing the needs of others above their own, which could discourage Latina women from seeking outside help for psychological difficulties. Another cultural value, *simpatía*, emphasizes the importance of presenting oneself as agreeable and positive even in times of difficulty and eschewing conflict, which could reduce disclosure of difficulties and receipt of both informal and formal aid for mental health problems (Antshel, 2002; Añez, Paris, Bedregal, Davison, & Grilo, 2005).

The effects of mental illness stigma are intensified for ethnic minorities, who are already stigmatized (Alang 2015; Gary, 2005). Latinxs identify greater concern about the stigma of mental illness and treatment than non-Latinx Whites (Interian, Martinez, Guarnaccia, Vega, & Escobar, 2007; Nadeem, Lange, & Miranda, 2007). Hirai and colleagues (2015) found, in a sample of Mexican American college students ($N = 267$) who were presented with the hypothetical situation of having a psychological disorder, that enculturation and stigma were associated with preferences for no treatment or religious treatment over psychological treatment. However, in the overall sample, conventional psychological treatment was favored over no treatment or religious treatment. Bridges et al. (2012) found 12% of a community Latinx sample had used an alternative or folk healer in the past year, though this was more often for somatic than mental health complaints. Satisfaction with mental health services varies not only by race/ethnicity but also by region, with Latinxs in the West reporting less satisfaction with mental health care (including general medicine, SMH, and alternative sources) than Latinxs living in the Northeastern, Midwestern, and Southern U.S. (Kim et al., 2014).

Members of stigmatized groups (e.g., ethnic minorities and lesbian, gay, bisexual, transgender, and queer (LGBTQ) individuals) may be reluctant to seek mental health services

due to fear of experiencing discrimination while doing so, a reasonable concern as such discrimination is a common occurrence (e.g., Pizer, Sears, Mallory, & Hunter, 2011; Tran, Lee, & Burgess, 2010; Umaña-Taylor & Updegraff, 2006). Using the NLAAS sample, Perez, Fortuna, and Alegría (2008) found 30% of Latinxs reported experiencing daily discrimination, but this varied by age and acculturation, with about half of Latinxs ages 18 to 24 endorsing daily experiences of discrimination. Higher levels of acculturation, higher educational attainment, and male gender were also linked with increased reports of discrimination. It may be that those who are more assimilated are better able to detect discrimination; another possibility is that less acculturated Latinxs are more likely to spend time within their subcultural group, minimizing interactions with non-Latinx Americans who may perpetrate discrimination. Discrimination stress has been linked not only with worse psychological functioning, but also with physical complaints, such as higher blood pressure in Latino men and obesity in Latina women (McClure et al., 2010; Tran et al., 2010; Umaña-Taylor & Updegraff, 2006).

As a highly immigrant population, limited English language proficiency is an oft-cited barrier to accessing mental health services among Latinxs in the U.S. (e.g., Kim et al., 2011; Sentell, Shumway, & Snowden, 2007). Of Latinxs who have had at least one medical visit in the past three months, those with lower English proficiency attend fewer additional medical visits and the magnitude of this finding matches the effects of poor health, no health insurance, and no usual source of care (Derose, 2000). A retrospective study found that the implementation of professional interpreter services increased delivery of medical services to patients with limited English proficiency (Jacobs et al., 2001). Research suggests the use of interpreters results in adequate quality of mental health care if the interpreters are professionally trained; however, availability of bilingual mental health providers and trained interpreters is low (Brune Eiroá-

Orosa, Fischer-Ortman, Delijaj, & Haasen, 2011; Kouyoumdjan et al, 2003; Shattell et al., 2008). While quantitative findings did not detect a difference in therapeutic alliance when trained interpreters and bilingual therapists were used in an integrated primary care clinic, qualitative findings suggested Spanish-speaking Latinx patients preferred to speak with a bilingual therapist and identified threats to therapeutic alliance even with a trained interpreter (Villalobos et al., 2015).

Concerns about deportation are a deterrent to both medical and mental health service seeking for Latinxs, despite the higher prevalence of self-reported psychological distress and poor health for undocumented Latinxs (Berk & Schur, 2001; Cavazos-Rehg, Zayas, & Spitznagel, 2007; Rastogi et al., 2012). It has been estimated that around 10 million undocumented Latinxs are living in the United States (Ortega et al., 2007). Undocumented Latinxs have lower rates of health insurance coverage as they are not eligible for Medicaid, have fewer educational and employment opportunities, and are unable to vote or (in most states) apply for a driver's license (Derose, Escarce, & Lurie, 2007; Gonzalez et al., 2012; Raymond-Flesch, Siemens, Pourat, Jacobs, & Brindis, 2014; Stacciarini et al., 2015). In qualitative interviews, Rastogi and colleagues (2012) found undocumented Latinxs expressed concerns that, if they sought mental health treatment, their records of treatment could be used against them in deportation proceedings. In a study with a sample of Latinxs eligible for Deferred Action for Childhood Arrivals (DACA; Raymond-Flesch et al., 2014), participants reported avoiding the health care system when possible and turning instead to informal sources of care due to cost barriers, limited intergenerational knowledge of where to seek help, not having a driver's license, and mistrust of providers related to discrimination and deportation concerns. The greatest unmet health need for these individuals was mental health need. Deportation concerns also affect the

mental health functioning of Latinxs who are legal residents, but have family members who are undocumented, especially in cases involving the potential separation of parents from their children (e.g., Gulbas et al., 2016; Sladkova, Mangado, & Quinteras, 2012).

Clinical-procedural barriers

In addition to the continued effects of contextual-structural and social-cultural barriers, once individuals make initial contact with mental health services, they may still face insufficient cultural sensitivity of services, clinician bias, communication problems, misdiagnosis, and failure to receive the most efficacious mental health interventions (APA Presidential Task Force on Immigration, 2013; Kohn-Wood & Hooper, 2014). These concerns are especially relevant for members of marginalized and traditionally underserved groups, such as ethnic minorities, LGBTQ individuals, and people with few economic resources (APA Presidential Taskforce on Immigration, 2013; Israel, Walther, Gortcheva, & Perry, 2011). These factors likely play a role in high rates of treatment dropout (Barrett, Chua, Crits-Christoph, Gibbons, & Thompson, 2008); in contrast, positive past experiences of mental health services do predict future service use (Gulliver et al., 2010).

Although several meta-analyses suggest culturally adapted treatments result in improved mental health outcomes for ethnic minorities, including Latinxs (Benish, Quintana, & Wampold, 2011; Griner & Smith, 2006; Hall, Ibaraki, Huang, Marti, & Stice, 2016; Smith, Domenech-Rodriguez, & Bernal, 2011), the cultural competency training of clinicians to disseminate such interventions and provide treatment in a culturally-sensitive manner is limited (Hacker, Anies, Folb, & Zallman, 2015; Kouyoumdjan et al., 2003; Sue, Zane, Hall, & Berger, 2009). Efforts to provide culturally appropriate assessment and treatment are hampered by limited access to norms representative of the Latinx population and Spanish language versions of assessment tools and

evidence-based treatment manuals (e.g., Atdjan & Vega, 2005; Kouyoumdjan et al., 2003). Indeed, misdiagnosis tends to be higher for members of disadvantaged groups than the general population (e.g., Nakash & Saguy, 2015). Mental health service providers often do not know how to draw on strengths from Latinx cultural values, such as family or community support and spiritual resources, and may not know how to address the common view of mind and body as closely connected (Barona & Santos de Barona, 2003). It is often important for therapists to establish warm, interpersonal relationships with their Latinx clients and show respect for them in a culturally appropriate way (e.g., Añez et al., 2005). Research suggests adapting treatment around the patient's "illness myth," or culturally relevant understanding of their mental health problem, is a key ingredient in the superior outcomes of culturally adapted mental health treatment over unadapted treatment (Benish et al., 2011). In a focus group study, Latinxs identified brief amount of time with the provider, lack of timely access to treatment, and the provider's failure to pay attention to them as impediments to successfully accessing depression treatment (Uebelacker et al., 2012). Therapeutic alliance with ethnic minorities can be affected by cultural misunderstandings or miscommunications; further, failure to assess the patient's expectations for and perceptions of therapy can damage therapeutic progress (Antshel, 2002; Vasquez, 2007).

Ethnic minorities overall (Atdjan & Vega, 2005), and Latinxs specifically, often feel mistrustful of mental health providers, whom they often perceive to deliver care that is not sufficiently culturally sensitive (Shattell et al., 2008). These concerns are supported by findings demonstrating clinician bias results in poorer quality of care for Latinxs than non-Latinx Whites (e.g., Kouyoumdjan et al., 2003; Vasquez, 2007). Studies find therapists score lower on measures of empathy and assess poorer prognosis and more blunted affect when working with Latinx than

non-Latinx White patients (reviewed in Kouyoumdjan et al., 2003). Cachelin and Striegel-Moore (2006) found that, out of women who had eating disorders, Mexican Americans were less likely to be referred for evaluation of eating concerns or even to be asked about eating disorder symptoms than European Americans. Implicit clinician biases commonly result in microaggressions (subtle degradations of a marginalized group), which can damage the therapeutic relationship and detract from the intended benefits of therapy (Sue et al., 2007; Vasquez, 2007). Latinx focus group participants reported feeling "dehumanized" in interactions with providers when seeking depression treatment (Uebelacker et al., 2012).

Conflicting results have been found regarding the impact of racial/ethnic matching of patient and therapist (Kouyomdjan et al., 2003). Cabral and Smith's (2011) meta-analysis found that people prefer and perceive more positively therapists who match their race/ethnicity; however, racial/ethnic matching was found to have little impact on therapy outcomes. Meta-analytic results for Latinxs specifically indicated that Latinxs had a strong preference for ethnic match with their therapist, but their perceptions of therapists varied only slightly by racial/ethnic match. Research suggests gender and ethnic matching does not improve rates of premature termination (Kouyoumdjan et al., 2003).

In summary, an abundance of structural-contextual (e.g., cost, insurance coverage, transportation, personal availability), social-cultural (e.g., low perceived need, stigma, doubts about the efficacy of therapy, preference to resolve the problem without help), and clinical-procedural obstacles (e.g., misdiagnosis, limited dissemination of efficacious treatments) restrict access to adequate mental health care for a large portion of people with psychological disorders. Financial and other structural barriers are exacerbated for Latinxs compared to non-Latinx Whites, and Latinxs face formidable barriers that are unlikely to pose a problem for many non-

Latinx Whites, such as limited English proficiency, deportation concerns, and discrimination. Latinxs also have higher odds of receiving poorer mental health care due to low cultural sensitivity, clinician bias, and misdiagnosis than non-Latinx Whites.

Recommendations for Improving Access to Mental Health Care

Many recommendations have been offered to reduce barriers to mental health treatment and increase health parity. The U.S. Department of Health and Human Services (2001) proposed the following steps for reducing mental health disparities: reduce the cost of services, increase the number of linguistically and culturally competent mental health professionals, and improve detection of mental health problems and quality of mental health care in primary care, where those with psychological disorders are most likely to present seeking aid. Other proposed solutions include: delivering mental health services through technology (e.g., Internet or smartphones), self-help materials, the media, and nontraditional or "lay" mental health providers (Kazdin & Blasé, 2011; Kazdin & Rabbit 2013). Making use of interdisciplinary collaboration, prevention, and locations where people in need of mental health treatment are often found, such as primary care, are thought to be fruitful strategies for improving access to mental health care (Kazdin & Blasé, 2011). The APA Presidential Taskforce on Immigration (2013) suggested that mental health disparities could be reduced by maintaining a focus on the context of the person during assessment and intervention, integrating scientific research flexibly into therapy and evaluating therapy's effectiveness regularly with clients, providing culturally sensitive treatment, partnering with community-based organizations, and recognizing and including discussions about systemic racism, discrimination, and social disparities into the provision of mental health services. According to Derose and colleagues (2007), immigrant health disparities can be reduced by expanding health insurance coverage, increasing access to interpreters and bilingual

providers, and strengthening the safety net through building and staffing more community health centers and public health systems.

A community sample of Latinxs in focus groups were invited to comment on strategies for reducing barriers to mental health treatment for Latinxs (Rastogi et al., 2012). They recommended increasing awareness and information about mental health problems and treatment in Latinx communities, making affordable mental health services available in the community, hiring Spanish-speaking personnel, and training personnel to work more effectively with Spanish-speakers by forming warm, personal relationships with their clients and offering encouragement. Participants also mentioned the need for more openness and support in discussing mental health problems and help-seeking from within Latinx families and communities.

Primary Care

As primary care has become the default outlet of mental health service delivery to the U.S. population, it offers a promising venue for reducing mental health disparities (Kessler 2008b; Regier et al., 1978; Wang et al., 2006). Latinxs are also more likely to present to primary care for assistance with mental health problems than to any other resource, including SMH and informal and religious sources of care (e.g., Barona & Santos de Barona, 2003; Bridges et al., 2012; Vega, Kolody, Aguilar-Gaxiola, & Catalano, 1999; Vega & Lopez, 2001). However, as primary care was not designed to serve as the primary mode of mental health service delivery in the U.S., this has resulted in difficulties for providers (by adding to their work burden in areas outside of their expertise) and for patients (who often do not receive appropriate mental health care in this setting; Blount, 1998; Wang et al., 2006). Patients with mental health problems who present to primary care (about a quarter of primary care patients have a psychological disorder;

Katon & Unützer, 2013) may receive psychotropic medication, but are unlikely to receive psychotherapeutic interventions (Kessler et al., 2008b). Patients whose mental health problems are not adequately addressed in primary care or elsewhere over-utilize medical care resources, resulting in high annual health costs, worse physical health, less effective medical treatment, and higher mortality rates than individuals without mental health problems (Kessler & Stafford, 2008b). Additionally, concerns about culturally sensitive provision of services remain relevant in medical care settings. Primary care providers are less likely to detect significant mental health problems in Latinxs, African Americans, and men compared to non-Latinx Whites, Asian Americans, and women (Borowsky et al., 2000). Blair and colleagues (2013) found that medical clinicians self-reported minimal explicit bias, but implicit bias was associated with lower therapist satisfaction ratings by Latinx and African American patients than non-Latinx Whites, with Latinxs providing lower satisfaction ratings than African Americans.

Although theoretically the widespread accessing of primary care could make it a gateway to mental health services through referral, only a small number of referred primary care patients actually make contact with mental health services (e.g., Hacker et al., 2014; Smith et al., 2009; Williams, Palmes, Klinepeter, Pulley, & Foy, 2005). Cunningham (2009) found two-thirds of primary care physicians ($N = 2{,}900$) were unable to secure mental health services for their patients, with about half of them citing inadequate insurance coverage, shortage of mental health providers, and health plan network and administrative barriers as significant barriers to referral.

Integrated Primary Care.

As individuals with psychological disorders are more likely to present to primary care than SMH services, but primary care is not equipped to well manage psychological disorders, integrating mental health services within the primary care setting has been proposed as a solution

to the wide gap between mental health need and access to mental health care (e.g., Blount et al., 1998; Kessler et al., 2008b; Robinson & Reiter, 2016). Similarly, many have suggested the IPC model of service delivery could reduce health disparities for ethnic minorities (e.g., Benuto & O'Donahue, 2016; Bridges et al., 2014, Farber, Ali, Van Sickle, & Kaslow, 2017; Sanchez, Chapa, Ybarra, & Martinez Jr., 2014).

In the IPC model of service delivery, behavioral health providers (BHPs) collaborate with physicians and other members of the medical team to provide holistic biopsychosocial services to patients in primary care clinics (e.g., Robinson & Reiter, 2007). Blount (1998) identified five levels of the integration of behavioral health services into primary care, each defined by the degree of integration. Lower levels of integration are characterized by separate locations and patient charts between medical and mental health professionals and infrequent, formal consultation between them. The next step in integration involves co-location of medical and mental health providers, with separate office space and patient charts, but regular referrals and consultation between them. Higher levels of integration are characterized by shared locations, office spaces, and patient charts, frequent referrals, and regular, informal consultation.

In IPC, the majority of behavioral health patients are referred by medical providers through "warm handoffs," in which the primary care provider identifies a mental health concern in the patient's medical visit and the patient is offered a behavioral health consultation either during their medical visit or later the same day. Unlike SMH, the course of IPC treatment consists of few (typically 1-4), brief (approximately 30 minutes) appointments spaced out over the course of several weeks. Within the brief sessions, BHPs rapidly identify a target problem with the patient and use functional analysis to develop a simple, concrete intervention that usually begins in the initial behavioral health appointment. BHPs work with patients who have a

wide variety of behavioral health concerns, ranging from mood and anxiety difficulties to management of chronic health conditions, smoking cessation, and efforts to improve patient health through healthy diet and exercise. Patients with problems that exceed the scope of IPC, such as serious mental illness and personality disorders, are typically referred out to SMH. The goal of IPC treatment is to improve patient functioning at the population level, prioritizing reach of services over elimination of psychological symptoms for patients. IPC is intended to serve as early intervention and prevention, and is ideally suited for treating comorbid medical and mental health conditions.

