The relationship between subordinates’ moqi and employees’ safety behaviour — a moderated mediation model

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ABSTRACT

Objectives: Based on the social information processing theory and impression management theory, we construct a moderated mediation model to explore how and when subordinates’ moqi affects safety behaviour.

Methods: A questionnaire study was conducted, using cluster random sampling, to select 841 employees from a state-owned petrochemical enterprise in Chinese as the subjects, data was collected in two stages. Subordinates’ moqi, job satisfaction, team psychological safety, and safety behaviour scales are chosen as measuring tools.

Results: Subordinates’ moqi has positive effects on safety compliance and safety participation; job satisfaction mediates the relationship of subordinates’ moqi and safety compliance, and safety participation; when team psychological safety is at a lower level, subordinates’ moqi has a stronger promotion effect on safety compliance and safety participation through job satisfaction.

Conclusions: Subordinates’ moqi can be an effect way to promote safety behaviour, and job satisfaction might be a psychological process in the above relation. Team psychological safety plays a moderating role in this mediation process.

KEY POINTS

What is already known about this topic:
(1) There is a limit on the extent to which employees’ safety behaviour can be improved through physical factors (such as safety equipment).
(2) Soft factors in organizations, such as leadership styles, leaders’ behaviours, and safety culture have effects on safety behaviour.
(3) Subordinates who have a state of moqi with their supervisors can implicitly understand the intention and expectation of their supervisors, and ultimately perform behaviours expected by the supervisors.

What this topic adds:
(1) The positive relationship between subordinates’ moqi and employee safety behaviour is discussed for the first time.
(2) We uncovered the psychological process of subordinates’ moqi affecting safety behaviour, that is, the indirect role of job satisfaction.
(3) Team psychological safety can moderate the indirect effect of subordinates’ moqi on safety behaviour through job satisfaction.

Introduction

According to the International Labour Organization (ILO) Newsroom (2021, September 17), nearly 2 million people die from work-related causes every year. To minimize the occurrence of workplace accidents, an increasing number of researchers have focused on the antecedents and mechanism of safety behaviour. Neal et al. (2000) divided safety behaviour into two dimensions: safety compliance and safety participation. Safety compliance means that employees carry out production activities by following the safety rules and procedures established by the organization, such as wearing safety protective equipment; safety participation refers to a series of behaviours in which employees take the initiative to maintain the safety of the organization, such as actively protecting the safety of colleagues and solving safety-related problems for colleagues (Neal & Griffin, 2006). Previous studies have suggested that physical factors (e.g., safety equipment) have only a limited effect on the improvement of safety behaviour (He et al., 2018), while soft factors have an increasing marginal influence on safety behaviour (Yang et al.,

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Therefore, researchers have been paying more attention to soft factors in organizations, such as leaders’ behaviour (Barling et al., 2002; Conchie & Donald, 2009), safety culture and climate (Cooper & Phillips, 2004; Gulденmund, 2000; Vinodkumar & Bhasi, 2010; Zohar, 2009) and person–environment fit (Wang et al., 2021), and the mechanisms of the above factors on safety behaviour are also explored. These studies mainly focused on the influence of leadership or organizational culture on safety behaviour. However, Luria et al. (2008) emphasized the importance of leader-employee interaction on employees’ behaviours, including safety behaviour. “Moqi” is such a construct, referring to the state between two parties. Linguistically, “mo” means silence and the absence of words, and “qi” means consensus or fit, hence moqi is a state where one party implies something and the other party tacitly understand it (Zheng, Li, Harris et al., 2019).

Therefore, from the perspective of subordinates, this study introduces the variable of subordinates’ moqi and discusses the relationship between subordinates’ moqi and employee safety behaviour for the first time. The word Moqi originates from the East and is evident almost everywhere in Chinese culture. China is a country with high power distance (Hofstede, 1980). The relationship between superiors and subordinates is highly hierarchical, and the activities between the two groups are often unidirectional. That is, subordinates need to follow instructions from superiors and meet their requirements for work tasks, but there is no necessity for superiors to care about and satisfy the demands of subordinates (Wang et al., 2018). Therefore, under such cultural background, the importance of subordinates’ moqi is highlighted, which is a bridge connecting superiors and subordinates.

