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Utilization of Standardized Mental Health Assessments in Anthropological Research: Possibilities and Pitfalls

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Abstract

In the past decade anthropologists working the boundary of culture, medicine, and psychiatry have drawn from ethnographic and epidemiological methods to interdigitate data and provide more depth in understanding critical health problems. But rarely do these studies incorporate psychiatric inventories with ethnographic analysis. This article shows how triangulation of research methods strengthens scholars' ability (1) to draw conclusions from smaller data sets and facilitate comparisons of what suffering means across contexts; (2) to unpack the complexities of ethnographic and narrative data by way of interdigitating narratives with standardized evaluations of psychological distress; and (3) to enhance the translatability of narrative data to interventionists and to make anthropological research more accessible to policymakers. The crux of this argument is based on two discrete case studies, one community sample of Nicaraguan grandmothers in urban Nicaragua, and another clinic-based study of Mexican immigrant women in urban United States, which represent different populations, methodologies, and instruments. Yet, both authors critically examine narrative data and then use the Center for Epidemiologic Studies Depression Scale to further unpack meaning of psychological suffering by analyzing symptomatology. Such integrative methodologies illustrate how incorporating results from standardized mental health assessments can corroborate meaning-making in anthropology while advancing anthropological contributions to mental health treatment and policy.

Keyword	S
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Depression; Na	arrative; Triangu	lation; Psychologic	cal anthropology;	Women's health

Introduction

As anthropologists engaged across disciplines and communities of practice we endeavor to translate meaning, experience, and what Farmer (2004) calls "emplaced histories" into our research and practice in global mental health. Employing mixed methodologies challenges us to incorporate our research into interdisciplinary research practice and health policy discussions. Methodologically, ethnographic and narrative data can inform global mental health priorities and practices while standardized psychiatric instruments can contain cultural meanings important for community health. Epistemologically, we insert questions of meaning and symbolic significance into our studies of mental distress while exploring cross-cultural generalizability. This article critically examines how employing ethnographic approaches and psychiatric instruments presents both complementarity and conflict for anthropologists engaged in global mental health research.

There is a long legacy of anthropological contributions to cross-cultural studies of mental health. In their volume Culture and Depression, Kleinman and Good (1985) question the universality of the biomedical category "depression", showing how anthropological investigations reveal the limits of diagnostic categories based on assumptions of underlying universal symptomatology. Anthropologists and others have repeatedly shown the pitfalls in using standardized psychiatric instruments without cultural adaptation and validation (Kleinman 1988b; Summerfield 2008; Van Ommeren 2003). However, research in anthropology and mental health shows how mixed methods can have demonstrable benefit for improving public health and clinical medicine (Bolton, Tol, and Bass 2009; Kohrt, Hadley, and Hruschka 2009; Robins et al. 2008). In many cases, such research has been used to improve the content, delivery, and interpretation of psychiatric questionnaires (Bolton, Wilk, and Ndogoni 2004; Flaherty et al. 1988; Kaiser et al. 2013; Kohrt et al. 2011; Van Ommeren et al. 1999; Weaver and Hadley 2011). For example, qualitative work is used to determine the cultural equivalence through evaluation of technical, semantic, criterion, and construct equivalence (Van Ommeren 2003). Qualitative methods have been used to identify cultural concepts of distress, which may be supplemented to existing instruments or to validate instruments with an emic criteria (Kohrt et al. 2014). Yet, the actual incorporation of these approaches into mental health interventions has as of yet been unfulfilled. This is an important area of intervention for anthropologists working in global mental health, which requires critical inquiry into how research methods can be utilized to make widely-applied psychiatric questionnaires more culturally-relevant and in turn how this research can inform mental health practice.

Less-often explored is the question of how psychiatric instruments may inform ethnographic studies. Is there added value of applying standardized tools in anthropological studies of mental health? What should interdigitation of ethnographic and survey data look like? When culturally adapted, can psychiatric questionnaires contribute to answering key anthropological questions? Even when psychometric tools are not culturally adapted, do they offer insight into the relation between culture and mental health? This paper responds to these key questions, showing how combining ethnographic approaches, namely ethnographic interviews and life history narratives, with psychiatric inventories provides a

deeper understanding of mental distress and illness, thereby demonstrating the complementarity of these methodological approaches.

This article explores two case studies to illustrate these arguments. Drawing from published and unpublished data, the case studies outlined below represent different populations, methodologies, and instruments. The commonality between them is the use of the Center for Epidemiologic Studies Depression Scale (CES-D) and the authors' interest in the cultural contexts shaping women's social suffering and psychological distress. Both case studies placed ethnographic (case study 1) and life history narrative (case study 2) data at the center of their research projects and this paper explores how scores on a standardized mental health assessment influence interpretation of ethnographic findings and conclusions for mental health intervention. The CES-D was used in both cases to measure depressive symptoms alongside ethnographic and life history narrative data.

