Published in final edited form as:

J Cross Cult Psychol. 2009 November 1; 40(6): 1041–1059. doi:10.1177/0022022109348782.

Conceptual Models of Depression in Primary Care Patients: A Comparative Study

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Abstract

Conventional psychiatric treatment models are based on a biopsychiatric model of depression. A plausible explanation for low rates of depression treatment utilization among ethnic minorities and the poor is that members of these communities do not share the cultural assumptions underlying the biopsychiatric model. The study examined conceptual models of depression among depressed patients from various ethnic groups, focusing on the degree to which patients' conceptual models 'matched' a biopsychiatric model of depression. The sample included 74 primary care patients from three ethnic groups screening positive for depression. We administered qualitative interviews assessing patients' conceptual representations of depression. The analysis proceeded in two phases. The first phase involved a strategy called 'quantitizing' the qualitative data. A rating scheme was developed and applied to the data by a rater blind to study hypotheses. The data was subjected to statistical analyses. The second phase of the analysis involved the analysis of thematic data using standard qualitative techniques. Study hypotheses were largely supported. The qualitative analysis provided a detailed picture of primary care patients' conceptual models of depression and suggested interesting directions for future research.

Introduction

Depression is common in community and primary care settings; yet only a small minority of persons experiencing depression receives effective treatment (Simon, Goldberg, Tiemens, & Ustun, 1999). Culture, social class, and ethnicity make a major difference along the pathway to depression care, influencing diagnosis, treatments prescribed, and treatment utilization. Depressed individuals from White, middle class backgrounds are more likely than working class and ethnic minorities to be treated for depression (Bristow & Patten, 2002; Gillam, Jarman, White, & Law, 1989; Farooq & Minhas, 2001). While problems of access to treatment play a role, evidence to date suggests that these disparities in rates of treatment may also be related to differences in attitudes and preferences regarding treatment (Burroughs et al., 2006; Givens et al., 2006; Sleath et al., 2005).

One way to explain these documented ethnic and SES differences is to examine the ways in which depressed patients form conceptual representations of depressive illness. Illness representations, the structured, cognitive frameworks through which individuals interpret and

experience health and illness, are a potential mediator of the relationship between culture and health behavior. As Figure 1 shows, illness representations can play a key role in shaping outcomes along the pathway to care. Cross cultural studies of psychological healing suggest that conceptual synchrony between the patient's explanatory model of illness and the theoretical framework underlying the treatment are key to therapeutic success. Treatment works best when both patient and healer share a set of assumptions about the nature of the disease and the pathway to cure (Kleinman, 1980; Callan & Littlewood, 1998).

The conceptual framework underlying most modern psychiatric treatments is the 'biopsychiatric model' of mental disorder. As represented on a fact sheet provided by the American Psychiatric Association: "*Let's Talk Facts about Depression*" (See Figure 2), the biopsychiatric model includes a series of related propositions emphasizing the definition of depression as a disease. These are widely regarded as scientific fact (see Lührman, 2000; Karasz, 2005). Though survey studies find that many members of the public view depression in quite different terms—as a variant of common misery resulting from loss, failure, and deprivation, this divergence of opinion in the community has been described disparagingly as "low mental health literacy" (Jorm, Christensen, & Griffiths, 2006).

Yet the scientific basis of many of the propositions in the biopsychiatric model is weak: little evidence, for example, supports the assertion of a strong genetic or neurochemical basis for depression (Dohrenwend et al., 1992; Johnson, Cohen, Dohrenwend, Link, & Brook, 1999; Lacasse & Leo, 2005); and large scale studies have found poor success rates for pharmacological treatment (Trivedi et al., 2006), especially when compared to placebo treatments (Moncrieff & Kirsch, 2005). We propose that the basis of the biopsychiatric model lies, not in empirical evidence, but a product of western ethnopsychology derived from implicit cultural assumptions embedded in the culture of late modernity (Johansson, 2000).

The first key assumption posits depression as a *problem of the individual*. In late modern culture, depressive emotion, like emotion in general, is conceptualized as a feature of inner experience. This view contrasts with a conception of emotions as social, relational phenomena originating in social interaction, common in many non-western societies (Lutz, 1985). The individual is viewed furthermore as the chief *cause* of depressive phenomena. A well-known program in attribution research has found that westerners—at least, European Americans (Bauman & Skitka, 2006)—typically overestimate the role of disposition and underestimate the role of context in explaining behavior, while persons from non-western societies are less prone to commit such errors. (Morris & Peng, 1994; Choi, Nisbett, & Norenzayan, 1999).

The second key assumption posits depression as a manifestation of an *underlying pathology or malfunction*. Arguably, the biopsychiatric model of depression reflects an overall program in western medicine to 'medicalize' suffering and the problems of every day life (Pilgrim & Bentall, 1999). This program has involved the gradual cooption by technical discourse, such as biomedicine, of other spheres of life that were formerly the province of families, communities, or religious authorities. Diagnostic categories in psychiatry have considerably expanded over the past decades, creating new disorders which must be addressed through technical interventions. The tendency may be particularly salient in American society, which has long been identified as having a strong belief in the power of therapeutics (Moskowitz, 1995).

