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The influence of organizational tenure on safety climate strength: A first look☆

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ABSTRACT

This study examined the relationship between the organizational tenure of employees at a given worksite and safety climate strength (i.e., the variability of employees' perceptions of the policies, procedures, and practices regarding workplace safety). Results revealed that average worksite tenure was related to safety climate strength such that higher average tenure was associated with stronger safety climates. The moderating effect of tenure level on the relationship between tenure and climate strength was also examined. Results revealed a curvilinear relationship between mean worksite tenure and safety climate strength, such that at higher levels of worksite tenure, smaller increases in the group's average tenure improved climate strength to a greater extent than at lower levels of worksite tenure.

1. Introduction

Unsafe behavior is costly for both the organization and the employee. In 2006, there were over four million non-fatal work injuries and more than 5800 work fatalities reported in the United States (Bureau of Labor Statistics, 2006). In 2004, estimated workers' compensation costs for non-fatal injuries were $48.6 billion (Liberty Mutual Research Institute for Safety, 2006). One factor that contributes to workplace safety is organizational safety climate, or the shared perceptions of organizational policies, practices, and procedures pertaining to safety (Zohar, 2003). Safety climate has demonstrated positive associations with safety compliance and participation (Clarke, 2006; Nahrgang et al., 2007) and negative associations with workplace accidents and injuries (Hofmann and Stetzer, 1996; Probst, 2004). Thus, safety climate is one variable that contributes to safe behavior and influences accident and injury rates.

Given the role safety climate plays in workplace accidents, it is important to identify variables that foster a positive safety climate in order to further our understanding of the development of safety climate and our ability to enhance it. We propose organizational tenure as a focal and understudied antecedent of safety climate. The purpose of this study is to empirically examine the relationship between organizational tenure and safety climate strength, or the degree to which safety climate perceptions are shared (Dickson et al., 2006; Schneider et al., 2002). First, we briefly review two properties of organizational safety climate: level and strength. Then, we offer a theoretical rationale for why organizational tenure is related to safety climate strength. Finally, we propose specific hypotheses regarding relationships between organizational tenure and safety climate strength.

1.1. Properties of safety climate

Safety climate is one of many possible organizational climates. Ostroff et al. (2003) proposed that organizational climate is a shared perception of organizational policies and norms. People strive to "attach meaning to, or make sense of clusters of psychologically related events" (Schneider and Reichers, 1983; p. 21) and climates provide information regarding the behaviors that are rewarded, supported, and expected in the workplace (O'Reilly and Chatman, 1996; Schneider and Reichers, 1983). In the workplace, people experience numerous events that can pertain to a variety of groupings, and thus there are "climates for" various aspects of organizational life (Schneider and Reichers, 1983; Schneider et al., 2002). Accordingly, safety climate is the shared perception of the policies, practices, and procedures regarding safety (Zohar, 2003).

Because of their shared nature, organizational climates have two important properties: level and strength. Climate level refers to the quality of a climate as positive or negative. Climate level corresponds to the mean of the individual group members' perceptions for whatever group is deemed relevant (e.g., workgroup, worksite, business division, organization, industry). Hence level describes the average perception of safety climate by group members as good or bad. Climate level has been linked to safety-related outcomes such as safety compliance (Goldenhar et al., 2003; Neal and Griffin,

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2006), workplace injuries (Probst, 2004; Zohar and Luria, 2004), near misses (Goldenhar et al., 2003; Probst, 2004), and automobile accidents (Morrow and Crum, 2004).

