Addressing organizational climate can potentially reduce sexual harassment of female agricultural workers in California

Assessing antecedents for sexual harassment among California’s agricultural workers yields insight into the causes and consequences of this behavior and suggests ways to mitigate it.

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Of the estimated 3 million farmworkers in the United States, approximately 1 million are employed in California, where a well-documented labor crisis (Martin 2017) has been driven by diminishing numbers of male migrant workers. Viticulture is one of many agricultural industries affected. In 2017, Napa County vineyards, which employ 10,000 farmworkers, experienced an estimated 12% shortage of vineyard laborers (Martin et al. 2019; Giovanni Peri, UC Davis Economics Department, personal communication). This labor shortage could have been considerably worse if not for an influx of female workers into the Napa County labor pool. Between 2013 and 2016, the proportion of female seasonal laborers in Napa vineyards increased from 10% to 25%, mirrored by a smaller increase in permanent laborers (Hobbs and Cooper 2017). There are indications that similar gender shifts are occurring in other California regions. The economic motivation is, therefore, stronger than ever for agricultural companies to reduce barriers to the employment and retention of female workers. One such barrier is workplace sexual harassment (SH).

Abstract

Workplace sexual harassment (SH) has been highlighted as a key issue for female agricultural workers in the United States. This study investigated how workers’ descriptive data (age, job experience, attitudes) and specific organizational variables (how work crews are structured) potentially facilitate SH in an agricultural setting. Harassment was reported by 30% of surveyed female viticulture workers in their current jobs. Harassed women tended to be younger, employed seasonally and working in crews where hostile sexist views were prevalent. Harassment affected worker productivity; harassed women and their male co-workers were less satisfied with their jobs and more likely to seek other employment. Efforts to address SH by restructuring at the level of the field crew may be ineffective. Instead, addressing workers’ hostile sexist attitudes and the extent to which an organization tolerates SH appears to have the most promise for reducing SH in agricultural industries.
Studies in the United States estimate that from 40% to 75% of all working women have experienced SH and that rates have not decreased since the 1980s (MacDonald 2012). Furthermore, SH rates are higher (70% to 80%) in male-dominated and lower-income jobs (Buchanan et al. 2014; Fitzgerald 2019), categories that include agricultural labor (Arcury et al. 2015; Murphy et al. 2015). California is no exception; in one study, 80% of female farm laborers reported experiencing SH (Waugh 2010) and, in a recent survey of farmworkers in northern California, 44% of women reported SH (Prado et al. 2018).

Defined as "unwanted sex-related behavior at work that is appraised by the recipient as offensive ... or threatening her well-being" (Fitzgerald et al. 1997), SH of women is one of the most prominent and detrimental barriers to women’s career development and satisfaction (Willness et al. 2007). Sexual harassment covers a range of behaviors usually placed on a continuum of severity. One common typology assigns behaviors into three categories: gender harassment, unwanted sexual attention and sexual coercion (Fitzgerald et al. 1997). All of these behaviors have negative consequences for both the victims and the organizations in which they work (Pina and Gannon 2012; Willness et al. 2007). Victims report debilitating effects on their physical and mental well-being (O'Leary-Kelly et al. 2009; Pina and Gannon 2012; Street et al. 2008). In addition, they are less productive, less satisfied with and committed to their jobs and have higher absenteeism and turnover rates (MacDonald 2012; Pina and Gannon 2012). SH may also act as a stressor for entire work teams, with negative impacts on intra-team interactions, cohesion and performance (Raver and Gelfand 2005). All of these consequences incur economic costs.

To tackle SH, a company needs to understand the antecedents. For example, it is important for a company to know which workers are at highest risk and in what work scenarios SH is most likely to occur. Organizational studies in other industries have identified multiple antecedent variables of SH over the last 30 years (MacDonald 2012). It was our objective to test these in an agricultural context (Willness et al. 2007), with the aims of improving our understanding of which antecedent conditions are present in agricultural work environments, specifically viticulture, and to assess how they are related to reported incidence of SH and work outcomes, that is, job satisfaction and job retention. In doing so, our goal was to provide practical guidance for the local industry and, by extension, other agricultural industries, as well as to learn which approaches may be effective for addressing SH, a significant barrier to women excelling in the workforce.