Over the past few decades, two 'versions' of the biopsychiatric model have competed in the mental health treatment marketplace: a biological model that emphasizes the genetic and neurochemical origins of depression, and a psychological model that focuses on personality, behavior, and individual biography. Although biological and psychological models of depression differ in important ways (Lührman, 2000), we argue that they are more similar than

different. Both emphasize metaphors of mechanical disrepair. Though marketplace competition between the models is fierce, individuals themselves may view their depression both in biological and psychological terms. A recent study of community dwelling white middle class women found that both neurochemistry (hormones, serotonin, and genetics) and personality were common attributions for depression (Karasz, 2005). Both rely on conceptual representations of depression as the result of metaphorical lesions: in the one case, the brain 'starved' or 'flooded' with serotonin; in the other case, the personality marked by traumatic psychological wounds incurred in childhood.

Both contrast sharply with a *situational* model of depression that appears to be in the norm in most cultures across the world. The situational model—or the idea that depressive symptoms constitute a normal reaction to toxic, pathogenic life situations --is common outside western societies. In sub-Saharan Africa and India, for example, concepts of psychotic illness are similar to those in the west. Yet neurotic illness is viewed in sharply different terms, being generally regarded as a sequela of toxic life situations (Patel, 1995; Patel, Pereira, & Mann, 1998).

The Present Study

The present study is located within an ongoing research program on cultural differences in conceptual models of depression. A previous study used a vignette methodology to investigate concepts of depression in women from two highly divergent New York City communities: a group of upper middle class European American women (EA), and a group of working class South Asian (SA) immigrant women.

The original study utilized a framework of inquiry based on a model of illness representation from the health psychology literature called the "Illness Representation Model" (IRM) (Leventhal, Nerenz, & Steele, 1984). The model describes common sense, or 'lay' representations of illness as organized into five dimensions. These include: 1) the identity of the illness, including both label and symptoms; 2) its *causes* or antecedents; 3) its *timeline* or chronicity; 4) *consequences* of the illness; and 5) the concepts of management and *treatment*. Striking differences across groups emerged in the results, including differences in the label (EAs were more likely to use technical, psychiatric labels); attributions (EA's were more likely to identify biological and psychological causes for depression); timeline (EA's were more likely to identify the problem as chronic); consequences (EA's were more likely to suggest catastrophic impact of the illness); and controllability/management (EA's more likely to identify pharmacological and psychotherapeutic treatments, while SA's were more likely to identify informal treatments such as consultation with friends and family). Thus, overall, it was found that European American participants viewed depression in largely biopsychiatric terms: they conceptualized depression as a disease process, originating within the individual. South Asian participants, by contrast, endorsed a largely situational model of depression, locating the illness in pathogenic life situations.

The present study represents a second phase in the research program. Here the authors compared primary care patients from various ethnic groups who screened positive for depression. The researchers sought to collect data on the social context and environment of each participant in order to better understand the relationship between life circumstances and depressive symptoms.

The present study had two goals. The first goal was to test hypotheses derived from the earlier study. These include the following.

Compared to African Americans and Hispanics,

H1: European American participants will be more likely to report a technical, psychiatric label for their symptoms.

H2: European Americans will be more likely to report a biological cause for their symptoms.

H3: European Americans will be more likely to report a psychological cause for their symptoms.

H4: European Americans will report a higher impact of depressive symptoms.

H5: European Americans will report a longer future timeline for depressive symptoms.

H6: European Americans will be more likely to view pharmacological treatment as helpful.

H7: European Americans will be more likely to view psychological treatment as helpful.

The second goal of the study was to use qualitative methods to provide a more detailed picture of the ways in which ethnicity and social context affect conceptual models of illness among depressed individuals, and to generate new hypotheses for further study.

Methods

Sample

The study was conducted at two New York City primary care health centers. One of the health centers serves a highly diverse group of patients of various racial and ethnic groups and from varied socioeconomic backgrounds (HC#1). The other health center serves a largely upper middle class patient population (HC#2).

Consenting patients waiting for their appointments were screened in the waiting room. Those screening positive for Major Depression or Other Depression (a milder condition), were invited to participate in the study. Patients unable to provide reliable data due to cognitive deficit, intoxication, or thought disorders, as judged by the interviewer at the time of screen or by review of the patient's medical history, were excluded from the study. Participants from three ethnic groups: European Americans (EA), African Americans (AA), and Hispanic Americans (HA), were recruited.

The three groups differed on education and social class. Reflecting the New York City population in general, most EA participants were middle or upper middle class, while most ethnic minority participants were working class. The goal of the study was *not* to tease apart the relative contributions of ethnicity and social class to conceptual models of depression. Rather, we sought to understand the difference that "culture," largely considered, makes in shaping these models. We share the widely prevalent view in sociology that social class is *constitutive* of culture (e.g. Jensen, 2004). Numerous studies have found that working class culture is more communitarian, and less individualistic, than upper middle class culture (Jensen, 2004, Komarovsky, 1964). The study will examine the degree to which this sociological reality is reflected the ways in which participants conceptualized their depressive illness.

Procedures

Patients from HC#1 participated in the research interview while waiting for their appointment with their physician. Patients from HC#2 participated in the same interview over the telephone, conducted within a week of the clinic visit. Informed, written consent was obtained before the beginning of the screening interview.

Measures—The Patient Health Questionnaire (PHQ), a common screening measure of depression in primary care settings (Spitzer, Kroenke, & Williams, 1999) was used to screen patients. Those scoring positive for Major Depression or Other Depression were invited to participate in the study. Socio-demographic characteristics were assessed.

Illness Representation Interview—This qualitative interview was designed to generate a detailed narrative of the experience of depression. Interviewers systematically queried participants on the five dimensions of the Illness Representation Model, including the labels used to describe the disorder, the perceived cause, the perceived timeline, consequences or impact of the illness, and concepts of treatment. We also included ‘life history’ questions, in which we asked participants to describe their personal histories and circumstances.