Climate level by itself, however, does not adequately describe the extent to which a climate can influence organizational outcomes, because it does not provide sufficient information to allow for reliable predictive ability (Schneider et al., 2002). Although good climates are likely to lead to good behaviors and bad climates are likely to lead to bad behaviors, there is also likely to be variability in employees' behaviors within a climate. That is, not all employees in a good (or bad) climate will have good (or bad) behaviors. One source of variability in employee behavior is the variability of individual climate perceptions, or climate strength, which indicates the "sharedness" of a climate (Dickson et al., 2006; Schneider et al., 2002). Schneider et al. (2002) argued that a strong climate (i.e., high within-group agreement), regardless of climate level, is expected to be more predictive of group behavior than a weak climate (i.e., low within-group agreement). That is, the behavior of a group with more similar perceptions should be more easily predicted than the behavior of a group with less similar perceptions because individual perceptions within a strong climate will each be more similar. Lindell and Brandt (2000) referred to the variability in climate perceptions as "climate consensus" and found that greater consensus was related to behavioral similarity among group members. In this study, we focus on one variable that could contribute to homogeneous climate perceptions: organizational tenure.

1.2. Development of climate strength

One variable likely to be a factor in safety climate strength that has not been examined is organizational tenure, or time spent in an organization. Tenure indicates the passage of time within a given work setting and can be used to represent the various processes that occur during this timeframe. There are a number of important organizational processes that unfold over the time individuals spend in an organization that are important to the development of climate.

The attraction–selection–attrition (ASA; Schneider, 1987) framework and the literature on organizational socialization offer theoretical explanations for the development of climate strength over time and, therefore, over organizational tenure (Kozlowski and Klein, 2000; Lindell and Brandt, 2000). According to the ASA framework, through the processes of attraction, selection, and attrition, organizations become homogeneous entities of individuals who hold similar perceptions and perceive similar meaning in organizational events (Schneider and Reichers, 1983). That is, individuals with similar characteristics tend to gravitate toward similar settings where they are subsequently socialized to act in similar ways (Lindell and Brandt, 2000). Employees who make it through the selection process but who are dissimilar from the members in their worksite in perceptions or behaviors will tend to turn over (Bauer et al., 2007), thus preserving the homogeneity of the group as a whole (Schneider, 1987). The ASA framework implies that climate strength will increase over time as organizations become increasingly homogeneous and individuals come to construe events similarly (Schneider and Reichers, 1983).

The organizational socialization literature suggests an additional mechanism by which climate strength increases over organizational tenure (Lindell and Brandt, 2000). Socialization is the process whereby people adapt to new jobs and roles in organizations (Chao et al., 1994) and has been described as the process by which "organizational outsiders" become "insiders" (Bauer et al., 2007). During socialization, new employees learn the ropes and the so-called "way we do things around here" (Fisher, 1986; Goffee and Jones, 1998; Van Maanen and Schein, 1979).

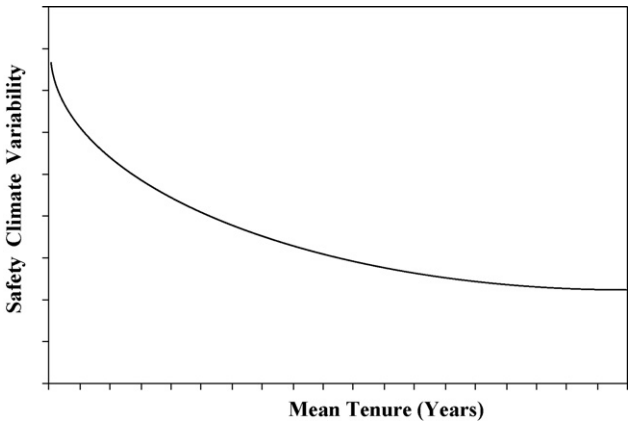

Fig. 1. Hypothesized relationship between organizational tenure and climate strength.

