Original Research Article

Organization resilience and organizational commitment: The roles of emotion appraisal and psychological safety

Helena Lee

The University of Newcastle, Australia, Singapore Campus, Singapore 188064, Singapore;
helena.lee@newcastle.edu.au

Abstract: **Purpose:** The study examines the mediating effect of self-emotion appraisal and other-emotion appraisal on psychological safety, individual resilience, and organizational commitment at the workplace. **Design/methodology/approach:** This study generated 140 survey responses from workers in diverse occupations and industries during the COVID-19 pandemic. A mixed-methods data analysis was conducted. Hierarchical regression analysis was employed to test the hypotheses, and process macroanalysis was used to generate the mediation analysis. Qualitative data analysis through thematic coding was adopted to interpret the respondents' written opinions and narratives. **Findings:** The results revealed that self-emotion appraisal strongly correlates to resilience, but evaluation of self-emotion has no effect on organizational commitment. Other-emotion appraisal and psychological safety are not significant predictors of resilience at the workplace. Rather, psychological safety is a significant predictor of organizational commitment. The qualitative analysis generated from the respondents' narratives provides deeper insight into the quantitative results. Additional data that emerged from the qualitative interpretation revealed other factors that are related to emotional appraisal, psychological safety, resilience, and organizational commitment. **Practical implications:** The findings shed light on the need to understand an individual's emotional appraisal when instilling workplace resilience. Further, promoting psychological safety, such as by involving employees in the change process, managing fairness perception, and eliciting trust, enhances organizational commitment in the workplace. Integrating open communication, management intervention, and coaching programmes should form part of the employee engagement and development functions to help build organizational resilience and commitment. **Originality/value:** This research is an original contribution conducted during the global health crisis that led to abrupt changes in the workers' lives and the workplaces in Singapore. **Research implications:** This present study demonstrated constructive findings on emotion regulations and perceived psychological safety associated with resilience and commitment amid the disruptive changes in work practices at the workplace. Further, the outcome of the study shows the mediating effect of self-emotional appraisal on psychological safety and resilience. The result draws parallels with past literature that showed that individuals who appraised their emotions tended to recalibrate and recognize their subjective behaviour and take actions to modify it. **Social implications:** Emotion regulation connotes employees' emotion coping strategies, and research showed that emotion reappraisal produces a positive effect on workplace relationship quality.

Keywords: emotion appraisal; emotional regulation; organizational commitment; psychological safety; resilience

1. Introduction

The occurrence of crises or changes in the external environment affects employees' emotions at the

workplace as organizations adjust their work practices in response to emergent circumstances. Changes in the workplace tend to shape employees' emotions and perceptions concerning uncertainty such as job security and resource distribution. During a major crisis, the organization plays a significant role in assuring employees, lifting their confidence, and instilling resilience in facing the realm of uncertainty. Resilience refers to the ability of an individual to rebound from crisis, adversity, conflict, or major changes[1].

Employees regulate and appraise their emotions by making sense of the changes while adhering to workplace rules and procedures. Some authors suggest that emotion appraisal is a relational process[2–5]. Other studies found that emotion moderates the relationship between conflict and individual performance[6]. Self-emotion appraisal involves an individual's emotion regulation strategies in adjusting one's emotion, in particular negative emotion, and being able to express and re-evaluate her or his emotion in a constructive way[6–8]. Other-emotion appraisal relates to an individual's ability to assess and recognize emotions in others[8].

Additionally, employees who feel safe expressing their true selves without fear of negative outcomes experience positive psychological safety[9]. The culture, peer support, and autonomy to carry out work play a pivotal role in promoting psychological safety. The present paper examines if self-emotion appraisal, other-emotion appraisal, and psychological safety influence individual resilience and organizational commitment at the workplace.

Previous studies showed a correlation between employee turnover or absence and organizational commitment[10]. Other studies found that organization support and reward satisfaction lead to affective commitment but are not associated with continuance commitment[11]. Employee commitment to an organization encompasses affective and continuance commitment to the organization[12]. Affective commitment involves an individual's emotional element, while continuance commitment involves the cost-and-benefit examination of exiting an organization. Organizations that care for the well-being of employees contribute to employee satisfaction and, in turn, attract employees to be committed to their workplace.

Past research was scant in examining the role of emotion appraisal in organizational commitment. Hence, this study seeks to investigate the mediating effects of self- and others' emotional appraisal on resilience and commitment.

The present study generated 140 survey responses from workers in diverse occupations and industries during the COVID-19 pandemic in 2020. This study employs a mixed-methods approach, using statistical analysis and qualitative thematic coding of the respondents' narratives to interpret the findings. The multiple regressions and macroprocessing analyses showed that self-emotion appraisal strongly correlates with resilience, and self-emotion is a mediating factor in psychological safety and resilience. However, the evaluation of self-emotion has no effect on organizational commitment. Rather, psychological safety is a significant predictor of organizational commitment.

Despite the small sample size in this study, the findings pave the way for a longitudinal study and for organizations to understand employee emotions and examine the critical function of emotional appraisal in workplace resilience. Further, the present study shows that promoting psychological safety, such as involving employees in the change process and eliciting trust, enhances organizational commitment.