Analysis

Overview—Qualitative studies differ from one another to the extent that they involve prior theory. While some are highly exploratory, beginning with an at least notional *tabula rasa*, others may be more or less shaped by apriori constructs. As described above, the present inquiry is located at a midway point along this continuum. Based on previous research, we wished to test specific hypotheses regarding group differences in the data; but we also wished to explore the variations in the meaning of depression in a new sample of theoretical interest: depressed primary care patients of varying ethnicities. The analysis thus involved two steps: the statistical analysis of ‘quantitized’ qualitative data (Tashakkori and Teddlie 1998) and a qualitative analysis.

Developing a rating scheme—For the hypothesis-testing analysis, dichotomous rating items were developed representing the five dimensions of the Illness representation model discussed above (See Table 1 for a list of the items raters used). Raters were instructed to score each theme as present or absent. An exception was the Impact/Consequences dimension, which was assessed using a self-report item. Participants judged the degree to which their depressive symptoms created difficulty in day to day functioning on a scale of 0 (“not at all difficult”) to 3 (“extremely difficult”).

Because the rating scale involved the testing of hypotheses, it was not feasible for members of the research team to apply the rating scale. An outside rater, blind to study hypotheses, was recruited and trained to rate interview data using the rating items. Once the rater had mastered the rating process, he and one of the authors rated a small subset of the data simultaneously. Few discrepancies emerged at this stage. The two raters then repeated the process. At this stage there were no discrepancies, and the independent rater proceeded to complete the ratings for the entire data set.

The rating scale data were entered into an SPSS data base. For each rating scale item, we made two comparisons: European Americans to Hispanic participants, and European Americans to African American participants. We had no hypotheses regarding Hispanic-African American differences so these were not tested. We used a non-parametric Chi-Square statistic to compare percentages of participants rated positively on each item. We used a t-test to analyze group differences on the self-rated impact item. Because we made detailed directional predictions in our hypotheses, one-tailed tests of significance were applied. In addition, due to the small sample sizes, we set our alpha level for significance at .05 and used the .10 level to designate a trend.

Developing a coding scheme—The qualitative analysis involved the development and application of a coding scheme for categorizing the data. A scheme developed for previous studies was used as an initial template (Karasz, 2005). It included categories representing the

five dimensions of the IRM. First, the three authors read segments of the data in order to identify new coding categories. A number of new categories were discovered and added to the list. In a second step, the second and third authors coded a larger portion of the data set. Coding decisions were then compared. Since the codes were simple and descriptive, few differences in coding decisions emerged at this early stage. Any differences that did emerge were resolved by discussion with the first author. In a last step, the second and third author coded the complete data set. The interview data were uploaded into N-Vivo, a qualitative computer analysis program that facilitates the rapid retrieval and comparison of thematically grouped data.

The next stage in the analysis involved description and synthesis. To generate a description of the data, we broke the data down into coded extracts and examined similarities and differences across individual cases and among groups. The goal of this phase of the analysis was to generate theoretical description of conceptual models of depression across the three groups that could be used as the hypotheses for future quantitative work.

Results

The Sample

A total of 74 participants were recruited into the study (See Table 2).

Based on demographic characteristics, along with qualitative life history data generated from the participant interviews, it was possible to generate an ethnographic description of the overall life situation of each individual. These descriptions revealed differences in living conditions and social context among the three groups.

EA participants were socially and geographically mobile and highly educated. Many had moved recently to New York City. A striking characteristic of the group was its occupational homogeneity—most participants were professionals in artistic and creative occupations, including film makers, writers, and actors. Nearly half the EA sample lived alone. Family ties were often weak due to geographic distance and to the cultural distance created by participants' upward mobility.

I'm kind of like the "golden child" my sisters didn't do anything with education. I'm the only one. They look to me like I'm the one who's going to make money.... And they think what I'm doing is disappointing.

Downward mobility was also an issue for some participants.

Some of my depression does often revolve around the fact that I'm an artist. Very different from how I grew up—my parents have a lot of money. They paid for college and then made clear that after college, I'd be independent. And so I think my anxiety about money [leads to my depression.].

Hispanic (HA) participants, by contrast, reported low levels of education as a group. A major issue for these working class participants was low pay and exploitative working conditions.

I have low pay, they don't want to give us raises... I feel overworked and underpaid. It is abusive.

HA participants differed in other ways from the other groups. They were more likely to live in multi-generational households, to be married, and to have children. A large number of HA participants were caregivers for elderly parents or small children, including their own grandchildren.

The AA group was slightly younger than the other groups, and even less likely to report having an intimate partner or children. This sample was more varied than the other two groups. Some

AA participants were students, while a subset belonged to the urban underclass, including former drug users and ex-convicts. Many of these poorer participants reported growing up in the fractured chaotic families of the inner city, and reported histories of drug abuse, homelessness, and child sexual and physical abuse. A number reported few social contacts. One woman whose chief social contact had been her mother, who had died many years before, noted:

My life is finished though. It has been for a while. I think about things that could've been but aren't and it hurts. It's thinking negative. And it's about that phase when I was bugged out.

Conceptual Models of Depression

1. Identity/Label

Hypothesis testing: H1 was supported. EA's differed significantly in the labels they reported for their depressive symptoms. More EA's (86%) reported a psychiatric or technical label for their depression than AA's (60%) ($\chi^2(1, N=51) = 4.267, p < .05$) and HA's (56%) ($\chi^2(1, N=59) = 6.48, p < .05$).