Socialization occurs to a significant extent through everyday interactions with coworkers (Ostroff and Kozlowski, 1992, 1993; Reichers, 1987; Schneider and Reichers, 1983). Over time, these interactions help to transform new employees' naïve expectations into more accurate perceptions of the organization by helping newcomers know about and interpret organizational events, learn nuances, filter out contradictory information, become embedded in their jobs, and internalize organizational norms (Allen, 2006; Feldman, 1981; Salanck and Pfeffer, 1978; Schneider and Reichers, 1983; Thomas and Griffin, 1989). In the safety climate literature, indicators of social interaction (i.e., group cohesion and social network density) have demonstrated positive relationships with safety climate strength (Luria, 2008; Zohar and Tenne-Gazit, 2008). Because social interactions occur over time, and because individuals who do not fit into the organization leave (Schneider et al., 1995), longer tenured individuals are likely to be more similar in their perceptions of the climate, and therefore create a stronger climate. Thus, we propose

Hypothesis 1. Mean worksite tenure is negatively related to climate variability.[1]

1.3. The moderating effect of mean tenure on the tenure–safety climate relationship

Although it might seem unusual to suggest that mean tenure moderates its own relationship with climate strength, in essence we are hypothesizing the effect of average worksite tenure on climate strength will not be the same across all levels of tenure. Instead, a curvilinear effect is proposed (Fig. 1); when considering low levels of mean tenure, small increases in group-level tenure are proposed to have larger effects on climate strength, whereas at higher levels of mean tenure, there will be less of an impact on climate strength. This is essentially a proposal of diminishing returns for increases in mean tenure: at low levels of tenure, slight increases are likely to make a large difference, but at higher levels of tenure, increases in mean tenure will have little effect.

This proposition is supported by research on newcomer socialization, which indicates that many newcomers actively engage in

[1] To simplify the hypotheses and interpretation of results, the term "climate variability" is used instead of "climate strength" for formal hypotheses. This is because strength and variability are perfectly inversely related. That is, a strong climate is one with little variability and a weak climate is one with greater variability. Additionally, climate strength is typically operationalized as standard deviation of climate within a group. Thus, making the formal hypotheses about climate variability leads to easier interpretation of results and greater consistency between the results and hypotheses.

Table 1
Descriptive statistics and correlations among the study variables.

	M	*SD*	1	2	3	4	5
(1) Working environment risk level[a]	1.89	0.65					
(2) Mean age	43.12	6.02	−.03				
(3) Mean tenure	8.59	3.65	.47**	.45**			
(4) Mean safety climate	4.04	0.29	.33**	.15	.15		
(5) Safety climate variability	0.65	0.22	−.37**	−.05	−.24*	−.42**	

Notes: $N = 80$ worksites.
* $p < .05$.
** $p < .01$.
[a] 3 = plant, 2 = research and development, 1 = office.

information gathering at the early stages of organizational entry to facilitate adjustment (Morrison, 1993), and that adjustment occurs relatively rapidly (Ashforth and Saks, 1996; Cooper-Thomas and Anderson, 2005; Saks and Ashforth, 1997). This active period of information gathering aids the development of climate strength as new employees are socialized according to the prevailing climate (Schneider and Reichers, 1983). However, as tenure increases, individual information gathering behaviors become less critical. Thus, the active information gathering by worksite members with low tenure is expected to have a greater impact on climate strength.

Hypothesis 2. Mean worksite tenure has a curvilinear effect on climate variability, such that at low levels of tenure, increases in tenure will have a larger effect on climate variability than it will at high levels of tenure.

2. Method

2.1. Participants and procedure

In late 2007, a health and safety survey was administered to personnel of a large international chemical processing and manufacturing organization with four primary lines of business (apparel, intermediate chemicals used in other processes, performance surfaces and materials, and polymers and resins). Approximately 20 260 employees and contractors were invited to participate. Of those, 8790 individuals (77% men) responded to the survey (43% response rate for the entire population) from 82 different worksites in 19 countries located in five distinct geographic regions. Worksites ranged from 3 to 1063 employees ($M = 219$, $SD = 248$). Response rates within site ranged from 6 to 100% ($M = 58\%$, $SD = 24\%$). Two worksites had only one individual respond to the survey, so the final worksite sample was 80.

Employees worked in one of three primary working environments: plant ($n = 5517$), research and development lab ($n = 531$), or office ($n = 2920$). Age ranged from 16 to 77 years of age with an average age of 41.73 years ($SD = 10.72$). Tenure ranged from less than 1 year to 45 years with an average of 9.35 ($SD = 9.43$) years of service.