The CES-D is a 20-item questionnaire designed to assess the major symptoms of depression (Radloff 1977) and has been validated in Spanish (Soler et al. 1997) with Spanish-speaking populations in the United States, and as a shorter 10-item scale. In the Spanish validation, the sensitivity of the CES-D was 0.95, specificity was 0.91, Cronbach's alpha was 0.90 (Soler et al. 1997). The CES-D's targeted symptoms include depressed mood, changes in appetite and sleep, low energy, feelings of hopelessness, low self-esteem, and loneliness. Respondents are asked to consider the presence and duration of each item/symptom over the past week and to rate each along a 4-point scale from 0 (rarely or never) to 3 (most or all of the time). Possible scores range from 0 to 60 for the 20-item scale and 0 to 30 for the 10-item scale; a score of 16 for the long and 10 for the short item scales indicates "likelihood of depression" as opposed to a clinical diagnosis. In neither study presented here was the CES-D used to "diagnose" interlocutors with depression; rather, the tool was employed as one other source of descriptive information about women's distress and a comparative tool to investigate correspondence between the standardized CES-D and iterative ethnographic and life history narrative data.

Apart from using the CES-D, the two case studies depart from one another in significant ways. The first study examines a community-based sample of women who are grandmother caregivers in transnational families, reside in Managua, Nicaragua, and met with the anthropologist multiple times over the course of more than a year of field research, including one sitting in which the CES-D, along with other self-report mental health assessments, were applied. The second case study examines a clinical-based sample of Mexican immigrant women, many who are also grandmothers, in Chicago, Illinois, USA, who in most cases met with the anthropologist one time for a three to six hour interview that triangulated myriad methods. The first study is ethnographic, with the CES-D and two other mental health assessments serving as the only non-ethnographic methods utilized, which allowed for a nuanced understanding of psychological suffering within the social worlds of a small sample of women (n = 25). In the second study the CES-D was one of multiple methods complementing the life history narrative data, including scales measuring post-traumatic stress disorder (PTSD), diabetes stress, acculturation, and subjective social status as well as anthropometrics and finger stick blood samples among a larger sample (n = 121). While the first study illustrates how mental health assessments can enhance traditional ethnographic

projects, the latter study demonstrates how mixed methods can bring anthropological scholarship into dialogue with clinical medicine. Both studies demonstrate the benefit of interdigitating ethnographic and narrative data with public health and medicine in order to advance applicability to practitioner and policymaker audiences within the field of global mental health.

Anthropological Critique of Standardized Mental Health Assessments

Drawing from narrative theory and interpretive approaches, medical and psychological anthropologists contend that the way people experience and express mental distress is rooted in local cultural contexts that shape psychological suffering, which thus presents a challenge for use of standardized mental health assessment that have been developed in one culturally settings and their application in another setting (Kleinman 1988a, b; Van Ommeren 2003). Within anthropological research, social, cultural, and personal meanings are therefore best accessed through narrative and elicitive interviewing, combined with ethnographic knowledge of cultural and historical context (Kleinman 1988a). This perspective has led to a growing body of research that unpacks localized complexities of social suffering and broadened our understanding as anthropologists of how people experience and embody distress (Kohrt and Mendenhall 2015).

Medical anthropological scholarship on Latin American women's experiences and embodiment of social and psychological suffering provides a useful point of departure to consider how psychological suffering can be interpreted through standardized mental health assessments. Much of this research has followed from Nichter's (1981, 2010) formulation of cultural idioms of distress, which are "an adaptive response or attempt to resolve a pathological situation in a culturally meaningful way", especially for women, who may use such expressions to describe physical and emotional suffering of their marginalized social positions. For example, Setha Low (1981, 1985) illustrated how Costa Rican women communicate sociocultural patterns of suffering through "nervios". Kathryn Oths (1999) unpacked the cultural and economic significance of the term "debilidad" among Andean women, which refers to exhaustion resulting from a lifelong accumulation of productive and reproductive stresses. Peter Guarnaccia (1992) extensively examined the idiom of "ataque de nervios" and found Puerto Ricans use it to describe expressions of social, psychiatric, and physical vulnerability. Kaja Finkler (1994) described how "coraje", translated roughly as rage or anger, was the most commonly reported cause of illness among women in urban Mexico. Emily Mendenhall and colleagues (2010) argued "diabetes" emerged as an idiom of social suffering among low-income Mexican immigrants in the U.S. to communicate social suffering within the clinical sphere. Finally, Kristin Yarris' (2014) ethnographic research demonstrates how the idiom of "pensando mucho" (thinking too much) functions as an expression of emotional distress for Nicaraguan women. These largely ethnographic studies underscore the importance of carefully examining emotional distress among Latin American women in order to situate embodied symptoms into the larger cultural and social surrounds of women's lives.

