# CHAPTER 3. MENTAL HEALTH AND COMMUNITY WELLBEING

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# Introduction: Mental Health Matters

Our study included the dimension of mental health in our assessments of overall community health. There are numerous reasons for this decision. Much research has documented the relationship between mental health and overall health (Thornicroft, 2011). Individuals with poor mental health are more likely to have a variety of health problems and mental health variables can play a role in whether or not people participate adequately in their own health care decisions and follow medical recommendations (Candia & Barba, 2011). In addition, mental health affects productivity, social engagement, and other indices of healthy living. Finally, there is very little research on mental health in economically poor communities. Individuals from such socially marginalized environments are often treated as if they are not "psychological beings," a form of dehumanization that is itself a source of stress and emotionally taxing (Waxman, 1977). Thus, there is a gap in the literature when it comes to understanding the mental health needs of individuals residing in such communities.

To address these gaps in the literature and to better understand the mental health context in poor, rural and urban communities in Puebla, we approached our research in three ways. First, we selected three widely used clinical measures that have good psychometric properties to assess the most common mental health symptoms that individuals tend to encounter. The Patient Health Questionnaire 2 (PHQ2) was used to assess depression in our participants; the Generalized Anxiety Disorder 2 (GAD2) was used to assess levels of anxiety; and the Perceived Stress Scale (PSS6) was used to assess levels of stress in our respondents. Given the overall length of our survey, we used the shortened versions of these three measures, although, as noted, all have excellent psychometric properties. In addition to these specific measures, we asked participants to rate the extent to which they felt mental health concerns were a problem in their community (single item). We also asked respondents to rate the extent to which they felt the following health/mental health-related issues were problems in their community: tobacco use, drug abuse, alcoholism, and domestic violence.

We were aware that the communities in which we were working had experienced a severe earthquake in the fall of 2017. In all of the communities the physical effects of the earthquake (such as collapsed buildings and buildings that were architecturally unstable and therefore dangerous) were still quite present. Some communities had individuals who had been trapped within collapsed buildings from which they had to be rescued. There were injuries and even deaths. Beginning with Kai Erikson's landmark book, "Everything in its path: Destruction of community in the Buffalo Creek flood" (Erikson, 1976) there is a significant literature on the psychological impact of natural disasters. These impacts affect both individual mental health as well as the social fabric of communities (Erikson, 1991). For this reason, we incorporated into our survey a question that asked respondents to identify what psychological symptoms, if any, they had experienced in the aftermath of the recent earthquake.

Finally, community cohesion is another variable that affects mental health because in healthy communities' individuals tend to feel more supported, less alone, and part of a larger social system (Berkman, 2000). Such characteristics are associated with better mental health outcomes. To assess community cohesion, we asked respondents to rate the extent to which they believed their community participated in collective activities, supported one another, shared values, etc. These questions were aimed at providing a rough index of community cohesion in each of our four communities. In addition, aware that many communities in Mexico have experienced high rates of migration and aware that such migration can have a profound effect on communities, we explored the experience of migration within the families we interviewed.

Together, this multi-faceted approach to assessing mental health and community wellbeing allowed for an unusual window into the mental health needs in the four communities (two rural, one peri-urban, one urban) that formed the basis for our study.



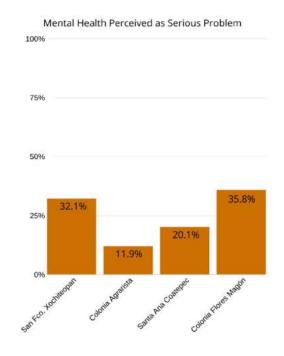
Photograph 3.1: UT faculty and students speak to Colonia Agrarista community members to present the results (Image taken by Alejandro Luna López in October 2019).

# Mental Health Results

#### Perceptions of Mental Health and Depression, Anxiety, and Stress Measures

A significant number of participants perceived mental health to be a "serious problem" in three of our four communities. In two of these, San Francisco Xochiteopan and Flores Magón, nearly

half of the respondents were of the opinion that mental health was a serious problem (Figure 3.1). Interestingly, for the most part our participants' scores on the depression, anxiety, and stress measures were within normal ranges (see below). However, between a quarter and a third of our respondents had clinically significant scores on these measures. Overall, while respondents tended to view mental health issues as a serious problem in the community, their self-ratings on these symptom measures tended to fall within a normal distribution. The only exception to this was the PSS, which measures stress. On this scale, aggregate scores in each of the four communities were at or above the cut off scores for clinical levels of stress (moderate or severe).



