The Importance of Psychological Safety and Perceived Fairness Among Hotel Employees: the Examination of Antecedent and Outcome Variables

Abstract

This research examines how organizational error management culture influences organizational commitment and employee turnover intention through employee psychological safety and perceived fairness. Data was collected from 173 hotel employees in Hong Kong. Using structural equation modeling, this study found that 1) error management culture positively influences employee psychological safety and perceived fairness; 2) error management culture had significant indirect effect on employee's turnover intentions, sequentially mediated by perceived fairness, psychological safety and organization commitment.

Key words: Psychological safety, Perceived fairness, Error management culture, Organizational commitment, Turnover intention

Introduction

Today's hospitality organizations confront highly competitive and ever-changing circumstances, rendering employee commitment and organizational change indispensable for the organizational development (Colquitt et al., 2011; Hu, Horng & Sun, 2009; Jeong & Shin, 2017). One factor found to be able to facilitate employee commitment is employee psychological safety (Kirk-Brown & Van Dijk, 2016). This describes a cognitive state where the individuals feel

comfortable being themselves as well as speaking up (admitting an error), taking risk and have interpersonal mutual respect and trust for one another (Edmondson, 1999; Edmondson & Lei, 2014). Although employee psychological safety has been proved to be an important factor that can affect several employee cognitive and behavioral outcomes, very few studies have studied psychological safety among hotel employees. Chatman and Jehn (1994) indicated that the relative importance of psychological safety can vary with work characteristics in different industries. Therefore, it's important to explore the importance of psychological safety by taking into consideration the work characteristics of the hospitality sector. One work characteristic in hospitality industry is its error-prone nature (Guchait, Madera & Dawson, 2016). The highly people-oriented and service-oriented work settings increase the likelihood of error occurrence (Bowen & Ford, 2002; Susskind, 2002). The customers' participation in the service production makes it difficult to fully control the production process, thus increasing the likelihood of making errors (Bowen & Ford, 2002). Therefore, the nature of front line employees' jobs renders them more error-prone (Zeithaml, Bitner & Gremler, 2012). In view of the error-prone nature, this study argues that employees who feel psychologically safe would have a stronger emotional attachment to the organization partly because they feel much less stressed out, less embarrassed and gain the organizational support when they make errors (Leroy et al., 2012; Meyer & Allen, 1991).

The importance for employees to feel psychologically safe also resides in that it has positive impacts on employees' attitudinal and behavioral intentions. Given the high likelihood of error occurrence in the hospitality industry, employees may often feel stressed out because of the fear of making errors and reporting errors, which in turn, may lead to lower level of organizational commitment and turnover intentions. Therefore, it is important to explore factors that can boost hotel employees' psychological safety. The current study explored one organizational-level factor

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that impacts employees' perceived psychological safety: the error management culture. Employees tend to feel psychologically safe in the organization where there is an error management culture which is characterized by more tolerance for error occurrence and more positive perception of those who make errors.

In addition to perceptions of psychological safety, another important factor that impacts employees' commitment to the organization is employees' perception regarding how fairly one is treated. Smith (2010) suggested that perceived fairness is a central concern in the workplace when it comes to any allocation of resources. The achievement of fairness perceived by the employees makes them feel obliged to provide something of value in return, such as stronger organizational commitment and weaker turnover intentions. Researchers in the hospitality industry have put emphasis on studying customer's perceptions of different types of fairness and customer's cognitive and behavioral outcomes, such as the impacts of customers' perceived fairness on online hotel booking (Andrés-Martínez, Gómez-Borja & Mondéjar-Jiménez, 2014), the effects of consumers' perceived fairness of revenue management pricing (Heo & Lee, 2011), as well as the impacts of customer perceived fairness of hotel cancelation policies on consumer patronage (Smith et al., 2015). However, very few studies, to our knowledge, have explored the impacts of hotel employees' general perceived fairness on attitudinal and behavioral outcomes, which may provide evidence of the importance of fairness from employees' perspective. Perceived fairness may be especially important for labor-intensive hospitality work settings given that perceived fairness involves the allocation of resources, interpersonal relationships and transparency (Smith, 2010). The more people are involved in the allocation of resources, the more important and difficult to allocate the resources fairly. Therefore, this research filled the research gap by studying perceived fairness from hotel employees' perspective and exploring its antecedent and outcome variables.

The current study argued that when employees work in the organization with strong error management culture, errors can be openly communicated and discussed, and the error handling process is open and accessible to employees. The transparency regarding errors builds a foundation for employees to perceive the fairness.

Employee turnover and high mobility have long been an issue of the hospitality industry that academics strive to better understand the antecedents, outcomes and underlying mechanism of employee turnover. Employee turnover tends to continue increasing because of the change in demographics, emphasis on the knowledge-based economy, as well as the increased globalization (Somaya & Williamson, 2008). The relationship between organizational culture and turnover intentions has not received a great deal of attention in empirical research even though previous studies emphasized the importance of organizational culture's impact on turnover intentions. Carmeli (2005) contended that the organizational culture or climate is partly responsible for employees' turnover intentions. The current study addresses this issue by exploring one distal antecedent of employee turnover intentions: the error management culture, and by identifying the underlying mechanisms.

Therefore, the purpose of this study is to investigate the way an error management culture impacts hotel employees' turnover intentions through the mediating factors of perceived fairness, psychological safety, and organizational commitment. The objectives of this study are three-fold: 1) to examine the extent to which the error management culture impacts hotel employees' psychological safety and perceived fairness; 2) to examine whether psychological safety and perceived fairness mediate the impact of error management culture on employee organizational commitment; and 3) to test the mediation effects of psychological safety, perceived fairness and organizational commitment between error management culture and turnover intentions.

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Literature review and hypotheses development

Error management culture

Errors have been defined as "*individuals' decisions and behaviors that 1) result in an undesirable gap between and the expected and the real state and 2) may lead to actual or potential negative consequences for organizational functioning that could have been avoided*" (Zhao & Olivia, 2006, p1013). Frese and Keith (2015) indicated that any new action including some fumbling is error-prone. Errors are often perceived as the material causing job dissatisfaction, stress, accidents, quality and performance problems, and a negative climate (Rybowiak et al., 1999). People consider errors as the indicators of incompetence (Mangels et al., 2006). Thus it is understandable that most people would prevent errors from happening, by namely the error prevention approach (Wagenaar, Hudson & Reason, 1990). In general, making errors is closely related to a negative mind-set. People intuitively feel embarrassed to be seen making an error, and they make efforts to prevent errors from happening. However, errors will inevitably occur independent of man's will (Arenas et al., 2006). In addition, an individual's development is closely linked with taking risks (trying to do something new), making errors and then improve from errors (Frese & Keith, 2015).