IPC is shown to be effective for improvement of functioning and symptoms of patients who present to primary care with mental health problems (Bridges et al., 2015; Bryan, Morrow, & Appolonio, 2009; Bryan et al., 2012; Ray-Sannerud et al., 2012). Symptom reduction has been demonstrated in diverse samples with CBT-based behavioral health interventions (e.g., Bridges et al., 2014; Ray-Sannerud et al., 2012) and for patients with severe mental health problems (e.g., Bryan et al., 2012). IPC patients, including Latinx patients, report high levels of satisfaction with services and therapeutic alliance (Corso et al., 2012; Funderburk & Fielder, 2013; Villalobos et al., 2015). IPC increases efficiency, both administratively and in patient care, and results in a cost savings for the clinic (Blount et al., 2007; Robinson & Reiter, 2016).

IPC may also reduce health disparities by reaching underserved segments of the population, including Latinxs (Benuto & O'Donahue, 2016; Bridges et al., 2014; Farber et al., 2017; Sanchez et al., 2014). To this effect, Bridges et al. (2014) found that Latinx and non-Latinx White IPC patients showed significant and comparable improvements in mental health functioning, strong levels of therapeutic alliance with CBT-based behavioral health interventions, and similar rates of treatment dropout. In cluster analyses of IPC patients by self-

reported behavioral health concerns, history of mental health service utilization, and perceived barriers to mental health service use in the past, Bridges et al. (2017) found 40% of patients (N = 105, 72% Latinx, 26% non-Latinx White) were classified in the "underserved" cluster, characterized by high need, low service use, and high perceived barriers to treatment. This finding supports the idea that some individuals with unmet mental health need who have had limited access to mental health treatment in the past are able to make contact with IPC for at least one appointment.

IPC capitalizes on the ability of many patients with mental health problems to access primary care by providing mental health treatment in the primary care setting. In doing so, IPC preserves the circumvention of barriers inherently reduced by the primary care setting, though the nature of this process has not been articulated. Additionally, IPC does not rely on the individual patient to actively seek out assistance for mental health problems or even recognize the presence of a mental health concern. Patients who present to a medical provider with mental health concerns or medically unexplained somatic symptoms are offered behavioral health services via the warm hand-off without having to navigate the SMH system.

However, there is little empirical evidence to clarify how IPC improves access to mental health care and reduces health disparities, or which barriers or mechanisms are addressed by the model. The format of IPC, consisting of few, brief sessions spread out over the span of several weeks and often paired with medical visits, likely reduces the financial, temporal, and transportation resources needed for treatment compared to SMH, with its hour-long, weekly sessions typically lasting at least several months. The prevention and early intervention focus of IPC likely minimizes the need for future and more comprehensive treatment by addressing psychological problems before they become intractable. Family members are generally welcome

in behavioral health situations, diminishing the need to secure childcare. Direct transfer of the patient from the medical provider to the BHP through warm handoffs, provision of behavioral health services in the primary care setting, often in the same medical exam room as the medical visit, and the framing of behavioral health concerns and interventions within the biopsychosocial model may cause behavioral health services to appear more "medical" in nature, potentially reducing the stigma associated with therapy and psychotropic medication. The nature of behavioral health service delivery in IPC is also relatively anonymous, as it would be difficult for others (e.g., other patients in a waiting room) to discern if the individual is receiving behavioral health services at all.

Fewer structural resources required for behavioral health treatment compared to SMH may be especially relevant for Latinxs, as they overall have lower income and less insurance coverage than non-Latinx Whites (Buchmueller et al., 2016; Derose et al., 2007, Kouyoumdjan et al., 2003). The facility of involving family members in behavioral health appointments and interventions may be especially beneficial for Latinxs, due to their strong family values. Additionally, IPC may fit better with Latinxs' conceptualizations of mental illness and appropriate treatment than SMH, due to the focus on connections between physical and psychological symptoms and recognition of the presentation of psychological disorders through somatic complaints. IPC is well-suited for managing a crisis orientation to treatment, whereas SMH is not well-poised to help patients during a crisis who withdraw from treatment when the crisis passes.

While the abovementioned factors may contribute to increased access to IPC compared to SMH, little is known about the specific mechanisms through which IPC reduces barriers to mental health treatment. Though it appears some individuals who might not otherwise receive

mental health treatment are able to attend an initial behavioral health appointment in primary care, attendance at follow-up behavioral health appointments is often low (e.g., Bridges et al., 2015; Ray-Sannerud et al., 2012). Additional research is needed to better understand how the IPC model of service delivery reduces barriers to treatment relative to SMH care and whether the implications of IPC vary between Latinxs and non-Latinx Whites.

While many of the postulated mechanisms of barrier reduction through the IPC model remain untested, in some cases, the data do contradict prevalent hypotheses. For example, it has been widely speculated that warm handoffs could be a particularly effective way of engaging Latinxs in behavioral health services through conservation of resources and transfer of rapport from the medical provider to the BHP (e.g., Benuto & O'Donahue, 2016). However, Horevitz, Organista, and Orean (2015) found that Spanish-speaking Latinx primary care patients were equally likely to follow-up after referral to behavioral health through a warm handoff (defined as receiving a same-day appointment) or a scheduled appointment another day. English-speaking Latinx patients were more likely to attend a follow-up appointment if the appointment was scheduled for another day, rather than a warm handoff. A subsample of these patients (n = 16) later participated in qualitative interviews to help clarify the unexpected findings, which yielded the information that the quality of the referral experience and the strength of patients' relationships with their medical providers affected their decision to participate in depression treatment, including whether their providers addressed the patients' level of health literacy and their expectations of depression treatment. Latinx patients originally predicted that they would be more likely to attend a behavioral health visit following a warm handoff but, in practice, many experienced warm handoffs as rushed and confusing, especially when facilitated by a medical assistant rather than the medical provider. Patients also indicated they were more likely to attend

a behavioral health appointment if the prescribed treatment fit with their beliefs about depression, consistent with illness myth as a vital component of culturally adapted treatment in meta-analytic research (Benish, Quintana, & Wampold, 2011). The findings of Horevitz et al. suggest it is necessary to empirically examine hypothesized routes of barrier reduction for IPC patients and sets a precedent for the value of augmenting quantitative results with qualitative data in this area of investigation.

Overall Aim

Using a mixed methodology approach, three studies were conducted with the goal of enhancing our understanding of whether and how the IPC setting reduces perceived barriers to mental health treatment compared to the SMH setting, and whether this process varies by Latinx or non-Latinx White ethnicity. Study 1 examined existing IPC patients' perceptions of barriers to continuing behavioral health treatment in IPC versus referral to SMH via a brief semi-structured interview. For Study 2, IPC patients shared their experience of behavioral health care and perception of barriers to IPC in qualitative telephone interviews. A community sample of non-treatment seeking participants were randomly assigned to report on perceived barriers to IPC or SMH settings in Study 3.

Study 1

Study Aim

The purpose of Study 1 was to assess how behavioral health patients utilizing IPC perceive barriers to seeking behavioral health services in IPC versus SMH.

H1: It is hypothesized that there will be a main effect of setting, such that patients will report greater barriers to continued treatment in SMH than IPC services.

H2: It is predicted that there will be a main effect of ethnicity, such that Latinx patients will report greater barriers to continued mental health treatment than non-Latinx White patients.

RQ1: Is there an interaction between setting and ethnicity predictor variables on reported barriers to continued mental health treatment?

Method

Setting

Community Clinic Northwest Arkansas (CC) is a federally qualified health center consisting of several satellite integrated primary care clinics in the Northwest Arkansas area. CC is located in a medically underserved area, with one primary care physician for every 4,000 to 4,999 residents (Health Resources and Services Administration, 2012). Data were collected from three of these clinics, two of which serve a primarily Latinx and highly monolingual Spanish-speaking patient population (CC Springdale; CC Rogers), whereas the other serves a primarily non-Latinx White, rural patient population (CC Siloam Springs). Overall, 90% of patients live within 200% of the federal poverty level (Uniform Data System, 2007). Sliding scale fees are available for uninsured and low-income patients; no patient is turned away due to inability to pay. CC offers interdisciplinary whole-patient care, including medical, dental, behavioral health, pharmacy, patient advocacy, nutrition, and insurance specialist services. Full-time behavioral health providers (BHPs) tend to be licensed social workers. Behavioral health interns in a clinical psychology PhD program see patients at no cost. A licensed psychiatrist rotates time at various satellite clinics. While medical and behavioral health providers typically do not speak Spanish, professional interpreters are available in the clinics.

CC uses the primary care behavioral health model of integrated behavioral health care. As such, patients are typically introduced to behavioral health services through consults, when a BHP is brought into their medical visit to address a specific concern. Patients may then follow up with a short series of scheduled behavioral health appointments. Less often, an episode of behavioral health care is initiated when a patient calls to schedule a behavioral health visit. Behavioral health visits are expected to be brief (less than 30 minutes), targeted, and short-term. Patients requiring more comprehensive treatment are referred out to SMH services.

Participants

A sample of 95 participants (ages 18-78 years, $M = 43.42$, $SD = 12.90$) were recruited from behavioral health visits with behavioral health interns (trainees from a PhD clinical psychology program at a local university) at CC over a period of approximately two years. Inclusionary criteria were the following: adult patient (i.e., 18 years of age or older) who participated in a behavioral health visit during the data collection period, Latinx or non-Latinx White ethnicity, and completion of an outcome evaluation questionnaire and brief structured interview. Fifty-eight percent of participants reported Latinx ethnicity, 77% were female, and 52% had a Spanish language preference. Seventy-nine percent of participants were recruited from the Springdale clinic, 16% from the Siloam Springs clinic, and 5% from the Rogers clinic. Patients presented with a range of global psychiatric distress as measured by the A Collaborative Outcome Resource Network questionnaire's (ACORN; Brown, Simon, Cameron, & Minami, 2015) composite of 0 (*never*) to 4 (*very often*) Likert scaled items (range: 0.45-3.46, $M = 2.06$, $SD = 0.82$).

Measures

All measures used were available in both Spanish and English or were forward and backward translated by bilingual research assistants to ensure comparability. Measures were administered in the language of the patient's preference. Additional demographic and diagnostic information was culled from the patients' medical records and BHPs' notes as needed.

Psychiatric distress

The A Collaborative Outcome Resource Network questionnaire (ACORN; Brown et al., 2015) is a 14-item self-report measure that evaluates patient symptoms and functioning. The adult version of the ACORN covers symptoms related to mood, anxiety, sleep, and substance use in the past 2 weeks. Responses are scored on a Likert scale ranging from 0 (*never*) to 4 (*very often*). Items are averaged to compute a global psychiatric distress score. The ACORN is available in Spanish. Global distress items were reported to have a Cronbach's alpha of .92 in clinical samples in the ACORN manual and global distress items were correlated with results from the Beck Depression Inventory (r = .78; Beck, Steer, & Carbin, 1988). In Study 1, ACORN items had a Cronbach's alpha of .89 for English speakers and .92 for Spanish speakers.

Perceived barriers to continued mental health treatment

For the purposes of the study, the Therapy Setting Preferences and Barriers interview (TheSP-B; Anastasia & Bridges, 2017), a brief (approximately 5-minute) semi-structured interview, was developed to assess patients' perceptions of barriers to two options for continuing mental health treatment: 1) follow-up visits in IPC, and 2) referral for SMH services (Appendix A). The interview contains both open-ended and close-ended (yes/no) questions. Item content was modeled after questions used in the National Comorbidity Survey-Replication (NCS-R,

Kessler et al., 2005a) and adapted to fit the patient population and the purpose of the current study. The interview was designed to provide valuable information about barriers to treatment while only taking a few minutes, so as to not burden the patient or interfere with the IPC model of service delivery. The measure includes the following potential barriers to continued mental health treatment: (1) structural: cost, insurance coverage, transportation, time; (2) attitudinal: preference to resolve the problem alone, doubts about the effectiveness of mental health treatment, reluctance to change therapists; (3) social/cultural: language, deportation concerns. Participants were given the option to identify a salient barrier that was not included in the list. The interview was informally piloted by a behavioral health intern with patients at the CC Springdale clinic to inform usability of the measure within the flow of care. The final list of barriers was influenced by pilot data; reluctance to change therapist was added because this was a frequent open-ended response and stigma was excluded both because the prompt appeared to confuse pilot patients and so as to not introduce or exacerbate concerns of stigma for IPC patients.

Procedures

As part of standard operating procedures of CC, all patients sign a consent form stating that information included in their medical chart may be used for research purposes. At the end of each behavioral health visit, behavioral health interns routinely administer an outcome evaluation questionnaire (the ACORN). During the data collection period, after completing the ACORN, behavioral health interns asked about their patients' willingness to participate in a brief interview to share their opinions about the accessibility of behavioral health services offered at the clinic and potential barriers they may encounter to continued services. After verbal consent was obtained, either the trainee or, if needed, a bilingual research assistant proceeded with the brief

structured interview (THeSP-B). All behavioral health interns were clinical psychology PhD students at a local university. Of the six behavioral health interns involved in data collection, two were bilingual Spanish-speakers. The patient was informed that the overall results of the study would be shared with the administration of their IPC clinic.

Analytic approach

Statistical analyses were computed in SPSS Version 23. Hypotheses 1 and 2 and Research Question 1 were assessed using mixed between-within subjects analysis of variance (ANOVA), with setting (IPC or SMH) and patient ethnicity as independent variables and the sum of patient-reported barriers to treatment as the dependent variable. According to a power analysis using G*Power 3.1 (Faul, Erdfelder, & Buchner, & Lang, 2009) a sample of 54 participants was needed to detect a small effect size with a 95% confidence interval in a mixed between-within subjects ANOVA with 2 groups and 2 measurements. The assumption of homogeneity of variances was upheld per Levene's Test of Equality of Error Variances and Box's Test of Equality of Covariance Matrices for all ANOVAs. *Z*-tests were conducted to examine differences in the proportions of participants who endorsed individual barriers to IPC and SMH settings.

Results

Correlations with phi coefficients.

Phi coefficients were used to assess bivariate relations between patient-reported barriers in both IPC (Table 1) and SMH (Table 2) settings. For Latinx patients reporting on barriers to IPC, presence of an insurance barrier was correlated with preference to resolve one's problem alone ($\Phi = .36$, $p = .008$; Table 1) and with fear of deportation ($\Phi = .39$, $p = .004$). Doubts about the utility of therapy were correlated with reluctance to change therapist ($\Phi = .37$, $p = .007$) and

presence of a time barrier (Φ = .30, p = .028), and reluctance to change therapist was associated with fear of deportation (Φ = .30, p = .026). For non-Latinx White patients reporting on access to integrated primary care, doubts about the utility of therapy were related to the preference to resolve one's problem alone (Φ = .49, p = .002) and reluctance to change therapist (Φ = .41, p = .015).

For Latinx patients reporting on barriers to SMH, presence of an insurance barrier was associated with a cost barrier (Φ = .49, p < .001) and fear of deportation (Φ = .44, p = .001). Reluctance to change therapist was linked with the preference to resolve one's problem alone (Φ = .30, p = .03) and doubts about the utility of therapy (Φ = .28, p =.04). For non-Latinx White patients, doubts about the utility of therapy were again associated with the preference to resolve one's problem alone (Φ = .69, p < .001).

ANOVAs

Statistical analyses were performed with various combinations of barriers: total barriers, a subset of barriers with culturally specific barriers excluded, structural barriers, and attitudinal barriers. All means and standard deviations of summed barriers by setting and ethnicity are located in Table 3.

To address Hypotheses 1 and 2 and Research Question 3, a mixed between-within subjects analysis of variance (ANOVA) was completed, with setting (IPC or SMH) and patient ethnicity as independent variables and the sum of patient-reported barriers to treatment (cost, insurance, transportation, time, preference to resolve the problem alone, doubts about the utility of therapy, reluctance to change therapists, language, fear of deportation) as the dependent variable. There was a significant interaction between setting and ethnicity, Wilks Lambda = .92, $F(1,81) = 6.88$, p = .01, η_p^2 = .08 (Figure 1). There was a substantial main effect for setting,

Wilks Lambda = .46, $F(1,81) = 94.0$, $p < .001$, $\eta_p^2 = .54$, with both Latinx and non-Latinx White patients reporting greater barriers to SMH than IPC services. The main effect comparing Latinx and non-Latinx White ethnicity was not significant, $F(1,81) = 11.82$, $p = .135$, $\eta_p^2 = .03$. Although there was little difference between ethnicities in reported barriers to IPC services, Latinx patients reported a greater number of barriers to SMH services than did non-Latinx White patients.

A second mixed between-within subjects ANOVA was performed with the cultural variables of language and fear of deportation removed from the sum of barriers. With cultural variables removed, there was no longer a significant interaction between setting and ethnicity (Wilks Lambda = .98, $F(1,81) = 1.40$, $p = .24$, $\eta_p^2 = .02$), only a significant main effect of setting (Wilks Lambda = .50, $F(1,81) = 82.10$, $p < .001$, $\eta_p^2 = .50$), with patients endorsing greater barriers to SMH than IPC, regardless of ethnicity ($F(1,81) = 0.38$, $p = .54$, $\eta_p^2 = .01$).