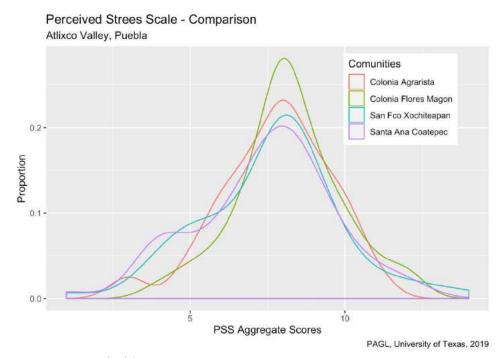
Source: Household Survey

# Figure 3.1: Extent to which mental health is construed as a serious problem in the four communities.

Table 5.1. Assessments of Depression, Anxiety & Stress					
Pueblos and	San Fco.	Colonia	Santa Ana	Colonia Flores	
Sites	Xochiteopan	Agrarista	Coatepec	Magón	
Depression (PHQ-2)	1.6	1.33	1.01	1.63	
Anxiety (GAD- 2)	1.81	1.47	1.06	2.2	
Perceived Stress Scale (PSS)	7.6	7.75	7.4	8.19	

Source: Household Survey.

It is noteworthy that our one urban community, Flores Magón, had somewhat higher average scores on each of the three symptom measures and the highest report that mental health problems represented a serious issue in the community (Table 3.1). These findings suggest that life in economically poor urban communities is more taxing on mental health than life in more rural areas, notwithstanding the latter's greater poverty as reflected in lower levels of educational attainment and greater levels of food insecurity, for example. It also bears noting that while responses to the three measures were evenly distributed within each community, the absence of mental health services means that individuals whose scores were at the higher end of these diagnostic scales (that is, on the upper "tail" of the normal distribution) were likely not receiving services of any kind for these concerns. It is also likely that our mental health assessments represent an under estimation of these symptoms given cultural taboos around mental health topics (Mascayano et al., 2016). It may have been easier for our respondents to acknowledge mental health problems "out there" in the community, but when asked about their own experiences they were perhaps less inclined to share their felt symptoms. After all, they were typically interviewed by two team members who were strangers to them and, occasionally, other family members were present.



Source: Household Surveys Figure 3.2: Perceived stress scales for each of the four communities

#### Perceptions of Behavioral Problems in the Communities

Participants were also asked to assess the extent to which they believed tobacco use, drug abuse, alcoholism, and domestic violence were problems in their respective communities. As with the measures of depression, anxiety, and stress, respondents in Flores Magón, the urban community, were more likely to rate tobacco consumption, drug abuse, and alcoholism as "serious problems" in their community as compared with the other three communities' ratings. In Santa Ana Coatepec, a focus group was held on the topic of alcoholism (<u>https://lahn.utexas.org/Puebla/App5.html</u>). The participants all widely recognized that alcoholism was a problem, but it is was considered hard to control due to the easy access of alcohol at the many corner stores. They identified the youth within the community as the primary users of alcohol. The one exception was for domestic violence, where San Francisco Xochiteopan had a notably higher domestic violence rating (40-percent) as compared to the other three communities. Otherwise, rural communities reported lower levels of these concerns than our urban community. It is important to underscore that ratings of these four issues do not necessarily represent an index of their actual prevalence; rather, they are residents' perceptions of the importance of these issues in the community.

Pueblos and	San Fco.	Colonia	Santa Ana	Colonia Flores
Sites	Xochiteopan	Agrarista	Coatepec	Magón
Tobacco Abuse	53%	15%	73%	76%
Drug Abuse	33%	2%	35%	25%
Alcohol Abuse	53%	15%	73%	49%
Domestic	40%	6%	12%	21%
Violence				

### Table 3.2: Unhealthy Behaviors Perceived as Serious Problems

Source: Household Surveys

## Psychological Impact of the 2017 Earthquake

When asked if they experienced symptoms of fear, anxiety, or depression in the aftermath of the earthquake, all four communities had high numbers of respondents who reported at least one of these symptoms. The trauma literature recognizes that individuals who have suffered traumatic experiences may vary in their symptomatology.



