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Testing Traditional Machismo and the Gender Role Strain Theory with Mexican Migrant Farmworkers

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Abstract

The current study examines the moderating role of traditional *machismo* on mental health outcomes. We hypothesized that *machismo* would enhance the effects of stressors that are incongruent with traditional *machismo* beliefs (discrimination, adverse childhood experiences [ACEs], and fear of deportation) on depression and anxiety outcomes but would not enhance stressors that are congruent (harsh working conditions and poverty) on depression and anxiety. Participants were 190 male Mexican migrant farmworkers. As hypothesized, endorsing high traditional *machismo* was associated with stronger effects of fear of deportation and discrimination on depression outcomes compared with low traditional *machismo*. The interaction of *machismo* and ACEs was not significant in predicting depression or anxiety. Moreover, *machismo* did not moderate the effects of poverty or harsh working conditions on depression or anxiety outcomes. Results partially supported our hypotheses and suggested that the effect of *machismo* on depression may be better understood in the context of value incongruent stressors.

Keywords: Latino migrant farmworkers, mental health, machismo, gender role strain

Traditional *Machismo*, often described as beliefs in traditional male gender roles in various Latino cultures, appears to increase the risk of multiple deleterious health and mental health outcomes (Nunez et al., 2016). Although *machismo* broadly refers to a diverse range of beliefs and values regarding the role of men in their families, relationships, and society, it is typically characterized by beliefs that men should be aggressive, stoic, womanizing, and domineering toward women (Arciniega et al., 2008). These kinds of definitions contrast with other traditional male gender role values, such as *caballerismo*, of many Latino cultures which emphasizes masculinity defined by chivalry, hard work, and honoring and providing for one's family (Arciniega et al., 2008). In contrast, traditional *machismo* is often examined as a risk factor where it directly predicts adverse mental health outcomes such as higher posttraumatic stress symptoms, depression, anxiety, antisocial behavior, and perceived levels of general stress (Fragoso & Kashubeck, 2000; Nunez et al., 2016). However, not all studies have found that traditional *machismo* has an adverse effect on mental health among Latinos (Perrotte et al., 2018).

Given the mixed findings regarding traditional *machismo's* effect on mental health outcomes, the literature can benefit on more research regarding traditional *machismo's* specific role. Gender role strain theory may provide a theoretical groundwork that outlines the conditions under which traditional *machismo* enhances the harmful effects of specific stressors while having no effect on others. Gender role strain theory, in short, posits that stress occurs when demands and life circumstances conflict with beliefs about roles (e.g., believing men should be primary breadwinners and simultaneously having a wife who earns more; Levant, 2011). Research with other Latino populations suggests that racism was positively associated with gender role conflict (Arellano-Morales et al., 2016) and higher levels of gender role strain was associated with elevations of depression and psychosocial stress (Fragoso & Kashubeck, 2000). In turn, it would suggest traditional *machismo* would enhance the deleterious effects of stressors that conflict with its valued gender roles and would not alter the effects of stressors that do not conflict with traditional *machismo*. Furthermore, gender role strain theory would suggest that role strain would increase stress and mental health symptoms broadly but may be most associated with disorders that represent problems with stress related emotions and negative affect specifically, such as depression and generalized anxiety. The current article will explore how traditional *machismo* affects stressors that are both congruent and incongruent with its gender role values, as well as the relationship between traditional *machismo* and stressors on depression and generalized anxiety.

Machismo and Gender Role Strain: The Importance of Stressor Congruence

Although primarily examined with non-Latino populations, gender role strain posits that gender role beliefs are most likely to lead to significant distress under conditions in which those beliefs are threatened or conflict with other demands (Levant, 2011). Indeed, prior work has suggested that traditional *machismo* may enhance the effect of role strain on depression and stress among Mexican American men (Fragoso & Kashubeck, 2000). Extending on these findings, traditional *machismo* could enhance the effects of stressors that are incongruent and produce gender role strain, particularly for disorders characterized by

emotional distress, such as depression and anxiety. Multiple stressors may conflict with traditional *machismo*; however, we will explore three potential stressors because of their theoretical incongruence and demonstrated high frequency among Latino populations: (1) discrimination, (2) fear of deportation, and (3) adverse childhood experiences (ACEs).