Subordinates’ moqi means that subordinates can understand and comprehend the intention and plan of their superiors without the plan being explicitly stated (Zheng, Li, Harris et al., 2019). According to social information processing theory, the social information provided by colleagues can affect individual behaviour (Salancik & Pfeffer, 1978). Subordinates having a high degree of moqi with supervisor can perceive the supervisor’s intention, plan and expectation from the supervisor’s eyes, facial expressions, intonation and body language and complete relevant tasks in a way that satisfies the supervisor (Zheng, Li, Zhang et al., 2019). In this dynamic process, subordinates perceive the affirmation and support from the supervisor by constantly seeking feedback and positive interaction (Wang et al., 2018) and believe that they are valued and recognized by the organization (Zhou & Zheng, 2019). Consequently, employees tend to strictly practise behaviours within the role (for example, compliance with safety regulations), show more safety compliance behaviours, take the initiative to make suggestions for organizational safety management, and show safety participation behaviours conducive to the long-term development of the organization. Accordingly, the following is hypothesized:

**H1a:** Subordinates’ moqi is positively correlated with safety compliance.

**H1b:** Subordinates’ moqi is positively correlated with safety participation.

The link between subordinates’ moqi and safety behaviour has not yet been proven by empirical research, and the potential process through which subordinates’ moqi affects safety behaviour also remains unclear. Drawing on social information processing theory (Salancik & Pfeffer, 1978), we propose that job satisfaction plays a mediating role in the relationship between subordinates’ moqi and employee safety behaviour. According to this theory, work characteristics can affect an individual’s attitude towards work, and such work characteristics are often not intrinsic features of the objective environment but the subjective construction of the individual’s work environment (Salancik & Pfeffer, 1978). As a manifestation of a high-quality relationship between supervisors and subordinates (Zhou & Zheng, 2019), subordinates’ moqi can also be regarded as a vital feature of the workplace, through which employees will perceive less uncertainty and obtain more information and support from their supervisors (Ma et al., 2020). Through the processing of these positive social cues, employees will have more favourable evaluations of their own work environment, thus enhancing job satisfaction. In addition, some researchers recognize that one of the factors influencing job satisfaction is the relationship between superiors and subordinates (Volmer et al., 2011). Therefore, this study proposes that there is a positive correlation between subordinates’ moqi and job satisfaction.

Additionally, social information processing theory also holds that individuals evaluate their environment based on their attitudes and choose to behave accordingly. On the one hand, with high job satisfaction, employees’ needs will be met, and they will have a higher sense of belonging to the team and the organization (Brambilla & Riva, 2017; Morganson et al., 2010) and classify themselves as members of the inner group, thus showing more in-role behaviours, such as safety compliance. On the other hand,
with high job satisfaction, employees will take initiative to take responsibility and engage in more safety participation behaviours (Wei et al., 2016), which are discretionary (Lyubykh et al., 2022). Therefore, this study suggested that job satisfaction could positively affect employees’ safety behaviours. In summary, this study proposes the following hypothesis:

**H2:** Job satisfaction mediates the relationship between subordinates’ moqi and safety compliance and safety participation.

Safety behaviour, also known as safety performance, is an important aspect of job performance (Griffin & Neal, 2000). According to Judge, Thoresen, Bono, and Patton (2001), satisfaction has a moderate positive correlation with performance. Also, Brayfield and Crockett (1955) suggest that job satisfaction need not improve performance. Meanwhile, some researchers call for exploring the moderators in the satisfaction-performance relationship (Bowling et al., 2015). In response to it, this study explores a team-related moderator between job satisfaction and safety behaviour, because much of the work in organizations is completed through teams (Marks et al., 2001). Team psychological safety is a belief or perception shared by team members that it is safe to take interpersonal risks within the team, which derives from trust and respect among each other (Edmonston, 1999).