More recently, medical anthropologists working in India and Haiti have applied such research to create psychiatric questionnaires that engage with and draw from ethnographic

knowledge of local, cultural forms of distress. For example, Weaver and Hadley (2011) conducted a study of Indian women residing in New Delhi and found that women expressed psychological distress more frequently through the idiom "tension" as opposed to "depression". The authors used a combination of ethnographic and more structured interviewing to develop a tool to measure the symptoms women used to describe tension and then used this measurement in a broader sample to show that tension overlapped with depression, but remained a distinct cultural expression of distress (Weaver and Hadley 2011). Working in Haiti, Kaiser and colleagues (2013) used a combination of open-ended and structured interviewing to develop a culturally-relevant instrument to assess mental health. To do so they identified a range of idioms for psychosocial distress through ethnographic procedures, then developed and piloted a scale to measure these systematically. Both projects proved successful not only in the ability to assess complex cultural factors that shape mental distress but also in the scholars' ability to communicate these findings to public health and clinical medicine.

This article brings together two different sets of data in order to probe the strengths and limitations of standardized mental health assessments in relation to anthropologicallyrelevant questions about culture and mental health. Although neither project was designed primarily to produce or verify CES-D data, these case studies together demonstrate how the CES-D may make anthropological interpretations of social suffering accessible to scholars and practitioners beyond medical anthropology. By employing two case studies, we discuss how comparing CES-D results across our samples within studies and in relation to other research tools (such as ethnographic data) provides useful understanding of embodied distress for medical anthropologists. As such, these case studies provide opportunities to compare CES-D scores to what we know ethnographically about women's lives, their social relationships, and their concerns about their families and futures. In some instances, our findings show discrepancies from expected patterns of psychiatric distress within and across groups. In these ways, this article offers insights into how researchers in global mental health may draw upon mixed methods from ethnography and standardized mental health assessment in order to understand the embodiment of social suffering and to appropriately design interventions to support mental health and wellbeing in different cultural contexts.

Case Study 1: Women in Nicaraguan Transnational Families

The Managua case study was an ethnographic study conducted with a community-based sample of 24 Nicaraguan transnational families residing in Managua, Nicaragua's capital city, and surrounding semi-urban and rural communities. In all of these families, grandmothers had assumed primary childrearing responsibilities for their grandchildren after their adult children outmigrated. The focus of this study was on how transnational migration is experienced by "los que se quedan", or the caretakers who "stay behind" in migrant-sending countries such as Nicaragua. In addition to participant observation, spending time with families, talking to children and other family members, and interviewing mother migrants when possible, the research included a series of three semi-structured

¹Destinations for migrant parents in this study include all the major destinations for contemporary Nicaraguan migrants, namely: Costa Rica, the U.S., Spain, Panama, and other Central American countries. For more on the study sample, see Yarris (2014).

interviews with grandmother caregivers and other women family members over a 12-month period. These interviews focused on family migration history, family health and wellbeing, and experiences of emotional distress (discussed further in Yarris 2011, 2014). At the end of the third semi-structured interview with each woman, several standardized measures of physical and mental health were administered, including the CES-D. These tools were applied mainly because they are readily-available (not licensed) for researchers working with limited funding and because the researcher has a background in public health and was interested in generating data that might be applied to community health promotion interventions.

Table 1 includes the sample characteristics and CES-D scores from the women interviewed in the Nicaragua study. Women were related in some way to transnational migration, as family members of migrants, or as migrants themselves. Most were late-adult women who were grandmother caregivers for children of parent migrants, and all were of low socioeconomic status. The 10-item short version of the CES-D was applied in Spanish in this study in order to assess depression symptomatology or the "likelihood of depression", although no cut-off point was used and interpretations focused on comparing women's experiences within the study sample. The CES-D was also used by the author in an interpretive process in order to assess women's psychological burden in relation to data obtained through other ethnographic methods.

Importantly, the CES-D was not validated in the community sample in which the Nicaragua study was carried out, and the instrument and findings here would be strengthened by a validation study. Furthermore, generalizations are limited because the sample is not randomly-selected nor representative of the larger population. However, the CES-D still produced findings that were internally valid, that is, correlated with women's experiences of psychosocial suffering as accessed through ethnographic data. The Nicaraguan women often reported high CES-D scores, tending to respond positively to specific items of the instrument such as "being bothered by things that usually don't bother me", "feeling fearful", and "feeling lonely." While CES-D items were not meant to be analyzed separate from the entire instrument, such findings underscore the importance of future cultural adaptation of this instrument in the Nicaraguan or Central American context. Within this small sample, it could be that these items were particularly relevant for women bearing the burden of intergenerational caregiving while worrying about their migrant children abroad and missing their absence at home.

Nicaraguan Women's Social Stress and Social Support

Juana is 47 years old and lives with her husband Pedro and young grandchildren in a semi-rural community about an hour's bus ride from the capital city of Managua. Yarris came to know Juana through her study of the impacts of parent outmigration for family members "left behind" in Nicaragua. Juana's household is economically supported by remittances sent from Costa Rica by her three migrant children—a son and two daughters. Juana is raising three children of these migrants, grandchildren aged 3–11 years old for whom she is responsible for attending to their daily needs for food, water, education, clothing, and health care despite her limited economic means. Juana herself was a migrant years earlier, the first

person in her family to make the journey to Costa Rica, pushed abroad by a lack of incomeearning opportunities at home and by the need to support her children and family. Juana worked without legal documents as a domestic worker and faced the discrimination and mistreatment common to undocumented Nicaraguans in Costa Rica (see, for example, Goldade 2009). Juana remembers vividly the feeling of being, in her words, "mistreated when one is in a country not of one's own," vulnerable and alone in a country hostile to even while dependent on—her presence as an undocumented immigrant laborer.