The global director of health and safety sent employees a message about the project, including a link to an online survey. Messages from the director were also sent to site leadership requesting leaders to encourage employee participation. Banners with information about the survey were also placed on the organization's employee portal. The survey link was active for 1 month. Site leaders were provided each week with the percentage of employees at their site who had completed the survey, creating some friendly competition for response rates across sites. Reminders were sent to the employees about the survey approximately once a week. Surveys were administered in nine languages.

2.2. Power analysis

A power analysis was conducted to determine if our sample size provided sufficient power to detect an effect between organizational tenure and safety climate variability. Because the magnitude of the relationship was unknown, we computed the conventional small (.10), medium (.30), and large (.50; Cohen, 1988) effect sizes with a desired power of .80 (i.e., an 80% probability of detecting true effects) to determine the respective sample sizes needed to detect effects. The power analysis revealed that for a power level of .80, samples of 785, 85, and 29 were needed to detect small, medium, and large effects respectively. Thus, our sample ($N = 80$) provided sufficient power for detection of both medium and large effects.

2.3. Measures

Tenure was measured with a single item in which employees were asked to indicate how many years and months they had worked in their current job. Tenure was averaged across all employees at each worksite to represent mean tenure.

Safety climate variability (i.e., strength) was operationalized as the standard deviation of the individual scores within a worksite on a measure of safety climate. The safety climate measure was eight items adapted from Zohar and Luria (2005). All items were administered on a 5-point agreement scale (1 = strongly disagree, 5 = strongly agree). At the individual level of analysis, coefficient alpha was .82. These items appear in Appendix.

We controlled for mean age of the worksite, average working environment risk level, and safety climate level in all analyses. Given the strong relationship between age and tenure, we controlled for mean age to rule out this alternative predictor. We coded working environment risk level to be an ordinal variable from 1 (least risky) to 3 (most risky), such that office = 1, research and development = 2, and plant = 3 (mean = 2.3, median = 3, mode = 3) and then calculated an average for each site (mean = 1.89). Further, because climate variance is not independent of climate mean (Table 1; Dickson et al., 2006; Gonzalez-Roma et al., 2002; Schneider et al., 2002; Zohar and Luria, 2005), we controlled for the worksite's mean level of safety climate. This facilitated a more conservative test of the proposed relationships between tenure and safety climate because it allowed us to determine the extent to which mean worksite tenure contributes to climate variability after removing the variance associated with mean age, working environment risk level, and climate level.[2]

3. Results

Table 1 presents descriptive statistics and correlations among the study variables at the site level ($N = 80$). Hypothesis 1 proposed that mean worksite tenure was negatively related to climate variability. Consistent with our prediction, mean worksite tenure had a significant zero order correlation with safety climate variability ($r = -.24$, $p < .05$). However, when examined in the regression

[2] Business within the worksite, site population, site response rate, country, and region was not significantly related to safety climate variability.

Table 2
The prediction of safety climate variability from mean worksite tenure.

Variable	*B*	*SE B*	β	R^2
Constant	.761**	.229		
Mean safety climate	−.273**	.081	−.360	
Working environment risk level	−.065	.042	−.195	
Mean age	.001	.004	.038	
Mean age squared	.000	.000	−.066	
Mean tenure	−.005	.008	−.076	
Mean tenure squared	−.004*	.002	−.236	.31**

Note: $N = 80$; predictor and moderator variables are centered.
* $p < .05$.
** $p < .01$.

that also included the control variables, this relationship was not significant ($\beta = -.11$, $p > .05$). Thus, Hypothesis 1 was not supported.

Hypothesis 2 proposed the relationship between mean worksite tenure and climate variability is curvilinear such that at low levels of tenure, small increases in tenure will have a larger effect and at high levels of tenure, small increases in tenure will have smaller effects on climate variability. We tested Hypothesis 2 with polynomial regression. First, we centered the predictors to reduce the correlation between the lower-order and higher order terms (Aiken and West, 1991). Following the control variables, we entered the main effect of mean worksite tenure (linear term) followed by a squared (i.e., quadratic) term for mean worksite tenure.