Although 100% error avoidance is impossible, a pure error prevention approach is limited. Frese (2008) indicated that error management is a new approach towards error handling. The most significant difference between error management and error prevention is the different emphases: error prevention is about blocking erroneous actions, whereas error management focuses on how to deal with error when it occurs. The ultimate goal of error management is to minimize the negative outcomes and maximize the positive outcomes of errors (Hofmann & Frese, 2011, Van Dyck et al., 2005). Control of negative outcomes includes quick damage control and secondary

error prevention (repetition of same errors). Better performance, learning and creativity are possible positive outcomes of error occurrence (Frese & Keith, 2015). Overall, error management is a prescriptive concept describing an optimal error handling strategy (Frese, 2008).

Van Dyck et al. (2005) introduced the concept of an error management culture, indicating that error management principles and practices may apply at the organizational level. The common shared beliefs and practices of strong error management culture include error detection and analysis, error handling, error reporting and communication, error knowledge discussion and learning, helping and supporting one another when error occurs (Van Dyck *et al.*, 2005). On the contrary, individuals in an organization with weak error management culture are more likely to cover up errors due to the fear of punishment, avoid reporting or communicating errors, and less motivation to learn from errors (Frese & Keith, 2015; Van Dyck *et al.*, 2005).

Psychological safety

Psychological safety describes an employee's belief that the workplace is a safe place to ask questions, expose mistakes, take risks, or come up with new ideas (Edmondson, 1999). When employees have higher level of perceived psychological safety, they feel confident to ask for help, speak up freely (admit one's error), express different views as well as not feel awkward being different compared to others (Nembhard & Edmondson, 2006). When linking psychological safety with error-related behavioral intentions, employees are more likely to communicate about errors openly and learn from errors in more psychologically safe environment (Cannon & Edmondson, 2001).

As a broad concept containing different facets, psychological safety is embodied through various behaviors: discussing tough problems, not undermining others, and making errors without

being scared of punishment. Similarly, one important norm and practice of the organizational error management culture is error communication. Kahn (1990) proposed that organizational norms can be an antecedent of perceived psychological safety. Eisenberger et al. (1986) suggested that employees develop an integral assessment regarding the extent organization is a supportive entity. Linking error management culture with psychological safety has special importance in the context of hospitality work setting. First, given the labor-intensive nature and close cooperation among hospitality employees from various departments (Bowen & Ford, 2002), noted that error occurrence is ubiquitous. Therefore, the way error is treated in the workplace can exert impacts on employees' job attitudes (Frese & Keith, 2015). Second, Guchait, Pasamehmetoglu and Dawson (2014) emphasized the importance for hotel employees to feel psychologically safe in order to be willing to provide important information from customers' sides to the hotel manager level. In an organization with stronger error management culture, employees communicate about errors and share error knowledge with the purpose of learning from errors, probably leading to employees' conceptualization of the organizational support and formation of psychological safety. Thus, the following hypothesis is proposed:

Hypothesis 1: Error management culture is positively related to psychological safety.

Perceived fairness

As an important subject in the organizational behavior literature (Holbrook, 2002; Jones & Skarlicki, 2003), the organizational fairness is defined as the perceptions employees have regarding how fairly they are treated by their organization (De Cremer et al., 2010). Bies and Moag (1986) suggested that employees value the interpersonal treatment received from the organization and the supervisor during the work, and the quality of interpersonal treatment affects the

employees' fairness perceptions. Researchers have posited that informational aspects such as explanations as well as interpersonal aspects such as politeness, respect and sensitivity importantly constitutes the individual's fairness perception (Cropanzano et al., 2001; Greenberg & Cropanzano, 1993). Skarlicki and Folger (1997) suggested that if the organization demonstrates a sincere concern and adequate sensitivity towards employees, the employees tend to have higher level of perceived fairness. In other words, when the organization treats employees with respect and dignity, employees tend to have more acceptance and tolerance of the organization in terms of their fairness perceptions.

When working in an organization without an error management culture, employees tend to link errors with negative emotional and behavioral outcomes (fear, stress, sense of guilt, embarrassment, loss of time, customer satisfaction, added work effort, weakened job performance) (Van Dyck et al., 2005; Zhao & Olivera, 2006). The organization's aversive attitudes and punitive actions towards errors hardly make employees feel that the organization shows sincere concern and adequate sensitivity toward them. In addition, the negative perception of errors, the punitive actions after the error occurrence without listening to employees' explanations easily leave an impression to employees that the organization is not willing to listen to them carefully after the error occurrence and does not really treat them with the dignity, sensitivity and respect since the way error is dealt with renders employee embarrassed, stressed and anxious. On the contrary, employees working in an organization with a strong error management culture would feel much less stressed, anxious and embarrassed when they make errors, given that the organization holds a more positive attitude towards the error occurrence and encourages the error communication (e.g. error reporting, explanation of errors). By creating an error management culture which is characterized by a more positive perception of errors, more tolerance and understanding of error

occurrence, employees tend to feel more respected and supported from the organization, leading to higher level of fairness perception.

Another important component in relation to perceived fairness is the transparency (Yamazaki & Yoon, 2016). Being related to morality and ethics (Vaccaro, 2012), transparency is an important standard of perceived fairness. Transparency refers to providing employees with proper and clear information, including in error handling situations. In the case of an error situation, an employee would expect a transparent and fair atmosphere in the organization regarding the way errors are perceived and handled. In the organizations with weak organizational error management culture, employees tend to hide their errors and not communicate about errors because of the fear of being punished. First, Taft (2015) identified one critical influential factor of perceived fairness: the transparency of the processes. If the organizational activities related to error handling lacks transparency, and becomes an opaque and untouched "out-of-bounds area" in the organization, employees may become suspicious about it, resulting in confusion and distrust between the employees and the organization.

On the contrary, when employees work in an organization with strong error management culture: 1) employees communicate about and report errors, which is aligned with the principle of transparency of procedure; 2) the organization has more tolerance and more positive perceptions about errors by not blaming employees who make errors and by providing the supports to help employees in error situation, which corresponds to the norms and practices of organizational interpersonal treatment; 3) the employees are encouraged to explain the error situation and communicate it with supervisors and peers. Folger and Konovsky (1989) noted that the procedures were perceived as more fair when employees were encouraged to express or "voice" into the

process. Therefore, employees tend to perceive a higher level of fairness working in an organization with a strong error management culture.

Hypothesis 2: Error management culture is positively related to perceived fairness.

Organizational commitment

Judge and Kammeyer-Mueller (2012) described organizational commitment as "*an individual's psychological bond with the organization, as represented by an affective attachment to the organization, internalization of its values and goals, and a behavioral desire to put forth effort to support it*" (p.349). Organizational commitment is a psychological state which (a) describes the extent to which the employee is attached to the organization, and (b) has implications for the attachment to the organization. Employees with strong organizational commitment like their organization and want to keep employment there with strong emotional attachment and the willingness of being included in the organization (Meyer *et al.*, 2002). From the perspective of the organization, Williams and Anderson (1991) stressed the importance of organizational commitment as it contributes to employee creativity and adaptability. From the broader perspective, the employees' organizational commitment improves the efficiency of the society as a whole by reducing the unnecessary turnover and by improving the overall job performance (Solinger, 2008). In addition, reinforcing hotel employees' organizational commitment is critical in the hospitality industry because organizational commitment has been found to reduce employee turnover intentions (Behery et al., 2016).