Qualitative analysis: While the quantitative data shows predicted differences in the frequency of particular labels, the qualitative data provides detail into the participants' understanding and experience of depression across the three groups. Participants used multiple terms to label their distress. Though 'depression' was the most common, emotion labels such as "sad," or "tired," and situational labels such as "Problems finding work," were common in all groups. Some participants used emotion labels as a way of resisting the psychiatric diagnostic label:

I don't even call it depression all the time, I call it sadness. Events happen in life that make you sad or make you more sad and then you all of a sudden in your medical record it's saying that you are this huge thing, depressed (HA).

Symptoms: Symptoms associated with depression, including sadness, sleeping problems, poor self esteem, exhaustion, and irritability, were common. Several other symptoms, including anger and anxiety, were also widely reported:

Sadness- well I don't know. If I feel sadness I know I'm well. *You don't associate sadness with your depression?* That's right. If I start feeling sad, it's generally a true emotion. Anxiety, anger, confusion, frustration for me is associated with the depression. Not sadness so much (EA).

One striking group difference was the emphasis on *cognitive symptoms* expressed by EA participants but not by others

One of the problems with depression for me is that I lose a lot of my ability to function and think clearly... When you're depressed, it's like a constriction, I can't see as clearly.

Though ethnic minority participants described exhaustion and low energy states, none complained of decreased cognitive function.

2. Cause

Hypothesis testing: Overall, support was found for H2 and H3, though not all of the analyses reached significance. More EA's (22%) made a biological attribution for their depression than AA's (0%) ($\chi^2(1, N=51) = 3.95, p < .05$). While not reaching significance, the predicted trend was found when comparing EA's (22%) to HA's (8.7%) ($\chi^2(1, N=59) = 1.82, p < .10$). EAs were also more likely to report a psychological cause than AA's, though this difference was

not significant (61.1% vs. 53.3%) ($\chi^2(1, N=51) = .26, p=ns$). With HA's, H3 was supported with EA's (61.1%) reporting more psychological causes than HA's (39.1%) ($\chi^2(1, N=59) = 2.71, p<.05$).

Qualitative analysis: As the quantitative analysis indicates, EA participants emphasized internal attributions. Psychological attributions were very common in this group:

I think internal anxieties keep people from doing what they want to do. Anxieties cause depression and depression causes self-deprecation. It's caused only by you, an internal phenomenon.

Often internal personality attributions were explicitly related to deficits in upbringing:

I think I was depressed all through childhood... Mom was unpredictable. She was neurotic. Not a happy person. A lot of fighting in the house with my dad. It all affected me. I think it shaped who I am and how I think and how I feel about myself... I'm a fearful person and see things in a very bleak way.

The statistical analysis found that internal, psychological attributions were also common in the AA group. Many AA participants attributed their depression to childhood neglect and trauma:

The trouble concentrating just happened in like September when school started I lost interest in school... As soon as the school year started I felt less interested. All of these feelings have to do with family issues and how I grew up... I never really had a mother and father. (AA)

We found that overall, European American participants were more likely than other participants to blame themselves for their depression. Several proposed that they were responsible for their own depression:

I think about personal stuff all the time, but it's not productive. It's more about being miserable. I know it's not good for me to do this, but I do it anyway. It's almost like I want to be miserable.

One EA participant, who attributed her depression largely to her weight, explained that she *wanted* to be fat:

When will [your symptoms] get better? When I lose weight. *Why?* Because I'm a morbidly obese woman in this society. It's tied to a lot of things in my life that I don't wanna admit or see. I blame myself for being as large as I am. That I haven't done everything that I need to do in order to change that.

As expected, biological causes, such as a 'chemical imbalance' or 'hormones,' were an occasional explanation in the EA group though rare in the other groups. Along with genetic, neurological, and hormonal attributions, EA participants occasionally referred to a "chemical imbalance" brought about by improper diet.

Sugar has the same components as alcohol so if you eat too much it's like drinking too much.... It affects your chemical balance in your body. If I could get on point with my diet it would help my emotions a lot, I would be fine.

Though internal attributions were more common in the EA and AA groups, all participants described contextual, situational causes for their distress such as relationship conflicts, physical illnesses, financial problems and job stress. Differences in the *types* of situational attributions emerged strongly in the qualitative responses, providing insights into the way that social context shaped experiences and conceptual models of depression. Many participants in the Hispanic group, for example, attributed their depression to the ongoing burden of care for family members.

It's a fact that when you have a disease that you don't see yourself getting better, that gets you depressed right there...and on top if there's people that are even sicker than you that's depending on you and then you know, the expectations are even higher...

Family conflict and physical illness were also prevalent themes in this group.

That's been a problem for years. [My mother cares for my brother more than she cares for me.] The one she favors more is the one who doesn't do anything. It's sickening: I'm the one who does everything for her...but she treats me like crap.

I have diabetes and other people with diabetes have experience with depression because of our treatment, and the things we have to do, and the way we have to live now [which is] different from the way we were used to doing things before.

Among EA participants, reported social precipitants of depression similarly reflected the distinct social realities of their lives. Many in the EA group had moved to the city in search of vocational fulfillment in creative professions. Many suffered from chronic job insecurity, which led in turn to financial and housing problems.

I am a self-employed writer and I have been subletting from someone for years, and it turns out that it has been illegal. So I have been dealing with a slum lord who is trying to evict me. I have been dealing with the eviction threat for nine months. That probably contributed to my depression.

Vocational failure was a persistent theme in this group.