Migration has had an intergenerational impact on Juana's family's health and wellbeing. Given her personal migration experience, Juana assumes partial responsibility for her children's migration, feeling as though she paved the way for their departure and yet also sensing the inevitability of migration as a response to economic hardship in Nicaragua. Each time one of her children has left for Costa Rica, Juana recalls feeling "emptiness" inside, a sense of loss and grief that her family was being separated by circumstances beyond their control. Juana's youngest daughter Lisbeth's migration was the most emotionally impactful because she and Juana had spent a good deal of time together and because Juana imagined a different future for Lisbeth. Lisbeth migrated 2 years prior to our interviews, but in her narrative, Juana recalls feeling "very sad" and shared that "sometimes you distance yourself from your sadness because there's so much to do but when night falls, you can't sleep because you get to thinking too much, thinking that they're not here, about how they're doing over there, about whether they'll call home...We worry when they don't call." Juana's sadness is a reflection of the distance between her and her migrant children, a distance that is partially mediated via telephone calls, but a distance nonetheless persistent across national borders, time, and the ongoing emptiness and worry Juana feels for her children abroad. Still, Juana copes with these stressors by doing chores at home and occupying her time in the care of her grandchildren, activities which she simultaneously experiences as burdensome and as pleasurable, since they give her something to focus on in order to avoid "thinking too much" about her migrant children.

Olga was a 72 year-old grandmother raising two children (aged seven and seventeen) of a mother migrant. Olga's poorly ventilated two-room house on the edges of polluted Lake Managua was located in a barrio notorious for drug sales and consumption. Olga was visibly weathered from a life of hardship: her face appeared worn with time and her eyes would often well with tears as she talked about her past and present struggles. These include the death of a spouse in 1993, raising her children alone, and coping with the consequences of a son's alcohol and drug use—which Olga called his "desgracias"—before his untimely death in 2000. Transnational migration has also reconfigured Olga's family—several grandsons are labor migrants in El Salvador and Olga's daughter Manuela had left for Panamá about 1 year prior to the study. Olga shared her small home with Manuela's two children as well as Manuela's adult son and his wife and two young daughters. Also present in a troublesome way was the father of Manuela's two younger children, who occupied a bed, ate Olga's food, and intercepted Manuela's remittances; however, he provided minimal if any economic support to the household. This man caused considerable stress for Olga and she reported that he had "threatened me to take custody of Juliana if I didn't give him all the remittances". Olga asked Manuela to intervene, but neither woman was successful. Olga described often "thinking too much" about the impact of her daughter Manuela's migration on her

grandchildren, and she feared for Manuela's safety as an undocumented migrant in Panamá, worrying she might be deported, or worse.

Juana's narrative and others demonstrate that standardized markers of depression communicate symptoms meaningful to cross-cultural psychiatry and to medical anthropology. While the anthropologist who conducted the Nicaragua study was skeptical about the ability of standardized measures to map onto women's emotional distress, strong connections emerged between psychometric measures and ethnographic portraits of women's lives. For example, Juana scored a 20 on the CES-D, which usually taken to indicate moderate depression. Juana's CES-D scores can be interpreted in light of her lived reality, such as the everyday stresses of her responsibilities as a head of household and her roles as a grandmother and mother in a transnational family. Her depressive symptoms are understandable when reflecting upon her concerns about her migrant children and their safety abroad, especially given her firsthand knowledge of the troubles of migrant life. Such findings offer ways to communicate the cultural meaning of emotional distress to nonanthropological audiences. In other words, the CES-D findings may open the door to conversations with psychologists, psychiatrists, and public health professionals, creating space for broader discussions of the social and cultural determinants of—and potential responses to-mental distress. The CES-D data from the Nicaragua study also underscore what may be culturally salient to women's psychosocial suffering in the context of transnational migration; namely, exacerbated feelings of loneliness, abandonment, and fear about the future, all of which are picked up by specific CES-D items. These findings suggest both the utility of the CES-D at capturing dimensions of psychological distress and the need for future research in psychiatric anthropology and global mental health to more carefully invest in the cross-cultural validation of this, and other standard psychometric instruments.