This study suggests that the impact of team psychological safety on individuals is driven by impression management motivation. According to impression management theory, individuals in social situations are inclined to undertake impression management, which will eventually affect their behaviours related to social roles (Goffman, 1959), and individuals’ motivation for such impression management could differ in degree or level (Bolino et al., 2016). In particular, this study suggests that when team psychological safety is low, team members tend to have poor interpersonal relationships and lower levels of trust and respect. Studies suggest that strong ties and mutual trust within the team illustrate the existence of group social capital, a set of resources available to a group, bringing instrumental benefits (e.g., timely access to information) and emotional support (Chang, 2017; Oh et al., 2006). Hence, this study accordingly argues that the lower-level trust within the team means employees have less available resources for use (less information and other support), which may be detrimental to the completion of tasks, hence damaging the impression the leader has of the employees. To protect their positive images from damage or threat, individuals’ motivation to carry out impression management will be triggered (Tetlock & Manstead, 1985). Thus, driven by high impression management motivation, in teams with low psychological safety, job satisfaction is more likely to encourage employees to exhibit safety compliance and safety participation, which are behaviours that are appreciated by leaders. However, when team psychological safety is high, employees can freely perform and express themselves without worrying that their words and deeds will threaten their status or others’ impression of them (Kahn, 1990), meaning that there is less potential threat to employees’ self-image and thus having low motivation to conduct impression management. At this time, regardless of the level of job satisfaction, employees always tend to show safety behaviours; that is, the positive promotion effects of job satisfaction on safety participation and safety compliance are weakened. Therefore, this study proposes that team psychological safety plays a moderating role between job satisfaction and safety behaviour. Combined with the above inferences about the mediation effect, the study further proposes that team psychological safety plays a moderating role in the above mediation path. We thus put forward the following hypothesis:

**H3:** Team psychological safety moderates the latter half of the indirect pathway through which subordinates’ moqi affects safety compliance and safety participation through job satisfaction.

**Method**

**Sample and procedure**

With the help of the human resources department, 841 out of more than 1000 employees from a state-owned petrochemical enterprise in Chinese were selected as participants by the cluster random sampling method. In this study, data were collected at two time points to minimize common method bias (Zhou & Long, 2004). Employees completed the questionnaire on subordinates’ moqi at time point 1 and completed the questionnaire on job satisfaction, team psychological safety and safety behaviour at time point 2 (i.e., two weeks later). After the invalid questionnaires were eliminated, the number of final valid matching questionnaires was 702, yielding a response rate of 83.47%. Regarding the demographic characteristics of the participants, 64.1% were male, 89.5% were married, 39.3% had an undergraduate degree or above, and front-line employees accounted for 73.9%, 15.8% were front-line managers,
others (temporary front-line workers who have six-month contracts with the company) accounted for 10.3%. The average age of the sample was 38.39 years old (SD = 7.50), and the average number of working years was 16.06 years (SD = 8.49).

All of the participants volunteered to participate in our research and signed the informed consent form at the beginning of the study. In addition, all procedures met the ethics standards of the research committee of Shandong Normal University, the Helsinki Declaration in 1964, and other similar ethical standards.

**Measures**

Unless otherwise noted, all measures used 5-point Likert rating scales (1= strongly disagree, 5= strongly agree).

**Subordinates' moqi**

We measured subordinates’ moqi with an eight-item scale developed by Zheng, Li, Harris et al. (2019). Sample items included “I can usually understand any ambiguities and concerns about work from my supervisor”. Cronbach’s α = .96.

**Job satisfaction**

Job satisfaction was measured using a three-item scale developed by Hackman and Oldham (1975) and revised by Shu and Liang (2015). Sample items included “Generally, I am satisfied with my work”. Cronbach’s α = .91.

**Team psychological safety**

We adopted the 7-item scale developed by Edmondson (1999) and revised by Yang and Zhang (2012) to measure team psychological safety. Using confirmatory factor analysis techniques and based on the opinion of experts in psychometrics, items with factor loads lower than .40 were deleted, and 5 items were reserved for formal study. Sample items included “If I make a mistake on the team, the team members will often criticize me for it.” Cronbach’s α = .66.

**Safety behaviour**

Safety behaviour was measured using an 11-item scale developed by Neal and Griffin (2006) and revised by Ye et al. (2014). The scale includes two dimensions: safety compliance and safety participation. Sample items of safety compliance included “I strictly abide by the safety rules and regulations in my work”. Sample items of safety participation included “I voluntarily carry out tasks or activities that help improve workplace safety”. Cronbach’s α = .93.

**Control variables**

We controlled for gender, age, working years (organizational tenure), and position levels.

**Data analysis**

SPSS 22.0 and Mplus 8.0 statistical software were used for data analysis and model testing.

**Result**

**Measurement model**

Using Mplus 8.0, confirmatory factor analysis was conducted to test the discriminant validity among the variables. The results showed that the five-factor model provided an obviously better fit than the other comparative models (see Table 1), suggesting that the four variables in this study have good discriminant validity.