Previous research suggested the correlation between the organizational commitment and employee perceived psychological safety. Kahn (1990) identified commitment and satisfaction as the most important attitudinal and motivational outcomes of psychological safety. When

employees feel safe in their workplace, they are more likely to develop and maintain a strong emotional attachment to the organization (Meyer and Allen, 1991). Although scholars have linked psychological safety and organizational commitment (O'Neill & Arendt, 2008; Frazier et al., 2017), no study, to our knowledge, has been done in a hospitality setting. Given the work characteristics in the hospitality industry (error-prone, high job mobility), it is interesting to examine to what extent the employees' perceived safety affects employees' commitment to their organization(s).

Hypothesis 3: Psychological safety is positively related to organizational commitment.

Another antecedent of organizational commitment that is critical is employee perceived fairness. When employees are treated fairly, they tend to identify themselves with the organizational value and to develop the emotional bonds with the organization, namely to be more committed to the organization (Brockner et al., 1994). Researchers have proposed that perceived fairness leads to stronger organizational commitment (Jiang, Gollan & Brooks, 2017). The relationship between the perceived fairness and organizational commitment can be explained using the social exchange theory. The social exchange theory describes the employee-organization relationship based on the norm of reciprocity (Gouldner, 1960), assuming the voluntary mutual obligations between two parties (Rousseau, 1989). Aselage and Eisenberger (2003) suggested that employees tend to commit to their organization when they receive support and good treatment from the organization. In addition, Otto and Mamatoglu (2015) proposed that when organizations treat employees fairly, employees reciprocate it with positive attitudes and behaviors, resulting in increased employee loyalty. The positive correlations between employee perceived fairness and outcome variables can be interpreted by the norm of reciprocity (Eisenberger, 2011). Using similar justification and grounded on the social exchange theory, the current study argues that employees' increased perceptions of fairness will increase employee's organizational commitment.

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Hypothesis 4: Perceived fairness is positively related to organizational commitment.

Turnover intentions

Turnover intention refers to the conscious and deliberate willingness to leave the organization (Bluedorn, 1982). Some of the highest turnover is observed among hospitality employees (Moncarz, Zhao & Key, 2009), thus finding a way to reduce employees' turnover intention becomes critical. Employees with low level of organizational commitment are more likely to leave the job (Carayon et al., 2006). Joo (2010) found that organizational commitment explained 40% of the variance in intention to leave. Previous studies have identified organizational commitment as one key antecedent variable that affects employees' turnover intention (Karsh et al., 2005; Lee & Bruvold, 2003). Meyer and Allen (1997) indicated that organizational commitment was negatively related to turnover intentions, while turnover intentions was positively correlated with turnover. Organizational commitment is important in hotel settings because of its strong negative relationship with employee turnover intentions (Lee, Huang & Zhao, 2012). The current study replicates the relationship between organizational commitment and turnover intentions using a sample of hotel employees:

Hypothesis 5: Organizational commitment is negatively related to turnover intentions.

The mediation effects of psychological safety & perceived fairness & organizational commitment between error management culture and turnover intentions

Previous studies have focused on exploring proximal antecedent variables of the organizational commitment, including job characteristics and personal characteristics, but the exploration of its distal antecedents seems largely ignored. Mathieu and Zajac (1990) indicated that organizational

commitment can be enhanced through certain organizational characteristics, suggesting that the organizational culture reflecting certain characteristics can affect employees' perception of the organizational commitment. The formation of the organizational commitment is an adjustment process which involves both proximal and distal determinants (Kammeyer-Mueller & Wanberg; 2003), suggesting that the organizational commitment can be affected by distal determinants through other proximal factors.

This study addresses this issue by identifying organizational error management culture as a distal antecedent which affects organizational commitment through two proximal antecedents: psychological safety and perceived fairness. Thus, error management culture affects employees' organizational commitment through employee's psychological safety and perceived fairness. Organizational culture is a multifaceted abstraction with several dimensions that can guide attitudes and behaviors, shape employee's interpretations of events, and influence employees' focus of attention (Song, Kim & Kolb, 2009). The multi-dimensionality of the organizational culture implies the possibility to impact more than one employee attitudinal and behavioral outcomes to varying degrees. This study argues that the organizational error management culture can impact employees' perception of psychological safety and fairness, which in turn, impact employees' organizational commitment.

In addition, given that hospitality industry is negatively affected by the high employee turnover rates (Moncarz, 2009), research has demonstrated that the degree of organizational commitment is a key factor in the decision to stay or leave (Hausknecht, Rodda & Howard, 2009). Therefore, it is important to explore the antecedents of the "organizational commitment-turnover intention" relationship in order to better understand employee turnover intentions. This study identified two antecedents that could impact employees' organizational commitment and their

turnover intentions: psychological safety and perceived fairness. Perceived fairness impacts employees' turnover intentions through the organizational commitment in that the employee reciprocates the organization's fair treatment by more identifying themselves with the values represented by the organization. Psychological safety impacts employees' turnover intentions through the organizational commitment in that a strong emotional attachment to the organization can't exist if the employee doesn't feel safe in their workplace.

Methodology

Sample and Data Collection

Using a convenience sample, an upper-upper scaled hotel in Hong Kong known to one researcher of this study was chosen for the data collection. Through the initial contact with the hotel general manager, the researcher obtained permission to contact hotel employees who were intended to be the participates. With the senior management's endorsement, hotel employees were asked to select a time slot for data collection and participate in a survey during the corresponding time slot in a hotel meeting room.

Instrument

Error management culture was measured with eight items adopted from an error management culture scale developed by Van Dyck et al. (2005). A sample item from the scale is, "For us, errors are very useful for improving the work process." Cronbach's alpha was 0.83. Organizational fairness was measured with four items adopted from an organizational justice scale developed by Ambrose and Schminke (2009). A sample item from the scale is, "Overall, I am treated fairly by my organization." Cronbach's alpha was 0.87. Psychological safety was measured with four items adopted from a psychological safety scale developed by Edmondson (1999). A sample item from

the scale is, "If you make a mistake at work, it is often held against you" (reverse coded). Cronbach's alpha for the scale was 0.79. Organizational commitment was measured with a six-item organizational commitment scale (Cho, Johanson & Guchait, 2009). A sample item from the scale is, "For me, this is one of the best places to work." Cronbach's alpha was 0.89. Turnover intentions was measured with a three-item intent to leave scale developed by Mobley et al. (1978). A sample item from the scale is, "I often think about leaving this organization." Cronbach's alpha was 0.89. All items were measured on a 5-point Likert-type scale (1 = strongly disagree, 5 = strongly agree).

