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Authors

Bacio, Guadalupe

Moore, Alison

Karno, Mitchell

et al.

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Determinants of Problem Drinking and Depression among Latino Day Laborers

Guadalupe A. Bacio, M.A. [Graduate Student],
Department of Psychology, University of California, Los Angeles

Alison A. Moore, M.D., M.P.H. [Professor-in-Residence],
Division of Geriatrics, David Geffen School of Medicine, University of California, Los Angeles

Mitchell P. Karno, Ph.D. [Associate Researcher], and
Integrated Substance Abuse Programs, University of California, Los Angeles

Lara Ray, Ph.D. [Associate Professor]
Department of Psychology, University of California, Los Angeles

Abstract

Little is known about alcohol misuse and depression among Latino day laborers despite the fact that they encounter multiple stressors (e.g. job instability, unsafe work environments). A structural equation model tested the relationships among laborer stress, social support, health status, current alcohol misuse, and depression. A sample of 89 male, urban Latino day laborers completed measures assessing these constructs in 2011. Stress was negatively related to physical health status, which was associated with depression. Findings suggest that stressors specific to being a day laborer resulting from their work and living conditions generate and maintain health disparities in this vulnerable population.

Keywords

Latino day laborers; migrant stress; depression and alcohol use; health disparities

1.Introduction

It has been estimated that as many as 117,600 individuals in the United States (U.S.) are day laborers or are looking for day labor in any one day (Valenzuela, Theodore, Melendez, & Gonzales, 2006). Although there is no consensus with respect to the definition of a day laborer or who counts as a day laborer, in general, day labor refers to “the practice of searching for work in open-air, informal markets such as street corners” (Valenzuela & Melendez, 2003). Day labor often includes high risk jobs such as construction, painting, landscaping, etc. Studies suggest that the vast majority of day laborers in the U.S. are of Latino origin, primarily from Mexico and Central America. They are primarily male, recent immigrants, have limited English proficiency, and tend to be unauthorized (Valenzuela,

Corresponding author: Guadalupe A. Bacio, UCLA Psych-Clin, 1183D Franz Hall, Box 951563, Los Angeles, CA 90095-1563, gbacio@ucla.edu.

2000; Worby, 2007). Despite the fact that Latino day laborers are becoming more and more visible in cities across the U.S. (Duke, Bourdeau, & Hovey, 2010), very little is known about the physical and mental health of this hard to reach population.

Day laborers confront many stressors that pose challenges to their physical and mental health. Day labor is characterized by instability and low, unpredictable wages. In addition, the working conditions under which day laborers operate are often physically hazardous (Duke et al., 2010). Further, the majority of day laborers experience abuse by their employers, intimidation by authorities, and harassment by the communities in which they seek employment (Cleaveland, 2010; Valenzuela & Melendez, 2003). However, this population tends not to report any of these experiences for fear of encountering further consequences due to their unauthorized work status (Cleaveland, 2010).

The unique stressors associated with the migratory, working, and living circumstances of Latino day laborers make them vulnerable to risk factors that may affect their physical health status, mental health, and drinking patterns. A pilot study conducted by de Castro and colleagues (2010) of a sample of Latino day laborers in Seattle found that the number of years of working as a day laborer was associated with a higher allostatic load, which is a physiological measure of "wear and tear". This study highlighted the impact of the stressors associated with being a Latino day laborer to their physiology that goes beyond any physical injuries encountered as a result of unsafe working practices. Similarly, a study conducted by Negi (2013) concluded that the inherent conditions of being a Latino day laborer place them at risk for social isolation and may have adverse consequences to their mental health and drinking patterns. For example, studies conducted with farmworkers, with whom Latino day laborers share similarities, have found that time spent in the United States was related to higher rates of depression (Vega, Kolody, Valle, & Hough, 1986; Vega, Scribney, Aguilar-Gaxiola, & Kolody, 2004). Although Latino day laborers do not seem to acquire drinking as a result of living in the U.S. (Mills et al., 2012) and generally report low rates of alcohol use, when they drink, they drink heavily (Mills et al., 2012; Organista & Kubo, 2005; Worby & Organista, 2007).