2. Literature review

2.1. Roles of emotion and emotion appraisal

Emotional states encompass the expressions and feelings of positive discrete emotions such as optimism, pride, hope, and joy, and the display of negative discrete emotions such as fear, anger, anxiety, sadness, and

stress[13,14]. Crisis and events elicit emotional responses[15] where individuals appraise the situation of how an event and the changes to work and life mean to them. According to Lee's study[16], the findings shed light on employees who felt that they had control over their work schedule and experienced trust between the management and employees, who expressed gratitude and positive emotion. On the contrary, when employees perceived that their jobs were at risk of being terminated or the absence of social connections at work, they exhibited negative emotional states such as stress and anxiety.

Employees who engage in self-emotional appraisal in adjusting their state of emotions tend to re-evaluate their emotions in a constructive way and are more expressive emotionally[6–8]. In a way, individuals construct and shape their behaviours and thoughts through evaluating their emotions. Inward-focused (self-focused) and outward-focused (other-focused) emotion appraisals demonstrate different behavourial outcomes[17–20]. Inward-focused emotions occur when an employee reflects his or her own behaviour and feelings that are at odds with personal ideals and values or pose a threat to their social or personal identity[21,22] at the workplace.

In other-emotion appraisal, individuals examine and recognize the emotion in others[8]. Outward-focused emotions arise when an employee assesses another's role in attributing to an outcome such as injustice[23], in the way resources such as monetary reward, training, or office space are allocated by the management.

Scholars' investigations of the appraisal of emotion or emotion regulation showed the association of emotion appraisal with physical and psychological health[7,24,25]. According to Gross[7], individuals regularly appraise their emotions, and emotion reappraisal led to a reduction in behavioural and subjective emotion signals. The literature demonstrates that emotion appraisal contributes to behavioural change and action-oriented outcomes.

2.2. Resilience

In the field of psychological development, resilience is defined as one's mental state that is absent from severe harm to well-being due to adversity or a traumatic event[26]. Over the years, scholars have tended to conceptualize resilience as a personality trait (e.g., Block and Kremen[27], Connor and Davidson[28], Fletcher and Sarkar[29]). In addition, the experience of resilience puts an individual through the process of tapping on his or her resources, such as emotional or social resources[29,30]. In the context of an organizational environment, employee resilience refers to the individual's ability to overcome or bounce back from a sudden event, adversity, or failure[1].

A previous study[31] showed that social resources such as the social exchange relationships of the leader-member and team-member interactions mediated the effects on employees' resilience and organizational commitment. The findings demonstrated that positive work-related outcomes, interpersonal relationships, and mental health were attributed to the employees' resilience. Other scholars have found a positive relationship between resilience and organizational commitment[32–34].

To our knowledge, the relationship between self- and other-emotion appraisals and resilience was under-researched. Against this backdrop, this present study seeks to examine the phenomenon of self-emotion appraisal and other-emotion appraisal's influential effect on individual resilience and organizational commitment at the workplace.

Therefore, our research questions and hypotheses seek to find out:

RQ1 Does emotional appraisal affect resilience?

H1 Self-emotion appraisal is associated with resilience.

H2 Other-emotion appraisal is associated with resilience.

2.3. Psychological safety

According to Kahn[9], psychological safety entails the absence of fear of negative outcomes for one's image, position, or career when expressing their true selves at work. In essence, within a psychologically safe environment, an individual will not suffer any detrimental outcome that will negatively affect his or her status at work following the expression of viewpoints. Moreover, psychological safety is an intrinsic resource that is generated from a supportive organization's cultural environment and social support network[35–37]. Several studies showed the relationship between these variables and the mediating effect between supportive leadership, employee engagement, and higher performance (e.g., Nembhard and Edmondson[38]). Furthermore, according to Singh et al.[37], psychological safety is mediated between social support and organizational embeddedness, implying an attachment to work. Further, according to Lee[16], emotional resources such as social emotional resources that include tasks, freedom of expression, and empowerment to carry out their own work without constant monitoring contributed to employees' feelings of positive psychological safety.

During major changes in workplace practices, employees encounter varied levels of stress and hardship. In turn, employees' stress management through evaluating their positive and negative emotions contributes to resiliency. Employees' resilience depends on their psychological coping mechanisms to help them cope and adapt flexibly to change, excessive workload, work conflicts, perceived injustice, lack of autonomy, or suppression of speaking up. Employees's relational contract in performing beyond their expected role is correlated with their psychological resilience[39]. Hence, relational support and perception of psychological safety in an organization are demonstrated through interactional justice or fairness in the treatment of employees and a safe communication space[40].

We further examine the relationship between psychological safety and resilience.

H3: Psychological safety is associated with resilience.

2.4. Organizational commitment

Organizational commitment signals the bond between the employee and the organization[41] or the employee's psychological attachment to an organization[42].

Scholars have linked employee fit, a person's characteristics, and three types of organizational commitment. For example, participation and emotional attachment are identified with affective commitment[43]. According to these authors, organizational commitment includes self-evaluation, such as continuance commitment and normative commitment. In continuance commitment, an individual assesses the perceived cost of exiting the organization, and in normative commitment, the individual examines his or her moral obligation to continue to work in the organization.