Consistent with Hypothesis 2, we found support for a curvilinear relationship ($\beta = -.24$, $p < .05$; see Table 2); however, a plot of the equation revealed a pattern inconsistent with our speculation (Fig. 2). Rather than a predominately negative curve that asymptotes at moderate levels of tenure, the curve was predominantly negative with an accelerating slope. It appears that at high levels of tenure as compared to low levels of tenure, small increases in tenure have larger effects. In other words, the safety climate perceptions within a group become more consistent more quickly at higher levels of tenure than at lower levels of tenure. Thus, although our prediction regarding a curvilinear relationship was supported and the beginning and end points supported more climate variability when the group's average tenure is low and less climate variability when the group's average tenure is high, the nature of that curve was inconsistent with our speculation. We also tested a cubic polynomial effect of mean tenure to determine whether there were additional "bends" in the relationship, but this term was not significant.

Given the strong relationship between age and tenure, a possible competing explanation for our results is that mean age contributes to safety climate variability. Therefore, we tested an alternate form of Hypothesis 2 with mean age and mean age squared instead of tenure. However, mean age did not account for a significant amount of variance in safety climate variability.

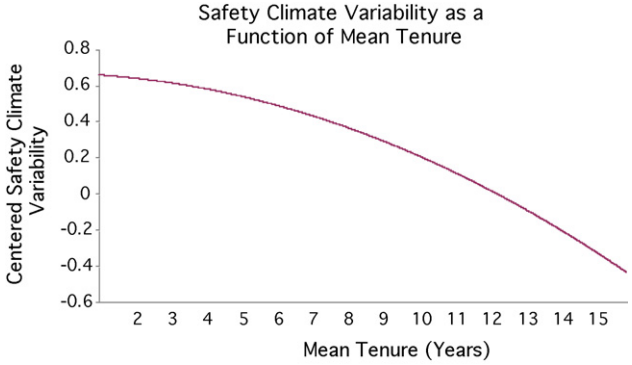

Fig. 2. Predicted safety climate variability as a function of mean tenure.

4. Discussion

The purpose of this study was to empirically examine the relationship between worksite organizational tenure and safety climate strength. We proposed that mean worksite organizational tenure would have a main effect on climate strength. We also proposed that this relationship would vary across levels of mean worksite tenure. Results were mixed. First, worksite mean tenure was significantly related to climate strength; however, this relationship was reduced when worksite mean age, working environment risk level, and safety climate mean were accounted for. We further proposed that worksite mean tenure moderated the relationship between worksite mean tenure and safety climate strength, such that there would be a curvilinear effect of worksite mean tenure on climate strength. Although a quadratic curvilinear effect was found, the form of the curve was not as expected.

Our theoretical review suggested that ASA and socialization processes would aid in the development of a stronger safety climate. We proposed that organizational tenure encapsulates these processes to some extent, as — all else being equal — greater time in the organization necessarily means greater exposure to the organization, its events, and the people in it. Thus, we hypothesized that worksite mean tenure would be negatively related to safety climate variability (Hypothesis 1).

The results lend some credence to this viewpoint, as worksites with higher mean tenures had stronger safety climates. However, it is important to note that our research does not directly demonstrate the extent to which ASA or socialization processes support the development of safety climate strength. It may be the case that socialization is particularly important, as individuals learn the policies, practices, and procedures of the workplace through their interactions with coworkers. However, it may also be the case that ASA is especially important, and that some subcomponents of the ASA model are essential. For example, it may be that attrition is the most influential mechanism, such that workers who do not align themselves with the organization's worldview (i.e., are discrepant in their individual climate perceptions compared to the workgroup mean) are more likely to turn over. It could also be that organizations with strong and highly valued climates have an advantage in recruiting and attracting likeminded individuals and also have a clearer sense of which individuals they wish to select based on these values and expectations. Thus, although our research suggests that tenure-related processes such as socialization and ASA are important to the development of safety climate strength, additional research is needed to determine the underlying mechanisms of the tenure–climate strength relationship.