A third mixed between-within subjects ANOVA was performed with setting and patient ethnicity as independent variables and the sum of structural barriers only (i.e., cost, insurance, transportation, time) as the dependent variable. There was no significant interaction between setting and ethnicity, Wilks Lambda = .99, $F(1,85) = 0.82$, $p = .37$, $\eta_p^2 = .01$. There was a substantial main effect for setting, Wilks Lambda = .45, $F(1,85) = 102.94$, $p < .001$, $\eta_p^2 = .55$, with both Latinx and non-Latinx White patients reporting greater barriers to SMH than IPC services. The main effect comparing Latinx and non-Latinx White ethnicity was not significant, $F(1,85) = 0.13$, $p = .72$, $\eta_p^2 = .002$.

A fourth mixed between-with subjects ANOVA was conducted with setting and patient ethnicity as independent variables and the sum of attitudinal barriers only (i.e., preference to resolve the problem alone, doubts about the utility of therapy, reluctance to change therapists) as

the dependent variable. There was no significant interaction between setting and ethnicity, Wilks Lambda = 1.0, $F(1,85) = 0.23$, $p = .63$, $\eta_p^2 < .01$. There was a substantial main effect for setting, Wilks Lambda = .95, $F(1,85) = 4.60$, $p = .035$, $\eta_p^2 = .05$, with both Latinx and non-Latinx White patients reporting greater barriers to SMH than IPC services. There was a marginally significant ($p < 1.0$) main effect comparing Latinx and non-Latinx White ethnicity, with non-Latinx White patients reporting greater attitudinal barriers than Latinx patients, $F(1,85) = 3.19$, $p = .078$, $\eta_p^2 = .04$.

Z-tests

Z-tests were used to examine differences in the proportions of participants who reported individual barriers to IPC and SMH settings (Table 4). A greater number of Latinx and non-Latinx White patients identified cost and insurance barriers to receiving care in SMH than in IPC. A greater number of Latinx patients endorsed a language barrier to treatment in SMH than in IPC.

Discussion

Overall, results suggested that IPC patients perceive greater overall, structural, and attitudinal barriers to seeking treatment in a SMH setting than remaining in IPC, with large effect sizes for overall and structural barriers. While barriers to IPC were perceived similarly by Latinx and non-Latinx White patients, Latinx patients reported greater barriers to SMH than did non-Latinx White patients; this difference was partially fueled by culturally specific barriers (language and deportation concerns) which non-Latinx White individuals in the recruitment location rarely confront. However, the magnitude of this effect was small. Regarding individual barriers, more patients identified cost and insurance barriers to the SMH than IPC settings across

ethnic groups; a greater number of Latinx patients reported a language barrier to SMH than IPC. Proportions of individual attitudinal barriers did not vary by setting.

Study 2

Study Aim

The purpose of Study 2 was to gain a deeper, more nuanced understanding of behavioral health patients' perceptions of IPC.

RQ2: What is the experience of behavioral health care like for IPC patients?

a: How do patients perceive barriers to behavioral health treatment in IPC?

b: How satisfied are patients with their interactions with behavioral health services?

c: How do patients feel about feel about the practical characteristics of behavioral health services delivered in the IPC model?

d: What recommendations do IPC patients have for improving behavioral health services and access to behavioral health treatment?

Method

Setting

Data for Study 2 were collected from Community Clinic NWA (CC; described in Study 1 method) and Salud Family Health Centers (Salud), an IPC clinic in Northeast Colorado. Salud, a federally qualified health center comprising 13 clinics, was founded in 1970 to serve the local migrant farmworker population and continues to treat primarily low-income, medically underserved patients. Data were collected from one clinic located in a Denver suburb with a majority Latinx and Spanish-speaking patient population. Sliding scale fees are available for uninsured and low-income patients; patients are seen by providers regardless of ability to pay.

Whole-patient care at Salud includes medical, dental, behavioral health, pharmacy, care navigation, and nutrition services in addition to shared medical appointments for pregnant women and patients with diabetes. Full-time BHPs are licensed psychologists or social workers. Behavioral health trainees consist of clinical psychology PhD students, predoctoral interns, and postdoctoral fellows. Medical, behavioral health, and other providers are expected to have bilingual proficiency in English and Spanish; thus, trained interpreters are rarely used.

Salud utilizes a unique IPC model offering four distinct behavioral health visit types: behavioral health screens (routine 10-15 minute screening for mental health concerns during medical visits), consults (15-25 minute behavioral health consultations for a concern detected during a medical visit), therapy (30-60 minute scheduled therapy visits typically for limited episodes of fewer than 7 visits), and formal psychological assessment. Behavioral health screens and consults are billed to Medicaid or, if the patient does not have Medicaid, the services are provided at no cost. Therapy visits with full-time BHPs or behavioral health trainees are billed to Medicaid or provided on a sliding scale to uninsured patients. Administrators at Salud emphasize equal standing between medical providers, BHPs, and pharmacists, rather than viewing BHPs as consultants only. Patients requiring more comprehensive treatment or possessing private medical insurance are referred out to SMH services.

Participants

A sample of 13 participants was recruited from visits with behavioral health interns at CC (5 participants) and Salud (8 participants). At Salud, patients were recruited only from behavioral health screen or consult visit types. Inclusionary criteria were the following: adult patient (i.e., 18 years of age or older) who participated in a behavioral health visit during the data collection period, Latinx or non-Latinx White ethnicity, and completion of a 30-minute qualitative

telephone interview. Of the participants, 9 were female, 9 reported Latinx ethnicity, and 7 had a preferred language of Spanish.

Measures

Qualitative data for Study 2 were collected via in-depth telephone interviews intended to yield a fuller understanding of IPC patients' views of mental health treatment options and associated barriers. The semi-structured interview prompts were developed by generation and revision of stem questions by the research team, consultation with an expert in qualitative interview methodology, and informal piloting with an experienced behavioral health intern at CC who served as a mock participant and provided feedback related to the prompts. The qualitative interview protocol can be found in Appendix B.

Procedures

Study participants were recruited from behavioral health visits at CC and Salud, in which they received information about the study, signed a consent form, and agreed to be contacted via telephone to schedule and complete a 30-minute qualitative telephone interview. The patient was informed that the overall results of the study would be shared with the administration of their integrated primary care clinic. The interviews were intended to gather more in-depth information about IPC patients' experience of services in the context of their individual health ecology. All participants received gift card compensation in the amount of $10 mailed to their provided address.

Analytic approach

Research Question 2 and its subcomponents were evaluated through the coding of qualitative responses into content analyzed themes organized by a codebook. A team of research assistants (6 clinical psychology PhD students and 3 licensed clinical psychologists) read through

the interview transcripts in pairs and identified major themes that recurred across interviews. I then condensed and refined these coding themes to form the official codebook. Two research assistants (me and another clinical psychology PhD student) were trained to utilize the codebook and separately coded each interview. Intercoder reliability was adequate ($\kappa > .4$, κ range across themes: 0.46-1.00). Any discrepancies were resolved by consensus between the two coders.

Results

Table 5 presents all thematic categories and relative frequencies of endorsement in the overall sample and by ethnicity. Themes are organized into four general categories: barriers and facilitators to IPC, patient experience of behavioral services, acceptability of the IPC model, and patient recommendations to improve access to behavioral health care.

Barriers and facilitators to IPC

Both structural (i.e., transportation/distance, time/schedule, childcare, insurance, cost) and attitudinal (i.e., knowledge/familiarity, perceived utility of therapy, perceived need, stigma) factors emerged as both potential barriers and potential facilitators to the access of IPC, in addition to one clinical-procedural barrier (i.e., past interactions with providers). Around a quarter of Latinx (22%) and non-Latinx White patients (25%) disclosed transportation as a barrier to accessing IPC. Whereas all non-Latinx White patients (100%) described transportation to IPC as a facilitator of access, less than half of Latinx patients (44%) did so. Latinx patients (56%) more often considered time/schedule to be a facilitator of access than non-Latinx White patients (25%), while two Latinx (22%) and two (50%) non-Latinx White participants did identify time/schedule as a barrier. Three Latinx patients (33%) identified cost as a barrier and one Latinx patient (11%) considered insufficient medical insurance coverage to be a barrier. No

Latinx-White patients described cost or insurance as either a barrier to or a facilitator of care. One Latinx (11%) and one non-Latinx White (25%) patient endorsed childcare as a barrier.

About three-quarters of Latinx (78%) and non-Latinx White patients (75%) reported knowledge/familiarity as a facilitator of access to IPC, including indication that patients with limited knowledge of mental health were able to access behavioral health services in IPC and/or mention of familiarity with the IPC clinic enhancing access. Referring to her experience of a provider-initiated behavioral health visit during a medical appointment, a Latinx patient stated:

> And that's good because some of us still need it and we don't know how to reach out, and there's some people that don't know how to reach out at all, good to check up on them and see if we do need help but we're too shy to say anything.

Another Latinx patient said, "Pues, para mí, más fácil para la clínica [integrada]. *Por qué?* Porque es la que he visitado siempre, es la primera opción que tengo." [Well, for me, it's easier to go to [IPC clinic]. *Why?* Because it is the one I have always gone to, it is my first option.] However, 31% of patients also discussed past instances of failing to reach needed mental health care due to lack of knowledge and familiarity with the mental health system. A non-Latinx White patient reported:

> I really needed to be seeing somebody for assistance but was[n't] because I didn't know what my options were. I tried to look but I wasn't successful. I didn't realize [IPC clinic] was available until recently. I didn't know of options besides [SMH clinic].

About half of patients across both ethnicities (54%) described positive perceptions of the utility of therapy as a facilitator, with only 15% of patients citing doubts about the usefulness of therapy as a barrier to care. Perceived need for mental health care was mentioned as a facilitator of care for 31% of patients. Only one (8%) non-Latinx White patient reported stigma as a barrier to accessing IPC. The positive or negative quality of past interactions with medical or behavioral

health providers were identified both as facilitators of (31%) and barriers to (23%) care, which will be covered in greater detail later.

Patient experience of behavioral health services.

All 13 participants (100%) who were interviewed made statements that expressed satisfaction with current or past behavioral health visits. In addition to conveying satisfaction with current behavioral health visits, two Latinx patients (15% of overall sample) also expressed dissatisfaction with past behavioral health visits with BHPs other than those who recruited them for this study. Both Latinx and non-Latinx White patients were likely to describe overall behavioral health treatment (85%) and specific components of behavioral health treatment (85%) as beneficial. A majority of Latinx patients (67%) and all non-Latinx White patients (100%) expressed the importance of positive interpersonal characteristics of their BHP in shaping their experience of behavioral health care: "He was easy to talk to. He was kind and understanding." Five patients (38%) mentioned perceiving that their BHP has specialized knowledge and expertise to assist them with their behavioral health concern. The benefits of personalized care were brought up by 23% of patients. For example, one non-Latinx White patient said: "[BHP], she really cared about you…with [SMH] they just don't seem like they really care. It makes it difficult to try to communicate with somebody when they just come across as they're forced to be there." Almost one-third of patients (31%) described the care they received as comprehensive, and no patients described their care as lacking in comprehensiveness.

Of the two Latinx patients who expressed past dissatisfaction, one (8% of sample) described overall treatment as not beneficial and the other (8% of sample) described specific treatment components as not beneficial. Both of these patients (15% of sample) attributed their dissatisfaction to negative interpersonal characteristics of their BHP. The first patient stated:

> …pienso que tienen que estar más entendibles con uno, para que uno no siente como yo me sentí y no meterle esa idea cuando uno es gordito que es así. Ella me estaba mandando a hacer ejercicio. Porque yo le comenté que uno también se siente mal, la gente dice que está gordito, voy al doctor y ella dice que sí.
>
> [...I think that they have to be more understanding with a person, so that they don't feel how I felt and put this idea in their head that they are fat and that's how it is. She was instructing me to do exercise. Because I had told her that I was also feeling bad, people say that I am fat, I go to the doctor and she says I am.]

This patient noted that she discontinued behavioral health treatment due to her negative experience, "La otra señora no me gustó esa forma que me habló. Me hizo sentir que no valió la pena...después de una vez dije que ya me siento bien y era mentira." [I did not like how the other lady spoke to me. It made me feel like it wasn't worth it…after one time I said I am feeling better now and that was a lie.]

The other patient specifically cited impersonal care and lack of specialized expertise and knowledge as reasons for their dissatisfaction, saying:

> Me sentía que ella acababa de la escuela, estaba haciendo sus prácticas y siempre me decía esta idea o sea, es que como "nosotros hacemos esto." Cosas de la escuela y no nos enfocaba en el problema que tenía. Y para mí lo que yo pensaba de ella, está en la escuela practicando no sé pero te digo le di mis problemas y ahora, no sé, "cómo anda?" le decía, entonces como el primer día y la siguiente se le olvidó...Ella no me estaba ayudando con los problemas que tenía...También me dio pena que si me cambiaba por otra persona.
>
> [I felt that she had just finished her schooling, she was doing her internship and was always telling me this or that idea, like "Let's do this." Things from school and we did not focus on the problem that I had. And for me, what I was thinking about her, she is in school doing her training, I don't know, but I tell you, I told her my problems and now, I don't know, "How is it going?" she said just like the first day and she had forgotten…She was not helping me with the problems that I had…It pained me to think she had mistaken me for someone else.]

Finally, all but one patient (92%), explicitly referenced the collaboration of medical and behavioral health providers in their experience of behavioral health care, consistent with the basic tenets of IPC.

Acceptability of the IPC model

Sixty-seven percent of Latinx patients and 75% of non-Latinx White patients expressed a preference for the IPC setting over SMH, while 33% of Latinx patients stated they did not have a setting preference. No patients preferred the SMH setting. In discussing characteristics of IPC that differ from SMH, all non-Latinx White patients and most (78%) Latinx patients described the co-location of behavioral health and primary care medicine to be acceptable or favorable. In an exchange with a non-Latinx White patient, the following was said:

> *What was it like for you to receive behavioral health services at your medical clinic?* It was good. I think it was easier. *What makes it easier?* Because everything is all right there together, [integrated clinic medical provider] and [BHP] all at the same place.

Whereas all non-Latinx White patients viewed same-day medical and behavioral health visits as acceptable, 56% of Latinx White patients agreed, but 33% did not prefer same-day visits. As one Latinx patient explained:

> *Would you prefer to have your behavioral health and medical appointments on the same day or separate days?* Separate days. *What makes you prefer separate days?* I'm already waiting for the doctor and then not feeling good and then I have to stay for a longer day, you know. Because I'm taking naps now, I'm getting older, I need naps.

Seventy-eight percent of Latinx patients and half of non-Latinx White patients viewed brief behavioral health visits as acceptable, with two patients overall expressing a preference for longer visits. A non-Latinx White patient mentioned:

> Technically, it's kind of hard to even touch the bases on stuff in just a half hour. I understand things are busy schedule and time is tight so I have no problem with it, but personally it's hard to get anything done in a half hour.

All 13 patients interviewed affirmed that less frequent behavioral health visits were acceptable. Sixty-nine percent of overall patients considered the option to involve family members in behavioral health visits acceptable, but 31% did not prefer this option for themselves. A Latinx patient shared her concerns:

> Conmigo es que me acompañaron a la cita. La primera cita fue nada más medica, de repente me dijeron si aceptaba ver el consejero y dije que sí y mi mamá me acompañó. Al principio me sentí incómoda, allí estaba mi mamá y no me sentía bien que estaba ella. Si ellos miran a alguien así como el mismo día como la situación mía, preguntar está de acuerdo que su familia esté con usted en ese momento? Que uno tome la decisión sí o no.
>
> [In my case, I was accompanied in the visit. The first visit was nothing more than medical, all of a sudden they said, "Do you agree to see a counselor?" and I said "yes" and my mother accompanied me. At first I felt uncomfortable, my mother was there, and I didn't feel good that she was there. If they [BHPs] see someone like that in the same day like in my situation, to ask if you agree for your family to be with you in that moment? That one makes the decision yes or no.]

One Latinx and one non-Latinx White patient indicated dissatisfaction with the practice of being referred out of IPC to SMH.

Patient recommendations to improve access to behavioral health care

When patients were asked for recommendations to improve access to behavioral health care, the most common response (54% of overall sample) was to better disseminate information about mental health issues and behavioral health services within the IPC clinic and the local community, such as through flyers, signage, television announcements, social media, and the use of public community spaces as a platform for reaching people. A few patients provided recommendations specific to IPC, including co-location of behavioral health and primary care medicine (15%), incorporation of behavioral health in medical visits (23%), an increase in the number of sites offering behavioral health services (23%), and greater scheduling flexibility for behavioral health visits (15%). Recommendations made by only one patient (8%) included offering behavioral health classes, increasing behavioral health personnel and resources, hiring bilingual BHPs, extending the length of behavioral health episodes, facilitation of patients remaining with the same BHP, and reduced fees for low-income patients. Thirty-one percent of patients responded that they could think of "nothing" to improve access to behavioral health care.