Other research suggested that personal characteristics, job characteristics, organizational structure, and employees' locus of control have an impact on organizational commitment (e.g., Suman and Srivastava[44], Hulin et al.[45], Morris and Sherman[46]). According to Meyer et al.[47], commitment energizes one to take a particular course of action, such as displaying a positive work attitude[48,49]. Furthermore, employees who are strongly committed to their organizations are found to enjoy more meaningful work[48]. According to Pathak[50], locus of control as an antecedent influences job attitude. For example, employees' negative perception is linked to attribution to external factors and job dissatisfaction. Attitudinal attitudinal behaviour denotes the intertwined relationship between the emotional element of self and others' appraisals and employees' organizational commitment.

Given the relationship between the state of emotion and resilience, this present study further seeks to examine if an employee's appraisal of their own emotions and others's emotions influences their organizational commitment.

Further, our research questions and hypotheses include:

H4: Self-emotion and other-emotion appraisals mediate between psychological safety and resilience.

RQ2 Does emotional appraisal affect organizational commitment?

H5 Psychological safety is associated with organizational commitment.

3. Methodology

3.1. Participants

The data is an extension of Lee's[16] study (see **Table 1**). Online questionnaires were distributed to participants who are full-time, part-time and contracted workers working in diverse industries (**Table 1**). Through the snowballing approach, the researcher requested institutions, colleagues, and friends to invite workers who are interested to take part in this study, to fill their questionnaire online.

Table 1. Descriptive statistics.

	Frequency	Percentage
Gender		
Male	36	26
Female	104	74
	140	100%
Age		
18-25 years	17	12%
26-33 years	59	42%
34-41 years	16	12%
42-49 years	24	17%
50 years and above	24	17%
	140	100%
Occupation		
Professional (e.g., engineers, lawyer)	25	18%
Managerial	15	11%
Executive	20	14%
Administrator	34	24%
Technical and IT	5	4%
Trainer	1	1%
Education	12	9%
Social & healthcare	6	4%
Marketing	2	1%
Front line/customer Service/retail	11	8%
Others: Nil	9	6%
	140	100%
Industries		
Manufacturing	7	5%
Healthcare	11	8%
Social service & non-profit	4	3%
Sales & service, food & beverage	7	5%
Finance, bank, insurance, legal	15	11%
Media, art, PR, advertising, Communication and IT	9	6%
Religious	1	1%
Government	10	8%

Table 1. (*Continued*).

	Frequency	Percentage
Oil & gas	3	2%
Education	37	26%
Trading & retail	14	10%
Construction & logistics	7	5%
Real estate	1	1%
Hospitality and tourism, fitness	3	2%
Maritime and shipping	3	2%
Aviation	2	1%
Others: Nil	6	4%
	140	100%

After removing 7 incomplete and duplicate responses, the final sample size of 140 survey responses were included for the quantitative and qualitative data analysis.

3.2. Measurement

The quantitative survey questions used a Likert scale of 1 to 5, with 1 being totally disagreeing and 5 being totally agreeing. The operational measurements of the key variables to test the hypotheses are:

Self-emotion appraisal—measured using 4 items adapted from Jiang et al.[6]; Wong and Law[8], with a slight modification to the question to relate the emotion to the workplace context. "I have a good sense of why I have certain feelings (such as feeling happy, sad, and anxious), and "I have a good understanding of what I feel about workplace issues".

Other-emotion appraisal—measured using 4 items. "I always know my friends' emotions from their behaviour", "I am a good observer of other's emotions".

Psychological safety—measured using 4 items adapted by Chrobot-Mason and Aramovich[51,52], "I feel comfortable giving suggestions on the right way to do things at my workplace", "I feel comfortable expressing my fear and anxiety without feeling judged at my workplace".

Organization commitment—measured using 5 items adapted from Meyer and Allen[12] and Singh et al.[37], "I feel a strong sense of belonging to my organization", "I am willing to put in extra effort to help this organization be successful".

Resilience—measured using 4 items, "I can get through difficult times at work like this, because I've experienced challenging times", "I usually manage difficulties one way or another concerning work" (Jiang et al.[6], Wong and Law[8]).

3.3. Qualitative analysis

The survey included open-ended questions requesting the respondents to write or type their comments. For example, a qualitative question asked, "What aspect of the change or behaviour particularly influenced your emotions before and during the crisis?".

The qualitative analysis complements the quantitative results to provide a thick description[53] to understand the multitude of perceptions, views, and experiences of the respondents during this crisis situation and changes in the workplace.

The cycle of coding was conducted by applying in-vitro codes (direct words or comments from the respondent), sub-codes, and analytical codes[54].

4. Results

The means, standard deviations, correlations, and reliabilities are listed in **Table 2**, $n = 140$ respondents. We adopt the hierarchical regression analysis to test the hypotheses and Process Macro analysis[55] Model 4 for the mediation analysis. **Table 3** shows the hierarchical multiple regression analysis of the relationship between emotion appraisal, psychological safety and resilience, and organizational commitment. The direct and indirect effects of psychological safety, self-emotional appraisal, and other-emotional appraisal on resilience and organizational commitment are explained and illustrated in **Figures 1** and **2.**

Scholars have highlighted a common methodology in adopting regression-based data analysis to investigate the correlations between the emotional state and emotion appraisal in a real-life context[56–59]. Further, the process macro analysis is an appropriate instrument for logistic regression path analysis in estimating direct and indirect effects in a single or multiple mediator model and is adopted in business, health sciences, and social disciplines[55].

Table 2. Means, standard deviations, correlations, and reliabilities ($n = 140$).