Although the data were collected at two time points, it is still important to further evaluate whether there are serious problems of common method bias. In line with the standard of Podsakoff et al. (2003), the single-factor model in Table 1 had the worst fit, indicating no serious common method bias. Meanwhile, using Harman univariate factor analysis, we performed unrotated principal component analysis for all items of the four variables in this study, and six factors were obtained, which could explain 80.39% of the total variance. The variance of the first factor was 35.38%, which was lower than the judgement standard of 40% (Zhou & Long, 2004), again indicating that there was no serious common method bias problem in this study.

**Descriptive statistics**

Descriptive statistics and correlations among all study variables are reported in Table 2. Correlations between all variables were significant. Specifically, subordinates’ moqi was significantly and positively correlated with safety compliance and safety participation ($r = 0.22, p < 0.01$; $r = 0.36, p < 0.01$), which supported Hypotheses 1a and 1b. Moreover, subordinates’ moqi was significantly and positively related to job satisfaction ($r = 0.39, p < 0.01$), and job satisfaction was significantly and positively associated with safety compliance ($r = 0.34, p < 0.01$) and safety participation ($r = 0.36, p < 0.01$), which provided preliminary support for Hypothesis 2.
Table 1. Results of confirmatory factor analyses.

| Model types                        | $\chi^2$ | df | $\chi^2$/df | RMSEA  | CFI   | TLI   | SRMR |
|------------------------------------|----------|----|-------------|--------|-------|-------|------|
| Five-factor model (A, B, C, D, E)  | 1084.77  | 304| 3.57        | 0.06   | 0.96  | 0.95  | 0.09 |
| Four-factor model (A+B, C, D, E)   | 5314.23  | 318| 16.71       | 0.15   | 0.73  | 0.70  | 0.14 |
| Three-factor model (A+B+C, D, E)   | 9104.60  | 321| 28.36       | 0.20   | 0.52  | 0.47  | 0.20 |
| Two-factor model (A+B, C+D+E)      | 7924.35  | 323| 24.53       | 0.18   | 0.58  | 0.55  | 0.17 |
| One-factor model (A+B+C+D+E)       | 11744.10 | 324| 36.25       | 0.22   | 0.37  | 0.32  | 0.21 |

$\text{A}=\text{subordinates’ moqi}, \text{B}=\text{job satisfaction}, \text{C}=\text{safety compliance}, \text{D}=\text{safety participation}, \text{E}=\text{team psychological safety}.$

Table 2. Descriptive statistics and correlations among study variables (N = 702).

| Variables                      | $M$  | SD   | 1    | 2    | 3    | 4    | 5    |
|--------------------------------|------|------|------|------|------|------|------|
| Subordinates’ moqi             | 4.29 | 0.66 | -    | -    | -    | -    | -    |
| Job satisfaction              | 4.45 | 0.61 | 0.39**| -    | -    | -    | -    |
| Safety behaviour              | 6.75 | 0.43 | 0.33**| 0.39**| -    | -    | -    |
| Safety compliance             | 6.81 | 0.42 | 0.22**| 0.34**| 0.88**| -    | -    |
| Safety participation          | 6.69 | 0.56 | 0.36**| 0.36**| 0.91**| 0.59**| -    |
| Team psychological safety     | 3.81 | 0.78 | 0.14**| 0.25**| 0.30**| 0.29**| 0.24**|

**$p < 0.01.$

Hypothesis testing

Tests of mediating role of job satisfaction

According to the existing research (Hayes, 2013; Wen & Ye, 2014), the bias-corrected bootstrap test was conducted to test indirect effects using SPSS's PROCESS macro, with a sampling number of 5000 and a confidence interval of 95%. The results showed that after controlling for age, gender, position levels and tenure, subordinates’ moqi had a significant influence on safety compliance and safety participation ($B = 0.14$, $t = 5.75$, $p < 0.001$; $B = 0.31$, $t = 10.10$, $p < 0.001$). Even when the mediating variable was included in the model, the significant effects of subordinates’ moqi on safety compliance ($B = 0.06$, $t = 2.61$, $p < 0.01$) and safety participation ($B = 0.23$, $t = 7.08$, $p < 0.001$) still remained. In addition, subordinates’ moqi had a significantly positive effect on job satisfaction ($B = 0.35$, $t = 10.62$, $p < 0.001$), which also had a significant positive impact on safety compliance and safety participation ($B = 0.21$, $t = 7.86$, $p < 0.001$; $B = 0.24$, $t = 6.93$, $p < 0.001$). Moreover, the 95% CI for the indirect effect of subordinates’ moqi on safety compliance via job satisfaction did not include zero (indirect effect = 0.07; 95% CI [.047, .104]), and the 95% CI for the direct effect of subordinates’ moqi on safety compliance did not include zero (direct effect = 0.06; 95% CI [.016, .113]), causing the mediating effect to account for 53.00% of the total effect (total effect = 0.14; 95% CI [.090, .184]). Similarly, the 95% CI for the indirect effect of subordinates’ moqi on safety participation via job satisfaction did not include zero (indirect effect = 0.08; 95% CI [.052, .119]), and the 95% CI for the direct effect of subordinates’ moqi on safety participation did not include zero (direct effect = 0.23; 95% CI [.163, .288]), indicating that the mediating effect accounted for 26.87% of the total effect (total effect = 0.31; 95% CI [.249, .369]). More specific values are shown in Table 3.