On the other hand, social support has been identified as a protective factor against a variety of stressors and has been shown to have a positive relationship with health among the general population as well as the Latino community in the U.S. (Barrera & Ainlay, 1983; Cohen & Wills, 1985; Finch & Vega, 2003). The extensive literature on social support suggests that it is a multidimensional construct which encompasses perceived social support, social embededness, and enacted social support (Barrera, 1983). Among Latino farmworkers, perceived and instrumental/enacted forms of social support appear to have a protective effect against mental health problems and risky behaviors (Alderete, Vega, Kolody, & Aguilar-Gaxiola, 1999; Worby & Organista, 2007). Although less is known about how social support operates among Latino day laborers in specific, initial evidence from an ethnographic study underlined that, for day laborers, being part of support networks (i.e. church, friends) in the absence of their families is a critical factor for their well-being (Negi, 2013). Thus, it is likely that perceived social support may also protect Latino day laborers from physical health problems, depression and alcohol use, however, this hypothesis is yet to be tested.

Despite the growing interest in the physical health status and emotional well being of Latino day laborers, there is scant research on the physical and mental health of this population including unhealthy alcohol use and depression. Generally, this population is hard to reach due to their vulnerable status. In addition, there are very few quantitative studies assessing the hypothesized risk and protective factors using validated instruments. Furthermore, studies have yet to explore the interplay of these risk and protective factors to examine the determinants of alcohol use and depression among this population. To this end, conducting a pilot quantitative study would allow for a comparison of the health behaviors and outcomes of this population to the Latino population and the general U.S. population. This would allow for an understanding of the determinants of health and would help elucidate population-specific risk and protective factors that can be addressed in evidence-based behavioral treatments for this vulnerable population.

1.1 The present study

The present study seeks to take a step toward addressing these gaps in the literature by conducting a pilot quantitative survey of urban Latino day laborers in Los Angeles to explore how social support and stress related to day laborer status influence physical health status and, in turn, how physical health status predicts hazardous alcohol use and depression. For this purpose, Structural Equation Modeling (SEM) was used to test an *a-priori* model of the relationships among these constructs. It was hypothesized that stress would be negatively related to physical health status while social support would have a positive association with on physical health status. In turn, worse physical health status would predict heavier alcohol use and higher levels of depression. Each construct was measured by latent factors based on the existing literature and captured using validated instruments in the general population.

2. Material and Methods

2.1 Participants and Procedure

A pilot survey of health behaviors among a sample of male Latino day laborers was developed and implemented in collaboration with the Instituto de Educación Popular del Sur de California (IDEPSCA). IDEPSCA is a community-based organization that operates six Job Centers throughout the Los Angeles metropolitan area at no cost to the workers. IDEPSCA Job Centers are housed in buildings or trailers and provide day laborers with a safe space where they can seek and wait for employment rather than soliciting work in street corners. These centers also aid day laborers in negotiating types of work and wages. Through these centers, potential employers may call ahead to ask for availability and cost of hiring workers for specific jobs. In turn, each site follows a registration and lottery system to distribute potential jobs among its participants. As part of their mission, IDEPSCA Job Centers offers classes, information, and referrals about health, labor, and immigration laws.

A collaboration with IDEPSCA was developed early in the project to establish a trusting relationship between the researchers, IDEPSCA staff, and the workers. The university researchers frequently consulted with IDESPCA throughout the development of the survey and study procedures. Importantly, IDEPSCA staff played a key role in creating procedures

that would allow the university researchers, who may be seen as outsiders by the workers, to establish a collaborative relationship with the day laborers.

University research staff along with IDESPCA staff made morning announcements one to to two weeks prior to the dates of the survey to explain the purpose and procedures of the survey, underline the confidentiality and voluntary nature of the study, as well as to answer any questions. All workers present during the announcements were invited for sweet bread with the university and IDEPSCA staff in an effort to build trust among the community.

Surveys were carried out by trained bilingual research staff at three of IDEPSCA's sites: Cypress Park (n = 32), Hollywood (n = 6), and Pasadena (n = 51) between May and June, 2011. The study was conducted in a designated private space within the IDEPSCA site to ensure confidentiality. University staff arrived at each site in the early morning while the first lottery was conducted by IDEPSCA staff. University researchers made additional announcements reminding the workers of the study purpose and procedures, at which point those who expressed interest were given a number. The study was conducted throughout the day as laborers awaited potential job opportunities. Participants were screened individually by a staff member who obtained verbal informed consent prior to administering the survey. The brief screening was also used to assess the participants' preferred language and reading fluency to determine the language (i.e. English or Spanish) and format (i.e. paper-and-pencil or oral interview) of the survey.. University proctors interviewed participants who had less than the equivalent of a middle school education or who had reading difficulties due to age or limited vision. Proctors also assisted those who completed the survey individually on paper. The survey took approximately one hour to complete and participants were compensated fifteen dollars for their participation. All procedures were approved by the university's Institutional Review Board.