Variables	M	SD	1	2	3	4	5	6	7	8
Gender	1.74	0.44	–1.74	0.45	0.05	-	-	-	-	-
Age	2.85	1.33	0.05	1.0	0.56	-	-	-	-	-
Years of service	1.70	1.10	0.05	0.56	1.00	-	-	-	-	-
Self-emotion appraisal	15.56	2.11	–0.31	0.10	–0.00	(0.85)**		-	-	-
Others emotion appraisal	19.07	2.64	–0.21	–0.01	–0.02	0.48**	(0.87)**	-	-	-
Psychological safety	13.89	3.30	–0.19	0.10	0.13	0.36**	0.34**	(0.89)**		-
Organizational commitment	18.26	3.06	0.02	0.10	0.13	0.29	0.33**	0.56**	(0.81)**	-
Resilience	15.48	2.10	–0.27	0.10	–0.02	0.60**	0.31	0.35	0.35	(0.74)**

** $p < 0.001$ Cronbach's Alpha reliability indicated in parentheses.

Table 3. Hierarchical multiple regression analysis on the relationship between emotion appraisal, psychological safety and resilience and organizational commitment.

Variable	Resilience			Organizational commitment		
	B	*SE B*	*β*	*B*	*SE B*	*β*
Model 1						
Gender	–1.52	0.38	–0.32	–1.22	0.59	–0.17
Age	0.32	0.15	0.20	0.21	0.23	0.09
Years in service	–0.12	0.18	–0.07	0.12	0.28	0.04
Model 2						
Gender	–0.71	0.34	–0.15	–0.58	0.59	–0.08
Age	0.19	0.13	0.12	0.16	0.22	0.07
Years in service	–0.04	0.15	–0.03	0.15	0.27	0.06
Self-emotion appraisal	0.53	0.80	0.53**	0.21	0.14	0.14
Others emotion appraisal	0.03	0.06	0.30	0.29	0.11	0.25
Model 3						
Gender	–0.65	0.34	–0.14	–0.30	0.52	–0.04
Age	0.18	0.13	0.12	0.15	0.20	0.06
Years in service	–0.08	0.15	–0.04	–0.02	0.24	–0.01
Self-emotion appraisal	0.50	0.08	0.50	0.40	0.12	0.03
Others emotion appraisal	0.00	0.06	0.00	0.17	0.10	0.15
Psychological safety	0.09	0.05	0.14	0.45	0.07	0.48**

** $p < 0.001$, Resilience: Model 1, $R^2 = 0.13$, Model 2, $R^2 = 0.39$, $\Delta R^2 = 0.26$, $p < 0.001$; Model 3, $R^2 = 0.41$, $\Delta R^2 = 0.02$, $p = 0.06$ Organizational Commitment: Model 1, $R^2 = 0.05$, Model 2, $R^2 = 0.15$, $\Delta R^2 = 0.11$, $p < 0.001$; Model 3, $R^2 = 0.34$, $\Delta R^2 = 0.19$, $p < 0.001$.

4.1. Emotion appraisal, psychological safety and resilience

In the dependent variable of resilience (RES), for Model 1, $R^2 = 0.13$, gender, age, and years in service account for 12.6% of the variation in RES. For Model 2, emotion appraisal (self-emotion and others emotion

appraisal) accounts for 36.8% of the variance in RES. For Model 3, psychological safety accounts for only 2% of the variance in RES. (**Table 2**)

Self-emotional appraisal (SEA) indicated the strongest relationship with resilience, $\beta = 0.53$, $t(139) = 6.61$, $p < 0.001$.

Other-emotion appraisal (OEA) is not a significant predictor of resilience at the workplace (OEA, $\beta = 0.03$, $t(139) = 0.39$, $p = 0.70$. Psychological safety does not show a strong effect with resilience, PS, $\beta = 0.30$, $t(139) = 1.90$, $p = 0.06$. (**Table 3**).

This result showed that self-emotion appraisal has a stronger impact on resilience as compared with other-emotion appraisal and psychological safety.

4.2. Mediation analysis on resilience

To examine the indirect effects of psychological safety, self-emotion appraisal, other-emotion appraisal, and resilience, the study runs Process Macro analysis[55] Model 4 to test the mediation model. The number of bootstrap samples for percentile bootstrap confidence intervals is 5000.

While psychological safety does not demonstrate a direct effect of resilience, it shows an antecedent effect on self-emotional appraisal and other-emotional appraisal. Further, self-emotional mediates between psychological safety and resilience (see **Figure 1**).

Psychological safety shows a positive link to the two independent variables, demonstrating an antecedent effect on self-emotion appraisal (b = 0.2302, se = 0.05, $p < 0.001$) and other-emotion appraisal (b = 0.2706, se = 0.06, $p < 0.001$).

The macroprocessing analysis on mediation revealed that self-emotion appraisal is a positive predictor of resilience, mediating between psychological safety and resilience, SEA (b = 0.99, se = 0.054, $p = 0.04$), standardised indirect effect = 0.1964 (lower bound of 0.0768 and upper bound of 0.3369; zero does not fall within the confidence level).