Photograph 3.2: Visible damage of the church in San Francisco Xochiteopan from the 2017 Earthquake (Image taken by Dr. Ricardo Ainslie in October 2019). San Francisco Xochiteopan had the highest percentage of respondents who identified one or more of these symptoms (nearly 95%). It is noteworthy that this community also had the starkest reminder of the earthquake itself: Its 18th Century church had collapsed, trapping some 30 people inside until community members could rescue them. Portions of the churches' walls that did not fall during the earthquake remained precariously propped up with wood boards while large sections of the structure lay in ruins that were clearly visible from the street. A chain-link fence surrounds the space. At a community meeting, while we were presenting preliminary results of our study's findings, the community's leadership council openly pleaded with us to help them get their church back. "We are San Francisco Xochiteopan. This church is our San Francisco; it is our identity. Without it we are nothing," is the way the municipal president put it.

Pueblos and Sites	San Fco. Xochiteopan	Colonia Agrarista	Santa Ana Coatepec	Colonia Flores Magón	
At least One Earthquake- related Trauma Symptom (Sadness, Anxiety, or Fear)	93.82%	78.18%	83.33%	84.78%	

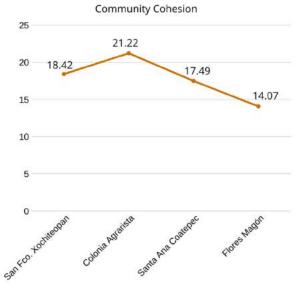
#### Table 3.3: Post-Earthquake Mental Health Trauma

Source: Household Surveys

### **Community Cohesion and Optimism**

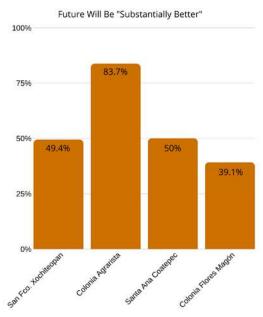
Communities vary in the extent to which they are cohesive and a source of support to their members as opposed to being fragmented social structures whose constituents feel isolated and alienated (Bramston & Chipeur, 2002). A community's felt cohesion is an index of the health of the community and a reflection of the extent to which a community is psychologically "serviceable" for its members. In order to assess community cohesiveness we asked participants the following five questions (rated on a five-point scale): "The people in my community share the same values as my family;" "There is a sense of pride in my community;" "When problems arise the residents of my community are able to deal with them;" "Residents participate in community events;" and, "People in my community support one another." Responses to these ratings were summed, giving each person a Community Cohesion score that could range from 5 (no cohesion) to 25 (high cohesion).

Residents of our two most rural communities, San Francisco de Xochiteopan and Colonia Agrarista, rated their communities the highest in terms of felt cohesion, while Santa Ana Coatepec and, especially, Flores Magón (the urban community) had lower scores on this variable (Figure 3.3).



Source: Household Survey Figure 3.3: Average Levels of Community Cohesion

In an effort to further ascertain each community's overall wellbeing we asked participants to answer the question: "In 15 years-time this community will be . . ." Response options were "Worse" "More or less the same" or "Substantially better." In other words, this question tapped a respondent's felt optimism for the future of their community. Again, our rural communities, led by Colonia Agrarista were clearly more optimistic about their community's future (Figure 3.4), whereas in our urban community residents were most likely to feel that their community would be "worse" (39-percent) in fifteen-years' time.



Source: Household Survey Figure 3.4 Optimism About the Future.

#### **Migration**

Migration to the United States has had a significant impact on many Mexican communities, both urban and rural. Nearly one in nine native born Mexicans now resides in the United States (Gonzalez-Barrera and Lopez, 2013) In an effort to understand the broader social context of the communities in which we were working, we explored questions related to migration, not least since our-migration from Puebla to the United States (the New York area especially) is widely documented (Castañeda, 20). The impact of migration was readily apparent in our data. Over 70% of the individuals surveyed indicated that they had family members currently residing in the US. In one of the rural communities (Colonia Agrarista), the percentage was as high as 84%. Given the importance of this topic, we conducted a focus group (https://lahn.utexas.org/Puebla/App5.html). Focus group members described how migration had changed their community, as well as the impact of remittances on everything from quality of housing to making their living conditions better. However, they also discussed who immigration had in some instances resulted in the disintegration of families.

More than half of our respondents indicated that these relatives had now resided in the US for more than ten years, and over sixty percent had resided abroad five years or more. The impact of such migration on family culture and relationships is perhaps best reflected in the amount of contact and communication that respondents reported in relation to the relatives living abroad. In our study, very few of those with family members in the USA had little or no contact with them, and for many (30%) the contact was frequent and ongoing (at least once a month). One household head of our intensive case studies (Margarito in Colonia Agrarista) talks at least once a week with his daughter on Skype and she provides an important stream of both emotional and financial support to him – important given his physical disabilities (Ch. 5 Case 5). Just in the period between July and October, he had built a new bathroom, living room, and installed a solar panel water heater on the roof– largely from remittances from his daughter.