Discussion

In qualitative telephone interviews, IPC patients described structural, attitudinal, and clinical-procedural factors that served as barriers or facilitators to care. Overall report of barriers to IPC was low. A majority of patients mentioned the ability of IPC to provide services to patients who have little knowledge or experience of mental health services. All patients expressed satisfaction with behavioral health services, while two Latinx patients also shared dissatisfaction with past behavioral health services due to negative interpersonal characteristics of their BHP and impersonal care. Collaboration between medical and behavioral health providers was referenced by nearly every patient interviewed. Practical aspects of the IPC model were acceptable to most patients, but there was some variation by ethnic group in preference related to features of care delivery, such as same-day visits and length of visit. Patients recommended increased dissemination of information about mental health services and expansion of IPC to better reach members of the community with mental health need.

Study 3

Study Aim

A limitation of Studies 1 and 2 is that both included only patients already accessing behavioral health services in IPC. The purpose of Study 3 was to examine how a broad, non-treatment seeking sample perceived the relative barriers to seeking mental health treatment in IPC and SMH.

RQ3: Do non-treatment seeking members of the community perceive greater obstacles to the pursuit of IPC or SMH services?

Method

Setting

Participants were recruited from and completed the study during an annual local cultural festival in Northwest Arkansas. The event is sponsored by a local Latinx community organization that also offers educational and support programs and scholarships. The organization espouses a mission to promote cross-cultural harmony in the community while celebrating Latinx cultures and advancing educational opportunities for Latinx families in the surrounding area.

Participants

Data were collected from a community sample of 97 adult participants (ages 18-72 years, $M = 38.02$, $SD = 12.1$) recruited from a cultural festival in Northwest Arkansas over the course of a single day. Inclusionary criteria were the following: Latinx or non-Latinx White ethnicity and completion of a brief questionnaire including demographic information. Seventy-six percent of participants reported Latinx ethnicity, 74% were female, and 39% had a Spanish language preference. Sixty-seven percent of participants were married, 16% were never married, 12% were divorced or separated, with 5% falling into an "other" category. History of highest educational attainment was as follows: less than high school diploma (27%), high school graduate (27%), trade school (2%), some college (12%), Bachelor's degree (13%), and graduate degree (14%). Participants worked full-time (62%) or part-time (16%), or were homemakers (12%), unemployed (5%), retired (3%), or disabled (1%). Participants presented with low average levels of psychological distress, as measured by the A Collaborative Research Outcome Network Questionnaire's (ACORN; Brown et al., 2015) composite of 0 (*never*) to 4 (*very often*) Likert scaled items (range 0-3.14, $M = 0.88$, $SD = 0.74$).

Measures

All measures used were available in English and Spanish or were forward and backward translated by bilingual research assistants to ensure comparability. Measures were administered in the language of the patient's preference.

Psychiatric distress. The A Collaborative Outcome Research Network Questionnaire (ACORN; Brown et al., 2015) was used, as described above. In Study 3, ACORN items had a Cronbach's alpha of .94 for English speakers and .90 for Spanish speakers.

Perceived barriers to mental health treatment by setting. For Study 3, the Therapy Setting Preferences and Barriers interview (TheSP-B; Anastasia & Bridges, 2017) was adapted for use in a community setting (Appendix C). The interview was reformatted into a self-report questionnaire with two conditions: half of participants reported on perceived barriers to IPC only, while the other half only reported on barriers to SMH. As participants were not treatment-seeking, they were asked whether specific barriers would interfere with them seeking mental health treatment in the setting of the condition to which they were assigned. Adjustments in wording were made to increase the suitability of several items for a non-treatment seeking community sample. Fear of deportation was not included so as not to elicit unnecessary fear and discomfort. Modifications were intended to make items applicable across Latinx and non-Latinx White ethnic groups. Final barriers included were cost, insurance coverage, transportation, ability to communicate with the therapist, clinic hours of availability, time, embarrassment, doubts about the utility of therapy, and inconsistency of therapy with one's beliefs and values.

Procedures

Research assistants recruited participants from a booth at a cultural festival. Once written consent was obtained, measures were distributed in English or Spanish at the participant's

preference. Participants were randomly assigned to the IPC or SMH version of measures through random ordering of questionnaire packets. Participants completed a demographic questionnaire (Appendix D), the ACORN, and either the IPC or SMH version of the adapted THeSP-B. After completing the study, participants were debriefed and received $5 compensation for completing the study. They were also provided with a list of local resources for mental health difficulties. The study questionnaires took approximately five minutes to complete.

Analytic approach

Statistical analyses were computed in SPSS Version 23. Research Question 3 was assessed using a two-way between groups ANOVA, with condition (IPC or SMH setting) and ethnicity as independent variables and the sum of perceived barriers to treatment as the dependent variable. The assumption of homogeneity of variances was upheld per Levene's Test of Equality of Error Variances.

Results

Descriptive statistics

Percentages of endorsement for individual barriers by setting can be found in Table 6. Inspection of simple percentages suggests only a slightly increased number of participants who viewed cost, insurance coverage, and transportation to be barriers to SMH as compared to IPC, and a slightly increased number of participants viewed time and embarrassment as barriers to IPC as compared to SMH.

ANOVA

A two-way between subjects ANOVA was conducted with version (IPC or SMH setting) and ethnicity as independent variables and sum of perceived barriers to treatment as the dependent variable. Results did not reveal significant main effects for setting, $F(1,72) = 0.21$, $p =$

.65, $\eta_p^2 < .01$, or ethnicity, $F(1,72) = 0.01$, $p = .92$, $\eta_p^2 < .01$, or an interaction effect, $F(1,72) = 0.10$, $p = .76$, $\eta_p^2 < .01$. Initial power analysis recommended recruitment of 44 participants for each condition; due to missing data in participant measures, data were available for 41 participants in the IPC condition and 31 participants in the SMH condition. However, it is unlikely given the miniscule effect sizes that a larger sample would have produced a significant effect of setting or ethnicity. Means and standard deviations for sum of reported barriers were as follows, IPC version: Latinx participants $M = 3.50$, $SD = 2.98$, non-Latinx White participants $M = 3.33$, $SD = 2.45$; SMH version: Latinx participants $M = 3.61$, $SD = 2.25$, non-Latinx White participants, $M = 3.92$, $SD = 3.71$.

Discussion

A community sample of non-treatment seeking study participants endorsed overall and individual barriers similarly across IPC and SMH settings. Across both settings, higher percentages of structural than internal barriers were reported (e.g., cost was identified as a barrier by 65% in the IPC condition and 77% in the SMH condition). Whereas the high number of Study 3 participants who viewed structural barriers to SMH fairly mirrored those of Study 1 participants, community sample participants' responses did not reflect a decreased perception of barriers in the IPC setting. Of note, the levels of psychological distress in this non-treatment seeking community sample were quite low.

General Discussion

The considerable gap between mental health need and access to mental health treatment in this country invites a closer examination of the promise of IPC for reducing barriers to care that exist in the current mental health system. A set of three studies explored barriers and facilitators to mental health care in IPC and SMH settings from the perspectives of the primary

stakeholders in the mental health system, the recipients of care. IPC patients endorsed fewer barriers to receiving mental health services in IPC than SMH, a finding that was more pronounced in Latinx than non-Latinx White patients. Overall, IPC patients expressed high satisfaction with their experience of behavioral health services and acceptance of the characteristics inherent in the IPC model of care. In contrast, regardless of ethnicity, non-treatment seeking community members did not identify a difference in barriers to accessing services in the IPC and SMH settings.

IPC Patients' Perceptions of Access to Care by Setting

In Study 1, the hypothesis that IPC patients would endorse greater barriers to seeking SMH services than remaining in IPC was upheld. Latinx and non-Latinx White patients reported a similar number of barriers to IPC, yet Latinx patients identified a significantly greater number of obstacles to receiving SMH than did non-Latinx White patients. These data suggest IPC patient perceptions are consistent with previous research (e.g., Bridges et al., 2014; Bridges et al., 2017) showing that ethnic disparities in access to mental health care may be mitigated in the primary care setting. In an effort to better understand the patterned effects of barriers to care in the two settings, analyses were run with subcategories of barriers. When barriers culturally relevant to Latinx patients (i.e., language, deportation concerns) were excluded from the analysis, the setting by ethnicity interaction disappeared, leaving only the main effect of setting. Thus, culturally relevant barriers are perceived as significant obstacles for SMH by Latinx patients. With only structural barriers (i.e., cost, insurance coverage, transportation, time) included in the analysis, only a main effect for setting was detected, further indicating that it may be the increase in culturally relevant barriers that makes access to SMH more difficult for Latinx patients than non-Latinx White patients, rather than an increase in structural barriers per se. The

influence of attitudinal barriers (i.e., preference to resolve the problem alone, doubts about the utility of therapy, reluctance to change therapists) was inconclusive; the main effect of setting was accompanied by a marginally significant interaction in which non-Latinx White patients expressed greater attitudinal barriers than Latinx patients. The effect of reduced barriers in the IPC relative to the SMH setting was much larger for structural than attitudinal barriers. Analyses of individual barriers suggested patients perceived greater cost and insurance barriers to SMH than IPC. Much of the difference between IPC and SMH settings lies in structural facets of operating procedures, such as colocation, same-day visits, and integrated coordination of medical and behavioral health care, whereas attitudinal barriers may manifest with more overlap across settings. Individuals may be better able to afford behavioral health services in a clinic where they have been successful in receiving medical services already. Reduction of structural barriers is highly relevant in light of the body of research suggesting structural barriers interfere with accessing care to a greater degree than attitudinal barriers (Chen et al., 2013; Mohr et al., 2006; Substance Abuse and Mental Health Services Administration, 2013; Walker et al., 2015).

In qualitative interviews for Study 2, IPC patients elaborated on their perceptions of access to care in the IPC setting. Qualitative data revealed that structural, attitudinal, and clinical-procedural factors influencing access to IPC had a dual nature, functioning as either barriers or facilitators depending on context. Some of the barrier/facilitator categories that emerged had been included in the structured interview for Study 1 (i.e., cost, insurance, transportation, time, utility of therapy), and others were novel to Study 2 (i.e., knowledge/familiarity, perceived need, stigma, childcare, and past interactions with providers). Past interactions with providers as a barrier to accessing mental health care has not been previously articulated in the field of health disparities.

Overall report of barriers to IPC was low, with no specific barrier endorsed by more than a third of qualitative study participants. A greater number of Latinx patients endorsed cost and transportation barriers than non-Latinx Whites, whereas non-Latinx Whites were more likely to disclose a time barrier. Only a single participant mentioned stigma. About three-quarters of Latinx and non-Latinx White patients commented on the benefits of IPC for reaching individuals with little knowledge of the mental health system. This finding may have special relevance for Latinxs, as Ruiz, Aguirre, and Mitschke (2013) found that failure to recognize a mental health problem and lack of knowledge of where to seek mental health services were more prevalent obstacles than structural and language barriers for non-U.S born Latinxs. Latinx and non-Latinx Whites alike had positive perceptions of the utility of therapy, with only a few doubting its usefulness. Past positive and negative interactions with BHPs and medical providers were relevant for a quarter to a third of the sample.

In previous research, Chen et al. (2013), Mohr et al. (2006), and Walker et al. (2015) found that about half of their study participants identified a cost barrier to mental health care, whereas less than a quarter of Study 1 and Study 2 participants endorsed a cost barrier to continuing care in IPC (Chen et al., 2013; Mohr et al., 2006). However, three-quarters of Study 1 IPC patients endorsed a cost barrier to receiving SMH care, similar to the numbers of non-treatment seeking participants who reported a cost barrier to IPC (65%) and SMH (77%) in Study 3. Mojtabai et al. (2011) found that low perceived need was a barrier for 45% of their NCS-R sample, yet in Study 2, no patients identified low perceived need as a barrier to care and 31% of participants described perceived need as a facilitator, noting either that mental health need was perceived or elements of IPC, such as BHP-initiated behavioral health screens during routine medical visits, reduced the effect of low perceived need in preventing care.

In sum, Study 1 and 2 findings were supportive of the claim that barriers to accessing IPC are low, as described from the perspective of existing IPC patients. Latinx patients in particular reported fewer barriers to accessing IPC than SMH. Endorsement of individual barriers suggested greater cost and insurance barriers to SMH than IPC across ethnic groups. The ability of IPC to reach patients with little knowledge of mental health services was a prominent response from qualitative interviewees.

IPC Patients' Experience of IPC

In addition to exploring mechanisms of access to IPC, Study 2 results centered around IPC patients' experience of behavioral health services. All participants expressed satisfaction with IPC and most viewed their treatment as beneficial. Positive interpersonal characteristics of BHPs were considered an essential component for successful behavioral health treatment by patients across ethnic groups, consistent with the large body of research supporting the robust effect of therapeutic alliance for achieving positive treatment outcomes (e.g., Barrett et al., 2008; Fluckiger et al., 2020). Dissatisfaction with current or past behavioral health services was expressed by almost a quarter of Latinx patients, but no non-Latinx White patients. Sources of dissatisfaction centered around negative interpersonal aspects of the BHP and impersonal care, and included perceptions that treatment was not beneficial and BHP expertise was inadequate. Collaboration between medical providers and BHPs in patient care was nearly universally cited. The comprehensiveness of patient care was valued by about a third of the sample.

While a majority of patients preferred to receive behavioral health services in IPC over SMH, about a quarter expressed no particular setting preference. The majority of patients viewed co-location as acceptable and all patients were comfortable with less frequent behavioral health visits. Only about half of Latinx patients viewed same-day visits as acceptable, whereas only

about half of non-Latinx Whites viewed brief visits as acceptable. The option to include family in behavioral health visits was acceptable to two-thirds of patients, but not preferred for the other third, who noted the potential negative consequences of involving family members in visits. Two patients who received outside referral for SMH expressed they would have preferred to continue receiving services in IPC instead. One of these was referred out due to possession of private insurance; the other wished to remain in IPC because of positive rapport, but stopped receiving services at all after disliking her experience trying SMH.

About half of patients recommended greater dissemination of information about mental health and mental health services to increase access to mental health care in their communities. Several patients suggested increasing and expanding elements of IPC to better reach individuals who would benefit from mental health treatment.

Taken together, results suggest IPC patients were satisfied with their experience of behavioral health services and viewed the characteristics of service delivery in IPC to be acceptable. However, a minority of Latinx patients recounted concerns related to negative interpersonal characteristics of their BHP, impersonal care, and inadequate expertise of their BHP. This finding may be contextualized by previous research in which Latinx patients disclosed especially valuing the building of a warm, personal relationship with their therapist, with close attention paid to the patient's disclosures followed by validating affirmations (Rastogi et al., 2012; Uebelack et al., 2012). Behavioral health care delivered in the IPC model is driven by a streamlined focus on efficiency. Not only are behavioral health visits intended to be brief, infrequent, and targeted compared to SMH visits, but the IPC model tends to emphasize a linear package of delivering psychoeducation and specific intervention recommendations that if mismanaged, could translate to less of a focus on listening, validation, and rapport-building,

which could be especially problematic for some Latinx patients. Qualitative findings emphasize the necessity of continuing to prioritize therapeutic alliance and cultural sensitivity in conjunction with the pursuit of efficiency in IPC visits. As patients only disclosed dissatisfaction with a previous BHP, not the BHP who recruited them for the study, it is possible that patients did not feel comfortable sharing dissatisfaction in recent behavioral health visits. Additionally, agreeableness has been considered a Latinx cultural value (*simpatía*) and some patients may not have felt it was appropriate to share negative feedback in the interviews (e.g., Añez et al., 2008). While issues with cultural insensitivity likely also have a stake in dissatisfaction of Latinx patients, the two dissatisfied patients in Study 2 (one had a Latinx BHP and the other had a non-Latinx White BHP) did not mention cultural insensitivity in their concerns.

Latinx patients were less likely to prefer same-day medical and behavioral health visits than non-Latinx Whites, consistent with Horevitz et al.'s (2015) findings of mixed preferences regarding same-day appointments, with Latinx patients stating a preference for visits following warm-handoffs theoretically, but finding them confusing in practice and showing equal follow-up rates whether warm-handoffs occurred or not. In contrast, non-Latinx White patients, none of whom had a preference against same-day visits, often commented on the convenience of back-to-back behavioral health and medical visits, whereas Latinx patients were more likely to comment on the convenience of co-location. Non-Latinx White patients' interest in longer behavioral health visits could be related to expectations derived from the SMH system, which was originally developed by and continues to be dominated by non-Latinx White individuals and thus, may not consider formats of therapy preferable to other ethnic groups.

In sum, most patients expressed satisfaction with their experience of care in IPC. While patients generally viewed the characteristics of IPC as acceptable, at times they preferred longer

visits or behavioral health and medical visits on separate days. It remains important to consider cultural variation in the best fit of IPC delivery for patients, both in terms of style of interpersonal interaction and structure of service delivery in IPC. Additionally, patient responses suggested that the inherent elements of the IPC model of service delivery, such as collaboration of BHPs and medical providers, permeated the care patients received. Patient's recommendations to improve access to mental health care in the community were consistent with IPC's focus on increasing mental health literacy and access to behavioral health treatment at a population level and offering services in a location that community members already frequent.