I want to do more with this job.... It is in no way an investment in my future unless I can get results. And I'm not getting them so it's extremely depressing...

In the EA group, distance from family and friends was closely linked to depression:

My family is in Georgia, friends are in California. I feel lonely and like I'm doing nothing right. I feel like I'm drowning and there's nothing I can do.

In keeping with the greater diversity in social circumstances, there was more variety among the AA group. Among the former drug addicted participants, most described lives of almost complete isolation:

Look, I'm depressed because I'm here all by myself. Nobody comes. I have one girlfriend in Brooklyn, and we talk on the phone sometimes. But it still gets lonely (AA).

3. Concepts of Impact

Hypothesis testing: H4 was supported. On a scale of 0-3, European Americans rated the impact of their depression as being more severe ($M=1.50$, $SD=.75$) than African Americans ($M=1.07$, $SD=.99$) ($t(46) = 1.63$, $p<.10$) and Hispanics ($M=1.04$, $SD=.77$) ($t(58) = 2.33$, $p<.05$). These differences were significant despite the fact that the groups did not differ in severity of depression, as measured by the PHQ.

Qualitative analysis: Most accounts of the impact of depression could be categorized as either social or performance-oriented. Participants in all three groups described the social impact of depression. Pulling back from others, and isolating, was a very common consequence of the illness.

Instead of trying to make [friends] closer to me, I push them away. I tell them, it's all right, it's ok even when it's not okay. So they stop asking me questions. They don't offer their support anymore (AA).

Participants in all three groups reported difficulties in taking care of routine tasks:

I feel very pressured to do my everyday things, just like for instance cooking or dusting...I haven't really dusted the way I used to, I used to really like to keep things in order. And it bothers me when it's not in order but I can't get myself to do it. (HA)

A subtle, but significant difference emerged across the groups regarding the impact of depression on drive and motivation. EA participants routinely complained that they lacked the motivation to do things that were good for their health, such as exercising or eating healthy food.

There's so much that I'm not doing that I need to do and want to do... For example, I haven't been exercising ... the reason I don't do that is ... part of my self punishment.

A lack of drive and motivation at work was another common complaint in this group:

Has depression had an impact on your life? Absolutely. I'm a performer who can't get an audition. ... Doing what I love and what I'm good at. It's been 5 years since I've done anything artistic. And that's devastating to me.

4. Timeline

Hypothesis testing: H5 was not supported. We hypothesized that EA participants would be more likely to report a chronic or deteriorating future course for their depression, in keeping with a disease model orientation. However, there were no differences among groups: 63.9% of EAs, 69.6% of Hispanics, and 66.7% of African Americans reported the belief that their depression had a chronic or deteriorating course.

Qualitative analysis: Although no differences in perceptions of chronicity were found in the quantitative analysis, the qualitative analysis suggested differences in the way the groups regarding the temporal trajectory of their illness. Many participants in the two ethnic minority samples felt that their depression would improve when specific situational problems were resolved.

I think it could improve...if they were to resolve my social security issue that would fix at least one part of the things I'm worried about because that would take care of the financial part of my life (HA).

When I'm out of here I know my depression will improve. I know it will improve but I have no idea when it will happen. Whenever NYC housing calls. I wouldn't know. I've been waiting since 1996 (HA).

In the European American group, those who felt that their depression resulted from character issues or genetics were more likely to perceive a long timeline for their depressive illness:

I think I try as I get older and become more aware of what I need to do to pull myself out of being depressed or sad. I'm more aware of when it's happening. I think that I will always be the type of person that goes through periods of depression. I think it's mostly genetic for me...

In the EA group, the idea that depression might resolve as the participant gained insight into their problems was also common:

I also think—this is more important—with time and experience and professional and non-professional help I'll get better at knowing myself and knowing how to problem solve my bad feelings for myself.

EA participants were more likely to feel that their depression would resolve when they took charge of their lives:

I don't know. It's up to me. I'm the only one who can get a new job, find a new apt. I'm the only one that can end this relationship that's floundering desperately at this point. I should be able to say tomorrow, I'll do it tomorrow.

5. Concepts of Treatment

Hypothesis testing: H6 was supported. Sixty-two percent of EA's suggested that they would consider pharmacological treatment for their depression compared to only 6.7% of AA's ($\chi^2(1, N=51) = 12.67, p < .05$) and 26% of HA's ($\chi^2(1, N=59) = 6.9, p = .05$). However, H7 was not supported. 72% of EAs, 60% of AA's, and 72% of HA's thought that counseling would be helpful, a non-significant difference.

Qualitative analysis: Although medication was viewed in a negative light across all the groups, the qualitative data showed that the groups differed in their views of the specific efficacies of pharmacological treatment. Among the ethnic minority groups, medication was generally perceived as something that would be beneficial only for seriously mentally ill or psychotic patients. For patients like this, medication could suppress violent or destructive tendencies:

... If I am on medication it might be the last resort, because I might need to be drugged up, to calm down. (AA)

However, the sedating effects of medication were also viewed as a serious side effect:

I felt like a zombie, I didn't like taking it. I took it for less than a month. I don't like to take medicines, I didn't feel like myself. I felt sleepy. (AA)

Some ethnic minority participants expressed the view that medication was inappropriate for problems caused by 'real life' situations;

I said forget it, because of the way I live and the things that I do I get sad because I would things to be a certain way. I get depressed when the things don't go the way I want them to, then take a pill for that? Forget it... That's a bizarre idea to me... (HA)

Some HA and AA patients suggested that they would consider medications as long as there was evidence that their problems were biological, rather than situational:

They'd have to do a brain scan and show me red and blue areas that were abnormal. Or some kind of objective measurement that says there is something physically different about your body and we need this much hormone (HA).