Ninety two participants completed the survey. Three participants were excluded from analysis because one was non-Hispanic White, data for a second participant was invalid due to his limited cognitive ability, and data for a third could not be recovered due to computer difficulties. A total of 89 participants were eligible for analysis. Participants' age ranged from 20 to 76 and they were 46.4 (SD = 11.45) years of age on average. The majority were born in Mexico (64%), followed by those born in El Salvador (14%), Guatemala (12%), Honduras (6%), United States (3%) and Other (1%). Most reported their first language to be Spanish (95%). Participants had spent a range of 3 to 44 years in the U.S. with an average of 18 years (SD= 11.65) The range of time in which they had been a day laborer was wide, between two months and 40 years with an average of approximately 8 years (SD= 9.22). The vast majority was looking for a permanent job (92%). Most participants reported less than a high school education (89%).

2.2 Measures

All measures were available in English and Spanish. Validated instruments were used to assess each construct of interest and had previously been translated to Spanish. Nevertheless, bilingual staff members as well as members of IDEPSCA reviewed the selected measures to ensure that the Spanish used was appropriate for the level of education and regionalisms spoken by participants based on their country of origin.

Sociodemographics—Participants indicated their age, first language, country of origin, level of education, reading proficiency in English and Spanish, number of years as a day laborer, and whether or not they were seeking permanent employment.

Perceived Social Support—Social support was measured using the Multidimensional Scale of Perceived Social Support (MSPSS). The MSPSS (Zimet, Dahlem, Zimet, & Farley, 1988) is a 12-item instrument that assesses three dimensions of perceived social support from: family (α= .92), friends (α=.92), and significant other (α=.86). Participants indicated how much they agree with each statement on a 7-point Likert scale ranging from “Very strongly disagree” to “Very strongly agree”. A sum score for each subscale was calculated by adding their corresponding four items. The MSPSS is a reliable and valid instrument that (Zimet et al., 1990) has been widely used in the U.S. among different subpopulations. The MSPSS has been translated to Spanish and used for Mexican-American adolescents (Edwards, 2004) and Latin American immigrants (Dunn & O'Brien, 2009). However, the psychometric properties of the MSPSS have not been investigated among Latino day laborers.

Stress—Stress was assessed using the Migrant Stress Inventory (MSI), an instrument adapted from the Migrant Farmworker Stress Inventory (MFSI) originally developed by Hovey (2001) to assess levels of stress associated with being a migrant farmworker. Several minor modifications were made to the original measure to capture stressors specific to day laborers (Duke et al., 2010; Hovey, 2001). The MSI is a 39-item self-report measure where participants endorse how stressful each presented stressor is on a 4-point scale ranging from “Not At All Stressful” to “Very Stressful”. The MSI is a relatively new measure and its psychometric properties have been tested once with a sample of day laborers in the San Francisco Bay area (Duke et al., 2010). Duke and colleagues did not replicate the same factor structure for the MSI as the MFSI and, given the potential differences in our study samples, we first followed the same steps and conducted a principal components analysis with varimax rotation on all items to confirm the factor structure of the instrument. The initial analysis indicated that 11 factors had eigenvalues of one or greater. We used the same criteria as Duke and colleagues and chose items that loaded ≥ 0.55 on the main factor and <0.40 on any other. The final factor structure yielded 4 factors with eigenvalues greater than 1 and used 16 items. Factor loadings across factors ranged between .60 and .77. The factors captured stressors related to job conditions (five items), offspring (four items), migration (three items), and everyday hassles (four items). The job conditions factor included items related to stressors encountered at work, for example “At times I have to work many hours in one day”. The offspring factor captured all the items related to worry about their children, for example “I worry about the education of my children”. The migration factor included stressors encountered as a result of migration, for example “it was difficult for me to emigrate to this country”. The everyday hassles factor captured items related to stressors encountered every day associated with overall living conditions, for example, “At times I worry because I do not have secure transportation”.