Case Study 2: Mexican Immigrant Women with Diabetes in Urban USA

The second case study was a mixed methods study of stress and diabetes among a clinical population of 121 mid-life Mexican immigrant women who sought diabetes care through a large urban hospital clinic in Chicago. The focus of the study was to explore women's narratives of social and psychological suffering and understand how mental and physical health conditions might function as causes and consequences of their suffering throughout their lives. Women were recruited from a general medicine clinic waiting room and invited to participate in a 2-3 h interview while they waited to meet with their physician. Conducted in a trusted institution in which they received routine medical care, participating in the study did not disrupt their care and often provided an opportunity to pass the time. The extensive interviews, which often took much longer than expected due to women's propensity for selfreflection and story-telling, included open-ended, life history narrative interviews, psychiatric interviews for depression and PTSD commonly used scales to evaluate diabetes distress, diabetes self-care practices, diabetes healthcare access, subjective social status, and acculturative experiences, and anthropometrics and finger stick blood samples to evaluate stress within the body. These tools were utilized in part because they were applied in previous waves of this research study—this research was conducted as wave three, following exploratory ethnographic research and a population-based survey designed based on that

research. Most research tools used for this mixed methods study were maintained to match the integrity of the parent study.

Table 2 presents sample demographics and the CES-D Scale. Women who participated in these studies were related in some way to (im)migration, as immigrants themselves, or family of those who immigrated. Many were late-adult women who were grandmothers, and most were low socioeconomic status with limited education. The CES-D Scale conducted in Chicago was the long version (20 items) and administered in either English or Spanish, based on the women's preferences in order to assess depression symptomatology or the "likelihood of depression"; the cut-off point for depression on the long form is 16. However, in Table 2 we present only the questions that correspond with the short form (for brevity's sake).

Table 2 indicates that the clinical sample of Mexican immigrant women who participated in the study carry a greater burden of depression than has been observed in representative populations in the United States, including Cubans, Mexican immigrants, and Puerto Ricans. While statistical generalizations are limited because the sample is not representative from an epidemiological standpoint, this does not discount the fact that the CES-D data corresponded so well with women's narratives of suffering (see Tables 3 and 4). Reproduced from a table published in this journal (see Mendenhall and Jacobs 2012), these data show that narratively-derived stressors correlated with one another, such as social isolation with interpersonal abuse and diabetes distress as well as health stress with physical abuse (Table 3). Unadjusted regression analyses demonstrate that many of the most commonly reported social stressors from life history narrative interviews increased the odds of depression (Table 4). In adjusted multivariate analyses, the data demonstrate that the odds of depression were significantly greater for those women who had reported interpersonal abuse in their life history narratives and that this relationship persisted after adding health stress or diabetes distress alone or together into the model (Table 5). Moreover, depressive symptoms increased according to an increase in the number of social stressors iteratively reported in life history narratives; for example, someone who reported six social stressors was more likely to report depressive symptoms when compared to someone who reported two (ibid).

Mexican Immigrant Women's Distress and Diabetes

Domenga is a 51-year-old mother of three residing in Chicago with her two living children. She was born in rural Mexico and spent childhood in Jalisco before emigrating to the U.S. at age twenty. Domenga described her arrival in Chicago as difficult, telling "many bad stories that include my father." Domenga's parents emigrated to Chicago years before, leaving her to care for the remaining siblings. When she arrived to Chicago, she encountered family dynamics that she did not anticipate. Specifically, she described an aggressive father, saying: "he would hit me in the face, and other things happened that were even more horrible." In fact, Domenga had been raped and remembered screaming loudly for help in her family's small apartment building, where neighbors undoubtedly would have heard her cries. However, due to the social and legal vulnerability of her own, her family's, and her neighbors' undocumented status, Domenga's cries were unheeded. Domenga had no legal protection and no charges were filed against her father.

Domenga eventually gained citizenship, but this did not shield her from the chronically severe stresses of everyday life common among the poor and working class in the United States. A decade after the abuse, Domenga lost her husband in a work accident and never received insurance money for her loss. She was left to raise their two daughters alone and manage the grief of losing her partner. Domenga's resilience was illustrated in her ability to soldier on and protect her children's wellbeing despite carrying the wounds and worries of her life. Indeed, both her daughters have attended university.

Four years after her husband's death, Domenga was diagnosed with diabetes, and this disease has become a central part of her daily life. She explained, "Initially I was depressed. I stopped taking the medicine for a year and it made me forget many things, and when I started taking the medicines again a year later, it had affected me so much. I don't know if it's the medicine or all that has happened to me, but I have forgotten many doctor appointments, forgetting many things, and then I just forget my medicines. [Pause] I am able to control my disease well, passing through normal phases of depression, sadness, and more or less calm."

Domenga's case mirrored others in the study, where interpersonal abuse, immigration stress, feeling socially isolated from others, and the stress of managing one or multiple chronic illnesses came together to shape a stressful life (Mendenhall 2012). In many cases what was most interesting was that although all the women in the study were united through their previous type 2 diabetes diagnoses, very few described it as a major stressor in their lives and a limited number reported diabetes distress (ibid). This was a provocative anthropological finding for biomedicine and public health because these disciplines often use questions designed a priori that prioritize information about people's physical illness in research studies (as opposed to social experiences). Notably, memories of stressful and traumatic experiences from Domenga's story corresponded roughly with mental health assessments, and increased psychological distress corresponded with reporting more and more social stressors in one's life story. Five social stressors (Table 4), including interpersonal abuse and disaggregates of physical and sexual abuses, social isolation, and health stress, were not only repeated in life history narrative interviews but also strong predictors of depressive symptoms according to CES-D (Mendenhall and Jacobs 2012). Similar ethnographic findings of suffering amidst structural violence have been supported by mental health assessments in Appalachia (Brown et al. 2009), India (Mendenhall et al. 2012) and Nepal (Kohrt et al. 2012).