Measuring study variables

Our study focused on the organizational level of the work team because agricultural workers spend most of their time working in small groups (field crews). We quantified three categories of antecedent variables based on organizational models (Raver and Gelfand 2005): (1) personal and situational characteristics of female workers, (2) job gender context and (3) organizational climate (see below and table 1). Our primary criterion for selecting each antecedent measure was the likelihood a company could influence that variable if it were linked to SH. These antecedents were compared with a measure of SH, which was then compared to work outcomes as a demonstration of how SH can negatively impact productivity (fig. 1).

Personal and situational characteristics

The personal and situational characteristics we measured were age, employment status, duration of employment in the company, crew size and the presence of relatives on a crew. Previous studies have found that women with temporary employment contracts are more vulnerable to SH than those with permanent fixed contracts (LaMontagne et al. 2009), and that younger women are consistently identified as at greater risk than older women (MacDonald 2012).

TABLE 1. Study measures

<table>
<thead>
<tr>
<th>Personal and situational</th>
<th>(1) Age: years; (2) crew size: no. members; (3) duration of employment: days worked in company; (4) employment status: seasonal or permanent; (5) number of relatives present in crew</th>
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</thead>
<tbody>
<tr>
<td>Job gender context</td>
<td>Percentage of female members in vineyard crew</td>
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<tr>
<td>Organizational climate</td>
<td>(1) SH awareness training: participant completion of SH training (yes/no) and the percentage of crew members replied “yes”; (2) hostile sexism: four statements selected from the Ambivalent Sexism Inventory (ASI; Glick and Fiske 1996) based on judged ease of comprehension for the participants and scores totaled on a rating scale from 0 (completely disagree) to 5 (completely agree). Cronbach’s alpha = 0.64.</td>
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<tr>
<td>Sexual harassment incidence</td>
<td>Revised Sexual Experiences Questionnaire (SEQ): Nineteen items measuring frequency of SH behaviors on a scale of 0 (never) to 4 (very often). Subscales of gender harassment (GH), unwanted sexual attention (USA) and sexual coercion (SC). The SEQ does not define a time period for participants so they responded only with respect to their current employment. Cronbach’s alpha = 0.69.</td>
</tr>
<tr>
<td>Work outcomes</td>
<td>(1) Agricultural Job Satisfaction Survey (AJSS; Hobbis, Klachky, Cooper 2020): 32 statements, rated from 0 (completely disagree) to 5 (completely agree). Total scores provide value of overall job satisfaction. Cronbach’s alpha = 0.87. (2) Turnover intentions (Abbas et al. 2012): three-statement tool using same scale as AJSS. Cronbach’s alpha = 0.71.</td>
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</table>
**Job gender context**

Job gender context refers to the "balance of genders in the work environment" (Quick and McFayden 2017). We adopted a common measure: the ratio of male to female members in a crew. Women have consistently been shown to be more vulnerable to SH in male-dominated teams and organizations than they are in gender-balanced or female-dominated contexts (McCabe and Hardman 2005).

**Organizational climate**

Organizational climate is the extent to which an organization tolerates SH and the effectiveness of any remedies put in place to combat it. A permissive social climate for SH behaviors, as well as failures to properly address complaints by recipients, facilitate SH (O’Leary-Kelly et al. 2009). Awareness training programs are widespread across industries to educate employees on what constitutes SH and appropriate workplace behaviors (Cortina and Berdahl 2008). In California, these training programs are mandatory for supervisors in companies with at least 50 employees, but they are not mandatory for crew members. We took an indirect measure of organizational climate, measuring how many crew members had completed SH awareness training, to assess the impact of training on reported incidence of SH. We also measured hostile sexist attitudes associated with perpetration of, and tolerance for, SH (Begany and Milburn 2002; Dejudicibus and McCabe 2001). Hostile sexist attitudes were measured using questionnaire items from the Ambivalent Sexism Inventory that reflect aggressive attitudes to women and opinions that women are inferior (Glick and Fiske 1996).

**SH incidence and work outcomes**

We measured incidence and severity of SH using the Sexual Experiences Questionnaire (SEQ) (Fitzgerald 1993), which quantifies the three types of SH mentioned previously: gender harassment (offensive comments, jokes or gestures), unwanted sexual attention (physical contact or requests for sexual relationship) and sexual coercion (job-related rewards or reprisals contingent on sexual cooperation). We measured two work outcomes using questionnaires for turnover intentions (thoughts and plans about quitting job), which is an established predictor of actual turnover (Lambert et al. 2001), and job satisfaction, which is negatively linked to turnover (Hobbs, Klachky, Cooper 2020).