Other-emotion appraisal is not a statistically significant predictor of resilience, OEA (b = 0.00, se = 0.06, $p = 0.99$), standardised indirect effect = 0.0003 (lower bound of -0.0520 and upper bound of 0.0762, zero falls within the confidence level). That is, other-emotion appraisal does not show a mediating effect between psychological safety and resilience.
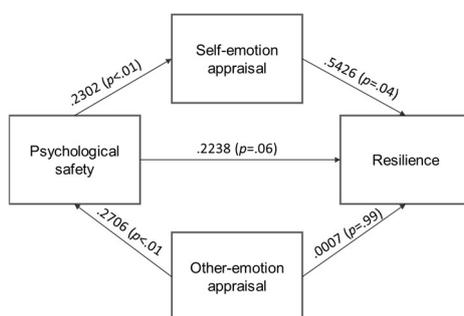

Figure 1. Direct and indirect effects of psychological safety, self-emotional appraisal, other-emotional appraisal and resilience.

The findings on emotion appraisal, psychological safety and organizational commitment show:

4.3. Emotion appraisal, psychological safety and organizational commitment

For the dependent variable of organizational commitment (OC), for Model 1, $R^2 = 0.13$, gender, age, and years in service account for 5% of the variation in OC. For Model 2, emotion appraisal (self-emotion and other-

emotion appraisal) accounts for 11% of the variance in OC. For Model 3, psychological safety accounts for 19% of the variance in OC. (**Table 2**)

Self-emotion is not statistically related to organizational commitment. Self-emotion appraisal, $\beta = 0.03$, $t(139) = 0.32$, $p = 0.75$. (RQ2)

Other-emotion appraisal is not statistically related to organization commitment, $\beta = 0.15$, $t(139) = 1.80$, $p = 0.07$. (RQ2)

Psychological safety showed a stronger direct effect on organizational commitment. PS, $\beta = 0.48$, $t(139) = 6.2$, $p < 0.001$. (H4) (see **Table 3**)

4.4. Mediating analysis of organizational commitment

The macroprocessing analysis in mediation shows psychological safety is the antecedent of self-emotion appraisal (b = 0.2302, se = 0.05, $p < 0.01$) and other-emotion appraisal (b = 0.2706, se = 0.06, $p < 0.01$).

However, both self-emotion and other-emotion appraisals are not significant predictors of organizational commitment.

Self-emotion appraisal (b = 0.0665, se = 0.1194, $p = 0.58$), standardised indirect effect = 0.0153 (lower bound of -0.0510 and upper bound of 0.1040, zero falls within the confidence level).

Other-emotion appraisal (b = 0.1687, se = 0.0945, $p = 0.08$), standardised indirect effect = 0.0457 (lower bound of -0.0110 and upper bound of 0.1325, zero falls within the confidence level) (**Figure 2**).
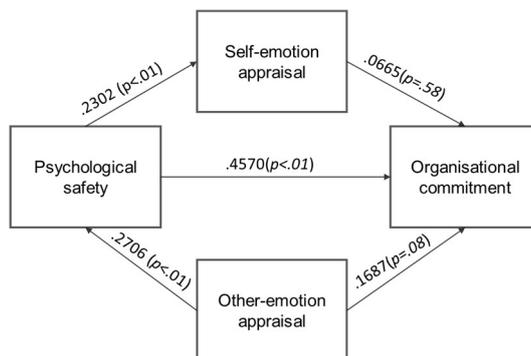

Figure 2. Direct and Indirect effects of psychological safety, self-emotional appraisal, other-emotional appraisal and organizational commitment.

5. Discussion

This study extends on the theoretical and practical implications underpinning emotion appraisal, psychological safety, resilience, and organizational commitment. Specifically, our mixed-method study reveals the association of self-emotion appraisal and resilience, and the mediating effect of self-emotion appraisal on psychological safety and resilience. Furthermore, psychological safety is linked to organizational commitment.

5.1. Theoretical implications

5.1.1. Emotion appraisal, psychological safety, and resilience

The findings of the present study shed light on the mediating effect of self-emotional appraisal on psychological safety and resilience. The result is aligned with past literature in which it was demonstrated that individuals who appraised their emotions tended to recalibrate and recognize their subjective behaviour and take actions to modify it behaviour[7]. Emotion regulation connotes the employees' emotional coping strategies.

As evident in past studies, research has shown that emotional reappraisal produces a positive effect on workplace relationship quality (e.g., Jung et al.[60])

Assessing one's emotions points to self-centricity and denotes an inward-focused behaviour. Relevantly, self-conscious behaviour is an inward-focused emotion whereby employees engage in internal dialogue while reflecting on their current state of emotions. The recalibration and adjustment of one's own emotional state give clarity and affirmative psychological safety, regardless of whether an individual perceives positive or negative psychological safety.

From the quantitative and qualitative analysis shown in **Table 4**, a participant's self-evaluation of feelings and emotions allowed her to adapt and accept the current situation and demonstrate self-resilience. Further, it opens a way for this participant, a gymnastic coach, to look at the perceived poor decision-making by the management as a learning process.

"I've learned to make the best of it (the COVID-19 crisis) and embrace the downtime given. Sometimes at work, when the going gets tough, we'd quietly yearn for a break, and hence I'm embracing it now…this will make work as well as rest a lot more enjoyable. Every bad decision from the top had a negative impact on my work…I've learned to embrace that no place is perfect, and it is all about balance." (P40)

Our findings are aligned with the study of May et al.[61] on the correlations between self-conscious behaviour and psychological safety. By drawing on their own emotional resources and feelings through emotional evaluation and addressing self-perception, it helps employees overcome challenges and uncertain events, thus strengthening individual resiliency.