Results

The field researchers distributed 226 questionnaires to hotel employees in all departments, and 173 questionnaires were returned as usable data, resulting a response rate of 77%. Fifty-five percent of respondents were male hotel employees (95). Thirty-four percent of the respondents were 26 - 35 years old. Thirty-five percent of respondents had graduated from high school whereas twenty-six percent of respondents had somewhat college degree. Forty-three percent of the respondents worked in the housekeeping department, 18 percent of participants worked in the hotel restaurant and 12 percent of participants worked in the front office. Remaining participants worked in the security department (7%), engineering department (7%), kitchen (4%), accounting department (2%), human capital department (2%), room service department (2%) and other departments. Forty-nine percent of respondents worked more than 2 years in the same organization.

A reliability test was used to assess the internal homogeneity among items in this study. The coefficient alpha estimates (See Table 1) for the multi-item scales used in this study exceed the minimum standard for reliability of 0.7 recommended by Nunnally and Bernstein (1994). Thus, the results ensured reliability of multiple measurements. Construct validity assesses the degree to

which a measurement represents and logically connects, via the underlying theory, the observed phenomenon to the construct. Following Anderson and Gerbing's (1988) two-step approach, a measurement model was estimated prior to the structural model. As Table 1 presents, the results for the measurements of multiple constructs were very good based on confirmatory factor analysis: $\chi^2(245) = 666.40$, RMSEA=.073, CFI=.92, NNFI=.91. All of the indicator loadings for constructs were significant (p<.01).

Table 1. Results of Confirmatory Factor Analysis

Construct	Item	Loading
Error Management culture (α=.83)	1	0.75
	2	0.80
	3	0.73
	4	0.74
	5	0.78
	6	0.82
	7	0.77
	8	0.83
Perceived Fairness (α=.87)	1	0.88
	2	0.79
	3	0.89
	4	0.84
Psychological Safety (α=.79)	1	0.76

	2	0.72
	3	0.81
	4	0.73
Organizational Commitment (α=.89)	1	0.87
	2	0.80
	3	0.77
	4	0.85
	5	0.97
Turnover intentions (α=.89)	1	0.90
	2	0.88
	3	0.89

$\chi^2(245)=666.4$, RMSEA=.073, CFI=.92, NNFI=.91

Discriminant validity exists when the average variance extracted (AVE; $\rho_{vc\ (\eta)}$) of each construct exceeds the square of the coefficient representing its correlation with other constructs (Fornell & Larcker, 1981), as shown in Table 2. For instance, the AVE of the error competence construct (.84) exceeded the square of the intercorrelation (shared variance) between organizational commitment and intention to leave (.33).

Table 2. Measure correlations, the squared correlations, and AVE

	Correlations among latent constructs (squared) [a]					
Measure	EMC	PF	PS	OC	TI	AVE [b]
EMC	1.00					0.83

|	EMC	PF	PS	OC	TI	
PF	**0.52**(.27)	1.00				0.84
PS	**0.21**(.04)	**0.35**(.12)	1.00			0.70
OC	**0.44**(.19)	**0.55**(.30)	**0.33**(.11)	1.00		0.82
TI	**-0.24**(.06)	**-0.41**(.17)	**-0.34**(.12)	**-0.57**(.33)	1.00	0.84
Mean	3.86	3.58	3.06	3.45	2.70	
SD	0.50	0.73	0.70	0.72	0.84	

Notes: EMC: Error Management Culture; PF: Perceived Fairness; PS: Psychological Safety; OC: Organizational Commitment; TI: Turnover Intention

[a] Correlation coefficients are estimates from LISREL. $p < .01$, bolded coefficients were significant at the .01 level.

[b] All average variance extracted (AVE) exceeded .50, showing construct validity.

Hypothesis testing

The theoretical model was tested (see Figure 1) and goodness-of-fit and practical indices were as follows: $\chi^2(248)=604.18$, p=.00, RMSEA =.076, CFI = .91, NNFI = .90. A competing model was tested against the theoretical model in this study by adding direct effect of EM on OC. The fit of the competing model was much poorer than the theoretical model, thereby the theoretical model providing a good basis for further testing.
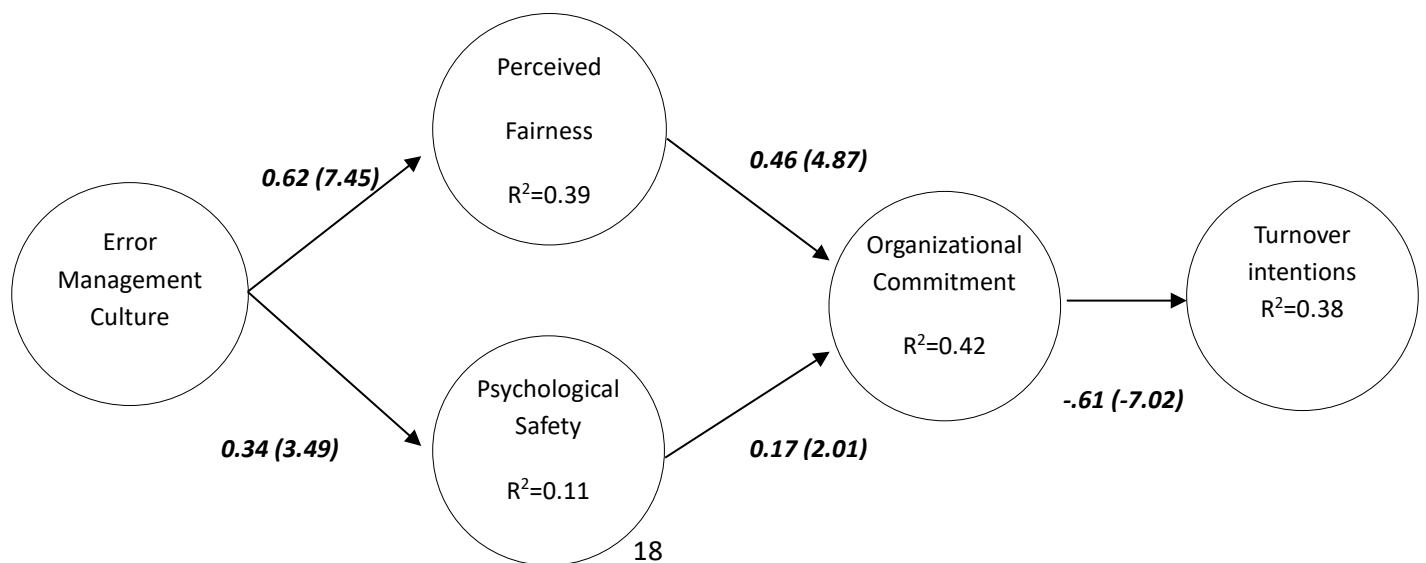
$\chi^2(248) = 604.18$, p=.00, RMSEA =.076, CFI = .91, NNFI = .90. Bold p <.05

Figure 1. Standardized Maximum-Likelihood Parameter Estimates

Hypothesis 1: An Error management culture is positively related to psychological safety.

A significant positive relationship was found between error management culture and employee psychological safety (γ_{21} = .34, t = 3.49, see Figure 1). The results indicated that strong error management culture can improve employees' psychological safety. That is, employees working in an organization with strong error management culture tend to feel more comfortable taking risks, admitting an error they make, and asking questions. Risk-taking behavior may include taking initiative to discover a new work approach, or coming up with a new idea. Therefore, Hypothesis 1 was supported.