**Data collection**

We collected data from male (n = 195) and female (n = 100) Hispanic vineyard workers from 21 distinct crews across nine companies operating in Napa County. The nine companies consisted of seven contract labor companies (vineyard management or labor contractors) and two estate vineyard companies who employed their crews directly. Each participating company, except one estate vineyard, had more than 50 employees. Eighty-five participants (29% female) reported they were permanent employees, and 198 participants (67% female) reported they were temporary seasonal employees. At the time of the survey (April to July 2018), all workers were engaged in standard crop-production tasks (e.g., canopy management), but not harvest. Questionnaires were presented to workers in groups during their work breaks. Study questions were displayed on a flipchart while a bilingual researcher read them aloud in Spanish. Crew members answered using electronic response pads (Turning Technologies, Youngstown, Ohio), which allowed participants to respond anonymously. Each question also had a “do not wish to respond” option so that participants could opt out of responding to specific items. All questions except the SEQ were presented to all participants, both male and female, within their work crews. After they finished the questionnaires, the male employees returned to work, out of sight and hearing range, and the female workers were taken aside in small groups (with a maximum of six participants) to conduct the SEQ. All female workers agreed to participate in the SEQ, but some participants chose not to answer all items.

**Incidence of SH**

Gender harassment was reported by 30% of female crew members, of which 9% also reported unwanted...
sexual attention and 1% reported sexual coercion. The relative prevalence of these SH categories mirrored the pattern in prior California studies, although the rates of workers reporting SH in our study were considerably lower than the rates (44% to 80%) reported in those studies (Prado et al. 2018; Waugh 2010). This may be explained by regional and crop-specific differences. For example, working conditions in Napa vineyards are generally considered better than those in other agricultural sectors, with workers offered above-average wages and benefits (Hobbs, Herrero et al. 2020; Hobbs, Klachky, Cooper 2020). Additionally, we considered harassment only at a worker’s current company, not throughout the worker’s overall agricultural or working career, which could have resulted in a lower reporting rate compared to previous studies.

The low rates of unwanted sexual attention and sexual coercion in our study were far lower than those found in other studies. Such low rates reflect well on the Napa industry, but they may also, despite the anonymity of responses, indicate a reluctance among women to admit severe harassment when participating alongside co-workers and in a study coordinated as we did this one. The small number of women reporting unwanted sexual attention or sexual coercion meant we were not able to consider an analysis of the relationship between the severity of SH with the other variables measured. Instead, we focused on two types of group comparison based on the presence or absence of SH: (1) women reporting any type of harassment versus women reporting no harassment, and (2) crews where SH was reported (SH+) versus crews where SH was absent (SH−). We analyzed average scores or counts except for crew gender ratio, SH awareness training and relatives in crew. For these three variables, we classified female participants into additional groups based on the percentage of females in a crew, the percentage of crew members that were SH-trained and the presence or absence of relatives in a crew. Thus, female participants were assigned either to a low-female (7% to 40%) group or a high-female (44% to 100%) group and either to a low-SH-trained group (18% to 63%) or to a high-SH-trained group (75% to 100%), using a median split.

### Characteristics of harassed vs. non-harassed women

Descriptive data for harassed and non-harassed female participants (table 2) show that harassed women in our study differed on two antecedent variables. As in other industries (Street et al. 2008), harassed women were significantly ($P = 0.001$) younger than non-harassed women; women under 40 years of age accounted for two-thirds of reported harassment cases in our study. Second, 89% of women reporting the more severe categories of harassment (unwanted sexual attention, sexual coercion) were seasonal employees. More female seasonal workers (33%) than permanent workers (22%) reported gender harassment, although this relationship was not statistically significant ($P = 0.28$). Harassed and non-harassed women did not differ significantly in the presence of relatives on their crews, the duration of their employment, crew size, crew gender ratio or the number of members in their crew that had received SH awareness training (all $Ps = ns$, not