Physical Health Status—Health status was assessed by four indicators, two questions obtained from the Comorbidity Alcohol Risk Evaluation Tool (Moore, Beck, Babor, Hays,

&Reuben, 2002) and the one component summary obtained from the Health Status Short Form SF-12(Ware, Kosinski, & Keller, 1996): *(1) Health Conditions*. Participants indicated if they had experienced any of the following health conditions in the past year by endorsing yes or no: high blood pressure, active or chronic gout, diabetes, depression, active/chronic hepatitis, stomach or intestinal ulcers, cirrhosis or other liver condition, and pancreatitis. The total number of health conditions in the past year was calculated by adding the answers to these items. *(2) Health Problems*. Participants experienced the following problems in the past year by marking "Never/Rarely", "Sometimes", or "Often": Problems sleeping, feeling sad or blue, memory problems, heartburn /stomach pain /nausea/ vomiting, tripping or bumping into things, falling/accidents. A sum score was calculating by adding the answers to these items. *(3) SF-12 Physical Health Component Summary (PCS)*. This score is calculated based on 12 items that assess a range of indicators of health in past month. The score derived has a normed population average of 50 and a standard deviation of 10. The SF-12 is widely used to assess health status in the population and it exhibits test-retest reliability as well as construct and criterion validity (Ware et al., 1996). This instrument has been translated to Spanish and cross-validated in Spain (Gandek et al., 1998). The Spanish version of the SF-12 has been used with Latino populations in the U.S. (e.g. Franzini& Fernandez-Esquer, 2004) but psychometric properties among Latino day laborers are not available.

Unhealthy Alcohol Use—Alcohol misuse was assessed with a series of questions obtained from the Comorbidity Alcohol Risk Evaluation Tool and the Alcohol Use Disorders Identification Test (AUDIT). A standard drink was defined as one 12oz. beer, a single 1.5 oz. shot of spirits, a medium glass 4–6 oz. of wine, a cocktail with one shot of spirits, or a 4oz. glass of sherry or liqueur. *(1) Alcohol use frequency*. Participants indicated how often they had a drink over the past year on a 6-point scale ranging from "Never" to "Daily". *(2) Number of drinks per occasion*. Participants reported the number of drinks they usually had on the days they drank on a 7-point scale ranging from 1 drink to 7 or more. *(3) Binge drinking episodes*. Participants indicated how often they had 4 or more drinks on one occasion on a 5-point scale ranging from "Never" to "Daily" *(4) Hazardous alcohol use*. Risky alcohol was measured using the AUDIT (Babor, Higgins-Biddle, Saunders, & Monteiro, 2001). The AUDIT is a 10-item instrument developed by the World Health Organization that assesses a number of indicators including recent alcohol use, alcohol dependence symptoms, and alcohol related problems. Participants endorse each item on a 5-point scale. A sum score is calculated by adding responses to these items (α=.92). The AUDIT is a reliable and valid measure that has been widely used in the U.S. across a variety of settings (Allen, Litten, Fertig, & Babor, 1997; Reinert & Allen, 2002). The AUDIT has been translated to Spanish and used in Spain and Mexico (Cherpitel & Borges, 2000; Gomez, Conde, Santana, & Jorrin, 2005). Whereas the psychometric properties of this instrument among Latino day laborers are unknown, the AUDIT has been used with other Latino populations in the U.S.(Cherpitel & Borges, 2000).

Depressive Symptomatology—Depression was assessed with the Center for Epidemiologic Studies Depression Scale (CES-D). The CES-D (Radloff, 1977) is a 20-item instrument designed to assess depressive symptomatology in the general population on four

domains: positive symptoms (α = .73), negative symptoms (α = .80), somatic symptoms (α = .69), and interpersonal symptoms (α = .18). Participants indicated the frequency with which they experienced each symptom over the past week on a 4-point scale ranging from "Rarely or none of the time (less than one day)" to "Most or all of the day (5–7 days)". A sum score for each of the four subscales was calculated by adding their corresponding items. The CES-D is a valid and reliable measure (Roberts, 1980; M. M. Weissman, Sholomskas, Pottenger, Prusoff, & Locke, 1977) widely used to assess depressive symptomatology among various subpopulations in the U.S. The psychometric properties of the CES-D have not been assessed among Latino day laborers, but it has been used with similar populations of farmworkers (e.g. Alderete, Vega, Kolody, & Aguilar-Gaxiola, 1999; Hiott et al, 2008).