Somewhat surprising was the evidence that increases in mean tenure had a proportionally greater effect on climate strength at higher levels of tenure rather than at lower levels of tenure (Hypothesis 2). The theoretical review suggested that socialization happens early and quickly in an individual's organizational tenure and that this early socialization leads to the greatest changes in the cognitions and perceptions of individual employees (Ashforth and Saks, 1996; Cooper-Thomas and Anderson, 2005; Saks and Ashforth, 1997); the early tenure period is a time of inordinate amounts of change and development in employees' work experiences (Bauer et al., 2007).

However, our results demonstrated the opposite effect: a change in the worksite's mean tenure was associated with greater change in safety climate strength when the worksite mean tenure was higher. This result is surprising, as the socialization literature has been particularly strong in its evidence that newcomer socialization is powerful and leads to great changes in the worker's experiences. It may be the case that it takes a rather long time for individuals who do not fit into the organization to leave; this could be because it takes a long time for individuals and/or organizations

to recognize that a lack of fit is occurring, or that it is a detriment. Therefore, it might only be at higher levels of mean worksite tenure that individuals turn over when they do not fit.

Additionally, there may be labor market and career development forces at play. Economic conditions might keep individuals in the workplace who successfully perform their jobs but do not conform to the prevailing perceptions of safety climate; that is, individuals who do not fit with the organization's values, but still successfully complete their jobs, might choose to stay with the organization due to economic pressures (Meyer and Allen, 1997). Furthermore, managers might not fire individuals with the "wrong" values when they succeed at core work tasks. It may also be especially salient at mid- and later-career time periods that having correspondent perceptions of important climates, such as safety, is essential to career advancement. In the early career stage, individuals might not be concerned that their perceptions diverge from others, as the emphasis is on task mastery and performance. They may not perceive themselves to be probable candidates for promotion given their low seniority and the likelihood that they will have had fewer opportunities to establish themselves as emergent leaders in their workgroups, and at this stage in their careers, this is not a concern. However, at later career stages, such a divergence from the prevailing climate might block desired opportunities for advancement within the company. At this time, workers might more actively attempt to conform their climate perceptions to the prevailing climate; alternately, they might leave the organization for one in which they perceive their values and beliefs are a better fit to the prevailing climate. Further research is needed on the relationship between organizational tenure and climate strength, so that we can determine the robustness of this curvilinear relationship.

In sum, our results support the importance of worksite mean organizational tenure as a contributor to safety climate variability. Future research should attempt to validate and generalize these results to other organizations, within other industries, and possibly to other kinds of climate; such research should be relatively easy to accomplish within organizational science's typical research paradigms when multiple groups are identifiable and relevant to the type of climate studied, as organizational tenure is a commonly collected demographic variable and is often readily available from organizational records. Yet no other known study has examined this relationship at the group level. Despite its simplicity, organizational tenure — and some related psychological processes — appears to be a driver of safety climate strength.

4.1. Tenure variability

In the development of this work, we also speculated that tenure variability would moderate the effect of mean tenure on climate strength. For any given mean level of tenure in a worksite, lower tenure variability indicates that members of the worksite have been part of the organization for a similar amount of time. This means that the worksite members would have a more shared history of organizational experiences. That is, worksite members would have been exposed to the same leadership, organizational events (e.g., ceremonies and organizational change programs), ASA of coworkers, and market pressures. Groups with greater tenure variability will have greater variability in members' organizational experiences. Although numerous objective experiences will overlap (i.e, employees with greater organizational tenure will have experienced all the events that newer employees experienced, as well as additional experiences earlier in time), in the context of organizational life, events that happen later are often interpreted in light of events and experiences that happened earlier (i.e., sensemaking; Weick, 1995). Thus, greater variability across individuals in perceptions of safety policies, practices, and procedures is expected when there is higher tenure variability in the worksite.