Non-treatment Seeking Community Members' Perceptions of Access to Care by Setting

In Study 3, non-treatment seeking Latinx and non-Latinx White community members randomly assigned to IPC or SMH conditions did not report a difference in barriers to the two settings, nor did endorsement of barriers vary by ethnicity. The intention of this study was to assess the perceptions of barriers by setting in individuals who were not already situated within IPC or SMH. As expected, Study 3 participants presented with lower global psychiatric distress than treatment seeking Study 1 participants. It stands to reason that individuals with low mental health need may consider barriers to care differently as the urgency is lower than for those with high mental health need. Furthermore, individuals who have not previously tried to access mental health care may not be as familiar with the barriers that arise in the pursuit of care.

Overall, Study 3 failed to provide evidence of a difference in barriers in IPC and SMH settings from the perspective of non-treatment seeking Latinx and non-Latinx community members. Widely documented disparities in access to mental health care for Latinx individuals compared to non-Latinx patients were not apparent in this non-treatment seeking sample. Whether or not barriers vary by setting or ethnicity, non-treatment seeking individuals do not

appear to perceive such a distinction. Still, it is important to consider that IPC patients are likely to perceive fewer barriers in a setting where they already receiving care.

Clinical Implications

Study results have clinical implications for the practice of IPC. Overall, the basic elements of IPC, such as colocation, collaboration of medical providers and BHPs, and infrequent and brief behavioral health visits were viewed as acceptable to patients, who also reported few barriers to continuing care in the primary care setting. While findings support the IPC model overall, certain aspects merit special attention. A majority of Study 2 participants emphasized the benefits of IPC for reaching patients with little knowledge of mental health and the mental health system, a unique advantage to service delivery in IPC. The ability of IPC to reach patients can be capitalized on through the use of regular behavioral health screening of the entire primary care clinic population. Interactions with BHPs through screenings at medical visits not only reach additional patients, but also normalize incorporation of behavioral health into routine medical care, increasing the familiarity which patients referred to as a facilitator to accessing care and knowledge of behavioral health and services for all patients. As recommended by study participants, IPC clinics can make renewed efforts to disseminate information about behavioral health and services to the general primary care population. Further investigation into the mechanisms resulting in patients' perceptions of reduced cost and insurance barriers to care in IPC is warranted, as cost and insurance are perceived among the most prohibitive of barriers to mental health care by potential patients (e.g., (Chen et al., 2013; Mohr et al., 2006; Walker et al., 2013).

While maintaining adherence to the IPC model, there is still room for flexibility in response to patients' preferences regarding the delivery of care. For example, patients can be

offered a choice between same-day or separate day medical and BH visits. BHPs can take special care in discussing patients' preferences about including family members in visits, to maximize patient privacy while reducing the likelihood of offending family members. Study results point to therapeutic rapport and cultural sensitivity as paramount in the delivery of behavioral health services to all patients. Attention to developing a personal and validating rapport may be especially important for Latinx patients. As some Latinx patients face a language barrier and deportation concerns, clinics must consider how adequate communication between monolingual Spanish-speaking patients and BHPs will occur, as well as how to promote safety and trust with undocumented patients. This issue will be especially salient for clinics with limited access to bilingual providers and trained interpreters.

Much of the health disparities research literature has centered around the considerable barriers individuals face to receiving care. In Study 2, IPC patients emphasized the competing force of facilitators to care, highlighting the benefits of colocation, interdisciplinary collaboration, familiarity with the primary care clinic, the ability to receive behavioral health services without actively seeking care for a behavioral health concern, rapport-building skills of BHPs, and positive appraisals of the utility of behavioral health services after the occurrence of successful visits.

Study Limitations

Several limitations exist pertaining to Studies 1, 2, and 3. It is likely that IPC patients will demonstrate a bias toward continuing to receive care in the same setting and will perceive fewer barriers to a modality of treatment they have already successfully accessed. Indeed, study results were consistent with this likelihood. Additionally, to better understand patients' perceptions of barriers across settings, the perspective of SMH patients is crucial and was not assessed in the

current studies. It is important to acknowledge that individuals' perceptions may not reflect the objective reality of the ease or difficulty of accessing mental health services in IPC or SMH settings. However, as patients are the primary stakeholders in the receipt of mental health services, their perceptions, experiences, and preferences are valuable to public health and health disparities research and policy decisions.

Study findings must be contextualized within the IPC clinics from which participants from Studies 1 and 2 were recruited. Both clinics make concerted efforts to reach underserved and Latinx populations, through location of clinics near Latinx neighborhoods, provision of services in Spanish, ancillary services, and reduced fees for low income patients. As such, barriers to care in these clinics, especially for Latinx patients, may be lower than is representative for IPC clinics in this country. The relationship between IPC and SMH clinics is also likely to vary by specific neighborhood and thus influence patient perceptions of barriers in the two settings.

In Study 2, due to constraints in recruitment permitted by the IPC clinic, nine participants were recruited from a behavioral health visit with the interviewer, and may have felt less comfortable disclosing dissatisfaction with their recent visit than participants recruited from another BHP. Additionally, the sample for Study 2 was not evenly distributed by IPC clinic (Community Clinic NWA: 5 participants; Salud: 8 participants) or ethnicity (Latinx: 9 participants; non-Latinx White: 4 participants). Due to the open-ended structure of qualitative interview prompts, patients may have faced barriers they did not spontaneously articulate. Additionally, financial and time constraints limited our ability to continue recruitment for qualitative interviews until reaching theme saturation.

Conclusions and Future Directions

In conclusion, the set of studies presented herein adds to our knowledge of how and whether delivery of mental health services through IPC reduces barriers to accessing mental health care. IPC patients reported fewer barriers to IPC than SMH, while non-treatment seeking community members perceived no differences in barriers to the two settings. Overall, IPC patients reported a positive experience of behavioral health services and acceptability of practical characteristics of the IPC model of service delivery. Many relevant findings were similar across Latinx and non-Latinx White participants, yet Latinx IPC patients reported greater barriers to SMH and expressed more instances of dissatisfaction with care received in IPC due to interpersonal factors in behavioral health visits. Results provide initial support for the promise of IPC for increasing access to mental health care for IPC patients specifically, especially Latinx patients, and providing care in a format that is acceptable to patients. Consistent with previous research (e.g., Bridges et al., 2014), results suggest some of the health disparities in care experienced by Latinx patients are reduced but not fully erased in the IPC setting.

However, it remains unclear whether and how delivery of care in the IPC setting meaningfully reduces barriers to mental health care for the general population. Additional research is needed to explore SMH patients' perceptions of barriers to IPC and SMH settings. Approaches for future research on this topic are recommended as follows: objective measures of barriers to accessing care in IPC and SMH settings, prospective tracking of individuals' service utilization and experience of barriers, inclusion of a greater number of IPC and SMH clinics in data collection, and continued dialogue with the recipients of care regarding the suitability of the delivery of mental health care. Finally, results supporting the accessibility, utility, and acceptability of IPC for patients emphasize the importance of investing in increased

incorporation of BHPs in primary care, especially in neighborhoods with a high Latinx population, where ratios of BHPs to primary care providers are lower than other neighborhoods (Vander Wielen et al., 2016).

References

Alang, S. M. (2015). Sociodemographic disparities associated with perceived causes of unmet need for mental health care. *Psychiatric Rehabilitation Journal*, *38*, 293-299. doi: 10.1037/prj000113

Alegría, M., Canino, G., Ríos, R., Vera, M., Calderón, J., Rusch, D., & Ortega, A. N. (2002). Mental health care for Latinos: Inequalities in use of specialty mental health services among Latinos, African Americans, and non-Latino Whites. *Psychiatric Services*, *53*,1547-1555. doi: 10.1176/appi.ps.53.12.1547

Alegría, M., Mulvaney-Day, N., Woo, M., Torres, M., Gao, S., & Oddo, V. (2007). Correlates of past-year mental health service use among Latinos: Results from the National Latino and Asian American Study. *American Journal of Public Health*, *97*(1), 76-83.

Alegría, M., Chatterji, P., Wells, K., Cao, Z., Chen, C., Takeuchi, D., & … Meng, X. (2008). Disparity in depression treatment among racial and ethnic minority populations in the United States. *Psychiatric Services*, *59*, 1264-1272. doi:10.1176/appi.ps.59.11.1264

Alvidrez, J., & Azocar, F. (1999). Distressed women's clinic patients: Preferences for mental health treatments and perceived obstacles. *General Hospital Psychiatry*, *21*(5), 340-347.

Anderson, C. M., Robins, C. S., Greeno, C. G., Cahalane, H., Copeland, V. C., & Andrews, R. M. (2006). Why lower income mothers do not engage with the formal mental health care system: Perceived barriers to care. *Qualitative Health Research*, *16*(7), 926-943.

Andrés-Hyman, R. C., Ortiz, J., Añez, L. M., Paris, M., & Davidson, L. (2006). Culture and clinical practice: Recommendations for working with Puerto Ricans and other Latinas(os) in the United States. *Professional Psychology: Research and Practice*, *37*(6), 694-701. doi: 10.1037.0735-7028.37.6.694

Andrulis, D. P. (1998). Access to care is the centerpiece in the elimination of socioeconomic disparities in health. *Annals of Internal Medicine*, *129*(5), 412-416.

Antshel, K. M. (2002). Integrating culture as a means of improving treatment adherence in the Latino population. *Psychology, Health & Medicine*, *7*(4), 435-449.

Añez, L. M., Paris, M. J., Bedregal, L. E., Davidson, L., & Grilo, C. M. (2005). Applications of cultural constructs in the care of first generation Latino clients in a community mental health setting. *Journal of Psychiatric Practie*, *11*(4), 221-230. doi: 10.1097/00131746-200507000-00002

American Psychological Association (APA) Presidential Taskforce on Immigration. (2013). Crossroads: The psychology of immigration in the new century. *Journal of Latina/o Psychology*, *1*, 133-148. doi: 10.1037/lat0000001

Atdjian, S., & Vega, W. A. (2005). Disparities in mental health treatment in US racial and ethnic minority groups: Implications for psychiatrists. *Psychiatric Services*, *56*(12), 1600-1602.

Barona, A., & Santos de Barona, M. (2003). Recommendations for the psychological treatment of Latino/Hispanics populations. In Council of National Psychological Associations for the advancement of ethnic minority interests (Ed.). Psychological treatment of ethnic minority populations (pp. 19-23). Washington, DC: Association of Black Psychologists.

Barrett, M. S., Chua, W. J., Crits-Christoph, P., Gibbons, M. B., & Thompson, D. (2008). Early withdrawal from mental health treatment: Implications for psychotherapy practice. *Psychotherapy: Theory, Research, Practice, Training*, *45*(2), 247-267.

Beck, A. T., Steer, R. A., & Carbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review, 8,* 77–100. doi:10.1016/ 0272-7358(88)90050-5

Benish, S. G., Quintana, S., & Wampold, B. E. (2011). Culturally adapted psychotherapy and the legitimacy of myth: A direct-comparison meta-analysis. *Journal of Counseling Psychology*, *58*, 279-289. doi:10.1037/a0023626

Benuto, L. T., & O'Donahue, W. (2016). *Enhancing behavioral health in Latino populations:Reducing disparities through integrated behavioral and primary care.* Cham, Switzerland: Springer International Publishing.

Berk, M. L., & Schur, C. L. (2001). The effect of fear on access to care among undocumented Latino immigrants. *Journal of immigrant health*, *3*(3), 151-156.

Bernal, G. E., & Domenech Rodríguez, M. M. (2012). *Cultural adaptations: Tools for evidence-based practice with diverse populations*. American Psychological Association.

Beronio, K., Glied, S., & Frank, R. (2014). How the affordable care act and mental health parity and addiction equity act greatly expand coverage of behavioral health care. *The Journal of Behavioral Health Services & Research, 41*(4), 410-428. doi:http://0-dx.doi.org.library.uark.edu/10.1007/s11414-014-9412-0

Blair, I. V., Steiner, J. F., Fairclough, D. L., Hanratty, R., Price, D. W., Hirsh, H. K., ... & Havranek, E. P. (2013). Clinicians' implicit ethnic/racial bias and perceptions of care among black and Latino patients. *The Annals of Family Medicine*, *11*(1), 43-52.

Blount, A. (1998). *Integrated primary care: The future of medical and mental health collaboration.* New York, NY: Norton.

Blount, A., Schoenbaum, M., Kathol, R., Rollman, B. L., Thomas, M., O'Donohue, W., & Peek, C. J. (2007). The economics of behavioral health services in medical settings: A summary of the evidence. *Professional Research and Practice*, *38*, 290-297. doi: 10.1037/0735-7028.38.3.290

Blumenthal, D., Abrams, M., & Nuzum, R. (2015). The Affordable Care Act at 5 years. *New England Journal of Medicine*, *372*(25), 2451-2458.

Bonabi, J. Muller, M., Ajdacic-Gross, V., Eisele, J., Rodgers, S., Seifritz, E., & … Rusch, N. (2016). Mental health literacy, attitudes to help seeking, and perceived need as predictors of mental health service use: A longitudinal study. *Journal of Nervous and Mental Disease*, *204*, 321-324. doi: 10.1097.NMD.0000000000000488

Brenes, G. A., Danhauer, S. C., Lyles, M. F, Hogan, P. E., & Miller, M. E. (2015). Barriers to mental health treatment in rural older adults. *The American Journal of Geriatric Psychiatry*, *23*, 1172-1178. doi: 10.1016/j.jagp.2015.06.002

Bridges, A. J., Andrews, A. R., & Deen, T. L. (2012). Mental health needs and service utilization by Hispanic immigrants residing in mid-southern United States. *Journal of Transcultural Nursing*, *23*(4), 359-368.

Bridges, A. J., Andrews, A. I., Villalobos, B. T., Pastrana, F. A., Cavell, T. A., & Gomez, D. (2014). Does integrated behavioral health care reduce mental health disparities for Latinos? Initial findings. *Journal of Latina/o Psychology*, *2*, 37-53. doi: 10.1037/lat0000009

Bridges, A. J., Gregus, S. J., Rodriguez, J. H., Andrews III, A. R., Villalobos, B. T., Pastrana, F. A., & Cavell, T. A. (2015). Diagnoses, intervention strategies, and rates of functional improvement in integrated behavioral health care patients. *Journal of Consulting and Clinical Psychology*, *83*(3), 590.

Bridges, A. J., Villalobos, B T., Anastasia, E. A., Dueweke, A. R., Gregus, S. J., & Cavell, T. A. (2017). Need, access, and the reach of integrated care: A typology of patients. *Families, Systems, & Health*, *32*, 193-206. http://doi.org/10.1037/fsh0000268

Brown, J., Simon, A., Cameron, J., & Minami, T. (2015). A collaborative outcome research network (ACORN): Tools for increasing the value of psychotherapy. *Psychotherapy*, *52*, 412-421. https://doi.org/10.1037/pst0000033

Brune, M. M., Eiroá-Orosa, F. J., Fischer-Ortman, J. J., Delijaj, B. B., & Haasen, C. C. (2011). Intermediated communication by interpreters in psychotherapy with traumatized refugees. *International Journal of Culture and Mental Health, 4,* 144–151. http://dx.doi.org/10.1080/ 17542863.2010.537821

Bryan, C. J., Morrow, C., & Appolonio, K. K. (2009). Impact of behavioral health consultant interventions on patient symptoms and functioning in an integrated family medicine clinic. *Journal of clinical psychology*, *65*(3), 281-293.

Bryan, C. J., Corso, M. L., Corso, K. A., Morrow, C. E., Kanzler, K. E., & Ray-Sannerud, B. (2012). Severity of mental health impairment in an integrated primary care clinic. *Journal of Consulting and Clinical Psychology*, *80*, 396-403. doi: 10.1037/a0027726

Borowsky, S. J., Rubenstein, L. V., Meredith, L. S., Camp, P., Jackson-Triche, M., & Wells, K.B. (2000). Who is at risk of non-detection of mental health problems in primary care? *Journal of General Internal Medicine*, *15*(6), 381-388.

Buchmueller, T. C., Levinson, Z. M., Levy, H. G., & Wolfe, B. L. (2016). Effect of the Affordable Care Act on racial and ethnic disparities in health insurance coverage. *American Journal of Public Health, 106*, 1416-1421. doi:http://0-dx.doi.org.library.uark.edu/10.2105/AJPH.2016.303155

Cabassa, L. J., Zayas, L. H., & Hansen, M. C. (2006). Latino adults' access to mental health care: A review of epidemiological studies. *Administration and Policy in Mental Health and Mental Health Services Research*, *33*(3), 316-330.

Cabassa, L., Lester, R., & Zayas, L. (2007). "It's like being in a labyrinth": Hispanic immigrants' perceptions of depression and attitudes toward treatments. *Journal of Immigrant and Minority Health*, *9*(1), 1-16.

Cabral, R. R., & Smith, T. B. (2011). Racial/ethnic matching of clients and therapists in mental health services: a meta-analytic review of preferences, perceptions, and outcomes. *Journal of Counseling Psychology*, *58*, 537-554. doi: 10.1037/a0025266

Cachelin, F. M., & Striegel‐Moore, R. H. (2006). Help seeking and barriers to treatment in a community sample of Mexican American and European American women with eating disorders. *International Journal of Eating Disorders*, *39*(2), 154-161.