| TABLE 2. Descriptives comparing harassed and non-harassed female crew members |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
|                             | Non-harassed ($n = 70$)    | Harassed ($n = 30$)         |     |
|                             | GH ($n = 30$)               | USA ($n = 9$)               | SC ($n = 1$)*               |
| Personal and situational characteristics |  |  |  |
| Age range (years)            | 20–68                      | 18–47                       | 21–47                       | —  |
| Mean (+SD) age               | 40.8 (9.9)                 | 32.7 (9w.5)                 | 31.3 (10.0)                 | 25 |
| Crew size range              | 6–32                       | 8–20                        | 16–20                       | —  |
| Mean (+SD) crew size         | 15.0 (6.0)                 | 16.4 (3.3)                  | 18.1 (1.5)                  | 19 |
| Mean (+SD) employment time (days) | 431 (777)                 | 634 (832)                   | 545 (840)                   | 21 |
| Employment status (perm./seas.) | 24/44                     | 7/22                        | 1/8                         | Seasonal |
| Family present/absent in crew | 32/38                     | 13/17                       | 3/6                         | Absent |
| Job gender context and organizational climate |  |  |  |
| Crew gender ratio (low/high) | 33/37                      | 13/17                       | 4/5                         | Low |
| Crew SH training (low/high)  | 33/37                      | 18/12                       | 5/4                         | High |
| Work outcomes               |  |  |  |
| Mean (+SD) turnover intentions | 3.1 (4.0)                 | 5.97 (4.7)                  | 6.3 (5.1)                   | 12 |
| Mean (+SD) overall job satisfaction | 104.6 (26.3) | 91.3 (25.6) | 92.3 (36.1) | — |

*Actual values for woman reporting sexual coercion.
GH = gender harassment; USA = unwanted sexual attention; SC = sexual coercion; SD = standard deviation.

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significant). Harassed women had significantly higher turnover intentions \((P = 0.002)\) and lower overall job satisfaction \((P = 0.033)\) compared to non-harassed women, supporting prior research (Pina and Gannon 2012) on the negative impact of SH on morale and worker productivity.

**Comparing crews with SH vs. no harassment**

We compared descriptive data for SH+ and SH− crews (table 3) on hostile sexism (aggregated across all crew members, both men and women) and male work outcomes. Mean scores for hostile sexism were significantly higher \((P < 0.000)\) in SH+ crews compared to mean scores in SH− crews, supporting the theory that sexist attitudes contribute to a climate of SH tolerance (Begany and Milburn 2002). This complemented our finding of a higher incidence of gender harassment over other types of SH. The hostile sexism questionnaire can thus be considered an attitudinal measure of the behavioral gender harassment component of the SEQ, as hostile sexist attitudes appeared to be enacted as behavioral harassment towards women workers. Turnover intentions for male members of SH+ were significantly higher \((P = 0.024)\) and job satisfaction was lower \((P < 0.000)\) than they were for males in SH− crews. We could not determine whether dissatisfied male workers were more likely to perpetrate SH or if witnessing SH adversely affected male workers; however, the latter has previously been concluded in other research (Miner-Rubino and Cortina 2007).

**Implications for companies**

We identified several variables associated with the presence of SH in agricultural work crews, and we demonstrated that SH is associated with a decline in work outcomes. The type of design we employed in this study cannot verify causation between variables, only association. However, these statistical associations, together with consideration of the literature on SH in other industries, provides grounds for healthy speculation as to how agricultural companies might address SH among their workers.

**High-risk workers**

Young women were clearly identified as high-risk targets for SH. The oldest woman reporting SH was 47; most harassed women in this sample were 40 years or younger. Despite the lack of statistical differences in SH incidence between seasonal and permanent female workers, the severe forms of SH were overwhelmingly reported by seasonal workers. While recognizing that all workers are at risk of SH, companies should therefore be especially vigilant of the risk to young and seasonal female workers.