Hypothesis 2: An error management culture is positively related to perceived fairness.

Figure 1 indicates a significant positive relationship between error management culture and perceived fairness (γ_{11} = .62, t = 7.45), and the coefficient of determination was .39. The results indicated that strong error management culture led to employees' higher perceived fairness. That is, employees feel being treated more fairly when they work in an organization with strong error management culture compared to weak error management culture. Therefore, Hypothesis 2 was supported.

Hypothesis 3: Psychological safety is positively related to organizational commitment.

The result suggested a significant positive relationship between psychological safety and organizational commitment (β_{32} = .17, t = 2.02; Figure 1). The results indicated that employees' higher level of psychology safety resulted in higher level of organizational commitment. The

finding suggests that when employees feel more psychologically safe, they tend to be more committed to the organization. Therefore, Hypothesis 3 was supported.

Hypothesis 4: Perceived fairness is positively related to organizational commitment.

Figure 1 indicates a significant positive relationship between perceived fairness and organizational commitment ($\beta 31$ = .46, t = 4.87; Figure 1). The results indicated that when an employee feels they are being fairly treated, they tend to be more committed to the organization. The result indicated that employees who perceive that they are being treated fairly in an organization are more likely to be committed to that organization. Therefore, Hypothesis 4 was supported.

Hypothesis 5: Organizational commitment is negatively related to turnover intentions.

The result indicates a significant negative relationship between organizational commitment and turnover intentions (β 43 = -.61, t = -7.02; Figure 1). The results indicated that when an employee is committed to the organization, they are less likely to leave the organization. The result suggested that when employees are committed to the organization where they work, they tend to stay instead of leaving their organization. Therefore, Hypothesis 5 was supported.

Figure 1 presents that an error management culture had a significant indirect effect on intention to leave the organization which was mediated by perceived fairness (EMC->PF-> OC -> IL; γ_{11} -> β_{31}-> β_{43}= 0.18, p<.05), psychological safety (EMC->PS->OC->IL; γ_{21} -> β_{32}-> β_{43}= 0.14, p<.05), and organization commitment (EMC-> OC->IL; γ_{41} -> β_{43}= 0.22, p<.05). Specifically, perceived fairness and organization commitment performed as complete mediators to influence on employee turnover intentions by improving the model fit as well as the insignificant direct effect of error management culture on intention to leave in the competing model.

Discussion

The purpose of the current study is to examine the relationships among error management culture, psychological safety, perceived fairness, organizational commitment and turnover intentions among hospitality employees. The results showed that employees who perceived a stronger organization error management culture tend to perceive higher level of psychological safety, perceived fairness and organizational commitment, and are less likely to leave the organization. The organizational error management culture affects employees' turnover intentions because it reinforces employees' psychological safety and makes employees feel that they are fairly treated in the organization, which boost employees' organizational commitment. Specifically, employees' turnover intentions are not just the direct impacts of the individual perceptions of psychological safety and fairness, but also the organizational cultural factors such as the error management culture identified in this study. Consistent with previous studies, organizational commitment remains strongly negatively related to turnover intentions (Lau et al., 2016; Loi et al., 2006). Different from previous studies focusing on exploration of proximal antecedents of turnover intentions, this study explored a distal antecedent of turnover intention: the error management culture, one variable describing the commonly accepted attitudes and practices related to errors at the organizational cultural level (Van dyck et al., 2005). Moreover, this study proposed a sequential mediation effects of perceived fairness, psychological safety and organizational commitment between the error management culture and turnover intentions. The findings suggest that employees' intention to leave the organization may reduce if they work in the organization where the error is quickly detected and analyzed, and employees share error information and help one another in error situations.

Conclusion

The first research objective of this paper was to examine the extent to which the error management culture impacts hotel employees' psychological safety and perceived fairness. In line with the hypotheses, the result indicated that error management culture is positively related to employees' perceived fairness and psychological safety, addressing the first research objective. As a result, this study has identified error management culture as one antecedent of perceived fairness and psychological safety. The study's second research objective was to examine whether psychological safety and perceived fairness mediate the impact of error management culture on employee organizational commitment. The result of this study indicated the significant mediation effects of psychological safety and perceived fairness between error management culture and organizational commitment, thereby addressing the second research objective, as error management culture positively contributes to the organizational commitment through the employee perceived fairness and psychological safety. The third objective of this paper was to test the mediation effects of psychological safety, perceived fairness and organizational commitment between error management culture and turnover intentions. The findings confirmed the proposed chain of sequential mediation in that error management culture contributes to employee perceived fairness and psychological safety, both of which drive organizational commitment, which in turn, reduces employee turnover intentions. Therefore, the third research objective is addressed.

Theoretical implications

Building on research suggesting that a supportive work context is an important antecedent of psychological safety (Frazier et al, 2017), and on research that has demonstrated the importance of employee perceived fairness in the workplace (Holbrook, 2002), the current study examined the

relationships among error management culture, psychological safety, perceived fairness, organizational commitment, and turnover intentions.

Based on the error-prone nature and service production characteristics in the hospitality industry, this study addresses these job characteristics in the hospitality industry by exploring the antecedent and outcome variables of two critical variables among hospitality employees: the psychological safety and perceived fairness. First, the findings suggest that error management culture is a significant predictor of employee psychological safety and perceived fairness, showing that the organizational error management culture plays an important role in boosting employee perceived fairness and psychological safety, expanding the nomological networks of these variables. Second, the results show that psychological safety mediates the relationship between error management culture, organizational commitment and turnover intentions, confirming Kahn's (1990) suggestion that psychological safety was necessary for people to feel attachments to their work roles. Third, error management culture affects employee perceived fairness, which in turn, impacts employees' organizational commitment and turnover intentions, emphasizing the values of two factors forming employee perceived fairness: the interpersonal treatment and transparency (Bies & Moag, 1986; Yamazaki & Yoon, 2016).

This study identified a new distal antecedent of employees' turnover intention in the hospitality work setting. The link between error management culture and turnover intention may be especially significant in the hospitality industry, because the hospitality employees confront errors frequently thus the error treatment may play an important role determining employees' turnover intentions. In addition, this study tested the underlying mechanisms relating organizational error management culture to organizational commitment and turnover intentions. Previous studies showed that organizational commitment is a key determinant of turnover intention

(Karsh et al., 2005). Building on prior research, this study identified three distal antecedents of hotel employee turnover intentions: organizational error management culture, the psychological safety and the perceived fairness. High employee turnover affects the quality of products and services (Slåtten, Svensson & Sværi, 2011). Hinkin and Bruce (2000) conducted a research estimating the cost of turnover in American hospitality industry and indicated that the overall average cost of turnover for a front-desk associate for the hotels was nearly one-third of the position's annual salary. This study addressed this issue by proposing one way to reduce employee's turnover intentions. Finally, this study identified two key variables that are largely ignored but closely related to hotel employee's psychological states: the perceived fairness, which is often studied from the customers' perspectives in the hospitality industry (Hwang & Wen, 2009; Srikanth & Francis, 2008) and psychological safety, a rarely studied but very relevant variable in hospitality literature (Priyanko, Pasamehmetoglu & Dawson, 2014). By extending the nomological networks of these two variables, this study provides the evidence of how these two variables are formed and impact employees' attitudinal and behavioral intentions.