In conclusion, the above results supported Hypothesis 2.

Tests of moderated mediation model

The moderated mediating effect was tested by the SPSS macro program PROCESS (model 14), and the parameters of the regression equations were estimated. We centred the predictor and moderator variables and controlled for gender, age, tenure, and position levels. In line with Wen and Ye (2014), the moderated mediation model will be valid if the model satisfies the following conditions: (a) in Equation 1 and 4, the total effect of subordinates’ moqi on safety compliance and safety participation is significant; (b) in Equations 2 and 5, subordinates’ moqi has a significant effect on job satisfaction; and (c) in Equations 3 and 6, job satisfaction has a significant effect on safety compliance and safety participation, and the interaction term between job satisfaction and team psychological safety has a significant effect on safety compliance and safety participation. As shown
in Table 4, the three conditions are all satisfied, supporting Hypothesis 3.

To further reveal the interaction effect between team psychological safety and job satisfaction, we add or subtract one standard deviation to the mean of team psychological safety, perform a simple slope test, and draw simple effect analysis diagrams (see Figures 1 and 2). The results showed that when team psychological safety was low, job satisfaction significantly and positively predicted safety compliance ($B_{\text{simple}} = 0.31, t = 9.41, p < 0.001$) and safety participation ($B_{\text{simple}} = 0.30, t = 6.68, p < 0.001$); however, when team psychological safety was high, job satisfaction had no significant effect on safety compliance ($B_{\text{simple}} = -0.03, t = -0.80, p = 0.43$) or safety participation ($B_{\text{simple}} = 0.07, t = 1.29, p = 0.20$). As reported in Table 5, the indirect effects of subordinates’ moqi on safety participation and safety compliance through job satisfaction were moderated by team psychological safety, such that the effects were both positive and significant at low levels of team psychological safety but not at high levels. The difference value of the indirect effects didn’t contain zero in 95%CI either.

Additionally, Figures 1 and 2 show that regardless of whether job satisfaction is high or low, as long as team psychological safety is at a high level, both safety compliance and safety participation are higher than those teams with a low level of team psychological safety. When team psychological safety is at a low level, with an improvement of job satisfaction, employees’ tendency to perform safety compliance and safety participation behaviours will increase. In other words, job satisfaction has a stronger positive effect on safety compliance and safety participation when team psychological safety is low, but this effect is weakened with the improvement of team psychological safety, supporting Hypothesis 3.

In summary, the mediating process of subordinates’ moqi affecting safety compliance and safety participation through job satisfaction was moderated by team psychological safety. For individuals with low team psychological safety, subordinates’ moqi had a strong effect on safety compliance and safety participation through job satisfaction, while for individuals with high team psychological safety, the indirect effect of subordinates’ moqi on safety compliance and safety participation through job satisfaction was weakened.

**Discussion**

Based on social information processing theory and impression management theory, this study examined the relationship between subordinates’ moqi and safety compliance and safety participation, as well as the role of job satisfaction and team psychological safety in the above relationship. The results showed that there was a positive correlation between subordinates’ moqi and employees’ safety compliance and safety participation; job satisfaction played a mediating role in the relationship between subordinates’ moqi, safety compliance and safety participation; and team psychological safety moderated the above mediating relationship. The findings contribute to the research field of employee safety behaviour in the following ways.