Because of these contacts, we found that respondents were very aware of anti-immigration rhetoric and actions in the United States. One respondent spontaneously referred the current American president as "that man who does not like us" and many spoke of the fact that it was much more difficult (and costly) to cross the border today because of US government policies. There was also great awareness of deportations. In fact, on a few occasions, when we got to immigration questions, it became necessary to clarify that we were not part of the US government and that this information would confidential (de-identified) and not used against them or their family members.

Indeed, the importance of migration to the economic support of families was widely seen in their reports of remittances. Roughly twenty percent of our respondents indicated that they received remittances at least every six months and these were ranked as either very important or moderately important by roughly 30% of the respondents. Health-related needs and food were the two most cited uses of remittances, with clothing the third most commonly reported use of the remittances.

Do your relatives send remittances?	San Fco. Xochiteopan	Colonia Agrarista	Santa Ana Coatepec	All Rural Pueblos Combined	Colonia Flores Magón
Yes	21 (48.84%)	20 (43.48%)	29 (59.18%)	70 (50.72%)	11 (34.38%)
No	22 (51.16%)	26 (56.52%)	20 (40.82%)	68 (49.27%)	21 (65.62%)

Table 3.4: Remittances from the U.S.

Source: Household Survey

In addition to asking about relatives who had migrated, we also asked if the respondents themselves had ever migrated. Almost a quarter of our respondents indicated that they had lived in the United States prior to returning to their communities (the average length of time they had resided in the US was nearly 5 years). This was probably an underestimate of the actual proportions, since the large majority of our lead respondent heads of household were female, and while women also migrate, men represent the dominant migrant flow. Together, data of family member and respondent migration underscore the powerful impact of migration on these four communities. It is noteworthy, too, that migration is one of the few variables that appeared to cut across both rural and urban communities, having a salient impact on both. In addition, although reports of how remittances were used tended to focus on health, food, and clothing, we had numerous examples of families that had returned home from the US with savings that were used to remodel their homes and start businesses. There were also numerous examples of homes in the community where remittances from the US had been used to construct houses that were of better quality in terms of materials and design.

# **Conclusions & Summary**

While residents in all four communities tended to view mental health concerns as a "significant problem," objective measures of depression and anxiety were within normal distributions. However, between a quarter and a third of our respondents had clinically significant scores on these measures. This is especially noteworthy given the total absence of treatment options or resources available for mental health needs. In addition, stress levels were moderate to high in all four communities and likely a reflection of the emotional toll of living in marginalized and economically poor communities.

It is noteworthy that the psychological impact of the September 2017 earthquake remained strong across all four communities almost two years after the event, with an exceedingly high percentage of the respondents reporting at least one major symptom (depression, anxiety, or fear). It is well documented that catastrophic environmental events can affect the social fabric of a community and have a powerful emotional impact (Erikson, 1991). The fact that the nearby volcano, Popocatepetl, continues to be quite active, with plumes of smoke, rumblings, and lesser earthquakes are a staple of daily life, serves both as a constant reminder to residents

of these communities of what took place and evokes a sense of threat that another significant seismic event could happen again.

Finally, in mental health terms, rural communities appeared healthier when compared to our urban community, with lower levels of perceived mental health problems overall and higher indices of cohesion and future wellbeing. This is paradoxical given that the urban community had more access to healthcare and was better off economically, as reflected in levels of education, food security as well as quality of food (meat, vegetables, and fruit consumption frequency), use of gas rather than wood for cooking, vehicle ownership, and non-agricultural work. Our urban community fared worse on almost all of our assessments of mental health.

Similarly, our most rural community, Colonia Agrarista, was consistently the strongest on all of our mental health assessments as well as assessments of community cohesion and felt optimism. Colonia Agrarista was our smallest community, with a population of 306. It is possible that size, coupled with comparatively greater isolation (they were the farthest from Atlixco, the nearest city) contribute to a healthier community. Colonia Agrarista had also separated from San Francisco Xochiteopan some fifty years ago and that act of self-definition may have had enduring effects when it comes to community cohesion.

What stood out to our team is the fact that there were essentially no mental health services available, especially in the three rural or peri-urban communities. While we documented a variety of mental health concerns, community residents had nowhere to go to receive help for these concerns. In short, mental health is a key element in health and community wellbeing, yet it is often ignored (or downplayed) by health care agencies when compared with the more visible epidemiological aspects of health identification and care.

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