A producer from an advertising firm expresses neutral emotion and highlights the need for employee involvement and having a say in work arrangements prior to the management's implementation.

I would say the emotions/perceptions I had about workplace practices before and during the crisis did not change much. The only thing that altered it slightly was the work-from-home situation, as that definitely made it slightly more challenging in terms of communication, but I do understand that it is necessary and it's not something that is entirely difficult to overcome or, at the very least, get used to. Should the circuit breaker be lifted, I would like the company to gather feedback from everyone regarding the working arrangements before implementing anything else. (P40)

Contrary to self-emotion appraisal, other-emotion appraisal does not reveal a mediating effect on psychological safety and resilience. Expectedly, recognizing others' emotions and situations addresses the concerns of others and being sensitive toward another's emotions. Furthermore, in the outward-focused behaviour depicted in the other-emotion appraisal, individuals observe and assess equity and another's role and behaviour in assigning work or allocating resources.

Assessing others' emotions has no effect on perceived psychological safety relating to resilience. Rather, outward-focused behaviour in observing others' emotions and situations addresses the need for management action to improve tasks, communication, and empowerment. These are elements of generating psychological safety. In addition, psychological safety was derived from supportive supervisory and co-worker relations. Employees' positive experiences of psychological meaningfulness and safety instill confidence in employees' investment in their work roles and spur them to extend social support, but may not necessarily enhance workplace resilience.

Table 4. Quantitative and qualitative analysis of emotional appraisals, psychological safety, resilience and organizational commitment.

RQ and hypothesis	Quantitative data	Qualitative data	Interpretations
RQ1 Does emotion appraisal affect resilience?			
H1 Self-emotion appraisal (SEA) is associated with resilience.	SEA, $\beta = 0.53$, $t(139) = 6.61$, $p < 0.001$. H1 is supported.	[Self-emotion appraisal] "I've learnt to make the best out of it (Covid-19 crisis) and embrace the down time given. Sometimes at work, when the going gets tough, we'd quietly yearn for a break, and hence I'm embracing it now…this will make work as well as rest a lot more enjoyable. Every bad decision from the top had a negative impact on my work…I've learnt to embrace that no place is perfect, and it is all about balance." (P40)	Through self-evaluation, this respondent demonstrated adaptability and acceptance in exercising self- resilience. An opportunity to look at the crisis and the understanding of perceived poor leadership is seen as a learning process and experience contributes to acceptance and resilience.
H2 Other-emotion appraisal (OEA) is associated with resilience.	OEA, $\beta = 0.03$, $t(139) = 0.39$, $p = 0.70$. H2 is not supported.	[Other-emotion appraisal] "… the director seems (to be) giving the impression that he doesn't trust people can work from home." "… I hope the company can change the employment policy from yearly renewal to permanent contract…that would give us more motivation to contribute to the company." (P6) "My organization is very supportive of my well-being … they are doing a great job." (P9)	Other's emotion appraisals reflected in these respondents' feedback relate to the factors of management's action, organizational resources, motivational behaviour, employees' acknowledgement, recognition of support (psychological safety).
H3 Psychological safety [PS] is associated with resilience.	PS, $\beta = 0.30$, $t(139) = 1.90$, $p = 0.06$. H3 is not supported.	[Psychological Safety] "… involve me in decision making to have job satisfaction." (P69) "During crisis, (the issue of) decision making … need to go through several rounds of discussions and follow-ups which will take most of your time…Decision-making procedure is prolonged." (P76)	
H4 Self-emotion mediates between psychological safety and resilience.			
H4a Self-emotion appraisals mediate between psychological safety and resilience.	SEA ($b = 0.99$, $se = 0.054$, $p = 0.04$), standardised indirect effect = 0.1964 (lower bound of 0.0768 and upper bound 0.3369, zero does not fall within confidence level). H4a is supported.	[Self- and Other-emotion appraisal] "I always think positive in everything I do. During the crisis, I felt anxiety (anxious) … The environment and people are very important to me. Their support helps us stay strong." (P130)	The respondents desire decision-making involvement to derive job satisfaction. The concern of long decision-making process and constraints of time resources.
H4b Others-emotion appraisals mediate between psychological safety and resilience.	OEA ($b = 0.00$, $se = 0.06$, $p = 0.99$), standardised indirect effect = 0.0003 (lower bound of –0.0520 and upper bound 0.0762, zero falls within confidence level). That is, other-emotion appraisal does not show mediating effect between psychological safety and resilience. H4b is not supported.		Evident in this respondent's appraisal of her feelings in which the external environment, peer support and resilience appear to be key in staying strong indicative of positive psychological safety, social emotional resources and resilience.
RQ2 Does emotional appraisals affect organizational commitment?	SEA and OC, $\beta = 0.03$, $t(139) = 0.32$, $p = 0.75$. OEA and OC, $\beta = 0.15$, $t(139) = 1.80$, $p = 0.07$. Emotional appraisals (self and others) do not influence organizational commitment.		

Table 4. (*Continued*).