First, the relationship between subordinates’ moqi and employee safety behaviour is discussed for the first time. The results show that subordinates’ moqi can positively influence employees’ safety compliance and safety participation, supporting Hypotheses 1a and 1b. According to the theory of social information processing, to some extent, the social information received by individuals will affect their behaviour. A state of moqi between subordinates and supervisors indicates the agreement of expectations, intentions, and job requirements between them. On the one hand, such a state means high-quality interpersonal relationships between supervisors and subordinates; on the other hand, it also means that subordinates can obtain more information, attention and support.

### Table 3. Coefficient estimates for the mediation model for job satisfaction.

| Predictor     | Safety compliance | Safety compliance | Job satisfaction | Safety participation | Safety participation | Job satisfaction |
|---------------|-------------------|-------------------|------------------|----------------------|----------------------|------------------|
| B             | p                 | B                 | p                | B                    | p                    | B                |
| Gender        | 0.03              | 0.358             | 0.02             | 0.562                | -0.05                | 0.291            |
| Work position | -0.02             | 0.553             | -0.02            | 0.540                | -0.01                | 0.878            |
| Age           | 0.01              | 0.165             | 0.01             | 0.153                | 0.00                 | 0.732            |
| Working years | -0.00             | 0.463             | -0.00            | 0.489                | 0.00                 | 0.965            |
| Job satisfaction | 0.21***         | 0.000             | **0.24***        | 0.000                | **0.24***            | 0.000            |
| Subordinates’ moqi | 0.06**          | 0.009             | 0.14***          | 0.000                | 0.35***              | 0.000            |
| $R^2$         | 0.13              | 0.05              | 0.15             | 0.20                 | 0.14                 | 0.15             |
| F             | 17.38***          | 7.81***           | 25.07***         | 28.79***             | 23.35***             | 25.07***         |

*p < 0.05, **p < 0.01, ***p < 0.001.
from supervisors (Zheng, Li, Zhang et al., 2019; Zhou & Zheng, 2019). All this positive social information enables subordinates to build closer bonds with the organization, identifying themselves as members of the inner group, and performing more in-role behaviours, such as abiding by safety regulations and other safety-compliance behaviours (Zheng, Li, Zhang et al., 2019; Zheng, Li, Harris et al., 2019). At the same time, subordinates feel that they are respected and recognized in the organization, so they are more likely to initiate actions beneficial to the organization, such as timely reporting of potential risk factors, putting forward suggestions related to safety management, and other safety participation behaviours (Zhou & Zheng, 2019). The results not only shed light on the study of safety behaviour from the perspective of followership but also enrich the research on the outcome variables of subordinates’ moqi.

Second, the results show that job satisfaction plays a mediating role between subordinates’ moqi and employee safety behaviour, verifying Hypothesis 2. Previous studies have also shown that subordinates’ moqi can not only directly affect employees’ behaviour but also indirectly affect employees’ behaviour through their cognition (Zheng, Li, Harris et al., 2019). According to social information processing theory, subordinates’ interpretation of work environment characteristics will affect their attitudes towards work, which then affects employees’ behaviour (Salancik & Pfeffer, 1978). The state of moqi between subordinates and supervisors represents the positive dynamic interaction between subordinates and superiors (Wen et al., 2021). In this dynamic positive interaction, employees will improve their evaluation of their work which will lead to enhanced job satisfaction, further encouraging employees to engage in more safety compliance and safety participation behaviour (Liu et al., 2018). Therefore, the findings broaden the understanding of how subordinates’ moqi promotes employee safety behaviour.

Finally, the results show that team psychological safety moderates the second half of indirect pathway of subordinates’ moqi on safety behaviour through job satisfaction, supporting Hypothesis 3, namely, when team psychological safety is lower, subordinates’ moqi has a stronger promotion effect on safety compliance and safety participation through job satisfaction. The perspective of impression management can provide an explanation for this result. Compared with higher psychological safety, individuals in a group with lower psychological safety perceive poor relationships and low-level trust among team members (Edmondson, 1999), owning less available resources
Figure 1. The interactive effect of job satisfaction and team psychological safety on safety participation. Higher = 1 SD above the mean; Lower = 1 SD below the mean.

Figure 2. The interactive effect of job satisfaction and team psychological safety on safety compliance. Higher = 1 SD above the mean; Lower = 1 SD below the mean.