Unfortunately, we were unable to test tenure variability as a moderator given the cross-sectional nature of our data. Mean tenure and tenure variability were highly correlated making it difficult to separate the effect of tenure variability from mean tenure (Bliese and Halverson, 1998). The ideal test of the effect of tenure variability on safety climate variability would be to conduct a longitudinal study using multiple worksites that varied at the initial assessment in their mean tenure and tenure variability and in which tenure variability is constant within each worksite over time (i.e., no one either joins or turns over from the worksite). In such a scenario, the effect of mean tenure on safety climate could be examined within worksites over time (as tenure variability would be constant within worksites over time), and simultaneously, the effect of tenure variability on safety climate could be examined across worksites[3]. Such ideal data might be difficult to obtain, as individual employees cannot be forced to remain in an organization, and organizational demands might make it detrimental or even dangerous to operations — especially in high reliability organizations such as chemical processing — if needed personnel were not hired. Thus, it might not be possible to conduct such a test in natural organizational settings, although such studies might be possible in laboratory settings.

4.2. Limitations

Our research examined safety climate in only one industry—chemical processing and manufacturing. This industry has a strong emphasis on safety, in large part due to the potentially catastrophic events that could and have arisen when industrial incidents occur. This may have restricted the variability in safety climate among this sample. However, such a restriction would only make it more difficult to support the hypothesized relationships. Examining the effects of organizational tenure on safety climate variability in other industries and with different types of climate will show potential generalizability for this study's ultimate findings.

Additionally, our data only permitted aggregation to the worksite level. However, to the extent that there is variability in climate and tenure across workgroups within a worksite, our aggregation to the worksite level only makes it harder to detect significant relationships. However, it is noteworthy that when formalized safety procedures are instituted by top management, as is the case in many high risk environments, there is little difference between group level and organization level safety climates (i.e., supervisory practices will not vary greatly between workgroups; Zohar and Luria, 2005). Thus, because of the procedural routinization inherent in the chemical processing industry, aggregation to the worksite level should not have sacrificed meaningful variance between workgroups. However, future research is needed to determine if our findings underestimate the true effects of tenure variability at the work group level on climate strength.

4.3. Future directions

In addition to the avenues of research described above, several additional research questions could provide some insight into safety climate strength. First, we speculated that socialization reduces safety climate variability (i.e., enhances safety climate strength). However, because we were unable to assess socialization directly, future research is needed to determine how both formal socialization tactics (e.g., orientations, training, mentor-

[3] We thank an anonymous reviewer for bringing the dependency of mean tenure and tenure variability at the group level to our attention and making this suggestion for possible future research.

ships) and informal socialization influences (e.g., interactions with coworkers and supervisors) affect safety climate strength. A longitudinal examination of newcomers and their socialization to a new organization or workgroup could determine the efficacy of this proposition. Additionally, because workforces generally do not enter an organization simultaneously, research on newcomers as a "group" would be impractical to conduct. Therefore, such research would need to be conducted at the individual level (i.e., the effect of socialization on psychological climate cognitions [Ostroff et al., 2003]) and at the workgroup level (i.e., the fit of the newcomer's cognitions to the climate of the rest of the workgroup). Newcomer socialization research could also examine the communication networks — including density, source, and content — that newcomers experience, and how such networks affect perceptual discrepancies from the prevailing safety climate level.

Second, research on employee selection with respect to safety climate could examine whether hiring individuals whose *a priori* perceptions of safety are similar to incumbents' can increase safety climate strength. Although it is probably the case that all applicants pay lip service to safety in industries where safety is paramount, there is still variation in what "safety" entails at each organization. The selection of individuals whose preconceptions of safety policies, procedures, and practices more closely match the prevailing safety climate may also be a means of increasing safety climate strength. However, in organizations where the prevailing safety climate is bad (i.e., does not promote safety), weakening the climate by selecting individuals with positive perceptions of safety is a potentially useful means of increasing organizational safety. These are important questions for future research on the development of safety climate.