2.3 Analytic Strategy

Structural equation modeling was used to test an *a-priori* model of hazardous alcohol use and depression among an urban sample of Latino day laborers using EQS version 6.1 for Windows (Bentler, 1995). An SEM framework offers several advantages when studying multiple indicators. For example, it allows for the simultaneous examination of multiple constructs and provides model fit indices to indicate whether the hypothesized model fits the data. In addition, latent factors can be modeled using SEM. Latent factors reduce measurement error and capture the variance shared among several indicators that can be incorporated into a structural equation model. In addition, missing data can be handled in ways that are less biased as discussed below. Consistent with the literature, it was hypothesized that stress would be negatively related to physical health status while social support would have a positive effect on health physical health status and in turn, physical health status would have a detrimental effect on alcohol use and depression. Each construct was approximated by latent factors as indicated above. Full information maximum likelihood (FIML) estimation was used to handle missing data (Bentler, 2006). Complete cases approaches such as list-wise deletion provide biased results (Rubin, 1987) whereas FIML uses all available observed data and provides less biased estimates (Arbuckle, 1996). Due to the distribution of the variables, robust estimates of the standard errors were obtained to correct for non-normality. Three indicators were used to assess model fit: the Yuan-Bentler scaled χ^2, the comparative fit index (CFI), and the root mean square error of approximation (RMSEA). The Yuan-Bentler scaled χ^2 is comparable to the Satorra-Bentler scaled $\chi^2$and is generated when using FIML to handle missing data (Bentler, 2006). Whereas a non-significant χ^2 would suggest good fit, this indicator is affected by sample size. CFI values of 0.9 or above suggest acceptable fit (Bentler, 1990) and are less affected by sample size (Bentler, 1995). RMSEA values of less than 0.05 suggest close fit and values less than 0.10 indicate reasonable fit (Steiger, 1990).

3. Results

Means and standard deviations of all measures used in the model are presented in Table 1. The number of drinking occasions, total drinks per drinking episode, and number of binge drinking episodes were low among this sample of Latino day laborers. The average AUDIT score was 6.53 (*SD* = 8.15), which falls below the suggested cut-off for hazardous drinking of 8. The total depressive symptomatology score was 13.4 (*SD* =8.8) and is lower than the

suggested cut-off score for caseness is 16 (M.M. Weissman & Klerman, 1977). On average, the SF-12 physical and mental health conditions scores of 49.85 (*SD* = 7.44) and 51.97 (*SD* = 7.77) respectively, fall within the average range according to the population normed guidelines of 50 (*SD* = 10). The average overall social support was 4.7 (*SD* = 1.7) which is slightly higher than the average of 4. The total migrant stress inventory score was 60.7 (*SD* = 31.1). This score is lower than the recommended score of 80 for "caseness" of the original measure implemented with farmworkers (Kim-Godwin & Bechtel, 2004) and of 83.5 found on the previous study of this instrument with day laborers (Duke et al., 2010). Table 2 shows the zero-order correlations among all constructs.

Figure 1 illustrates the model with standardized path coefficients. All factors loaded significantly onto each construct. The model accounted for only 2% of the variance in current alcohol use and misuse and 42% of the variance in depression. As expected, day laborer stress was negatively related to health ($\beta = -.72$, $p < .05$). In turn, health was negatively related to depression ($\beta = -.64$, $p < .05$). Day laborer stress had an indirect effect on depression through health ($z = 2.11$, $p < .05$).

Perceived social support was positively related with health ($\beta = .21$, $p > .05$), but, contrary to what was expected, this relationship was not significant. Perceived social support and day laborer stress were not significantly related to each other. No significant relationship was found between health and current alcohol use ($\beta = -.15$, $p > .05$). The direct paths from perceived social support and day laborer stress to current alcohol use and depression were not significant and were thus dropped from the final model for parsimony. The proposed model fit reasonably well (CFI=.88; RMSEA=.08, CI = .06–1; Y-B χ^2 [130, N=89] = 185.74, $p < .05$).