Implications for managers

The current study has several practical implications to help hotel managers improve employees' commitment to their organization and reduce employee turnover intentions, addressing a longstanding issue perplexing the hospitality industry. First, the current research demonstrates the necessity for hotel managers to care about employees' psychological safety and perceived fairness. Employees tend to feel psychologically safe in a work environment where they feel comfortable taking risks and receive respect as well as support when taking risks. Risk-taking mainly includes taking initiatives to come up with new ideas, adopting a new work procedure and speaking up about errors they have made or observed. In order to build employees' psychological safety, a

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hotel managers' job is to ease all factors that may cause employees' fear of embarrassment, rejection or punishment when taking these risks. For example, because of the high interdependence between different links in the service production chain (Hu et al., 2009), admitting and communicating about errors becomes critical in the hospitality industry. If employees working on the previous production link can timely share the error information, those working on the following production link can take immediate corrective measures to minimize the negative consequences of the error occurrence. On the contrary, if employees cover up errors and no corrective action has been taken (as they are not aware of the error), it is very likely that customers, who are at the end of the service failure. Although the importance and benefits of error reporting, employees often choose to not report errors since it may result in managers' negative assessment even punishment. Therefore, managers should eliminate these concerns by publicly encouraging error communication, rewarding those who report errors and share error information. In addition, hotel managers should make sure that they treat employees fairly. To establish employee's perceived fairness, hotel manager can demonstrate sincere concern and adequate sensitivity towards employees especially when they are confronting error situations. Instead of blaming employees for making errors, managers should try to understand the context and cause of error, treat them with respect as well as empathy, and then propose assistance if needed.

Second, the current research provides hotel managers with a new perspective (error management perspective) about how to treat and better handle errors in the organization. The results of this study suggested that by adopting an error management approach, managers can use the error occurrence, usually a negatively perceived phenomenon, as a unique occasion to make employees feel the respect and support from the organization, which in turn, leads to employees' better job attitudes (e.g., organizational commitment) and behavioral intentions (e.g., turnover intention).

There are several ways to develop an error management culture in hospitality organizations. First, managers should realize that error occurrence cannot be totally avoided. Second, managers need to change their mindset and hold a more positive attitude towards errors. A conscious effort needs to be made by managers to make sure that employees do not form negative perceptions about errors. Specifically, managers should encourage reporting of errors so that errors are resolved effectively and efficiently. A memorandum accessible to employees can be created in the departments, allowing employees to write down the errors they have made or observed so that other employees can read the memorandum and avoid making similar errors. After reading the memorandum, people can share their own error experiences, offer recommendations to effectively handle such errors, and provide suggestions about how to stop them from occurring again in future. Moreover, managers can add a session during regular meetings during which error occurrences can be openly reviewed and communicated, and every employee is encouraged to share their own ideas to better deal with errors. Third, to build an error management culture, helping one another in error situations is another important aspect. Hotel managers should set good examples for employees by proposing help or support to those who are in need, given that managers have the authority of distributing and integrating different resources necessary to solve the problem. Fourth, HR managers should modify the compensation policy so that those who share more error knowledge are to be awarded. At the same time, the performance appraisal should not be negatively affected for employees who report their own errors.

At last, hotel managers should be aware that developing as well as maintaining an organizational culture is a progressive evolution. Managers may imply Lewin's (1999) "Unfreezing-Moving-Refreezing" roadmap to form and develop an organizational error management culture. At the unfreezing stage, managers should indicate the problems of not reporting and communicating

about errors so that people can recognize the need for the organizational culture change and to search for new solutions. At the moving stage, managers should mobilize people to conduct new behaviors that embody the error management culture such as helping each other in error situations instead of blaming, communicating about errors instead of covering up. Through conventional training and development activities, employee may understand this new organizational culture. At the refreezing stage, managers should reinforce the newly formed practices to make sure that employees don't slide back into its former ways of thinking and doing, such as hiding errors.

Limitation and Suggestions for Future Research

This study has some limitations despite its theoretical and practical implications. First, this study that an error management culture is one antecedent of psychological safety and perceived fairness, and the results showed a significant relationship between error management culture and two outcome variables. Future studies may consider exploring other antecedents of the two variables that are particularly important for hotel employees' job performance and their well-being, such as team characteristics, team leadership and organizational context (Edmondson & Lei, 2014). Second, since the error management culture, perceived fairness, organizational commitment, psychological safety and turnover intentions were measured using the same individuals and questionnaires, common method variance might have inflated the relationships among those variables (Podsakoff et al., 2003). Future studies may collect data from multiple sources to avoid common method bias. Third, since the data were collected in Hong Kong, it might raise the issue of generalizability to other cultures. Hofstede (1980) indicated that the culture refers to the collective mental programming that people have in common within a group, a geographical region, or a nation. Therefore, the findings of this study could vary in others cultural contexts. Therefore,

the future study should conduct more studies in other cultural contexts in order to realize a higher level of generalizability.

The current study has identified two outcome variables of psychological safety and perceived fairness: organizational commitment and employee turnover intentions. Future research may need to continue exploring possible outcomes of these two variables that are important for hotel employees, such as job satisfaction, job performance and job engagement. In addition, the underlying mechanisms between these relationships need to be studied by testing the mediators and moderators. For example, individual personality may moderate the relationship between psychological safety and outcome variables, such as job satisfaction.

References

1. Ambrose, M. L., & Schminke, M. (2009). The role of overall justice judgments in organizational justice research: A test of mediation. *Journal of applied psychology*, 94(2), 491.

2. Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, *103*(3), 411.

3. Andrés-Martínez, M. E., Gómez-Borja, M. Á., & Mondéjar-Jiménez, J. A. (2014). A model to evaluate the effects of price fairness perception in online hotel booking. *Electronic Commerce Research*, *14*(2), 171-187.

4. Arenas, A., Tabernero, C., & Briones, E. (2006). Effects of goal orientation, error orientation and self-efficacy on performance in an uncertain situation. *Social Behavior and Personality: an international journal*, *34*(5), 569-586.

5. Aselage, J., & Eisenberger, R. (2003). Perceived organizational support and psychological contracts: A theoretical integration. *Journal of organizational behavior*, *24*(5), 491-509.

6. Behery, M., Behery, M., Abdallah, S., Abdallah, S., Parakandi, M., Parakandi, M., ... & Kukunuru, S. (2016). Psychological contracts and intention to leave with mediation effect of organizational commitment and employee satisfaction at times of recession. *Review of International Business and Strategy*, *26* (2), 184-203.

7. Beldona, & Kwansa. (2008). The impact of cultural orientation on perceived fairness over demand-based pricing. *International Journal of Hospitality Management, 27*(4), 594-603.