Yet, there was another important finding that warrants consideration: that psychological distress reflected what was communicated in narrative data, but not necessarily what was experienced throughout the life course. For example, María was interviewed first in her home in Pilsen in 2007 and again at the old Cook County Hospital in 2010. In 2007 she had for the first time disclosed a history of child sexual abuse and like many other women expressed her struggles with emotional and physical abuse that she associated with her husband's alcoholism. After the first meeting, the anthropologist introduced María to the clinical psychologist associated with the clinic and María reported in the second interview that she had sought support from a counselor and worked through some of her emotional struggles. In her retelling of her personal narrative in 2010 María did not bring up childhood

sexual abuse or discuss the ongoing stress related to her marriage that plagued much of her adult life; the general narrative was the same, although she had lost some weight and her depressive symptoms had diminished. She reported that her husband had passed away and she had moved into her daughter's family home.

Discussion and Implications

Medical anthropologists value first-person narrative accounts of social suffering and psychological distress, which may be best revealed through in-depth and preferably long-term ethnographic engagement with individuals, families, and communities. Such engagement provides a deeper understanding of the cultural significance of expressions of suffering or how complaints about the body, mind, and emotions index broader social and cultural transformations. This sort of engagement moves anthropological scholarship closer to the internal validity of social-cultural phenomena and expressions of psychosocial distress, enabling analysts to understand the cultural meanings of such expressions within specific social worlds. This anthropological approach is of unquestionable value. Yet, in order to effectively engage in interdisciplinary and applied research in global mental health, anthropologists must also engage with standardized mental health assessments in order to speak across disciplines such as public health and clinical medicine, where concerns are focused on external validity, generalizability, and objectivity. By engaging in such conversations, anthropologists can bring insights about culture and the social significance of psychosocial distress to inform research and practice in global mental health.

Additionally, complementarity across ethnographic narratives and data from mental health assessments advance social and cultural interpretations of epidemiological findings on the burden of mental illness. Situating narratives of social and psychological suffering within population-based patterns of disease burden can elucidate how social suffering becomes embodied as psychiatric distress and underscore the importance of social and cultural factors in shaping the distribution of mental illness. Further, such tacking back-and-forth between ethnography and epidemiology can enrich mental health interventions (cf. Brown et al. 2009), both inside and outside the clinic, by pushing them to take local inflections of cultural meaning seriously and by acknowledging the social causes of mental distress as well as the potential social interventions to foster mental wellbeing; this includes examples such as social support for those living with chronic and comorbid illnesses and social support to family caregivers.

Standardized mental health assessment data also can enhance interpretations of ethnographic findings. For instance, the second case study's exploration of structural violence and suffering is reinforced in part by the finding of levels of depression to exceed forty percent among low-income people living with diabetes in Chicago (Mendenhall and Jacobs 2012). Narratively speaking, Domenga's brief narrative demonstrated how the severity of trauma and subjugation can manifest over the long term and her biomedical symptoms of severe depression (CES-D: 30) were equally profound. But beyond the correspondence of social trauma communicated in each narrative and CES-D score, the quantitative data (Tables 3, 4 and 5) generated by evaluating the association of life history narrative interviews with CES-D outcomes provide a unique perspective into what social factors people perceive to impact

their lives and which factors do increase odds of mental distress. Such analyses are possible because a sample size of 121 ethnographic interviews is "powerful" enough to produce a statistically significant odds ratio. Rarely do anthropologists collect so many qualitative interviews because theme saturation often occurs at a much lower number (such as 30); the intention to conduct these analyses must be embedded in the project from the beginning. One limitation of such an approach is that the anthropologist relied on a non-probability sample (although, such an approach could be used for a randomized sample in future studies).

Yet, scores on the CES-D may not so neatly communicate mental health (Westerhof and Keyes 2010). Discordance between ethnographic findings and CES-D data opens pathways for interpretation and intervention. For instance, grandmother Olga's distress was not reflected in her CES-D score of three, the second-lowest among the 25 women sampled in the Nicaragua study. However, due to the multiple examples of social and emotional suffering found through narrative interviews and ethnographic engagement with Olga, there is obviously something that the CES-D is missing. This disconnect may be due to "reactivity" or other sorts of bias in the administration of the CES-D; in other words, the researcher's relationship with Olga or Olga's misunderstanding of the questionnaire may have shaped Olga's answers to the CES-D question items. However, it is likely that such biases are common in the administration of the CES-D, and yet researchers with larger sample sizes can cover up this bias through statistical analysis. Similarly, in the Chicago study, women's narratives did not always correspond with mental health assessments. For example, six of the 22 women who reported sexual abuse did not report depressive symptoms. Maria was one of these women. Maria's interview was unique because, despite what she described in her earlier interview, Maria dismissed questions related to childhood experiences, narratives of maltreatment, and marriage—all significant memories shared in her earlier interview. In sum, discordance between ethnographic and mental health assessment data calls for close analytical attention to be given to the context surrounding and shaping the expression and measurement of psychosocial distress by global mental health researchers.