4. Discussion

The aims of this study were to conduct a pilot quantitative study of Latino day laborers, a hard to reach population and simultaneously examine the associations among day laborer stress, social support, health, depression, and alcohol use and misuse among an urban sample of Latino day laborers. The primary study results revealed that stress was negatively related to health and, in turn, health was negatively related to depression. Further, day laborer stress indirectly negatively affected depression through the day laborers' health status. However, contrary to the initial hypotheses, social support was not significantly associated with health and health status was not associated with current alcohol use.

Consistent with the proposed model, stress was related to worse health status. These results provide further evidence that the stressors inherent to being a day laborer and the social context in which they operate may have a negative impact on their health (Duke et al., 2010). Specifically, day laborer stress captured stress related to encountering job-specific stressors, worrying about their offspring, facing difficulties by having migrated to the U.S., and confronting day-to-day living hassles maintained as a result of being a day laborer. The stress that Latino day laborers encounter as a direct result of their occupation and associated living circumstances seems to have a detrimental effect on their health. These results are consistent with de Castro et al. (2010) who found a negative effect of stress as a result of

being a day laborer on the allostatic load of a sample of Latino day laborers. In addition, social support was not significantly related to day laborer stress or health. The limited existing literature on risk and protective factors for alcohol misuse and depression among Latino day laborers and farmworkers identified social support as a protective factor against negative psychosocial outcomes (Escobar, Nervi, & Gara, 2000; Worby & Organista, 2007). However, social support was not found to have a positive effect in this study. A possible explanation for this result is that the dimensions of perceived social support assessed (i.e. family, friends, and significant other) in the present study only captured emotional support and, in the face of the stressors day laborers have to confront, emotional support is not sufficiently buffering. This is consistent with a study demonstrating that emotional social support did not have protective value against depressive symptomatology among farmworkers whereas instrumental support did (Alderete et al., 1999). Similarly, the importance of instrumental support to the well-being of Latino day laborers may also be related to the degree to which social networks (i.e. friends, churches) provide them with opportunities to earn money as sending remittances to their families is often their primary concern (Negi, 2013). Perhaps assessing instrumental social support in the form of concrete resources and assistance may show a greater protective effect on health, alcohol use, and depression.

As expected, physical health status was associated with greater depressive symptomatology but was not significantly related to current unhealthy alcohol use. Thus, in this sample, health status was a more salient risk factor for depression than alcohol use. In addition, our model suggests that stress due to being a day laborer has a detrimental indirect effect on mental health, which is consistent with other findings (Negi,, 2013). The associations between day laborer stress, health status, and depression suggest that for this population, the stress encountered as a result of their working conditions and associated with the social context in which they live may contribute to generating and maintaining the health disparities they confront.

Consistent with the literature, the frequency of drinking occasions was low in this sample, however, participants reported a lower number of drinks per drinking episode than previously found (Worby & Organista, 2007). Accordingly, current alcohol use was not associated with depression, health, social support, or day laborer stress. It is possible that these relationships were not significant because most of the participants in the study reported being former drinkers, and few continued to drink hazardously.

The findings of the present study should be considered in light of its strengths and limitations. The sample size in this study is relatively small. Consequently, the presented SEM model must be replicated in larger samples. Further, causality and directionality may not be determined in light of the cross-sectional study design. It is possible that the relationships among the constructs in the SEM model may differ in other samples. For example, alcohol use may increase stress and deteriorate social support, and in turn, increased stress may negatively impact mental and physical health. In addition, despite that every effort was made to use validated instruments, it is possible that these may not be applicable to this population as most of these measures have not been used with samples of day laborers primarily. Moreover, participants were recruited from a work center that may

shelter them from harsher working conditions and provides them with more resources than other sites where day laborers find work. In addition, Los Angeles is an urban metropolis with a large percentage of Latinos, where Spanish is frequently spoken, and where recent immigrants often settle in ethnic enclaves that may protect them from further stressors. For these reasons, generalizability to other samples may be limited. This is especially true of Latino day laborers working in less stable conditions, such as corners, and in cities where the Latino population and Latino day laborers are fairly new (Valdez, Cepeda, Negi, & Kaplan, 2010). Study strengths include the use of quantitative methods that allowed is to explore the simultaneous relationships among day laborer stress, social support, health status, current alcohol use, and depression. In addition, the use of validated measures permits comparisons to the general population including the Latino population more broadly.