8. Bies, R., & Moag, R. (1986). Interactional justice: Communication criteria of fairness in: RJ Lewicki, BH Sheppard, MH Bazerman (eds.) Research on negotiations in organizations (pp. 43-55).

9. Bluedorn, A. C. (1982). Managing turnover strategically. *Business Horizons*, *25*(2), 6-12.

10. Bowen, J., & Ford, R. C. (2002). Managing service organizations: does having a "thing" make a difference?. *Journal of management*, *28*(3), 447-469.

11. Brockner, J., Konovsky, M., Cooper-Schneider, R., Folger, R., Martin, C., & Bies, R. J. (1994). Interactive effects of procedural justice and outcome negativity on victims and survivors of job loss. *Academy of management Journal*, *37*(2), 397-409.

12. Cannon, M. D., & Edmondson, A. C. (2001). Confronting failure: Antecedents and consequences of shared beliefs about failure in organizational work groups. *Journal of Organizational Behavior*, *22*(2), 161-177.

13. Carayon, P., Schoepke, J., Hoonakker, P. L. T., Haims, M. C., & Brunette, M. (2006). Evaluating causes and consequences of turnover intention among IT workers: The

development of a questionnaire survey. *Behaviour & Information Technology*, *25*(5), 381-397.

14. Carmeli, A. (2005). The relationship between organizational culture and withdrawal intentions and behavior. *International Journal of Manpower*, *26*(2), 177-195.

15. Chatman, J. A., & Jehn, K. A. (1994). Assessing the relationship between industry characteristics and organizational culture: how different can you be?. *Academy of management journal*, *37*(3), 522-553.

16. Cho, S., Johanson, M. M., & Guchait, P. (2009). Employees intent to leave: A comparison of determinants of intent to leave versus intent to stay. *International Journal of Hospitality Management*, 28(3), 374‑381.

17. Colquitt, J., Lepine, J. A., Wesson, M. J., & Gellatly, I. R. (2011). *Organizational behavior: Improving performance and commitment in the workplace*. McGraw-Hill Irwin.

18. Cropanzano, R., Ambrose, M. L., Greenberg, J., & Cropanzano, R. (2001). Procedural and distributive justice are more similar than you think: A monistic perspective and a research agenda. *Advances in organizational justice*, *119*, 151.

19. De Cremer, D., Brockner, J., Fishman, A., Van Dijke, M., Van Olffen, W., & Mayer, D. M. (2010). When do procedural fairness and outcome fairness interact to influence employees' work attitudes and behaviors? The moderating effect of uncertainty. *Journal of Applied Psychology*, *95*(2), 291.

20. Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative science quarterly*, *44*(2), 350-383.

21. Edmondson, A. C., & Lei, Z. (2014). Psychological safety: The history, renaissance, and future of an interpersonal construct. *Annu. Rev. Organ. Psychol. Organ. Behav.*, *1*(1), 23-43.

22. Eisenberger, R., & Stinglhamber, F. (2011). *Perceived organizational support.* (pp. 25-60). American Psychological Association.

23. Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, *71*(3), 500.

24. Folger, R., & Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management journal*, *32*(1), 115-130.

25. Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of marketing research*, 382-388.

26. Frazier, M. L., Fainshmidt, S., Klinger, R. L., Pezeshkan, A., & Vracheva, V. (2017). Psychological safety: A meta-analytic review and extension. *Personnel Psychology*, *70*(1), 113-165.

27. Frese, M. (2008). *Error management or error prevention: Two strategies to deal with errors in software design*. Universitätsbibliothek.

28. Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American sociological review*, 161-178.

29. Greenberg, J., & Cropanzano, R. (1993). The social side of fairness: Interpersonal and informational classes of organizational justice. *Justice in the workplace: Approaching fairness in human resource management, Lawrence Erlbaum Associates, Hillsdale, NJ.*

30. Gronewold, U., Gold, A., & Salterio, S. E. (2013). Reporting self-made errors: The impact of organizational error-management climate and error type. *Journal of business ethics*, *117*(1), 189-208.

31. Guchait, P., Madera, J., & Dawson, M. (2016). Learning in the service environment: the influence of diversity climate. *Journal of Service Theory and Practice*, *26*(4), 448-470.

32. Guchait, P., Paşamehmetoğlu, A. & Dawson, M. (2014). Perceived supervisor and co-worker support for error management: Impact on perceived psychological safety and service recovery performance. *International Journal of Hospitality Management,* International Journal of Hospitality Management.

33. Hausknecht, J. P., Rodda, J., & Howard, M. J. (2009). Targeted employee retention: Performance-based and job-related differences in reported reasons for staying. *Human Resource Management*, *48*(2), 269-288.

34. Heo, C. Y., & Lee, S. (2011). Influences of consumer characteristics on fairness perceptions of revenue management pricing in the hotel industry. *International Journal of Hospitality Management*, *30*(2), 243-251.

35. Hinkin, T., & Tracey, J. (2000). The Cost of Turnover. *Cornell Hotel and Restaurant Administration Quarterly, 41*(3), 14-21.

36. Hofmann, D. A., & Frese, M. (Eds.). (2011). *Error in organizations*. Routledge.

37. Hofstede, G. (1980). Culture and Organizations. *International Studies of Management & Organization, 10*(4), 15-41.

38. Holbrook, R. L. (2002). Contact points and flash points: conceptualizing the use of justice mechanisms in the performance appraisal interview. *Human Resource Management Review*, *12*(1), 101-123.

39. Hu, M.-L. M., Horng, J.-S., & Christine Sun, Y.-H. (2009). Hospitality teams: Knowledge sharing and service innovation performance. *Tourism Management*, 30(1), 41‑50.

40. Hwang, J., & Wen, L. (2009). The effect of perceived fairness toward hotel overbooking and compensation practices on customer loyalty. *International Journal of Contemporary Hospitality Management, 21*(6), 659-675.

41. Jeong, I., & Shin, S. (2017). High-Performance Work Practices and Organizational Creativity During Organizational Change: A Collective Learning Perspective. *Journal of Management,*014920631668515.

42. Jiang, Z., Gollan, P. J., & Brooks, G. (2017). Relationships between organizational justice, organizational trust and organizational commitment: a cross-cultural study of China, South Korea and Australia. *The International Journal of Human Resource Management*, *28*(7), 973-1004.

43. Jones, D. A., & Skarlicki, D. P. (2003). The relationship between perceptions of fairness and voluntary turnover among retail employees. *Journal of Applied Social Psychology*, *33*(6), 1226-1243.

44. Joo, B. K. B. (2010). Organizational commitment for knowledge workers: The roles of perceived organizational learning culture, leader–member exchange quality, and turnover intention. *Human resource development quarterly*, *21*(1), 69-85.

45. Judge, T., & Kammeyer-Mueller, J. (n.d.). Job Attitudes. *Annual Review of Psychology, 63*, 341-367.

46. Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of management journal*, *33*(4), 692-724.