Moreover, discordance between narrative portraits and mental health assessment measures may point to aspects of women's lives that were under-investigated in the ethnographic exploration but are important to a well-rounded understanding of participants' social worlds and mental health. Maria's account illustrates areas that could have been further explored through ethnography. Ethnography would be the ideal tool to understand more about the women in the second case study who had experienced sexual violence but did not have current symptoms of distress: who did they depend upon, how did they cope, and have they received psychiatric care? Gaining a more in-depth portrait of how these women's lives differed from women with symptomatology would reveal possible sources of resilience. Other anthropologists and cross-cultural researchers have commented on how the expectation to provide in-depth linear trauma narratives is a Western, particularly Freudian, expectation of recovery (James 2010; Kenny 1996; Young 1995). Maria's truncated narrative in the second interview echoes examples of resilience found by other researchers. This is clinically relevant because it suggests that interventions focusing on retelling a trauma

history could be more harmful than beneficial for Maria and other women who had experienced sexual violence but do not currently express symptoms of distress.

A key priority for anthropologists working in interdisciplinary engagements in global mental health is to make participants' (rather than researchers') concerns central to research questions and intervention priorities. For example, the Chicago case study illustrates how a life history approach opens opportunities to explore culturally and socially relevant experiences that shaped people's lives when compared to using a predetermined check-list of social stressors. Specifically, narrative interviews employed with Maria, Domenga, and other women reveal how imperative addressing issues of immigration stress and domestic violence can be when designing interventions to support diabetes management. Similarly, in Juana's case, mental health instruments corresponded roughly with an ethnographic understanding of her lived experience, derived through a series of open-ended interviews and broader ethnographic engagement with her family (home visits, spending time with family and in the community, and so on). And yet, Juana's CES-D score alone is relatively insignificant absent information about her social world derived through ethnography. To bolster the mental wellbeing of women in transnational families such as Juana, interventions must address both the burdens of caregiving and the importance of social support for families divided by national borders. In other words, anthropological findings about the social determinants and cultural significance of mental distress force global mental health researchers to consider the question: absent ethnographic interpretation, what sense can be made out of standardized mental health assessment scores alone? Furthermore, we might add, to what benefit are standardized descriptions of psychological distress without the cultural knowledge needed to design effective mental health interventions for people living with multiple social stressors?

In sum, we have argued for three fundamental ways in which integrative methodologies can enhance anthropological contributions to global mental health by using standardized mental health assessments to advance our understanding and interpretation of ethnographic data gleaned from narrative and life history interviews. First, triangulation of research methods strengthens scholars' ability to draw conclusions from smaller data sets; even as this does not necessarily mean generalizations can be made from small, ethnographic samples. Alternatively, combining standardized measures of psychological distress with ethnographic data provides an opportunity to compare and contrast what suffering means and how it is conveyed within and across cultural contexts and study sites while upholding ethnographic integrity. In other words, as opposed to studies that employ standardized mental health assessments in isolation, ethnographic approaches that accompany such instruments have the possibility of enhancing the robustness of their interpretations. Second, incorporating mental health assessments and checklists into anthropological research broadens perspectives on ethnographic data by providing opportunities to interdigitate narratives of suffering with standardized evaluations of psychological distress. Both complementarity and contrasts between narrative and standardized data enhance anthropological understandings of psychosocial distress by enriching interpretations. Finally, mixed methodologies may enhance applicability for interventionists. Indeed, because of the lack of uptake of ethnographic research and limited utilization to date of ethnographic approaches by practitioners and policy makers working in global mental health, there is an apparent need to

make anthropological research more accessible. Engaging with standardized mental health assessments is one component of such a contribution.

Conclusion

The methodological exercise presented here shows how anthropologists pair ethnographic interviewing with standardized mental health assessments to contribute to our understandings of psychosocial distress. Although this brief article does not pave an innovative path for new research in cross-cultural psychiatry, psychology, or medical anthropology, this article speaks to the dearth of communication between significant anthropological scholarship and global mental health. Indeed, it is our supposition that lack of scholarly discourse lies in the ways in which people design, conduct, and communicate their research. By integrating ethnographic and standardized research tools, we reinvigorate the capability of communicating across and within disciplines of anthropology, psychology, psychiatry and public health. As such, narrative accounts allow our interlocutors to define what's meaningful in their lives and pertinent to their mental health and ethnographic data help emplace social suffering in particular cultural and historical surroundings. More specifically, CES-D data enrich our understanding of mental distress when placed alongside these other forms of knowledge about women's psychosocial suffering. By combining anthropological and psychiatric methods, we may further our ability to design effective interventions in community and clinical mental health; first, because standardized instruments allow us to communicate the burden of mental distress in a study group and second, because ethnographic and narrative data help us draw attention to the social sources of psychological suffering that interventions must address. Finally, and most importantly, applying localized ways in which people experience, understand, and communicate their suffering to can move forward the global mental health agenda in ways that are culturally sensitive, socially rooted, and motivated to reduce stigma and improve services for the most afflicted.