Cavazos-Rehg, P. A., Zayas, L. H., & Spitznagel, E. L. (2007). Legal status, emotional well-being and subjective health status of Latino immigrants. *Journal of the National Medical Association*, *99*(10), 1126.

Chen, L., Crum, R. M., Martins, S. S., Kaufmann, C. N., Strain, E. C., & Mojtabai, R. (2013). Service use and barriers to mental health care among adults with major depression and comorbid substance dependence. *Psychiatric Services*, *64*, 863-870. doi: 10.1176/appi.ps.201200289

Chua, K. P., & Sommers, B. D. (2014). Changes in health and medical spending among young adults under health reform. *Journal of the American Medical Situation*, *311*(23), 24372439.

Clement, S., Schauman, O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N., …Thornicroft, G. (2015). What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine*, *45*, 11-27. doi: 10.1017/S0033291714000129

Cook, B. L., McGuire, T., & Miranda, J. (2007). Measuring trends in mental health care disparities, 2000-2004. *Psychiatric Services*, *58*, 1533-1540. doi: 10.1176/appi.ps.58.12.1533

Coffman, M. J., & Norton, C. K. (2010). Demands of immigration, health literacy, and depression in recent Latino immigrants. *Home Health Care Management & Practice*, *22*(2), 116-122.

Corrigan, P. (2004). How stigma interferes with mental health care. *American Psychologist*, *59*,614-625. doi: 10.1037/0003-066X.59.7.614

Corso, K., Bryan, C., Corso, M., Kanzler, K., Houghton, D., Ray-Sannerud, B., & Morrow, C. (2012). Therapeutic alliance and treatment outcome in the primary care behavioral health model. *Families, Systems & Health: The Journal of Collaborative Family Healthcare*, *30*, 87-100. doi: 10.1037/a0028632

Creative Research Systems (2012). Sample size calculator. Retrieved from https://www.surveysystem.com/sscalc.htm

Cunningham, P. J. (2009). Beyond parity: primary care physicians' perspectives on access to mental health care. *Health Affairs*, *28*(3), w490-w501.

Department of Health and Human Services (DHHS). (2001). *Mental health: Culture, race, and ethnicity—A supplement to mental health: A report of the surgeon general.* Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services.

Derose, K. P., & Baker, D. W. (2000) Limited English proficiency and Latinos' use of physician services. *Medical Care Research and Review*, *57*(1), 76-91. doi: 10.1177/107755870005700105

Derose, K. P., Escarce, J. J., & Lurie, N. (2007). Immigrants and health care: Sources of vulnerability. *Health affairs*, *26*(5), 1258-1268.

Drake, R. E., Goldman, H. E., Leff, H. S., Lehman, A. F., Dixon, L., Mueser, K. T., & Torrey, W. C. (2001). Implementing evidence-based practices in routine mental health service settings. *Psychiatric Services*, *52*, 179-182. doi: 10.1176/appi.ps.52.2.179

Druss, B. G., Hwang, I., Petukhova, M., Sampson, N. A., Wang, P. S., & Kessler, R. C. (2009). Impairment in role functioning in mental and chronic medical disorders in the United States: Results from the National Comorbidity Survey Replication. *Molecular Psychiatry*, *14*, 728-737. doi: 10.1038/mp.2008.13

Edlund, M. J., Unutzer, J., & Curran, G. M. (2006). Perceived need for alcohol, drug, and mental health treatment. *Social Psychiatry and Psychiatric Epidemiology*, *41*, 480-487. doi: 10.1007/s00127-006-0047-1

Eisenberg, D., Downs, M. F., Golberstein, E., & Zivin, K. (2009). Stigma and help seeking for mental health among college students. *Medical Care Research and Review*, *66*(5), 522-541.

Farber, E. W., Ali, M. K., Van Sickle, K. S., & Kaslow, N. J. (2017). Psychology in patient-centered medical homes: Reducing health disparities and promoting health equity. *American Psychologist*, *72*(1), 28-41.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. (2009). Statistical power analyses using G*Power 3.1: Tests for correlatioin and regression analyses. *Behavior Research Methods*, *41*, 1149-1160.

Fluckiger, C., Del Re, A. C., Wlodasch, D., Horvath, A. O., Solomonov, N., & Wampold, B. E. (2020). Assessing the alliance—outcome association adjusted for patient characteristics and treatment processes: A meta-analytic summary of direct comparisons. *Journal of Counseling Psychology*, https://doi.org/10/1037/cou0000424.supp

Funderburk, J. S., & Fielder, R. L. (2013). A primary mental health care model for advanced practicum training in a university health clinic. *Training and Education in Professional Psychology*, *7*(2), 112.

Garland, A. F., Lau, A. S. Yeh, M. McCabe, K. M. Hough, R. L., & Landserk, J. A. (2005). Racial and ethnic differences in utilization of mental health services among high-risk youths. *The American Journal of Psychiatry*, *162,* 1336-1343.

Gary, F. A. (2005). Stigma: Barrier to mental health care among ethnic minorities. *Issues in Mental Health Nursing*, *29*(10), 979-999.

Golberstein, E., & Gonzales, G. (2015). The Effects of Medicaid Eligibility on Mental Health Services and Out‐of‐Pocket Spending for Mental Health Services. *Health services Research*, *50*(6), 1734-1750.

Gonzales, R. G., Chavez, L. R., Boehm, D. A., Brettell, C. B., Coutin, S. B., Inda, J. X., ... & Stephen, L. (2012). "Awakening to a Nightmare" Abjectivity and illegality in the lives of undocumented 1.5-generation Latino immigrants in the United States. *Current Anthropology*, *53*(3), 000-000.

Gonzalez, J. M., Alegría, M., Prihoda, T. J., Copeland, L. A., & Zeber, J. E. (2011). How the relationship of attitudes toward mental health treatment and service use differs by age, gender, ethnicity/race and education. *Social psychiatry and psychiatric epidemiology*, *46*(1), 45-57.

Gostin, L. O., Hyman, D. A., & Jacobson, P.D. (2017). The Affordable Care Act: Moving forward in the coming years. *Journal of the American Medical Association*, *317*, 19-20. doi: 10.1001/jama.2016.18908

Griner, D., & Smith, T. B. (2006). Culturally adapted mental health intervention: A meta-analytic review. *Psychotherapy*: *Theory, Research, Practice, Training*, *43*(4), 531-548.doi: 10.1037/0033-3204.43.4.531

Gulbas, L. E., Zayas, L. H., Yoon, H., Szlyk, H., Aguilar‐Gaxiola, S., & Natera, G. (2016). Deportation experiences and depression among US citizen‐children with undocumented Mexican parents. *Child: care, health and development*, *42*(2), 220-230.

Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: A systematic review. *BMC Psychiatry*, *10*,113-121.

Hacker, K., Arsenault, L., Franco, I., Shaligram, D., Sidor, M., Olfson, M., & Goldstein, J. (2014). Referral and follow-up after mental health screening in commercially insured adolescents. *Journal of Adolescent Health*, *55*(1), 17-23.

Hacker, K., Anies, M., Folb, B. L., & Zallman, L. (2015). Barriers to health care for undocumented immigrants: a literature review. *Risk Management and Healthcare Policy*, *8*, 175-183.

Hall, G. C. N., Ibaraki, A. Y., Huang, E. R., Marti, C. N., & Stice, E. (2016). A meta-analysis of cultural adaptations of psychological interventions. *Behavior therapy*, *47*(6), 993-1014.

Health Resources and Services Administration. (2012). *Medically underserved areas and populations.* Retrieved from http://bhpr.hrsa.gov/ shortage/muaps/

Hirai, M., Vernon, L. L., Popan, J. R., & Clum, G. A. (2015). Acculturation and enculturation, stigma toward psychological disorders, and treatment preferences in a Mexican American sample: The role of education in reducing stigma. *Journal of Latina/o Psychology*, *3*(2),88-102. doi: 10/1037/lat0000035

Horevitz, E., Organista, K. C., & Arean, P. A. (2015). Depression treatment uptake in integrated primary care: how a "Warm Handoff" and other factors affect decision making by Latinos. *Psychiatric Services*, *66*(8), 824-830.

Howard, K. I., Cornille, T. A., Lyons, J. S., Vessey, J. T., Lueger, R. J., & Saunders, S. M. (1996). Patterns of mental health service utilization. *Archives of General Psychiatry, 53*, 696-703. doi: 10.1001/archpsyc.1996.01830080048009

Insel, T. R. (2008). Assessing the economic costs of serious mental illness. *The American Journal of Psychiatry*, *165*, 663-665. doi: 10.1176/appi.ajp.2008.08030366

Interian, A., Martinez, I. E., Guarnaccia, P. J., Vega, W. A., & Escobar, J. I. (2007). A qualitative analysis of the perception of stigma among Latinos receiving antidepressants. *Psychiatric Services*, *58*(12), 1591-1594. doi: 10.1176/appi.ps.58.12.159

Israel, T., Walther, W. A., Gortcheva, R., & Perry, J. S. (2011). Policies and practices for LGBT clients: Perspectives of mental health services administrators. *Journal of Gay and Lesbian Mental Health*, *15*, 152-168. doi: 1080/19359705.2010.539090

Jacobs, E. A., Lauderdale, D. S., Meltzer, D., Shorey, J. M., Levinson, W., & Thisted, R. A. (2001). Impact of Interpreter Services on Delivery of Health Care to Limited–English-proficient Patients. *Journal of general internal medicine*, *16*(7), 468-474.

Jorm, A. F. (2012). Mental health literacy: Empowering the community to take action for better mental health. *American Psychologist*, *67*, 231-243. doi: 10.1037/a0025957

Kataoka, S. H., Zhang, L., & Wells, K. B. (2002). Unmet need for mental health care among US children: Variation by ethnicity and insurance status. *American Journal of Psychiatry*, *159*(9), 1548-1555.

Kazdin, A. E., & Blase, S. L. (2011). Rebooting psychotherapy research and practice to reduce the burden of mental illness. *Perspectives on Psychological Science*, *6*, 21-37. doi: 10.1177/174569161039527

Kazdin, A. E., & Rabbit, S. M. (2013). Novel models for delivering mental health services and reducing the burdens of mental illness. *Clinical Psychological Science*, *1*, 170-191. doi: 10.1177/2167702612463566

Katon, W. J., & Unützer, J. (2013). Health reform and the Affordable Care Act: the importance of mental health treatment to achieving the triple aim. *Journal of Psychosomatic Research*, *74*(6), 533-537.

Kessler, R. C., Demler, O., Frank, R. G., Olfson, M., Pincus, H. A., . . . Zaslavsky, A. M. (2005). Prevalence and treatment of mental disorders, 1990 to 2003. *New England Journal of Medicine*, *352*, 2515–2523. doi: 10.1056/NEJMsa043266

Kessler, R. C., Heeringa, S., Lakoma, M. D., Petukhova, M., Rupp, A. E., Schoenbaum, M. & … Zaslavsky, A. M. (2008). Individual and society effects of mental disorders on earnings in the United States: Results from the National Comorbidity Survey Replication. *The American Journal of Psychiatry*, *165*, 703-711. doi: 10.1176/appi.ajp.2008.08010126

Kessler, R., & Stafford, D. (2008). Primary care is the de facto mental health system. In R. Kessler, D. Stafford (Eds.), *Collaborative medicine case studies: Evidence in practice* (pp. 9-21). New York, NY: Springer Science + Business Media. doi: 10.1007/978-0-387-76894-6_2

Kim, G., Loi, C. A., Chiriboga, D. A., Jang, Y., Parmelee, P., & Allen, R. S. (2011). Limited English proficiency as a barrier to mental health service use: A study of Latino and Asian immigrants with psychiatric disorders. *Journal of Psychiatric Research*, *45*, 104-110. doi:10.1016/j.psychires.2010.04.031

Kim, G., Parton, J. M., Ford, K., Bryant, A. N., Shim, R. S., & Parmelee, P. (2014). Geographic and racial-ethnic differences in satisfaction with and perceived benefits of mental health services. *Psychiatric Services*, *65*, 1474-1482. doi: 10:1176/appi.ps.201300440

Kimerling, R., & Baumrind, N. (2005). Access to specialty mental health services among women in California. Psychiatric Services, 56, 729-734. doi: 10.1176/appi.ps.56.6.729

Kirby, J. B., & Kaneda, T. (2005). Neighborhood socioeconomic disadvantage and access to health care. Journal of Health and Social Behavior, 46, 15-31. doi: 10.1177/002214650504600103

Kohn-Wood, L. P., & Hooper, L. M. (2014). Cultural competency, culturally tailored care, and the primary care setting: Possible solutions to reduce racial/ethnic disparities in mental health care. *Journal of Mental Health Counseling*, *36*(2), 173-188.

Kouyoumdjian, H., Zamboanga, B. L., & Hansen, D. J. (2003). Barriers to community mental health services for Latinos: Treatment considerations. *Clinical Psychology: Science and Practice*, *10*(4), 394-422.

Lagomasino, I. T., Dwight-Johnson, M., Miranda, J., Zhang, L., Liao, D., Duan, N., & Wells, K. (2005). Disparities in depression treatment for Latinos and site of care. *Psychiatric Services*, *56*, 1517-1523. doi:10.1176/appi.ps.56.12.1517

Li, W., Dorstyn, D. S., & Denson, L. A. (2016). Predictors of mental health service use by young adults: A systematic review. *Psychiatric Services*, *67*, 946-956. doi: 10.1176/appi.ps.201500280

Lopez, S. R., Lara, M. C., Kopelowicz, A., Solano, S., Foncerrada, H., & Aguilera, A. (2009). La CLAve to increase psychosis literacy of Spanish-speaking community residents and family caregivers. *Journal of Consulting and Clinical Psychology*, *77*(4), 763-774.doi: 10/1037/a0016031

Mackenzie, C. S., Gekoski, W. L., & Knox, V. J. (2006). Age, gender, and the underutilization of mental health services: The influence of help-seeking attitudes. *Aging & Mental Health*, *10*, 574-582. doi: 10.1080/13607860600641200

McClure, H. H., Snodgrass, J. J., Martinez, C. R., Eddy, J. M., Jiménez, R. A., & Isiordia, L. E. (2010). Discrimination, psychosocial stress, and health among Latin American immigrants in Oregon. *American Journal of Human Biology*, *22*(3), 421-423.

McHugh, R. K., & Barlow, D. H. (2010). The dissemination and implementation of evidence-based psychological treatments: A review of current efforts. *American Psychologist*, *65*, 73-84. doi: 10.1037/a0018121

Mills, M. L. (2012). Unconventional mental health treatment: Reexamining the racial-ethnic disparity in treatment-seeking behavior. *Psychiatric Services*, *63*(2), 142-146.

Mohr, D. C., Hart, S. L., Howard, I., Julian, I., Vella, I., Cartledge, C., & Feldman, M. D. (2006). Barriers to psychotherapy among depressed and nondepressed primary care patients. *Annals of Behavioral Medicine*, *32*, 254-258. doi: 10.1207/s15324796abm3203_12

Mojtabai, R., Olfson, M., & Mechanic, D. (2002). Perceived need and help-seeking in adults with mood, anxiety, or substance use disorders. *Archives of General Psychiatry*, *59*(1), 77-84.

Mojtabai, R. (2005). Trends in contacts with mental health professionals and cost barriers to mental health care among adults with significant psychological distress in the United States: 1997-2002. *American Journal of Public Health*, *95*, 2009-2014. doi: 10.2105/AJPH.2003.037630

Mojtabai, R., Olfson, M., Sampson, N. A., Jin, R., Druss, B., Wang, P. S., & … Kessler, R. C. (2011). Barriers to mental health treatment: Results from the National Comorbidity Survey Replication. *Psychological Medicine*, *41*, 1751-1761. doi: 10.1017/S0033291710002291

Möller-Leimkühler, A. M. (2002). Barriers to help-seeking by men: A review of sociocultural And clinical literature with particular reference to depression. *Journal of affective disorders*, *71*(1), 1-9.

Nadeem, E., Lange, J. M., & Miranda, J. (2008). Mental health care preferences among low-income and minority women. *Archives of Women's Mental Health*, *11*(2), 93-102.

Nakash, O., & Saguy, T. (2015). Social identities of clients and therapists during the mental health intake predict diagnostic accuracy. *Social Psychological and Personality Science*, *6*(6), 710-717.

Olfson, M., Mojtabai, R., Sampson, N. A., Hwang, I., Druss, B., Wang, P. S.,, & … Kessler, R. C. (2009). Dropout from outpatient mental health care in the United States. *Psychiatric Services*, *60*, 898-907. doi: 10.1176/appi.ps.60.7.898

Ojeda, V. D., & McGuire, T. G. (2006). Gender and racial/ethnic differences in use of outpatient mental health and substance use services by depressed adults. Psychiatric Quarterly, *77*, 211-222. doi: 10.1007/s11126-006-9008-9

Ortega, A. N., Fang, H., Perez, V. H., Rizzo, J. A., Carter-Pokras, O., Wallace, S. P., & Gelberg, L. (2007). Health care access, use of services, and experiences among undocumented Mexicans and other Latinos. *Archives of Internal Medicine*, *167*(21), 2354-2360.