Extant research has demonstrated that discrimination increases the risk of several mental health outcomes, such as depression, among Latino populations (Halim et al., 2017). Perceived discrimination is also associated with social disempowerment and lower perceived social status (Karlsen & Nazroo, 2002). Thus, gender role strain might suggest that the effect of discrimination may increase under high degrees of traditional *machismo* because social disempowerment and insults to social status would conflict with beliefs regarding male social dominance. Preliminary evidence has supported this hypothesis. Specifically, Liang et al. (2011) demonstrated that traditional *machismo* appeared to enhance the effect of discrimination on gender role strain. Furthermore, traditional *machismo* alone also appeared to positively predict gender role strain. While results differed some across discrimination contexts, findings suggested that the combination of discrimination and traditional *machismo* may enhance gender role strain. The interactive effects of discrimination and traditional *machismo* on mental health outcomes have yet to be demonstrated.

Similarly, stressors that are highly common among migrant farmworkers may also conflict with traditional *machismo*. As one example, having a fear of deportation, a common source of stress for Latino migrant farmworkers may conflict with traditional *machismo* because of the restrictive nature of their legal status and related social disempowerment. Qualitative research has suggested that individuals reporting a fear of deportation may attempt to avoid conflicts, seek fewer employment opportunities, withstand greater work-related abuses, and other similar situations that may bring attention to themselves and in turn detection by immigration enforcement authorities (De Castro et al., 2006). Moreover, migrants who receive work-related visas may persist working in harsh conditions because a loss of employment could result in the loss of their legal status in the United States. For individuals with high degrees of traditional *machismo*, the avoidance of or inability to respond to such conflicts may then contradict aspects of male social dominance and patriarchal superiority. Having a fear of deportation and an inability to respond to work-related stress may threaten components of male dominance that have been found to be central to the construct of traditional *machismo* such as ideas that men “fight when challenged,” “have bills in their name,” or never appear “weak” (Arciniega et al., 2008). Thus, traditional *machismo* may be associated with larger effects of legal status worries and harsh working conditions on depression and anxiety outcomes, though this has yet to be demonstrated empirically.

With regard to childhood adversity, multiple investigations have indicated that ACEs forecast a wide range of negative mental health outcomes, including depression and anxiety (Lindert et al., 2014). ACEs generally refer to experiences of traumatic events and significant family disruption during childhood (Felitti et al., 1998). Pertinent to the current study, several Latino populations experience higher degrees of ACEs relative to other racial/ethnic groups (Cronholm et al., 2015). ACEs also forecasts greater difficulties in stress and emotion regulation (Street et al., 2005). Thus, ACEs may also represent a key incongruent stressor as its effects on emotion regulation may directly contradict traditional *machismo*

beliefs regarding stoicism and that displays of emotion are indications of weakness. While research has yet to examine the interactive effects of ACEs and traditional *machismo* on mental health, related research among Latino populations has demonstrated that other male gender role values associated with stoicism, namely *caballerismo*, may enhance the effect general emotional distress on alcohol use (Perrotte et al., 2018). Other work has suggested that men who endorse traditional *machismo* may attempt to cope with stress by restricting their emotions to conform to the masculinity ideal, which may in turn lead to an exacerbation of symptoms (Asnaani & Hall-Clark, 2017). Given the substantial effect of ACEs on stress-related mental health, such as depression and generalized anxiety, its associated emotion regulation difficulties, and prior results suggesting traditional *machismo* may result in maladaptive coping strategies, research is therefore needed to determine the potential interactive effects of ACEs and traditional *machismo*.

Latino Migrant Farmworkers and Unique Situational Stressors

Many of the stressors that may interact with *machismo* are common among migrant farmworkers, a population that is disproportionately Latino and male (National Center for Farmworker Health, 2016). Migrant farmworkers are seasonal farmworkers who travel to the job site and are not reasonably able to return to their permanent residence within the same day (U.S. Department of Labor, 2018). Many Latino migrant farmworkers report experiencing prejudice and hostility in the communities in which they live and work because of their transient lifestyle and minority status (National Center for Farmworker Health, 2016). These stressors may be highly prevalent among many Latino populations; however, Latino farmworkers are at particular risk for experiencing high degrees of poverty and discrimination (Winkelman et al., 2013). Moreover, migrant farmworkers experience an elevated risk for experiencing self-reported stress-related disorders such as anxiety and depression (Ramos, 2017). Specifically, prior research on Latino migrant farmworkers indicates a high prevalence of depressive symptomology and subjective stress (Limon et al., 2018; Ramos et al., 2016; Winkelman et al., 2013). Thus, understanding the interaction of traditional *machismo* and several of stressors common to migrant farmworkers may be critical to understanding mental health risk among this population, while also advancing our understanding of gender role values and stress in general.