Table 5. Summary of conditional indirect effects.

| Mediating effect: subordinates’ moqi—job satisfaction—safety participation | 95% Confidence interval of indirect effect |
|---------------------------------|------------------------------------------|
| Moderator:TPS | Indirect effect | SE | Low | High |
| High TPS (+SD) | 0.02 | 0.02 | −0.008 | 0.061 |
| Low TPS (−SD) | 0.10 | 0.02 | 0.062 | 0.154 |
| Indirect effect difference | −0.08 | 0.03 | −0.140 | −0.030 |

Mediating effect: subordinates’ moqi—job satisfaction—safety compliance

| Mediating effect: subordinates’ moqi—job satisfaction—safety compliance | 95% Confidence interval of indirect effect |
|---------------------------------|------------------------------------------|
| Moderator:TPS | Indirect effect | SE | Low | High |
| High TPS (+SD) | −0.01 | 0.01 | −0.032 | 0.007 |
| Low TPS (−SD) | 0.11 | 0.02 | 0.071 | 0.155 |
| Indirect effect difference | −0.12 | 0.03 | −0.174 | −0.075 |

TPS = team psychological safety; SE = standard error; *p < 0.05, **p < 0.01, ***p < 0.001.

for use in work, so they are threatened with a damaged impression and more likely to conduct impression management (Tetlock & Manstead, 1985). At this time, the job satisfaction caused by subordinates’ moqi is more easily transformed into safety compliance and safety participation behaviours. This suggests that job satisfaction can be a protective factor for employee safety behaviour when there are adverse factors in the organization (such as low team psychological safety). It is worth mentioning that this study does not deny the important role of high team psychological safety on employee safety behaviour. The results show that when team psychological safety is high, there is no significant relationship between job satisfaction and safety compliance and safety participation. However, when team psychological safety is high, regardless of the level of job satisfaction, employees’ tendency to perform safety compliance and safety participation is always higher than that of low team psychological safety. This indicates that the existence
of team psychological safety creates a good team atmosphere for employees, in which employees will establish interpersonal relationships of mutual trust and support with team members and conduct behaviours beneficial to the organization (Kahn, 1990). The results enrich our understanding of the boundary conditions of subordinates’ moqi affecting safety behaviour, and expand the application scope of impression management theory. Additionally, this study highlights that team- or organization-related variables are also important factors affecting employee behaviour.

The current study also has some implications for individual employees and management practices. For individual employees, subordinates’ moqi is beneficial to their positive work state and behaviour, which will obtain supervisors’ approval and praise. Moreover, research has found that feedback seeking positively predicts subordinates’ moqi (Wang et al., 2018), so employees can strengthen their own feedback seeking behaviour to build moqi with supervisors. For management practices, recent study has suggested that superior satisfaction positively affects subordinates’ moqi (Sun & Zheng, 2021), therefore, supervisors should timely know employees’ true attitudes towards them, cultivate high quality relationships with employees, and exhibit positive leadership styles, such as coaching-oriented leadership (Zheng, Li, Harris et al., 2019) and authentic leadership (Wen et al., 2021). Moreover, managers should develop employee assistance programs (EAPs), and consider designing and redesigning work, such as increasing motivational, task and knowledge work characteristics (Morgeson & Humphrey, 2006), which are all helpful to improve job satisfaction. Finally, organizations can use team building activities to strengthen communication among team members to create a safe and harmonious team atmosphere.

The findings should be considered in light of the following limitations. First, the sample of this study is limited to employees of a petrochemical enterprise in China; however, employees in different safety-related industries (e.g., construction and coal mining industries) value safety behaviours differently. At the same time, subordinates’ moqi, as a construct generated in Eastern culture, remains to be further studied to determine whether its relevant research conclusions can be extended to Western culture. Future studies should expand the sample to include different social and organizational cultures so that the research conclusions can be extended. Second, our data was collected at two time points, which can reduce common method bias to some extent. However, future studies can adopt multiple subjects to evaluate employees’ safety behaviours (e.g., let direct leaders evaluate employees) or take objective safety performance as an indicator. Finally, although the team-related variables were taken into account in this study, a cross-level research design was not adopted. To be more in line with the actual situation of enterprises, a cross-level research design can be considered in future research to obtain more accurate inferences.

Conclusions
This study provides support for the link between subordinates’ moqi and safety behaviour, and argues that job satisfaction might be a psychological process in the above relation, and that at lower levels of team psychological safety, subordinates’ moqi has a stronger promotion effect on safety compliance and safety participation through job satisfaction.

Disclosure statement
No potential conflict of interest was reported by the author(s).

Data availability statement
Research data are not shared.

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