On balance, this study makes important contributions by providing an initial multivariate model of stress and health in Latino day laborers, a hard to reach group at risk for negative outcomes that is becoming more and more visible across the U.S. In fact, little is known about the physical and emotional health of this group including unhealthy alcohol use and depression. The present study takes a step toward addressing this gap by testing an integrative model of day laborer stress, social support, health, alcohol use, and depression. Further, this study demonstrate that it is feasible to conduct quantitative studies with this population. It is critical to highlight that, in order to do so, university researchers must first establish a collaborative relationship with this community that allows day laborers to trust researchers with this information. In addition, the quantitative approach allowed for the multivariate analysis of the relationships among the constructs of interest. The findings suggest that the working conditions of Latino day laborers are associated with their health and depression and suggest that clinical interventions should concomitantly address mental and physical health. Specifically, it may be especially useful to provide day laborers with further resources and teach them skills to manage stressors encountered as a result of their occupational and living conditions.

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Glossary Terms

Migrant stress	stress experienced as a result of the conditions associated with being a migrant individual.
Latino day laborers	Individuals of Latin American ancestry whose primary source of financial income is obtained through negotiating day work in informal markets.

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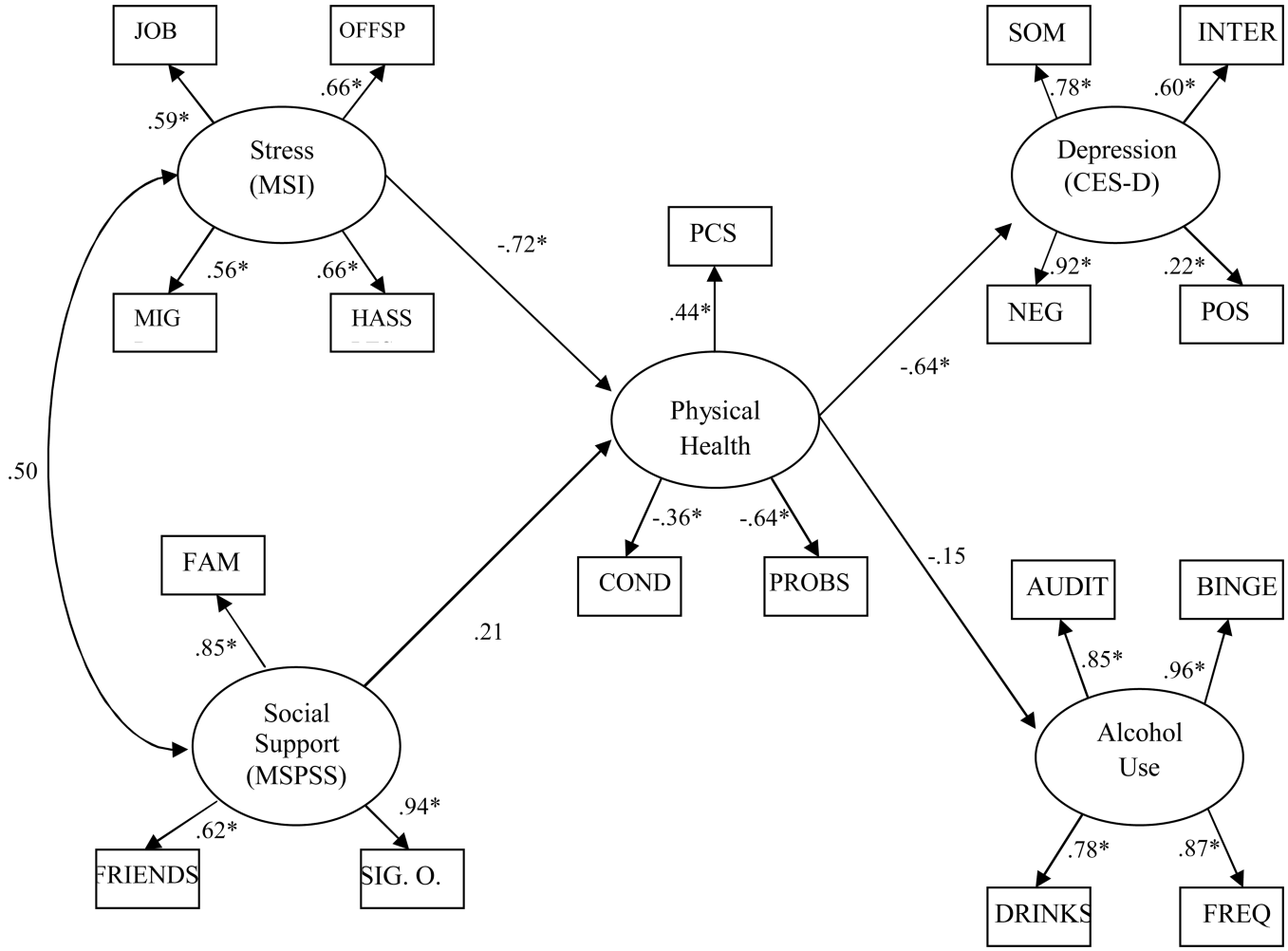