Purpose

The current study examined a moderating role of traditional *machismo* in which traditional *machismo* enhances the effects of stressors that are incongruent (conflict) with its associated values, while not altering the impact of stressors that are congruent (do not conflict). In the current study, we focused on the effects of traditional *machismo* and its interactive effects with traditional *machismo* “incongruent” and “congruent” stressors in a sample of Latino migrant farmworkers. The current study consists of secondary data analyses from a broader project focusing on migrant farmworker health, including depression and anxiety concerns. Incongruent and congruent stressors were selected from among those examined in the

study, which included: ACEs, poverty, discrimination, fear of deportation, and harsh working conditions (i.e., migrant farmworker stress).

Incongruent stressors were selected based on how they might contradict traditional *machismo*-related beliefs. Specifically, discrimination and reporting fear of deportation were selected as incongruent stressors as they oppose social dominance aspects of traditional *machismo*. In addition, ACEs were examined due to the ways in which their effects on stress and emotion regulation (Street et al., 2005) may conflict with beliefs regarding stoicism and emotional control. Finally, harsh working conditions for migrant farmworkers and poverty were hypothesized to be congruent stressors, as they did not directly contradict *machismo* beliefs.

Method

Participants

Data are part of a migrant farmworker health study conducted in the Midwest, which consisted of a sample of 241 primarily Mexican migrant farmworkers recruited in the rural Midwest between May and September of 2016 (Ramos, 2017). Given the focus of this analysis, the current sample consisted of only the male participants ($n = 190$, 78.8%). Average age was 35.46 years ($SD = 13.66$, range = 19–72 years). The majority of participants were born outside the United States ($n = 167$, 87.9%). Additional background information is contained in Table 1.

Procedures

Data collection was conducted by five bilingual and bicultural members of the research team. Recruitment occurred at migrant farmworker camps. Meetings were held at farmworker camps after working hours to inform potential participants about the study. A member of the research team explained the purpose of the study, informed potential participants of their rights as research participants both orally and in writing, answered questions, and obtained informed consent from those who were interested. All study materials were available in English and Spanish. A member of the research team interviewed each participant in the language of their choice, reading each question to them and marking the corresponding response on the questionnaire. The migrant farmworker health study assessed physical and mental health, social well-being, work context, and demographics. Interviews took approximately 45 to 60 minutes to complete, and participants were given US\$15 cash for their participation in the study. The university's Institutional Review Board approved the study.

Table 1. Demographics and Background Information

Demographics and Measures	<i>N</i> or <i>M</i>	% or <i>SD</i>	Minimum– Maximum
Age (years)	35.46	13.66	19–72
Education			
Never attended	3	1.6%	
Elementary school	71	37.4%	
Some high school	69	36.3%	
High school graduate	42	22.1%	
At least some college	2	1.1%	
College graduate	3	1.6%	
Born outside the United States	167	87.9%	
Born in Mexico	164	86.3%	
Years in United States			
< 1 year	50	26.3%	
1–10 years	48	25.3%	
More than 10 years	55	28.9%	
Income			
< US\$10,000/year	95	50.0%	
US\$10,000–US\$14,999/year	47	24.7%	
US\$15,000–US\$19,999/year	23	12.1%	
US\$20,000–US\$24,999/year	12	6.3%	
US\$25,000–US\$34,999/year	5	2.6%	
More than US\$35,000/year	5	2.6%	
English language proficiency			
Not at all	103	54.2%	
Not well	62	32.6%	
Well	9	4.7%	
Very well	16	8.4%	
Completed interview in Spanish	180	94.7%	
Machismo	30.35	11.65	10–66
Frequency total from Everyday Discrimination Scale	5.44	6.21	0–30
Fear of deportation	64	33.7%	
Poverty	170	89.5%	
Adverse childhood experiences (ACEs) total	1.55	1.78	0–9
Depression total (CES-D)	5.1	4.47	0–24
Anxiety symptom total (GAD-7)	9.92	4.03	7–24
Harsh working conditions from MFWSI	5.85	4.28	0–19