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Table 1
Sample characteristics and CES-D scores in Managua

Sample	Women in Nicaraguan transnational families
Sample size	25
Recruitment site	Community
Recruitment strategy	Snow-ball sampling
Age	26–72 years
Education	Majority had primary education incomplete
Sociodemographic descriptors	All born in Nicaragua, nearly evenly Catholic and "Evangelical" Christian, all poor or working poor (exact household income unknown)
CES-D	Mean (SD)
CES-D 1(1) "I was bothered by things that usually don't bother me"	1.12 (1.17)
CES-D 2(5) "I had trouble keeping my mind on what I was doing"	1.44 (1.16)
CES-D 3(6) "I felt depressed"	1.92 (0.91)
CES-D 4(7) "I felt that everything I did was an effort"	1.72 (1.06)
CES-D 5(8) "I felt hopeful about the future"	0.92 (0.95)
CES-D 6(10) "I felt fearful"	1.04 (1.06)
CES-D 7(11) "My sleep was restless"	1.76 (1.05)
CES-D 8(12) "I was happy"	1.32 (1.07)
CES-D 9(14) "I felt lonely"	1.40 (1.22)
CES-D 10(20) "I could not 'get going""	1.20 (1.19)
CES-D total score	13.84
Cronbach's alpha	0.79

Table 2
Sample demographics and CES-D scores in Chicago

Inclusion criteria	Late-adult women, self-identified as Mexican or Mexican– American, previously diagnosed with type 2 diabetes
Sample size	121
Recruitment site	Public hospital clinic
Recruitment strategy	Convenience sampling of those in waiting area of hospital clinic
Age	40–65 years
Education	Most had primary education and some had secondary
Sociodemographic descriptors	Two-thirds were born in Mexico, one-third in the US, most were Catholic, many were unemployed, and the majority lived under the poverty line (>\$10,000 for a family of four)
CES-D	Mean (SD)
CES-D 1(1) "I was bothered by things that usually don't bother me"	0.65 (0.09)
CES-D 2(5) "I had trouble keeping my mind on what I was doing"	1.03 (0.11)
CES-D 3(6) "I felt depressed"	1.35 (0.11)
CES-D 4(7) "I felt that everything I did was an effort"	1.40 (0.12)
CES-D 5(8) "I felt hopeful about the future"	1.12 (0.11)
CES-D 6(10) "I felt fearful"	0.62 (0.08)
CES-D 7(11) "My sleep was restless"	1.48 (0.12)
CES-D 8(12) "I was happy"	1.07 (0.10)
CES-D 9(14) "I felt lonely"	0.90 (0.11)
CES-D 10(20) "I could not 'get going""	1.10 (0.11)
CES-D total score	10.72
Cronbach's alpha	0.93

Table 3

Correlations among reported stressors

	Sexual abuse	Social isolation	Health stress	Diabetes distress
Interpersonal abuse	_	0.21*	0.13	-0.10
Physical abuse	0.35*	0.16	0.20*	0.00
Sexual abuse	=	0.21*	0.14	0.15
Social isolation	=	=	0.10	0.20*
Health stress	_	=	_	0.21*

^{*}p<0.05

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Table 4

Relationship between reported stressors and depression (CESD 24) in unadjusted analyses

	Depression		
	OR	95 % CI	p values
Any abuse	3.97	1.58-10.0	0.00
Physical abuse	2.95	1.32-6.60	0.01
Sexual abuse	3.63	1.51-8.72	0.00
Social isolation	3.82	1.35-10.8	0.01
Health stress	2.26	1.03-4.99	0.04
Family stress	1.64	0.77 - 3.51	0.20
Financial stress	0.96	0.44-2.13	0.93
Neighborhood violence	1.25	0.47-3.31	0.65
Immigration stress	1.29	0.46-3.63	0.63
Work stress	1.29	0.46-3.63	0.63
Diabetes distress	1.67	1.28-2.19	0.00

 Table 5

 Relationship between reported stressors and depression (CESD 24) in multivariate analyses

	Model 1	Model 2	Model 3	Model 4
	OR (95 %CI)	OR (95 %CI)	OR (95 %CI)	OR (95 %CI)
Interpersonal Abuse	4.49**	4.28**	5.75***	5.51***
	(1.67–12.1)	(1.57, 11.6)	(1.93, 17.1)	(1.85, 16.4)
Health Stress	-	2.14 (0.91, 5.05)	_	1.53 (0.59, 3.99)
Diabetes Distress	-	=	1.85*** (1.36, 2.51)	1.81**** (1.32, 2.46)

All models are adjusted for age, income, education, acculturation, and glycemic control

^{*}p<0.05;

^{**} p < 0.01;

^{4.6.6}