By contrast, among EA participants, the most common specific efficacy associated with antidepressants was the idea that they would resolve a 'chemical imbalance in the brain.'

Do you feel optimistic about taking these medications? Yes I do cause it's a serotonin increaser and that seems to be what I've been diagnosed with as a lack of having serotonin....Cymbalta and Lexapro were really good with the serotonin increase...

While ethnic minority patients viewed medication as calming or tranquilizing, this theme was uncommon among EAs. In this latter group, a common theme was the idea that medication could 'balance feelings,' and 'even out highs and lows.' These participants often expressed the idea of medication allowing them to be more logical.

If you take a medication that can give you time to relax and view your situation and view your situation clearly, it can help ... the first day that I took it, I noticed a change. I felt clearer. Like, okay, I can handle this.

EA patients were also more likely to suggest that medication could give them energy or make them feel more productive, a view that was missing from the ethnic minority groups:

It's a subtle mood elevator like I don't feel sooo depressed so I'm able to be a little bit more productive.

Although about a third of the total sample was concerned about side effects, with no differences between the groups, minority participants were far more concerned about the danger of addiction from antidepressant medication.

All groups strongly preferred counseling to medication. There were common themes among all three groups of participants regarding the aspects of psychotherapy that were likely to be helpful. The relationship between therapist and patient was emphasized across all groups. Comfort, closeness, empathy, and respect were key themes.

A good counselor? A person that listens. That is empathetic, basically that is caring, and that would actually like to see the person get better. (HA)

As expected, the EAs participants were far more likely than other participants to emphasize internal changes, such as insight, self-knowledge, and behavior change as key to successful therapy. EA patients tended to see the individual self as the focus of psychotherapy. Insight and self discovery were key themes.

I'm constantly disappointed when I'm hearing that I'm the one who has to change. People are not going to change. I'm the work.

I think therapists do a lot of listening, get people to talk. I think there is a lot of self discovery by just telling people about their problems. I think they can open people's eyes just by asking the right questions, get them to realize things by themselves.

The qualitative interview included questions about alternative and self care. These treatments were relatively rare in the ethnic minority groups. In the EA group, exercise was one of the most commonly mentioned self-treatments for depression. In some cases this was linked to biological attributions of depression in this group.

I'm also exercising. I think it helps. I think it releases endorphins. I just feel better, less depressed. I see it in my husband and he goes to yoga.

Another type of self care that was common in the EA group and missing in the other groups was self-reflection:

Journal writing gives me a sense of direction—where I've been and where I'm going. It gives me a chance to identify patterns in my feelings and to think about them in a brainstorming way rather than just a feeling way.

Several patients had tried various sorts of alternative therapies, such as Eye Movement Desensitization and Reprocessing Therapy (EMDR). The apparent scientific basis of EMDR made this alternative therapy appealing to some EA participants:

EMDR was very scientific. We were rating things on scales so I had a very numerological way to really see the progress or the not progress.

The logic underlying EMDR reflected an idea of depression as located within the individual person:

Well, particularly it helped me to pinpoint where in my body I felt the suicide thoughts, pain, or need. It helped me to move it somewhere else. To help it change. To give it the space to change.

Discussion

In this study we examined ethnic differences in conceptual models of depression and its treatment in a multiethnic primary care population of depressed patients. The hypothesis that EA participants would be more likely to describe a biopsychiatric model of depression than other groups was mostly confirmed. EAs were more likely than the other groups to describe their depression using a psychiatric label, attribute depression to psychological and biological causes, to rate their depression as having a greater impact, and to favor biological treatments. We did find that both psychological attributions for depression, as well as preferences for psychological treatments, were common in all three groups. However, despite this finding, the qualitative data confirms the degree to which the EA group conceptualized depression as a problem of the individual. For example, EA participants' views of the impact, timeline, and treatment of depression all reflected the idea of depression as an individual problem that must be addressed through individual efforts. On the other hand, similarities across groups were greater than those identified in the earlier study, an unsurprising finding given that all three groups shared both an exposure to American culture as well as an exposure to the experience of depression.

Given the importance of beliefs and expectations in the success of mental health treatments identified in cross cultural studies of healing (Kleinman, 1980), and growing evidence of the powerful role of placebo effects in shaping outcomes of modern mental health treatments (Moncrieff & Kirsch, 2005; Westen, Novotny & Thompson-Brenner, 2004) it is clearly important to describe conceptual models of depression among patients and community members and to document differences among groups. Identifying such differences may help to develop new approaches to treatment that achieve better conceptual synchrony with patients' models, leading to improvements in treatment uptake, adherence, and response. Community based participatory methods, which draw on community member's knowledge and preferences, may be a particularly fruitful path to the development of new treatment approaches. Our data suggests that such approaches might emphasize emotional support, strengthening social networks, and addressing pragmatic issues.

The study raised interesting new questions for further research. Results indicated, as expected, that the ethnopsychology of the European American group reflected the psychology of late modernity, with its emphasis on individualism and its affirmation of the technical management of the self; while the ethnopsychology of the other ethnic groups seemed to diverge in important ways. But why should these groups differ?