Patient Protection and Affordable Care Act, 42 U.S.C § 18001 (2010).

Pedersen, E. R., & Paves, A. P. (2014). Comparing perceived public stigma and personal stigma of mental health treatment seeking in a young adult sample. *Psychiatry research*, *219*(1), 143-150.

Pérez, D. J., Fortuna, L., & Alegria, M. (2008). Prevalence and correlates of everyday discrimination among US Latinos. *Journal of community psychology*, *36*(4), 421-433.

Pizer, J. C., Sears, B., Mallory, C., & Hunter, N. D. (2011). Evidence of persistent and pervasive workplace discrimination against LGBT people: The need for federal legislation prohibiting discrimination and providing for equal employment benefits. *Loyola of Los Angeles Law Review*, *45*, 715-790.

Prince, M., Patel, V., Saxena, S., Maj, M., Maselko, J., Phillips, M. R., & Rahman, A. (2007). No health without mental health. *The Lancet*, *370*(9590), 859-877.

Rastogi, M., Massey-Hastings, N., & Wieling, E. (2012). Barriers to seeking mental health services in the Latino/a community: A qualitative analysis. *Journal of Systemic Therapies*, *31*(4), 1-17.

Ray-Sannerud, B. N., Dolan, D. C., Morrow, C. E., Corso, K. A., Kanzler, K. E., Corso, M. L., & Bryan, C. J. (2012). Longitudinal outcomes after brief behavioral health intervention in an integrated primary care clinic. *Families, Systems, & Health*, *30*, 60-71. doi: 10.1037/a0027029

Raymond-Flesch, M., Siemons, R., Pourat, N., Jacobs, K., & Brindis, C. D. (2014). There is no help out there and if there is, it's really hard to find": A qualitative study of the health concerns and health care access of Latino "DREAMers. *Journal of Adolescent Health*, *55*(3), 323-328.

Regier, D. A., Goldberg, I. D., & Taube, C. A. (1978). The de facto U.S. mental health services system. *Archives of General Psychiatry*, *35*, 685-693. doi:10.1001/archpsyc.1978.01770300027002

Robinson, P. J., & Reiter, J. T. (2016). *Behavioral consultation and primary care: A guide to integrating services* (2nd edition). New York: Springer Publishing Co.

Rowan, K., McAlpine, D. D., & Blewett, L. A. (2013). Access and cost barriers to mental health care, by insurance status, 1999–2010. *Health affairs*, *32*(10), 1723-1730.

Sanchez, K., Chapa, T., Ybarra, R., & Martinez Jr, O. N. (2014). Eliminating health disparities through culturally and linguistically centered integrated health care: consensus statements, recommendations, and key strategies from the field. *Journal of health care for the poor and underserved*, *25*(2), 469-477.

Ruiz, E., Aguirre, R. T. P., & Mitschke, D. B. (2013). What leads non-U.S.-born Latinos to access mental health care? *Social Work in Health Care*, *52*, 1-19.

Sareen, J., Jagdeo, A., Cox, B. J., Clara, I., ten Have, M., Belik, S., & … Stein, M. B. (2007). Perceived barriers to mental health service utilization in the United States, Ontario, and the Netherlands. *Psychiatric Services*, *58*(3), 357-364. doi: 10.1176/appi.ps.58.3.357

Sentell, T., Shumway, M., & Snowden, L. (2007). Access to mental health treatment by English language proficiency and race/ethnicity. *Journal of General Internal Medicine*, *22*(2). 289-293.

Shattell, M. M., Hamilton, D., Starr, S. S. Jenkins, C. J., & Hinderliter, N. A. (2008). Mental health service needs of a Latino population: A community-based participatory research project. *Issues in Mental Health Nursing*, *29*(4), 351-370.

Sládková, J., Mangado, S. M. G., & Quinteros, J. R. (2012). Lowell immigrant communities in the climate of deportations. *Analyses of Social Issues and Public Policy*, *12*(1), 78-95.

Smith, M. V., Shao, L., Howell, H., Wang, H., Poschman, K., & Yonkers, K. A. (2009). Success of mental health referral among pregnant and postpartum women with psychiatric distress. *General hospital psychiatry*, *31*(2), 155-162.

Smith, T. B., Rodríguez, M. D., & Bernal, G. (2011). Culture. *Journal of Clinical Psychology*, *67*, 166-175. doi: 10.1002/jclp.20757

Stacciarini, J. M. R., Smith, R. F., Wiens, B., Pérez, A., Locke, B., & LaFlam, M. (2015). I didn't ask to come to this country… I was a child: The mental health implications of growing up undocumented. *Journal of immigrant and minority health/Center for Minority Public Health*, *17*(4), 1225.

Substance Abuse and Mental Health Services Administration. (2013). *Affordability most frequent reason for not receiving mental health services*. The NSDUH Report. Data Spotlight. Rockville, MD: SAMHSA. Retrieved from http://www.samhsa.gov/data/spotlight/ spot075-services-affordability-2013.pdf

Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A., Nadal, K. L., & Esquilin, M. (2007). Racial microaggressions in everyday life: implications for clinical practice. *American psychologist*, *62*(4), 271.

Sue, S., Zane, N., Nagayama Hall, G. C., & Berger, L. K. (2009). The case for cultural competency in psychotherapeutic interventions. *Annual review of psychology*, *60*, 525-548.

ten Have, M., de Graaf, R., Ormel, J., Vilagut, G., Kovess, V., & Alonso, J. (2010). Are attitudes towards mental health help-seeking associated with service use? Results from the European Study of Epidemiology of Mental Disorders. *Social Psychiatry and Psychiatric Epidemiology, 45*, 153-163. doi: 10.1007/s00127-009-0050-4

Tran, A. G., Lee, R. M., & Burgess, D. J. (2010). Perceived discrimination and substance use in Hispanic/Latino, African-born Black, and Southeast Asian immigrants. *Cultural Diversity and Ethnic Minority Psychology*, *16*(2), 226.

Uebelacker, L. A., Marootian, B. A., Pirraglia, P. A., Primack, J., Tigue, P. M., Haggarty, R., &…Miller, I. W. (2012). Barriers and facilitators of treatment for depression in a Latino community: A focus group study. *Community Mental Health Journal*, *48*(1), 114-126. doi: 10.1007/s10597-011-9388-7

Umaña-Taylor, A. J., & Updegraff, K. A. (2007). Latino adolescents' mental health: Exploring the interrelations among discrimination, ethnic identity, cultural orientation, self-esteem, and depressive symptoms. *Journal of adolescence*, *30*(4), 549-567. Uniform Data System. (2007). *The Health Center Program: National aggregate data*. Retrieved from http://bphc.hrsa.gov/uds/

Vander Wielen, L. M., Gilchrist, E. C., Nowels, M. A., Petterson, S M., Rust, G., & Biller, B. F. (2016). Not near enough: Racial and ethnic disparities in access to nearby behavioral health care and primary care. *Journal of Healthcare for the Poor and Underserved*, *26*(3), 1032-1047.

Vasquez, M. J. (2007). Cultural difference and the therapeutic alliance: An evidence-based analysis. *American Psychologist*, *62*(8), 878.

Vega, W. A., Kolody, B., Aguilar-Gaxiola, S., & Catalano, R. (1999). Gaps in service utilization by Mexican Americans with mental health problems. *American Journal of Psychiatry*, *156*(6), 928-934.

Vega, W. A., & Lopez, S. R. (2001). Priority issues in Latino mental health services research. *Mental Health Services Research*, *3*, 189-200. doi:10.1023/A:1013125030718

Villalobos, B. T., Bridges, A. J., Anastasia, E. A., Ojeda, C. A., Hernandez Rodriguez, J., & Gomez, D. (2015). Effects of language concordance and interpreter use on therapeutic alliance in Spanish-speaking integrated behavioral health care patients. *Psychological Services.* Advance online publication. http://dx.doi.org/10.1037/ser0000051

Walker, E. R., Cummings, J. R., Hockenberry, J. M., & Druss, B. G. (2015). Insurance status, use of mental health services, and unmet need for mental health care in the United States. *Psychiatric Services*, *66*, 578-584. doi: 10.1176/appi.ps.201400248

Wang, P. S., Berglund, P., & Kessler, R. C. (2000). Recent care of common mental disorders in the United States. *Journal of Internal Medicine*, *15,* 284-292. doi: 10.1046/j.1525-1497.2000.9908044.x

Wang, P. S., Lane, M., Olfson, M., Pincus, H. A., Wells, K. B., & Kessler, R. C. (2005a). Twelve-month use of mental health services in the United States: Results from the National Comorbidity Survey replication. *Archives of General Psychiatry*, *62*, 629-640. doi: 10.1001/archpsyc.62.6.629

Wang, P. S., Berglund,P., Olfson, M., Pincus, H. A., Wells, K. B., & Kessler, R. C. (2005b). Failure and delay in initial treatment contact after first onset of mental disorders in the National Comorbidity Survey replication. *Archives of General Psychiatry*, *62*, 603-613. doi: 10.1001/archpsyc.62.6.603

Wang, P. S., Demler, O., Olson, M., Pincus, H. A., Wells, K. B., & Kessler, R. C. (2006). Changing profiles of service sectors used for mental health care in the United States. *The American Journal of Psychiatry*, *163*, 1187-1198. doi: 10.1176/appi.ajp.163.7.1187

Wells, A., Lagomasino, I. T., Palinkas, L. A., Green, J. M., & Gonzalez, D. (2013). Barriers to depression treatment among low-income, Latino emergency department patients. *Community Mental Health Journal*, *49,* 412-418. doi: 10/1007/s10597-012-9547-5

Williams, J., Palmes, G., Klinepeter, K., Pulley, A., & Foy, J. M. (2005). Referral by pediatricians of children with behavioral health disorders. *Clinical Pediatrics*, *44*(4), 343-349.

Tables

Table 1
Study 1 Phi coefficients for barriers to IPC

	1	2	3	4	5	6	7	8	9
1. Cost	--	.26	.21	-.08	.02	.15	.14	-.09	.
2. Insurance	**.26^{t}**	--	-.02	.23	.31^{t}	.04	-.25	-.07	.
3. Transportation	**.14**	**.06**	--	-.15	-.07	-.17	.06	-.08	.
4. Time	**.02**	**.11**	**.05**	--	.11	.08	.24	-.10	.
5. Prefer to resolve the problem alone	**.07**	**.36****	**.08**	**-.05**	--	.49**	.12	-.08	.
6. Doubts utility of therapy	**-.14**	**.15**	**.13**	**.30***	**.17**	--	.41*	.24	.
7. Reluctance to change therapist	**-.05**	**.01**	**.10**	**.13**	**.02**	**.37****	--	.17	.
8. Language	**.26^{t}**	**.13**	**.20**	**-.08**	**.26^{t}**	**-.17**	**-.18**	--	.
9. Fear of deportation	**.13**	**.39****	**.18**	**.18**	**.04**	**.14**	**.30***	**-.07**	--

Bold values represent Latinx participants; unbold values represent non-Latinx White participants.
*$p < .05$; **$p < .01$; ***$p < .001$; $^{t}p < .10$.

Table 2
Study 1 Phi coefficients for barriers to SMH

	1	2	3	4	5	6	7	8	9
1. Cost	--	.30^{t}	-.10	.29^{t}	-.17	-.11	.26	.33*	.
2. Insurance	**.49*** **	--	.07	.26	.17	.26	-.01	.16	.
3. Transportation	**.21**	**.12**	--	-.14	.06	.09	-.04	.46**	.
4. Time	**.13**	**.19**	**.12**	--	.07	.03	.14	-.03	.
5. Prefer to resolve the problem alone	**.11**	**.19**	**.08**	**-.06**	--	.69***	.08	.30^{t}	.
6. Doubts utility of therapy	**.19**	**.12**	**.07**	**.23**	**.21**	--	.26	.17	.
7. Reluctance to change therapist	**.12**	**.18**	**.03**	**.14**	**.30***	**.28***	--	-.09	.
8. Language	**.23**	**.25^{t}**	**.11**	**.01**	**.11**	**-.02**	**.11**	--	.
9. Fear of deportation	**.21**	**.44****	**.12**	**.02**	**.03**	**-.02**	**.14**	**.01**	--

Bold values represent Latinx participants; unbold values represent non-Latinx White participants.
*$p < .05$; **$p < .01$; ***$p < .001$; $^{t}p < .10$.

Table 3
Study 1 Descriptive statistics for barriers by ethnicity and setting

Ethnicity	Setting	
	IPC *M (SD)*	SMH *M (SD)*
Total barriers		
Latinx	2.08 (1.69)	3.98 (0.27)
Non-Latinx White	1.94 (1.43)	3.00 (1.74)
Reduced barriers		
Latinx	1.52 (1.35)	2.90 (1.62)
Non-Latinx White	1.91 (1.42)	2.91 (1.66)
Structural barriers		
Latinx	0.83 (0.93)	2.06 (1.17)
Non-Latinx White	0.86 (0.92)	1.86 (1.08)
Attitudinal barriers		
Latinx	0.69 (0.80)	0.81 (0.91)
Non-Latinx White	1.06 (1.06)	1.14 (1.09)

Table 4
Study 1 Z-tests for individual barriers by setting

	IPC		SMH			
Barrier	*n*	%	*n*	%	*z*	*p*
Latinx						
Cost	10	19.6	39	76.5	-5.75	<.001
Insurance	14	26.9	35	67.3	-4.13	<.001
Transportation	6	11.3	13	24.5	-1.77	.077
Time	15	28.3	19	35.8	-0.83	.407
Prefer to resolve the problem alone	11	20.8	13	24.5	-0.46	.646
Doubts about utility of therapy	4	7.7	6	11.5	-0.67	.503
Having to change therapist	20	37.7	23	43.4	-0.59	.555
Language	12	22.6	36	67.9	-4.68	<.001
Fear of deportation	15	28.3	19	35.8	-0.83	.407
Non-Latinx White						
Cost	9	24.3	29	78.4	-4.65	<.001
Insurance	6	16.2	15	40.5	-2.32	.020
Transportation	7	17.9	11	28.2	-1.08	.285
Time	11	28.2	15	38.5	-0.96	.337
Prefer to resolve the problem alone	8	20.5	9	23.1	-0.27	.787
Doubts about utility of therapy	12	30.8	15	38.5	-0.72	.478
Having to change therapist	18	51.4	17	48.6	0.24	.810
Language	1	2.6	3	7.7	-1.03	.303

Z-scores for the ratio SMH/IPC

Table 5
Study 2 Frequency of qualitative interview themes

Theme	*n* (%) Total	*n* (%) Latinx	*n* (%) Non-Latinx White
Barriers and facilitators to IPC			
Transportation/distance			
Barrier	3 (23%)	2 (22%)	1 (25%)
Facilitator	8 (62%)	4 (44%)	4 (100%)
Time/schedule			
Barrier	4 (31%)	2 (22%)	2 (50%)
Facilitator	6 (46%)	5 (56%)	1 (25%)
Childcare			
Barrier	2 (15%)	1 (11%)	1 (25%)
Facilitator	0	0	0
Insurance			
Barrier	1 (8%)	1 (11%)	0
Facilitator	0	0	0
Cost			
Barrier	3 (23%)	3 (33%)	0
Facilitator	1 (8%)	1 (11%)	0
Knowledge/familiarity			
Barrier	4 (31%)	2 (22%)	2 (50%)
Facilitator	10 (77%)	7 (78%)	3 (75%)
Perceived utility of therapy			
Barrier	2 (15%)	2 (22%)	0
Facilitator	7 (54%)	5 (56%)	2 (50%)
Perceived need			
Barrier	0	0	0
Facilitator	4 (31%)	2 (22%)	2 (50%)
Stigma			
Barrier	1 (8%)	0	1 (25%)
Facilitator	1 (8%)	0	1 (25%)
Past interactions with providers			
Barrier	3 (23%)	3 (33%)	0
Facilitator	4 (31%)	2 (22%)	2 (50%)
Patient experience of behavioral health services			
Satisfaction	13 (100%)	9 (100%)	4 (100%)
Dissatisfaction	2 (15%)	2 (22%)	0
Treatment was beneficial overall	11 (85%)	8 (89%)	3 (75%)
Treatment was not beneficial overall	1 (8%)	1 (11%)	0
Treatment component was beneficial	11 (85%)	7 (78%)	4 (100%)
Treatment component was not beneficial	1 (8%)	1 (11%)	0

Study 2 Frequency of qualitative interview themes (Cont.)