RQ and hypothesis	Quantitative data	Qualitative data	Interpretations
H5 Psychological safety is associated with organizational commitment.	PS and OC, $\beta = 0.48$, $t(139) = 6.2$, $p < 0.001$. H5 is supported.	Refer to the above respondent P130 on "I always think positive in everything I do. During the crisis, I felt anxiety (anxious) … The environment and people are very important to me. Their support helps us stay strong." The bosses in charge do not care about the staff. Only way, moving forward, is to change my workplace. (P20)	The respondent's positive psychological safety, peer support (social emotional resources) and commitment (reflected in "*positive in everything I do*") and resilience. Perceived negative psychological safety (lack of support) resulting in plan to exit the organization.

5.1.2. Emotion appraisal, psychological safety and organizational commitment

Our findings revealed that, amid individuals' examination of their emotions or others' emotions, emotion appraisals in general do not appear to have a mediating effect on psychological safety and commitment. However, perceived psychological safety has a direct effect on organizational commitment.

An IT engineer, in evaluating the additional workload (outward-focused evaluation) due to the changes at the workplace, reflected on his sense of responsibility at work, relevant to psychological safety and organizational commitment.

The sudden change in heavy reliance on IT technology, though it added additional workload, gave an extra sense of importance and duty to work. (P31)

In resonance with past studies, psychological safety is a significant element in fostering employees' attachment to the workplace[37]. Our study similarly revealed that psychological safety nurtures organizational commitment. On one hand, when an employee perceives positive psychological safety, such as fairness exhibited at the workplace, it generates a sense of loyalty to the organization. On the other hand, perceived negative psychological safety in unfairness results in conflict in the employer-employee relationship.

A part-time educator experienced negative psychological safety when a perceived psychological contract was violated.

I am particularly upset when management implements changes to employees' workload or remuneration without considering if they have broken prior contractual agreements. During home-based learning, they changed some terms suddenly without any consultation, and I was quite mad. The company should show fairness during a crisis and stay true to the contractual terms already agreed upon.

The psychological contract denotes the reciprocal exchange in the terms and conditions of agreement and the implicit and explicit promises of the employer-employee relationship[62,63]. The psychological contract embedded within the employment relationship includes job security, work-life balance, empowerment, and supervisory and peer support. Explicit promises relate to the employee's interpretation of verbal and written contractual agreements, and implicit promises relate to the expectation of consistent exchange on agreed-upon terms with the employer. Rousseau and McLean[64] highlighted that both explicit and implicit promises that arise from individual perceptions and observed behaviour, are translated as a promise extended within the employment contract to be fulfilled.

A full-time teacher expressed the intention to exit the organization due to a lack of support and care and negative psychological safety from the supervisor. The autonomy given to employees, coupled with strong support, strengthens an individual's commitment to his or her work.

They have to stop being selfish, uncaring, and irresponsible bosses…. Start taking responsibility and stop pushing responsibilities to those who do not have a say in making decisions…. The bosses in charge do not care about the staff. The only way to move forward is to change my workplace. (P20)

As demonstrated in this study, perceived psychological safety has a direct effect on organizational commitment. In a perceived psychologically safe environment, employees exhibit confidence in their task, are more engaged and motivated, and are proactive in building social relationships[37].

As desired by the producer, who shared the hope of taking on meaningful tasks that yield results,.

I'm a producer in advertising, so while I understand that a lot of my projects are on hold, I would want to be working on something that's more tangible and executable rather than doing double work. (P24)

Major factors such as task role, personality types, locus of control, and organizational structure influence organizational commitment (e.g., Suman and Srivastava[44], Morris and Sherman[46]).

5.2. Practical implications

This research sheds light on the instrumental, intervening effect of self-emotion and how positive psychological safety and regulation of self-emotion contribute to building employee resilience. However, perceived psychological safety manifested in the form of social support and freedom of expression does not augment employee resilience unless self-emotion regulation takes place.

The implication of our study affirms that organizations could adopt proactive steps in drawing upon the strengths of self-emotional appraisal, promoting positive psychological safety, and maintaining employee and organizational resilience to enhance employees' well-being, reduce absenteeism, and reduce high turnover. In addition, the results of the association between perceived psychological safety and organizational commitment provide a significant contribution to human resources practice to galvanize individual commitment by managing employee perceptions of psychological safety.

First, through employee engagement and understanding individual needs and states of emotions, integrating behavioural intervention and coaching programme as part of employee development to help build resilience could improve employer-employee relationships. Scholars have suggested that designing behaviour-focused interventions is useful in building individual resilience and mental wellbeing in healthcare organizations (e.g., Mantaring et al.[65]).

Second, it is integral to identify concerns and emotions and establish concrete plans for mutually agreed-upon goals to balance both employees and the organization's needs. This programme should not be taken as a one-time event; rather, it should be an ongoing process to anticipate emotional responses to uncertain events or changes in the workplace.

Third, in managing psychological safety, organizations could adopt open-communication and participatory approaches to creating a safe space for employees to be involved in suggestions and decisions in work-related and management matters such as task roles, work schedules, or meetings. Involving employees during the change process and eliciting trust promotes employees' commitment at the workplace. Hence, organizations would benefit from these recommendations in implementing human resource management and development programmes.

6. Limitations and conclusions

This study contributes to the extant literature on emotion appraisals, psychological safety, resilience, and organizational commitment in real-time events. However, there are some limitations to this present study.