Note: CES-D = Center for Epidemiologic Studies Depression Scale; GAD = Generalized Anxiety Disorder Scale; MFWSI = Migrant Farmworker Stress Inventory

Measures

Traditional Machismo

Traditional *machismo* was examined using the “Traditional Machismo” subscale of the Machismo Measure (Arciniega et al., 2008). The 20-item Machismo Measure is composed of two subscales: *Traditional Machismo* and *Caballerismo*. The traditional *machismo* subscale assesses components of gender role beliefs that focus on social dominance and related ideas

such as restricted emotionality to avoid “appearing weak” and the submission of women. These scales use a 4-point Likert-type scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). Higher scores indicate higher endorsement of traditional *machismo*. The scale has demonstrated significant internal and external validity, including through confirmatory factor analyses (Arciniega et al., 2008). The *Traditional Machismo* subscale has also evidenced good internal consistency (Cronbach’s $\alpha = .84$; Arciniega et al., 2008). Internal consistency in the current sample was also good ($\alpha = .90$).

ACEs

ACEs were assessed using the ACEs scale. The ACEs scale has been used in numerous national and international studies of public health (Hughes et al., 2017) It consists of 10 dichotomous (yes/no) items focusing on various highly stressful events that individuals may have experienced during childhood (e.g., child physical abuse or witnessing domestic violence). Both sum scores and categorical approaches to ACEs have been used to forecast health outcomes (Felitti et al., 1998). In this study, only 9 of the 10 dichotomous items were used in data collection; information on sexual abuse was not collected. To capture a broader range of stressors during childhood and greater variance among the ACEs, the sum score was used in all analyses. Table 1 contains descriptive information.

Migrant Farmworker Stress

Stressors common to migrant farm work were measured by using the Migrant Farmworker Stress Inventory (MFWSI), a 39-item measure that assesses several stressors inherent to migrant farm work (Hovey et al., 2003). Participants rated the perceived degree of stress they experienced resulting from each potential stressor. Each item was measured on a Likert-type scale from 1 *not at all stressful* to 4 *extremely stressful*. Prior work with this sample had suggested that a single factor approach did not adequately fit the data and that a five-item, theoretically driven factor containing only items that specifically reference work conditions provided adequate fit (Andrews et al., 2019). Internal consistency for this five-item factor was good ($\alpha = .71$). Table 1 contains descriptive information.

Depression

Depression was measured using the revised Center for Epidemiologic Studies Depression Scale (CES-D). The revised CES-D is a 10-item depression screening tool. For each item, participants were asked to indicate how often they experienced each symptom within the last week, and responses ranged from 0 (*rarely or none of the time*) to 3 (*most or all of the time*). Some studies have indicated a single factor structure may be appropriate and other studies, including studies with immigrant and racial/ethnic minority samples, have suggested a two-factor solution consisting of positive and negative affect may be more appropriate (Gonzalez et al., 2017). In both cases, the single factor and negative affect factor have demonstrated good internal consistency in exploratory and confirmatory factor analyses. In addition, the scale has demonstrated strong convergent validity with comprehensive diagnostic interviews. In the current study, internal consistency was found acceptable (Cronbach’s $\alpha = .71$). Additional information regarding measurement fit is described in the “Results” section, and Table 1 contains descriptive information.

Anxiety

Anxiety was measured by using the seven-item Generalized Anxiety Disorder scale (GAD-7). The GAD-7 is a self-reported instrument that assesses severity of multiple symptoms from the Diagnostic and Statistical Manual, fifth edition, though it was initially created to match criteria from the fourth edition of the same manual. For each item, participants were asked to indicate how often they experienced each symptom within the last two weeks, and responses ranged from 0 (*not at all*) to 3 (*nearly every day*). Prior investigations indicate good reliability as well as criterion, construct, factorial, and procedural validity (Spitzer et al., 2006). In addition, the scale has demonstrated strong convergent validity with comprehensive diagnostic interviews. Internal consistency for the GAD-7 in this sample was good ($\alpha = .86$). Table 1 contains descriptive information.

Experiences of Discrimination

Participants' experiences with discrimination were assessed using the expanded Everyday Discrimination Scale (Williams et al., 2008) which assesses discrimination experiences across 10 different situations. Participants indicated how often each situation has happened to them in their daily lives with responses ranging from 1 *Never* to 4 *Four or more times*. It has demonstrated good internal consistency in factor analytic studies and concurrent validity (Krieger et al., 2005). Responses are summed to form a total score.