**Structure of work crews**

Changing the structure of work crews is unlikely to reduce SH. In our study, harassed women worked in crews that were large and small, with or without relatives, and with considerable variation in gender ratio. Harassed women were just as likely to be working on crews with a high percentage of females (44% to 100%) as on crews with a low percentage of females (7% to 41%). This was unexpected, as meta-analyses have demonstrated gender ratios to be a significant predictor of SH (Willness et al. 2007). However, the gender ratio effect may be small, and as SH occurs in a range of organizational settings (McCabe and Hardman 2005), the characteristics of SH perpetrators may be more important. For example, perpetrators in male-dominated workplaces tend to be co-workers, whereas perpetrators in female-dominated workplaces are more likely to be supervisors (Pina and Gannon 2012). The questionnaire we used in our study did not ask women about the perpetrators, but the unimportance of crew gender ratio indicates the possibility that SH may have originated not only from inside the crews but from outside, such as from supervisors or other company employees. Our presumption that the crew level is the most relevant company unit for SH was too optimistic. We often observed multiple crews working in the same vineyard, and they often mixed during work breaks; SH could therefore have originated from other crews, especially as the SH reported in our study was primarily verbal and gestural in nature. Crew membership was also probably more fluid than our study design conceived. Women were asked about SH only during their current employment, but these women did not necessarily work continually in the same crew configuration. If gender ratio is an important antecedent of SH in agriculture, we predict it will be at the level of the company rather than at the level of the work team.

**Organizational climate**

Our results, as supported by the literature (Russell and Trigg 2004), indicate that an improvement in organizational climate is a more effective method for tackling SH than a restructuring of work crews. The hostile sexist attitude of both men and women in a crew was significantly associated with the presence of SH. Companies can expect to reduce SH by changing or neutralizing these attitudes. However, shifting these attitudes may be difficult to accomplish, as indicated by our finding that previous SH awareness training was not related to a decrease in reported SH. Similar

**TABLE 3. Descriptives comparing SH− and SH+ crews and male work outcomes**

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<tr>
<th></th>
<th>SH− crew</th>
<th>SH+ crew</th>
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<tbody>
<tr>
<td>Mean (+SD) male turnover intentions</td>
<td>4.9 (5.2)</td>
<td>6.6 (5.2)</td>
</tr>
<tr>
<td>Mean (+SD) male overall job satisfaction</td>
<td>108.6 (24.4)</td>
<td>88.7 (26.7)</td>
</tr>
<tr>
<td>Mean (+SD) crew hostile sexism</td>
<td>9.2 (2.4)</td>
<td>12.9 (2.4)</td>
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</table>
poor efficacy of SH awareness training has been reported in prior research (Quick and MacFayden 2017), suggesting that improvements are needed to the structure and administration of awareness training for agricultural workers. Unless these changes are made, other organizational climate variables, such as the internal management of complaints and the overall social climate of a company (Jiang et al. 2014; Quick and MacFayden 2017), are more likely to be effective in reducing SH. There is still value in conducting training, as it has been shown to make women more likely to report SH and it makes workers more aware of what is (un)acceptable behavior (MacDonald 2012; Quick and MacFayden 2017). Since we did not collect details on which training programs the workers received, we cannot comment on the efficacy of one training program over another.

**SH and company performance**

Harassed females reported lower job satisfaction and higher intention to quit their jobs, illustrating that SH is likely resulting in companies losing female workers and experiencing other negative effects (e.g., lower performance) associated with poor worker satisfaction. The same reduced outcomes were reported by male workers in crews where harassment was occurring, suggesting that SH may be impacting not only the targets but also the co-workers. Dissatisfaction among men as a result of SH thus also has the potential to negatively affect company performance.

**The challenge of SH**

The current study demonstrated that workplace sexual harassment of female vineyard workers affects the wellbeing and retention of all workers in an agricultural sector where there is a paucity of quantitative data on the issue. Furthermore, this study illustrated that female workers in entry positions to the industry (young, seasonal) are most at risk of SH, illustrating that SH is...
a barrier for women seeking to enter the agricultural workforce. Thus, SH has the potential to significantly affect the stability of the labor pool in a time of labor shortage and to incur economic costs not only for workers but also for agricultural organizations seeking to train and retain stable work crews.

Incidence of SH in our study was lower than that previously reported for farmworkers, but our results should be treated with some caution; there may have been some underreporting due to our method of data collection and our relatively small sample size. This study also measured SH in one region (Napa County, Calif.) and one crop only, and incidence rates may not generalize to other agricultural regions and sectors. Workplace policies and practices that reduce or eliminate hostile sexist attitudes appear to have the most promise for reducing SH in agriculture. However, accomplishing these goals with limited resources and within a company’s traditional organizational structure may be challenging. Future studies may seek to consider in more detail how organizational climate can be effectively addressed in the agricultural sector, the effectiveness of different SH awareness programs and the characteristics of perpetrators of SH towards women.

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References