Third, we examined actual organizational tenure (i.e., the amount of time spent at the worksite). Recent work on "relative tenure" to one's workgroup (Rollag, 2004) suggests that the extent to which workers perceive themselves as newcomers may be even more important than the actual amount of time they have been on the job or at the worksite. Future research might compare objective and perceived relative tenure as predictors of safety climate perceptions.

Further, there may be individual difference variables that predict workplace safety behavior or the degree of safety sensitivity, such as neuroticism, locus of control, or fatalism. Such individual differences might have profound effects at both the individual and group levels in organizations. For example, it may be the case that individuals with higher levels of external locus of control (i.e., the individual's sense that the results of events are due more to fate, luck, or other external forces than to their own skill, attention, efforts, or other internal forces; Rotter, 1990) are less likely to adhere to safety guidelines because they believe that industrial incidents are "accidents" over which they have no control. At the group level, it may be the case that groups with higher mean levels of external locus of control have worse safety climates, because (a) the individual members of the group are less likely to attend to safety guidelines and to believe in the importance of safety policies, practices, and procedures, and (b) as the individual members of the group interact with each other, this individual tendency is heightened and reinforced. Such a situation might result in a "risky shift" within the group (Myers and Lamm, 1975), such that the effect on safety climate for a group high in external locus of control could be more pronounced than it is for individuals.

Finally, it is worth considering the generalizability of the mean organizational tenure–climate strength relationship in relation to other climate foci. Climates exist for numerous facets of organizational life. Should similar effects of tenure on climate strength be found for these other climate foci, it would provide greater support for the underlying psychological phenomena proposed in our theoretical review.

4.4. Study implications

Because a strong safety climate is one that will display a greater and more predictable influence on safety behavior (regardless of the safety climate level), and thus subsequent outcomes (Zohar, 2003), the indication that organizational tenure relates to the development of climate strength has important managerial implications. First, although some of our more surprising findings are regarding changes in safety climate variability across levels of worksite tenure, a basic tenet remains: worksite mean tenure is negatively related to worksite safety climate variability. That is, as a group has, on average, higher levels of tenure, the group will also have greater agreement on safety climate. This suggests that the retention of employees is a potential means of enhancing worksite safety through increased safety climate sharedness. In other words, losing employees might be costly not only in terms of recruiting, selecting, and training new employees to replace knowledgeable former employees, but also in terms of the reduction of safety climate as it has a negative impact on safety behaviors and subsequent workplace accidents and injuries.

Retaining employees might be especially important given our findings that suggest greater gains in safety climate strength at higher levels of mean tenure. Despite the prevailing organizational socialization literature, this research found that there is greater safety climate strength gained more quickly at higher levels of worksite mean tenure. Thus, it seems that retaining employees for a longer time should have even greater returns as time and individual tenure progresses. Thus, organizations should make an effort to retain employees, especially those with mid-to-high levels of tenure.

Additionally, it is important for organizations to determine what the underlying cause of these effects is. Once these are understood, then it might be possible to develop organizational interventions, such as changes in selection or training processes, that encourage the development of climate consensus earlier in workers' organizational tenure. However, this first look at the effect of tenure on safety climate suggests that tenure is an important predictor of safety climate and that there are some time-related processes that are relevant to the development of safety climate consensus. We hope that this research encourages other researchers to delve deeper into this topic so that worker safety can be better ensured.

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Appendix A. Safety climate items

(1) My supervisor insists we wear our protective equipment even if it is uncomfortable.
(2) My supervisor is strict about working safely at all times even when we are tired or stressed.
(3) My supervisor frequently discusses health and safety issues throughout the work week.
(4) Site management focuses on process safety in audits, self-assessments, and inspections.
(5) Site management considers health and safety when setting production rates and schedules.
(6) Site management provides all necessary safety equipment for workers.
(7) Site management focuses on safety in audits, self-assessments, and inspections.

(8) Site management is strict about working safely at all times even when work falls behind schedule.

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