Fear of Deportation

Fears of deportation was measured using the MFWSI question, "I worry about being deported." Anyone who responded that they were somewhat, moderately, or extremely stressed was classified as having a fear of deportation.

Demographic and Background Variables

Age, gender, country of origin, years in the United States, education, English language proficiency, and income were assessed as demographic and background variables. English language proficiency was measured by a single question, "How well do you speak English?" There were four original response options which were later dichotomized into *not well* or *not at all* (0) and *well* or *very well* (1). Education was also measured by a single item, and responses were collapsed into three categories: *less than high school education* (0), *high school graduate* (1), and at least some *college and/or technical training* (2). Participants were asked if they were born *in the United States* (0) or *outside the United States* (1). If participants indicated they were born outside the United States, a follow-up question assessed country of origin. Descriptive information for each of these variables is contained in Table 1.

Analyses

To test hypotheses related to the effects of traditional *machismo* and its interactive effects with traditional *machismo* congruent and incongruent stressors, several path analyses were conducted with robust maximum likelihood estimation. Specifically, separate path analyses were examined to examine traditional *machismo* by stressor interactions individually. This was done to reduce the number of interactions involving traditional *machismo* that

were examined simultaneously and to minimize the potential for multicollinearity among interactions. Each path analysis contained the same outcome variables: CES-D scores of depression and GAD-7 scores for generalized anxiety. Each path analysis included all of the stressors examined: discrimination, fear of deportation, harsh working conditions, poverty, and ACEs. English language fluency, immigration status, and age were included as control covariates in all analyses. Results of these path analyses are presented in Table 2. Significant interactions were probed as recommended by Preacher et al. (2006) by alternating coding schemes and interpreting the lower order effects as simple effects for the group coded as “0” across other variables in the interaction. Given that traditional *machismo* was measured continuously, effects were probed at the mean, one standard deviation below the mean, and one standard deviation above the mean.

Table 2. Effects of Machismo and Stressors on GAD-7 Anxiety and CES-D Depression Scores

	Depression		Anxiety	
	β	<i>p</i>	β	<i>p</i>
Baseline model with no interactions				
English language proficiency	.05	.413	<.01	.090
Age	-.03	.662	.11	.083
Number of people in the household	-.02	.702	-.03	.600
Poverty	.15	.018	.09	.099
Harsh working conditions from MFWSI	.41	<.001	.33	<.001
ACEs	.32	<.001	.38	<.001
Discrimination		.08	.360	.12
Fear of deportation	.07	.244	.06	.376
Traditional machismo interactions with incongruent stressors ^a				
Discrimination × Machismo	.30	.007	-.02	.822
Fear of deportation × Machismo	.30	.025	.18	.188
ACEs × Machismo	.13	.153	-.13	.180
Traditional machismo interactions with congruent stressors ^a				
Poverty × Machismo	-.26	.171	.16	.273
Harsh working conditions × Machismo	.01	.919	-.01	.681

Note: Depression scores were taken from the CES-D total score and anxiety scores were taken from the GAD-7 total score. Harsh working conditions were examined with a subset of items from the MFWSI. CES-D = Center for Epidemiologic Studies Depression-Scale; GAD = Generalized Anxiety Disorder Scale; MFWSI = Migrant Farmworker Stress Inventory.

^aInteractions were examined iteratively in separate models.

Prior to beginning analyses, analytic assumptions were checked. No data were significantly missing (i.e., all variables contained less than 5% missing data). Nevertheless, missing data were estimated using full information maximum likelihood, which has been demonstrated to reduce biases associated with missing data relative to other estimation methods (Enders & Bandalos, 2001). Also, CES-D and GAD-7 composite scores were significantly univariate kurtotic. Given that the composite measures for both variables are sums of frequency ratings and therefore approximate count data, these outcomes were examined using a negative binomial distribution, which appeared to better characterize the

data. Using negative binomial or Poisson distributions have also been shown to reduce biases associated with kurtotic dependent variables relative to alternatives such as transformations of the dependent variable (Đorić et al., 2009). Following these modifications, data appeared to meet all analytic assumptions.