Figure 1.

Relationships between migrant stress, social support, health, depression, and alcohol use. Coefficients are standardized path coefficients. * $p < .05$

Table 1

Mean and standard deviations for model variables

Construct	Subscale	Scale/Definition	Mean	SD
Alcohol Use and Misuse	FREQ	Frequency of alcohol use in the past year	1.23	1.46
	BINGE	Number of binge drinking episodes in the past year	1.0	1.21
	DRINKS	Drinks per drinking occasion in the past year	1.65	1.98
	AUDIT	Alcohol use disorders identification test	6.53	8.15
Depression	SOM	Somatic symptoms	3.62	3.22
	INTER	Interpersonal difficulties	1.38	1.35
	NEG	Negative affect	3.64	3.89
	POS	Positive affect	4.77	3.47
Physical Health Status	COND	Health Conditions in the past year	0.91	1.31
	PROBS	Health problems in the past year	2.47	2.24
	PCS	Physical Component Summary from SF-12	49.85	7.44
Social Support	FAMILY	Perceived social support from family	5.05	2.07
	FRIENDS	Perceived social support from friends	4.25	1.86
	SIG.O.	Perceived social support from a significant other	4.98	1.90
Stress	JOB	Stress related to job conditions	9.06	5.59
	OFFSP	Stress from offspring well-being	6.32	4.47
	MIGR	Stress related to migration factors	4.54	4.78
	HASSLES	Stress from every day hassles	4.81	4.14

Table 2

Correlations among model variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Frequency of alcohol use	--																	
2. Drinks per drinking occasion	.67**	--																
3. Number of binge drinking episodes	.81**	.73**	--															
4. Alcohol use disorders identification test	.75**	.64**	.79**	--														
5. Somatic symptoms	.04	.05	.05	.10	--													
6. Interpersonal difficulties	−.15	−.08	−.25*	−.16	.46*	--												
7. Negative affect	.06	−.05	−.04	.05	.71**	.58**	--											
8. Positive affect	−.04	−.07	−.02	.02	.18	.03	.21*	--										
9. Health Conditions in the past year	−.05	−.09	−.05	−.02	.28*	−.002	.16	.03	--									
10. Health problems in the past year	.18	.15	.19	.29*	.41**	.15	.39**	.13	.27*	--								
11. SF-12Physical Component Summary	.16	.04	.01	−.001	−.38**	−.26*	−.25*	−.06	−.18	−.22	--							
12. Perceived social support from family	.06	.15	.11	.22*	−.05	−.25*	−.14	.03	−.05	.09	.16	--						
13. Perceived social support from friends	.07	.11	.15	.11	.04	−.03	−.07	−.06	.09	.09	.14	.34*	--					
14. Perceived social support from a significant other	.05	.09	.11	.11	−.07	−.19	−.13	−.01	−.09	.15	.26*	.08**	.59**	--				
15. Stress related to job conditions	−.05	−.10	−.08	−.10	.34**	.25	.38*	.30*	.22	.25*	−.18	−.06	.003	−.06	--			
16. Stress from offspring well-being	.13	.22*	.13	.17	.20	−.03	.16	.15	.14	.31**	−.08	.17	.05	.19	.38**	--		
17. Stress related to migration factors	.17	.28*	.08	.18	.03	−.18	.07	.14	.04	.43*	.07	.28*	.02	.28*	.28*	.40**	--	
18. Stress from every day hassles	.08	−.01	−.10	−.01	.25*	.13	.33*	.18	.15	.33**	−.06	−.008	−.008	.05	.42**	.39**	.39**	--

* $p < .05$;

** $p < .01$