Theme	*n* (%) Total	*n* (%) Latinx	*n* (%) Non-Latinx White
Positive interpersonal characteristics of BHP	10 (77%)	6 (67%)	4 (100%)
Negative interpersonal characteristics of BHP	2 (15%)	2 (22%)	0
Expertise and knowledge of BHP	5 (38%)	3 (33%)	2 (50%)
Lack of expertise and knowledge of BHP	1 (8%)	1 (11%)	0
Personalized care	3 (23%)	1 (11%)	2 (50%)
Impersonal care	1 (8%)	1 (11%)	0
Care received was comprehensive	4 (31%)	3 (33%)	1 (25%)
Care received was not comprehensive	0	0	0
Collaboration between medical provider and BHPs	12 (92%)	8 (89%)	4 (100%)
<u>Acceptability of the integrated primary care model</u>			
Preference for IPC setting	9 (69%)	6 (67%)	3 (75%)
Preference for SMH setting	0	0	0
No setting preference	3 (23%)	3 (33%)	0
Co-location of behavioral health and primary care medicine			
Acceptable	11 (85%)	7 (78%)	4 (100%)
Not preferred	0	0	0
Same-day medical and behavioral health visits			
Acceptable	9 (69%)	5 (56%)	4 (100%)
Not preferred	3 (23%)	3 (33%)	0
Brief behavioral health visits			
Acceptable	9 (69%)	7 (78%)	2 (50%)
Not preferred	2 (15%)	1 (11%)	1 (25%)
Less frequent behavioral health visits			
Acceptable	13 (100%)	9 (100%)	4 (100%)
Not preferred	1 (8%)	1 (11%)	0
Option to include family members in behavioral health visits			
Acceptable	9 (69%)	6 (67%)	3 (75%)
Not preferred	4 (31%)	3 (33%)	1 (25%)
Outside referral for specialty mental health			
Acceptable	0	0	0
Not preferred	2 (15%)	1 (11%)	1 (25%)

Study 2 Frequency of qualitative interview themes (Cont.)

Theme	*n* (%) Total	*n* (%) Latinx	*n* (%) Non-Latinx White
Patient recommendations to improve access to behavioral health care			
Spread information about mental health and behavioral health services	7 (54%)	4 (44%)	3 (75%)
Co-location of behavioral health and primary care medicine	2 (15%)	1 (11%)	1 (25%)
Incorporate behavioral health check-ins during medical visits	3 (23%)	3 (33%)	0
Offer behavioral health classes in primary care	1 (8%)	1 (11%)	0
Increase behavioral health personnel and resources	1 (8%)	0	1 (25%)
Increase number of integrated sites offering behavioral health services	3 (23%)	2 (22%)	1 (25%)
Increase scheduling flexibility for behavioral health services	2 (15%)	1 (11%)	1 (25%)
Hire a greater number of bilingual BHPs	1 (8%)	1 (11%)	0
Extend the permitted length of episodes of behavioral health care	1 (8%)	0	1 (25%)
Optimize the patient's ability to continue with the same BHP	1 (8%)	0	1 (25%)
Reduce fees for low-income patients	1 (8%)	1 (11%)	0
Nothing	4 (31%)	3 (33%)	1 (25%)

Table 6
Study 3 Percentage endorsement of individual barriers by setting

	IPC		SMH	
Barrier	*n*	%	*n*	%
Cost	32	65.3	37	77.1
Insurance	27	55.1	30	62.5
Transportation	7	14.3	12	25.0
Clinic hours	20	40.8	20	41.7
Time	22	44.9	15	31.3
Embarrassment	15	30.6	9	18.8
Communication	13	26.5	13	27.1
Doubts about utility of therapy	13	26.5	12	25.0
Therapy conflicts with values and beliefs	7	14.3	10	20.8

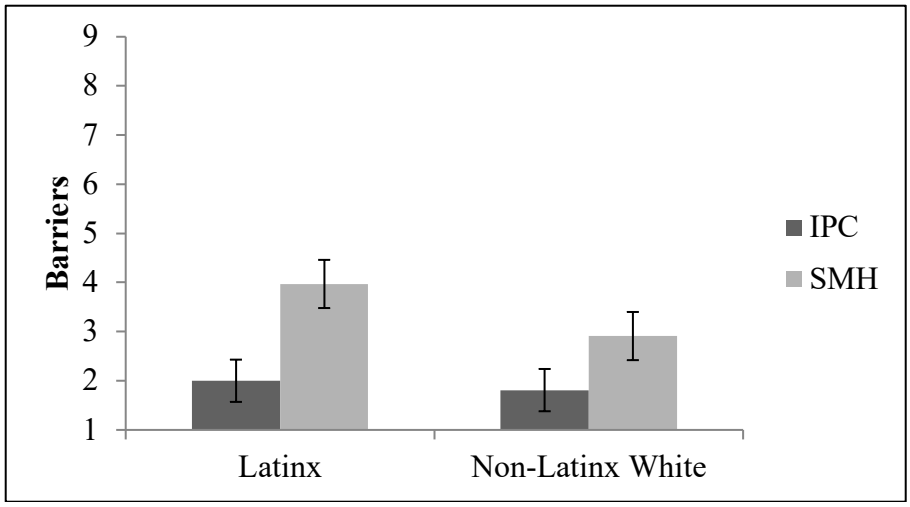

Figure 1. Study 1 Setting X Ethnicity interaction in mixed between-within subjects ANOVA on the sum of all barriers

Appendices

Appendix A

Brief Adult Outcome Questionnaire

This brief questionnaire asks about some of the most commonly reported thoughts, feelings and behaviors among adults seeking behavioral health treatment. Please think about the PAST TWO WEEKS and indicate how often each of the following occurred. This will help you and your therapist to plan your treatment and monitor your improvement.

In the past two weeks (14 days), how often did you:	**Never** (0 days)	**Hardly ever** (1 or 2 days)	**Some-times** (3-5 days)	**Often** (6-10 days)	**Very often** (11-14 days)
…feel unhappy or sad?	☐	☐	☐	☐	☐
…have little or no energy?	☐	☐	☐	☐	☐
…have a hard time getting along with family, friends or coworkers?	☐	☐	☐	☐	☐
…feel worthless?	☐	☐	☐	☐	☐
…feel no interest in things?	☐	☐	☐	☐	☐
…feel tense or nervous?	☐	☐	☐	☐	☐
…cry easily?	☐	☐	☐	☐	☐
...have someone express concerns about your alcohol or drug use?	☐	☐	☐	☐	☐
…feel lonely?	☐	☐	☐	☐	☐
…have problems with sleep (too much or too little)?	☐	☐	☐	☐	☐
…feel irritated?	☐	☐	☐	☐	☐
…feel hopeless about the future?	☐	☐	☐	☐	☐
…feel you were not able to complete your work or other important tasks in a timely manner?	☐	☐	☐	☐	☐
…find yourself daydreaming, worrying, or staring into space?	☐	☐	☐	☐	☐
... have thoughts that you would be better off dead?	☐	☐	☐	☐	☐
… thought about hurting yourself in some way?	☐	☐	☐	☐	☐

Please take a moment to give feedback on your behavioral health session.	Do not agree	Somewhat disagree	Not sure	Somewhat agree	Agree
I am satisfied with my appointment.	☐	☐	☐	☐	☐
I found it easy to talk about my problems with the therapist.	☐	☐	☐	☐	☐
The therapist gave me useful information and tips for how to manage my problems.	☐	☐	☐	☐	☐
I intend to come back for another appointment.	☐	☐	☐	☐	☐

We are trying to learn about how to improve the accessibility of our behavioral health services for our patients. Would you be willing to take just a few minutes to have a brief conversation with me about your opinions?

Would you prefer to come back here for your next behavioral health appointment or be referred to a psychological clinic? Why?

Would it be harder for you to come back here for your next behavioral health appointment or be referred to a psychological clinic? Why?

What is likely to interfere with you coming to your next behavioral health appointment?

Potential barriers	CC Behavioral Health		Psychological Clinic		Which one more?	Notes
Previously used the service?	Yes	No	Yes	No		
Cost ($10)	Yes	No	Yes	No		
Insurance	Yes	No	Yes	No		
Transportation	Yes	No	Yes	No		
Time	Yes	No	Yes	No		
Prefer to resolve on my own	Yes	No	Yes	No		
Not sure if therapy will help	Yes	No	Yes	No		
Language	Yes	No	Yes	No		
Fear of deportation	Yes	No	Yes	No		
Having to change therapist	Yes	No	Yes	No		
Other:	Yes	No	Yes	No		

Which of these barriers [review in list form which the pt. endorsed] is the most important?

Some people do prefer to seek help at a psychological clinic. What might be some reasons for that?

If you had not attended this behavioral health visit today, what would you have done about [patient's behavioral health concern(s)]?

If you were already feeling better before the next behavioral health appointment, how likely is it that you would still at

Appendix B

"I'd like to first get a sense of your past experiences with seeking mental health treatment."

Opening Question	Follow up questions
Can you tell me about the last time you sought out mental health care, before you saw [BHP] at [site]?	• When was it? • What was it for? • What made you decide to seek treatment? • What was it? • How long were you there? • How did it end?
Can you tell me more about your experience of seeking mental health care over the course of your lifetime?	
Can you tell me about a time you thought you might need extra help, but delayed in getting it?	• Why did you delay? • What made you decide to seek out help in the end?
Can you tell me about a time you thought you might need extra help, but decided not to seek it out?	• Why did you not seek it out? • Why else? • What did you do instead?

Current visit:
"Thank you for that. Now let's talk about your visit with [BHP]."

Opening Question	Follow up questions
What was the reason for your visit with [BHP]? How did you decide to attend the visit with [BHP]?	
Can you tell me about your visit with [BHP]?	• What was it like for you to receive behavioral health services at your medical clinic? • What did you like about it? What did you not like about it? • When you were offered a behavioral health visit, what did you expect it to be like? How was it different than what you expected? • What were you hoping to get out of your visit with [BHP]? • How helpful was the visit for you?

Opening Question	Follow up questions
• How do you feel about:	• Being offered a behavioral health appointment the same day as your medical appointment? • Your medical and behavioral health providers working together? • Having behavioral health appointments every two to four weeks instead of weekly? • Having behavioral health appointments that take 30 minutes instead of a whole hour? • The possibility of involving your family members in your behavioral health visits?
From your perspective, what different options do you have for addressing this issue?	• What do you like or not like about these different options? • [If not discussed] what do you like or not like about the idea of behavioral health care at CC or getting specialty mental health care from a therapist outside of CC?
Are you planning to continue with [BHP] or try to resolve this issue some other way? Why?	

Barriers:

Opening Question	Follow up questions
What things could get in the way of you coming to future behavioral health appointments?	• What else? • Follow-up Thesp-B • Are there any other reasons you would not continue behavioral health treatment? • How do these barriers relate to each other? • Which barriers interfere the most with you continuing behavioral health treatment? • How could these barriers be reduced?
If you could change only one thing to be able to access behavioral health treatment, what would it be?	
What prevented you from getting help sooner?	

Treatment preferences:

Opening Question	Follow up questions
Do you prefer to receive treatment at [site], a psychological clinic, have no preference, or prefer another way of resolving your problem?	
What are the pros and cons of [tx options they discussed as relevant]?	
Researchers have wondered if providing behavioral health services in medical clinics makes it easier to access care than traditional therapy. In your opinion, how is this working or not working?	

Recommendations:

Opening Question	Follow up questions
What could make it easier for you get behavioral health treatment at [site]? How could we improve our services?	• What do you wish was different about your experience?
What could make it easier for people in this community to get behavioral health treatment?	

Appendix C

Version A: Integrated Primary Care Version

If treatment for the problems listed on the previous page were offered at a primary care medical clinic, how likely would you be to use those services?

□ Not at all □ Somewhat Likely □ Likely □ Very Likely

What would you like about being able to get mental health treatment at a primary care medical clinic?

What are some reasons you might NOT want to get mental health treatment at a primary care medical clinic?

Below are some things that could get in the way of getting mental health treatment at your medical care clinic. Please select the response option for whether or not these factors would be an obstacle to you seeking treatment in this setting.

Would this get in the way of you seeking mental health treatment at your medical clinic?		
Cost (Approximately $10 per appointment)	Yes	No
Insurance coverage	Yes	No
Transportation	Yes	No
Ability to communicate with the therapist	Yes	No
Clinic hours of availability	Yes	No
Time	Yes	No
Embarrassment	Yes	No
Fear of negative consequences	Yes	No
Doubts about therapy effectiveness	Yes	No
Therapy is not consistent with my values and beliefs	Yes	No
Other:	Yes	No

Have you ever participated in therapy before?
Yes No

If yes, was it in a medical clinic, a specialty therapy clinic, both, or neither?

Have you ever been prescribed medication for problems like feeling depressed or anxious?
Yes No

Version B: Specialty Mental Health Version

If treatment for the problems listed on the previous page were offered at a specialty therapy clinic, how likely would you be to use those services?

□ Not at all □ Somewhat Likely □ Likely □ Very Likely

What would you like about being able to get mental health treatment at a specialty therapy clinic?

What are some reasons you might NOT want to get mental health treatment at a specialty therapy clinic?

Below are some things that could get in the way of getting mental health treatment at a specialty therapy clinic. Please select the response option for whether or not these factors would be an obstacle to you seeking treatment in this setting.

Would this get in the way of you seeking mental health treatment at a specialty therapy clinic?		
Cost	Yes	No
Insurance coverage	Yes	No
Transportation	Yes	No
Ability to communicate with the therapist	Yes	No
Clinic hours of availability	Yes	No
Time	Yes	No
Embarrassment	Yes	No
Fear of negative consequences	Yes	No
Doubts about therapy effectiveness	Yes	No
Therapy is not consistent with my values and beliefs	Yes	No
Other:	Yes	No

Have you ever participated in therapy before?
Yes No

If yes, was it in a medical clinic, a specialty therapy clinic, both, or neither?

Have you ever been prescribed medication for problems like feeling depressed or anxious?
Yes No

Appendix D

Demographic Questionnaire

1. Sex: ___ Male ___ Female ___ Transgender
2. Age: _____ Years
3. Ethnicity:

   ___ Latina/o

   ___ Non-Latino White

   If you are Hispanic or Latino, which country is your family originally from?

   _____

   ___ Asian/Pacific Islander

   ___ Black or African American

   ___ Other: _____
4. Education:

   ___ Less Than High School

   ___ High School Graduate

   ___ Trade School

   ___ Some College

   ___ Bachelor's Degree

   ___ Graduate Degree
5. Employment status:

   ___ Full Time

   ___ Part Time

   ___ Home Maker

   ___ Unemployed

   ___ Retired
6. Current marital status:

   ___ Married

   ___ Never Married

   ___ Divorced/Separated

   ___ Widowed

   ___ Other

Appendix E
IRB Approval Letters

UNIVERSITY OF ARKANSAS

To:	Elizabeth A. Anastasia BELL 4188
From:	Douglas James Adams, Chair IRB Committee
Date:	11/01/2018
Action:	**Expedited Approval**
Action Date:	10/29/2018
Protocol #:	1709063702R001
Study Title:	Barriers to Treatment for Behavioral Health Problems
Expiration Date:	09/20/2019
Last Approval Date:	10/29/2018

The above-referenced protocol has been approved following expedited review by the IRB Committee that oversees research with human subjects.

If the research involves collaboration with another institution then the research cannot commence until the Committee receives written notification of approval from the collaborating institution's IRB.

It is the Principal Investigator's responsibility to obtain review and continued approval before the expiration date.

Protocols are approved for a maximum period of one year. You may not continue any research activity beyond the expiration date without Committee approval. Please submit continuation requests early enough to allow sufficient time for review. Failure to receive approval for continuation before the expiration date will result in the automatic suspension of the approval of this protocol. Information collected following suspension is unapproved research and cannot be reported or published as research data. If you do not wish continued approval, please notify the Committee of the study closure.

Adverse Events: Any serious or unexpected adverse event must be reported to the IRB Committee within 48 hours. All other adverse events should be reported within 10 working days.

Amendments: If you wish to change any aspect of this study, such as the procedures, the consent forms, study personnel, or number of participants, please submit an amendment to the IRB. All changes must be approved by the IRB Committee before they can be initiated.

You must maintain a research file for at least 3 years after completion of the study. This file should include all correspondence with the IRB Committee, original signed consent forms, and study data.

cc: Alexander James Melkonian, Investigator
Linda E Guzman, Investigator
Roselee J Ledesma, Investigator
Ana Julia Bridges, Investigator

UNIVERSITY OF ARKANSAS

To:	Elizabeth A. Anastasia BELL 4188
From:	Douglas James Adams, Chair IRB Committee
Date:	01/17/2019
Action:	**Exemption Granted**
Action Date:	01/17/2019
Protocol #:	1809144189
Study Title:	Barriers to Mental Health Treatment for Integrated Primary Care Patients

The above-referenced protocol has been determined to be exempt.

If you wish to make any modifications in the approved protocol that may affect the level of risk to your participants, you must seek approval prior to implementing those changes. All modifications must provide sufficient detail to assess the impact of the change.

If you have any questions or need any assistance from the IRB, please contact the IRB Coordinator at 109 MLKG Building, 5-2208, or irb@uark.edu.

cc: Ana Julia Bridges, Investigator
Linda E Guzman, Investigator
Ayla R Mapes, Investigator
Roselee J Ledesma, Investigator
Meredith J Sourk, Investigator