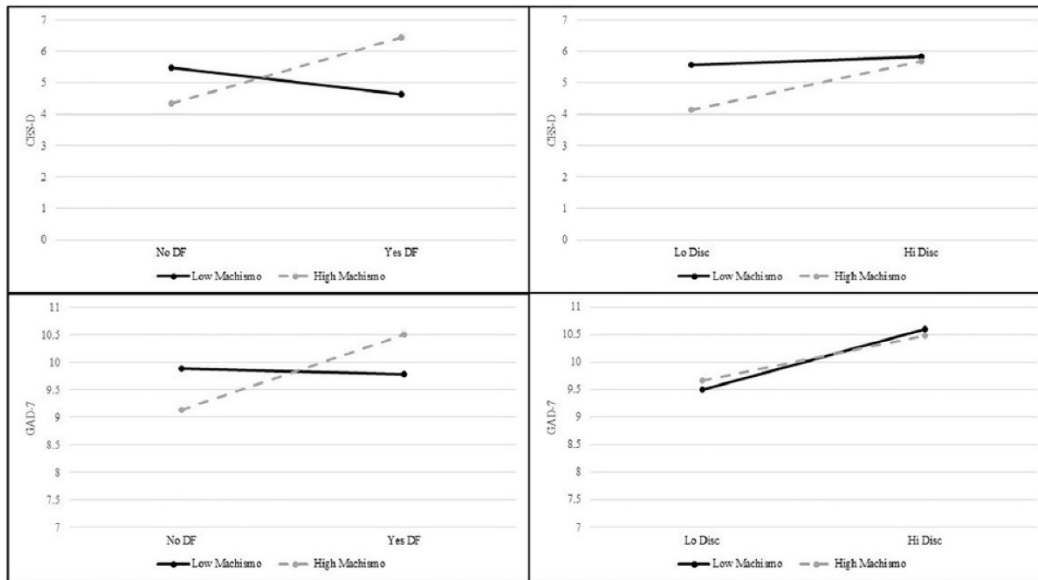
Results

Incongruent Stressors

Fear of deportation

In the model examining the interaction of fear of deportation with traditional *machismo* among those born outside the United States, the interaction was significant in predicting depression scores such that the effect of fear of deportation was more positive at higher levels of traditional *machismo* ($\beta = .30, p = .025$). The interaction was not significant when predicting anxiety outcomes ($\beta = .18, p = .188$). In probing the significant interaction on depression outcomes, the simple effect of having a fear of deportation positively predicted depression scores at one standard deviation above the mean ($\beta = .24, p = .005$; see Figure 1) and was not significant at the mean of traditional *machismo* scores or one standard deviation below (p -values $> .05$).

Interactions of Machismo with Discrimination and Precarious Legal Status on Depression and Anxiety



Note: DF – Deportation Fears, Disc – Discrimination; High and low values of discrimination and machismo were examined at one standard deviation above and below the mean.

Figure 1. Probing interaction effects of machismo with discrimination and fear of deportation on CES-D depression and GAD-7 anxiety scores. **Note:** CES-D = Center for Epidemiologic Studies Depression-Scale; GAD = Generalized Anxiety Disorder Scale

Discrimination

The interaction between traditional *machismo* and discrimination was also significant in predicting depression outcomes with the effect of discrimination becoming more positive at higher levels of traditional *machismo* ($\beta = .30, p = .007$). The interaction was not significant in predicting anxiety outcomes ($\beta = -.02, p = .822$). In probing, the significant interaction on depression outcomes positively predicted depression scores at high levels of traditional *machismo* ($\beta = .18, p = .029$; see Figure 1) but was not significant at the mean or at low levels of traditional *machismo* (p values $> .05$).

ACEs

In the model examining the potential moderation of ACEs by *machismo*, the interaction between traditional *machismo* and ACEs was not significant in predicting depression ($\beta = .13, p = .153$) or anxiety outcomes ($\beta = -.13, p = .180$). After removing the nonsignificant interaction, the main effect of ACEs positively predicted both depression ($\beta = .32, p < .001$) and anxiety scores ($\beta = .38, p < .001$).

Congruent Stressors*Poverty*

The model examining poverty and *machismo* suggested their interaction was not significant in predicting depression ($\beta = -.26, p = .171$) or anxiety scores ($\beta = .16, p = .273$). Once the nonsignificant interaction was removed, the main effect of poverty significantly predicted depression ($\beta = .15, p = .018$) but not anxiety scores ($\beta = .09, p = .099$).