47. Kammeyer-Mueller, J. D., & Wanberg, C. R. (2003). Unwrapping the organizational entry process: disentangling multiple antecedents and their pathways to adjustment. *Journal of Applied Psychology*, *88*(5), 779.

48. Karsh, B., Booske, B. C., & Sainfort, F. (2005). Job and organizational determinants of nursing home employee commitment, job satisfaction and intent to turnover. *Ergonomics*, *48*(10), 1260-1281.

49. Kirk-Brown, A., & Van Dijk, P. (2016). An examination of the role of psychological safety in the relationship between job resources, affective commitment and turnover intentions of Australian employees with chronic illness. *The International Journal of Human Resource Management*, *27*(14), 1626-1641.

50. Lau, P. Y. Y., McLean, G. N., Lien, B. Y. H., & Hsu, Y. C. (2016). Self-rated and peer-rated organizational citizenship behavior, affective commitment, and intention to leave in a Malaysian context. *Personnel Review*, 45(3), 569-592.

51. Lee, C. H., & Bruvold, N. T. (2003). Creating value for employees: investment in employee development. *The International Journal of Human Resource Management*, *14*(6), 981-1000.

52. Lee, C., Huang, S., & Zhao, C. (2012). A Study on Factors Affecting Turnover Intention of Hotel Empolyees. *Asian Economic and Financial Review, 2*(7), 866.

53. Leroy, H., Dierynck, B., Anseel, F., Simons, T., Halbesleben, J. R., McCaughey, D., ... & Sels, L. (2012). Behavioral integrity for safety, priority of safety, psychological safety, and patient safety: A team-level study. *Journal of Applied Psychology*, *97*(6), 1273.

54. Lewin, K., & Gold, M. E. (1999). *The complete social scientist: A Kurt Lewin reader*. American Psychological Association.

55. Loi, R., Hang‑Yue, N., & Foley, S. (2006). Linking employees' justice perceptions to organizational commitment and intention to leave: The mediating role of perceived organizational support. *Journal of Occupational and Organizational Psychology*, 79 (1),101-120.

56. Mangels, J. A., Butterfield, B., Lamb, J., Good, C., & Dweck, C. S. (2006). Why do beliefs about intelligence influence learning success? A social cognitive neuroscience model. *Social cognitive and affective neuroscience*, *1*(2), 75-86.

57. Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological bulletin*, *108*(2), 171.

58. Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human resource management review*, *1*(1), 61-89.

59. Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, research, and application*. Sage.

60. Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of vocational behavior*, *61*(1), 20-52.

61. Mobley, W. H., Horner, S. O., & Hollingsworth, A. T. (1978). An evaluation of precursors of hospital employee turnover. *Journal of Applied psychology*, 63(4), 408.

62. Moncarz, E., Zhao, J., & Kay, C. (2009). An exploratory study of US lodging properties' organizational practices on employee turnover and retention. *International Journal of Contemporary Hospitality Management*, *21*(4), 437-458.

63. Nembhard, I. M., & Edmondson, A. C. (2006). Making it safe: The effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *Journal of Organizational Behavior*, *27*(7), 941-966.

64. Nunnally, J. C. (1967). *McGraw-Hill series in psychology*. Psychometric theory. New York, NY: McGraw-Hill.

65. O'Neill, B., & Arendt, L. (2008). Psychological Climate and Work Attitudes. *Journal of Leadership & Organizational Studies, 14*(4), 353-370.

66. Otto, K., & Mamatoglu, N. (2015). Why does interactional justice promote organizational loyalty, job performance, and prevent mental impairment? The role of social support and social stressors. *The Journal of psychology*, *149*(2), 193-218.

67. Podsakoff, Philip M., Mackenzie, Scott B., Lee, Jeong-Yeon, Podsakoff, Nathan P., & Zedeck, Sheldon. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology, 88*(5), 879-903.

68. Rousseau, D. M. (1989). Psychological and implied contracts in organizations. *Employee responsibilities and rights journal*, *2*(2), 121-139.

69. Rybowiak, V., Garst, H., Frese, M., & Batinic, B. (1999). Error orientation questionnaire (EOQ): Reliability, validity, and different language equivalence. *Journal of Organizational Behavior*, 527-547.

70. Skarlicki, D. P., & Folger, R. (1997). Retaliation in the workplace: The roles of distributive, procedural, and interactional justice. *Journal of applied Psychology*, *82*(3), 434.

71. Slåtten, T., Svensson, G., & Sværi, S. (2011). Service quality and turnover intentions as perceived by employees. *Personnel Review, 40*(2), 205-221.

72. Smith, R. S. (2010). *The meaning and essence of fairness in the workplace: A phenomenological study of organizational justice*(Doctoral dissertation, The George Washington University).

73. Smith, S. J., Parsa, H. G., Bujisic, M., & van der Rest, J. P. (2015). Hotel cancelation policies, distributive and procedural fairness, and consumer patronage: A study of the lodging industry. *Journal of Travel & Tourism Marketing*, *32*(7), 886-906.

74. Solinger, O. N., Van Olffen, W., & Roe, R. A. (2008). Beyond the three-component model of organizational commitment. *Journal of applied psychology*, *93*(1), 70.

75. Somaya, D., & Williamson, I. O. (2008). Rethinking the'war for talent'. *MIT Sloan Management Review*, *49*(4), 29.

76. Song, J. H., Kim, H. M., & Kolb, J. A. (2009). The effect of learning organization culture on the relationship between interpersonal trust and organizational commitment. *Human Resource Development Quarterly*, *20*(2), 147-167.

77. Susskind, A. M. (2002). I told you so! Restaurant customers' word-of-mouth communication patterns. *The Cornell Hotel and Restaurant Administration Quarterly*, *43*(2), 75-85.

78. Taft, R. (2015). *Perceived fairness and justice in the employee appraisal process within the Department of Homeland Security*(Doctoral dissertation, Colorado Technical University).

79. Vaccaro, A. (2012). To pay or not to pay? Dynamic transparency and the fight against the Mafia's extortionists. *Journal of business ethics*, *106*(1), 23-35.

80. Van Dyck, C., Frese, M., Baer, M., & Sonnentag, S. (2005). Organizational error management culture and its impact on performance: a two-study replication. *Journal of applied psychology*, *90*(6), 1228.

81. Wagenaar, W. A., Hudson, P. T., & Reason, J. T. (1990). Cognitive failures and accidents. *Applied Cognitive Psychology*, *4*(4), 273-294.

82. Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of management*, *17*(3), 601-617.

83. Wilson, A., Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2012). *Services marketing: Integrating customer focus across the firm*. McGraw Hill.

84. Yamazaki, Y., & Yoon, J. (2016). A Cross-National Study of Fairness in Asia: How Perceptions of a Lack-of-Group Bias and Transparency in the Performance Evaluation System Relate to Job Satisfaction. *Human Resource Management*, *55*(6), 1059-1077.

85. Zhao, B., & Olivera, F. (2006). Error reporting in organizations. *Academy of Management Review*, *31*(4), 1012-1030.