One explanation relates to the "center to periphery" diffusion of psychological knowledge. Illustrating this process with historical examples, Shorter (1992) shows how medical and psychological concepts arising in modern western societies spread rapidly—outward from centers of cultural prestige to societies on the cultural and geographic periphery and down the status ladder within modern societies themselves. The 'center to periphery diffusion' of ideas may be viewed as an acculturative process accomplished through a variety of means: direct contact with professionals, popular media, and education (Angel & Thoits, 1987). The 'center to periphery' hypothesis would suggest that group differences in the present study reflect the more 'peripheral' cultural position of ethnic minority/working class participants. These individuals fail to 'buy in' to the biopsychiatric model because they have been insufficiently exposed to the model. They are, to use a common term, low in "mental health literacy." Further exposure, perhaps through education, is all that is required to convince them.

A second, intriguing explanation is that an individual's receptiveness to the biopsychiatric model of depression depends on the degree to which the model seems to reflect the underlying social context of the depressive illness. In this case, social class would shape conceptual models

of illness not just through differential exposure to knowledge, but through the influence of structural and institutional forces shaping life experiences within subgroups. Participants in the present study occupied social worlds shaped by radically different institutional structures: ranging from fragmented families in the lives of former drug addicts in the AA group, to the exploitative labor market experienced by HA participants, to the relatively weak family ties and emphasis on finding fulfillment through work in the EA group. Findings suggest that social context makes a difference in the shaping of depressive experiences.

For many of the EA participants, professional and vocational failure and insecurity were the chief cause of their depression; and most attributed their vocational difficulties to their own personal lack of rationality, energy, drive, motivation, and confidence. Depression both resulted from these personal deficits and was seen to exacerbate them. Thus, EA participants looked *inward* to solve the problem of depression, searching for strategies that would increase their rationality and productivity. Biological treatments which righted a chemical imbalance, psychological and alternative treatments which improved self knowledge and self control, made sense in this context. Ethnic minority participants, on the other hand, were more likely to view the resolution of their depression as linked to solving particular social difficulties, such as financial problems, caretaking burdens, and inadequate housing. Participants in these groups were less likely to attribute their depression to deficits within themselves, and felt less confident in treatments that focused on the individual. Though they valued psychotherapy, they sought psychological healing through the comforting relationship with the therapist, rather than the technical strategies of the treatment.

It is not possible to explain from the present study whether group differences arose from the differential exposure to the biopsychiatric model, or from more basic differences in social context and life experiences. Yet this question is not unimportant. If differential exposure to the model accounts for group difference, as suggested above, we would expect that members of ethnic minority communities and other non-mainstream groups may come to share the assumptions of the model in time. If the logic of social context plays the more significant role, then it is unlikely that time alone, or even psycho-education efforts aimed at improving 'mental health literacy,' are likely to change conceptual models of depression significantly. This question could be explored in further research focusing systematically on social context and life events and their relationship to conceptual models of depression.

Reference List

- Angel R, Thoits P. The impact of culture on the cognitive structure of illness. *Cult.Med Psychiatry* 1987;11:465–494. [PubMed: 3319427]
- Bauman CW, Skitka LJ. Ethnic Group Differences in Lay Philosophies of Behavior in the United States. *Journal of Cross-Cultural Psychology* 2006;37
- Bristow K, Patten S. Treatment-seeking rates and associated mediating factors among individuals with depression. 17. *Can.J Psychiatry* 2002;47:660–665. [PubMed: 12355678]
- Burroughs H, Lovell K, Morley M, Baldwin R, Burns A, Chew-Graham C. 'Justifiable depression': how primary care professionals and patients view late-life depression? A qualitative study. *Fam.Pract* 2006;23:369–377. [PubMed: 16476699]
- Callan A, Littlewood R. Patient satisfaction: ethnic origin or explanatory model? *Int.J.Soc.Psychiatry* 1998;44:1–11. [PubMed: 9574847]
- Choi I, Nisbett RE, Norenzayan A. Causal attribution across cultures: Variation and universality. *Psychological Bulletin* 1999;125:47–63.
- Dohrenwend BP, Levav I, Shrout PE, Schwartz S, Naveh G, Link BG, et al. Socioeconomic status and psychiatric disorders: the causation-selection issue. *Science* 1992;255:946–952. [PubMed: 1546291]
- Farooq S, Minhas FA. Community psychiatry in developing countries--a misnomer? *Psychiatric Bulletin* 2001;25