Harsh working conditions

The model with examining harsh working conditions and traditional *machismo* suggested their interaction was not significant in predicting depression ($\beta < .01, p = .919$) or anxiety scores ($\beta = -.01, p = .681$). After removing the nonsignificant interaction, the main effect of harsh working conditions, however, did significantly predict both depression ($\beta = .41, p < .001$) and anxiety ($\beta = .33, p < .001$).

Discussion

The current study examined multiple different stressors and the role of traditional *machismo* in altering the effects of these stressors on depression and anxiety outcomes. The results partially supported the hypotheses stemming from the gender role strain paradigm that traditional *machismo* would increase the effect of incongruent stressors on depression and anxiety. Specifically, these results diverged between depression and anxiety outcomes, with traditional *machismo* only evidencing moderation of effects of deportation fears and discrimination on depression symptoms. Both stressors were hypothesized to conflict with traditional *machismo* due to their incongruence with social dominance beliefs. Traditional *machismo* did not seem, however, to alter the effect of ACEs on either depression or anxiety. ACEs were hypothesized to conflict with traditional *machismo* because of the incongruence with ACE effects on emotion dysregulation.

Results also supported the gender role strain paradigm in that congruent stressors, those that did not appear to conflict with *machismo*, were not altered by *machismo* in their relationships with either of the examined mental health outcomes. Poverty and harsh working conditions were examined as congruent stressors, as they did not appear to have direct or indirect conflicts with the social dominance, male dominance, and emotional restriction components that appear to characterize traditional *machismo*. These stressors were not moderated by traditional *machismo*, yet they still positively predicted mental health symptoms. That is, concordant with prior research, harsh working conditions positively predicted both depression and anxiety symptoms, while poverty predicted depression scores but not anxiety. Similarly, though it was hypothesized to be an incongruent stressor, ACEs positively predicted both depression and anxiety. Taken together, these results suggest that traditional *machismo* may increase the effect of stressors that are incongruent with its values while not modifying the effects of congruent stressors on depression outcomes.

The current findings add to the literature on the gender role strain paradigm and extend them to a new population: Latino migrant farmworkers. The extension to Latino migrant farmworkers is particularly valuable due to the disparate number of stressors faced by this group relative to other Latino populations and general samples in the United States (Winkelman et al., 2013).

The results did not fully support hypotheses stemming from the gender role strain paradigm. First, none of the traditional *machismo* and incongruent stressor interactions were significant in predicting anxiety scores from the GAD-7. One potential reason for the divergent results between depression and anxiety could be that the conflicts between traditional *machismo* and the incongruent stressors result in significant self-criticism and negative self-perceptions. Both are focal components of depression, but not anxiety (Huang, 2015). Future research should examine the extent to which conflicts between traditional *machismo*, which heavily emphasizes social status and male dominance, and stressors result in alterations in self-perceptions as a potential explanation for these findings. Second, the lack of significant interactions between traditional *machismo* and ACEs could have occurred for multiple reasons. As one example, ACEs does not directly conflict with traditional *machismo*, but this would have only occurred indirectly through ACEs effects on emotion and stress regulation, which were not assessed in the current study. In addition, emotional restriction is a relatively minor component of the measure (i.e., only one item directly references emotionality). As a result, the gender role strain effects for this measure could be constrained to those that directly conflict with male social dominance and male superiority, which comprise large sections of the measure (Arciniega et al., 2008).

Limitations and Future Directions

While the current study provides many novel findings on traditional *machismo* and its interactive effects with common stressors Latino migrant farmworkers encounter, it has numerous notable limitations. First, the study employed only correlational and cross-sectional methods. Future studies should use longitudinal and experimental approaches to establish the direction of effects. For example, it may be that traditional *machismo* is a compensatory cognitive strategy for some men who are experiencing distress related to threats of social positioning in combination. In addition, the study examined only traditional *machismo*.

Future work should examine additional male gender role beliefs present among Latino populations (e.g., *caballerismo*) and the varying stressors that may potentially conflict with these beliefs. Finally, the sample consisted only of Latino men, and it is less clear how similar gender role conflicts occur for women. Future research could examine potential conflicts with female gender role values among Latina populations, such as *marianismo*, which suggests that women should attend to the “harmony” of the household and sacrifice for other family members (Castillo et al., 2010).

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