- Gillam SJ, Jarman B, White P, Law R. Ethnic differences in consultation rates in urban general practice. *BMJ* 1989;299:953–957. [PubMed: 2508951]
- Givens JL, Datto CJ, Ruckdeschel K, Knott K, Zubritsky C, Oslin DW, et al. Older patients' aversion to antidepressants. A qualitative study. *J.Gen.Intern.Med* 2006;21:146–151. [PubMed: 16336620]
- Jensen, B. Across the great divide: Crossing classes and clashing cultures. In: Zweig, Michael, editor. *What's Class Got to Do with It? American Society in the Twenty-first Century*. ILR Press; Ithaca: 2004.
- Johansson, T. *Social psychology and modernity*. Open University Press; Buckingham: 2000.
- Johnson JG, Cohen P, Dohrenwend BP, Link BG, Brook JS. A longitudinal investigation of social causation and social selection processes involved in the association between socioeconomic status and psychiatric disorders. *J.Abnorm.Psychol* 1999;108:490–499. [PubMed: 10466273]
- Jorm AF, Christensen H, Griffiths KM. Changes in depression awareness and attitudes in Australia: The impact of beyondblue: The national depression initiative. *Australian and New Zealand Journal of Psychiatry* 2006;40:42–46. [PubMed: 16403036]
- Karasz A, Dempsey K. Health seeking for ambiguous symptoms in two cultural groups: a comparative study. *Transcult Psychiatry* 2008;45(3):415–438. [PubMed: 18799641]
- Karasz A. Cultural differences in conceptual models of depression. *Soc.Sci.Med* 2005;60:1625–1635. [PubMed: 15652693]
- Kleinman, A. *Patients and healers in the context of culture: An exploration of the borderland between anthropology, medicine, and psychiatry*. University of California; Berkeley: 1980.
- Komarovsky, M. *Blue-Collar Marriage*. Random House; New York: 1964.
- Lacasse JR, Leo J. Serotonin and Depression: A Disconnect between the Advertisements and the Scientific Literature. *PLoS.Med* 2005;2:e392. [PubMed: 16268734]
- Leventhal, H.; Nerenz, D.; Steele, D. Illness representations and coping with health threats. In: Baum, A.; Taylor, S.; Singer, J., editors. *Handbook of Psychology and Health*. Hillsdale; New Jersey: 1984. p. 219-250.
- Luhrman, TM. *Of two minds: An anthropologist looks at American psychiatry*. Alfred A. Knopf; New York: 2000.
- Lutz, C. Depression and the translation of emotional worlds. In: Kleinman, A.; Good, B., editors. *Culture and Depression*. University of California Press; Berkeley: 1985. p. 63-100.
- Moncrieff J, Kirsch I. Efficacy of antidepressants in adults. *BMJ* 2005;331:155–157. [PubMed: 16020858]
- Morris MW, Peng K. Culture and cause: American and Chinese attributions for social and physical events. *Journal of Personality and Social Psychology* 1994;67:949–971.
- Moskowitz, E. *In therapy we trust: America's obsession with self fulfillment*. Johns Hopkins University Press; Baltimore: 1995.
- Patel V. Explanatory models of mental illness in sub-Saharan Africa. *Soc.Sci.Med* 1995;40:1291–1298. [PubMed: 7610434]
- Patel V, Pereira J, Mann AH. Somatic and psychological models of common mental disorder in primary care in India. *Psychol.Med* 1998;28:135–143. [PubMed: 9483689]
- Pilgrim D, Bentall R. The medicalisation of misery: A critical realist analysis of the concept of depression. *Journal of Mental Health* 1999;8
- Shorter, E. *From paralysis to fatigue : a history of psychosomatic illness in the modern era*. Free Press; New York: 1992.
- Simon GE, Goldberg D, Tiemens BG, Ustun TB. Outcomes of recognized and unrecognized depression in an international primary care study. *General Hospital Psychiatry* 1999;21:97–105. [PubMed: 10228889]
- Sleath B, West S, Tudor G, Perreira K, King V, Morrissey J. Ethnicity and depression treatment preferences of pregnant women. *J Psychosom.Obstet.Gynaecol* 2005;26:135–140. [PubMed: 16050539]
- Spitzer RL, Kroenke K, Williams JB. Validation and utility of a self-report version of PRIME-MD: the PHQ primary care study. *Primary Care Evaluation of Mental Disorders. Patient Health Questionnaire. JAMA* 1999;282:1737–1744. [PubMed: 10568646]

- Tashakkori, A.; Teddlie, C. *Mixed Methodology: Combining Qualitative and Quantitative Approaches*. Sage Publications; Thousand Oaks, CA: 1998.
- Trivedi MH, Rush AJ, Wisniewski SR, Nierenberg AA, Warden D, Ritz L, et al. Evaluation of outcomes with citalopram for depression using measurement-based care in STAR*D: implications for clinical practice. *American Journal of Psychiatry* 2006;163(1):28–40. [see comment]. [PubMed: 16390886]
- Trnka S. Languages of labor: Negotiating the “real” and the relational in Indo-Fijian women’s expressions of physical pain. *Med.Anthropol* 2007;21
- Vergouwen AC, Bakker A, Katon WJ, Verheij TJ, Koerselman F. Improving adherence to antidepressants: a systematic review of interventions. *J Clin.Psychiatry* 2003;64:1415–1420. [PubMed: 14728101]
- Westen D, Novotny CM, Thompson-Brenner H. The empirical status of empirically supported psychotherapies: assumptions, findings, and reporting in controlled clinical trials. *Psychol Bull* 2004;130(4):631–663. [PubMed: 15250817]

Figure 1.
Illness representations as a mediator between culture and illness outcomes

- Depression is a serious medical illness
- Sadness and depression are not the same
- Depression is caused by biochemistry, genetics, personality, and (lastly) environment
- Professional treatment is needed to recover from depression
- Antidepressants correct a chemical imbalance in the brain
- Professional treatment is efficacious in 80-90% of patients

Figure 2.

“Let’s Talk Facts about Depression” (www.healthyminds.org)

Table 1

Dichotomous Rating items

Label	The problem is given a psychiatric diagnostic name
Cause	The problem may have a biological cause The problem may have a psychological cause
Timeline	The problem has a chronic or deteriorating future course
Treatment	The problem will resolve with pharmacological treatment The problem will resolve with psychological treatment

Table 2

The sample

	African American (n=15)	Hispanic (n=23)	White (n=36)
Female	67%)	70%	62%
Mean Age	2	39	42
Education > BA	27%	15%	71%
Median income	\$20-30 K	\$30-40K	\$40-50K
Mean PHQ	13 (6-24)	14 (6-25)	14 (6-22)
History of Medication	0%	30%	53%
History of Counseling	40%	55%	85%