Firstly, this study was conducted within a short time frame during the COVID-19 pandemic, and the findings could not demonstrate emotion regulation and resilience as a long-term effect. However, the findings provide opportunities for longitudinal research to investigate the correlation between these variables. A longitudinal study in the future would extend the casual relationships of other variables such as stress management, workplace relationships, and turnover intention.

Secondly, the self-directed survey did not examine the different approaches adopted to emotion regulation or elements of perceived psychological safety attributable to individual resilience and organizational commitment. Future studies could investigate the types of emotion-coping strategies for managing change, resilience, and organizational commitment.

As a whole, this study paves the way for future research development for an in-depth examination of the effectiveness of intervention strategies in facilitating emotion regulation and the associations between emotion coping strategies, leader-member relationships, and turnover intention.

Conflict of interest

The author declares no conflict of interest.

Reference

1. Luthans F. The need for and meaning of positive organizational behavior. *Journal of Organization Behavior* 2002; 23(6): 695–706. doi: 10.1002/job.165
2. Barbalet J. Emotions beyond regulation: Backgrounded emotions in science and trust. *Emotion Review* 2011; 3(1): 36–43. doi: 10.1177/1754073910380968
3. Erber R, Erber MW. The self-regulation of moods: Second thoughts on the importance of happiness in everyday life. *Psychological Inquiry* 2000; 11(3): 142–148. doi: 10.1207/S15327965PLI1103_02
4. Kappas A. Emotion and regulation are one!. *Emotion Review* 2011; 3(1): 17–25. doi: 10.1177/1754073910380971
5. von Gilsa L, Zapf D. Motives for emotion regulation in service work. In: Perrewé PL, Rosen CC, Halbesleben JRB (editors). *The Role of Emotion and Emotion Regulation in Job Stress and Well Being*. Emerald Group Publishing Limited; 2013. Volume 11, pp. 133–161. doi: 10.1108/S1479-3555(2013)11
6. Jiang JY, Zhang X, Tjosvold, D. Emotion regulation as a boundary condition of relationship between team conflict and performance: A multi-level examination. *Journal of Organizational Behavior* 2013; 34(5): 714–734. doi: 10.1002/job.1834
7. Gross J. The emerging field of emotion regulation: An integrative review. *Review of General Psychology* 1998; 2(3): 271–299. doi: 10.1037/1089-2680.2.3.271
8. Wong CS, Law K. The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *The Leadership Quarterly* 2002; 13(3): 243–274. doi: 10.1016/S1048-9843(02)00099-1
9. Kahn WA. Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal* 1990; 33(4): 692–724. doi: 10.5465/256287
10. Blau GJ, Boal KB. Conceptualizing how job involvement and organizational commitment affect turnover and absenteeism. *Academy of Management Review* 1987; 12(2): 288–300. doi: 10.5465/amr.1987.4307844
11. O'Driscoll MP, Randall DM. Perceived organizational support, satisfaction with rewards and employee job involvement and organizational commitment. *Applied Psychology: An International Review* 1999; 48(2): 197–209. doi: 10.1111/j.1464-0597.1999.tb00058.x
12. Meyer JP, Allen NJ. A three-component conceptualisation of organizational commitment. *Human Resource Management Review* 1991; 1(1): 61–89.
13. Rubino C, Wilkin CL, Malka A. Under pressure: Examining the mediating role of discrete emotions between job conditions and well-being. In: Perrewé PL, Rosen CC, Halbesleben JRB (editors). *The Role of Emotion and Emotion Regulation in Job Stress and Well Being*. Emerald Group Publishing Limited; 2013. Volume 11, pp. 195–223. doi: 10.1108/S1479-3555(2013)0000011011
14. Connelly S, Torrence BS. The relevance of discrete emotional experiences for human management: Connecting positive and negative emotions to HRM. In: Buckley MR, Wheeler AR, Halbesleben JRB (editors). *Research in Personnel and Human Resources Management*. Emerald Group Publishing Limited; 2018. Volume 36, pp. 1–49. doi: 10.1108/S0742-730120180000036001

15. Weiss HM, Cropanzano R. Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. In: Staw BM, Cummings LL (editors). *Research in Organizational Behavior: An Annual Series of Analytical Essays and Critical Reviews*. Elsevier Science and JAI Press; 1996. Volume 18, pp. 1–74.

16. Lee H. Changes in workplace practices during the Covid-19 pandemic: The roles of emotion, psychological safety and organization support. *Journal of al Effectiveness: People and Performance* 2021; 8(1): 97–128. doi: 10.1108/JOEPP-06-2020-0104

17. Barclay LJ, Skarlicki DP, Pugh SD. Exploring the role of emotions in injustice perceptions and retaliation. *Journal of Applied Psychology* 2005; 90(4): 629–643. doi: 10.1037/0021-9010.90.4.629

18. Brockner J. Making sense of procedural fairness: How high procedural fairness can reduce or heighten the influence of outcome favorability. *Academy of Management Review* 2002; 27(1): 58–76. doi: 10.5465/amr.2002.5922363

19. Lazarus RS. *Emotion and Adaptation.* Oxford University Press; 1991. 570p.

20. Weiner B. An attributional theory of achievement motivation and emotion. *Psychological Review* 1985; 92(4): 548–573. doi: 10.1037/0033-295X.92.4.548

21. Lazarus RS, Cohen-Charash Y. Discrete emotions in organizational life. In: Payne RL, Cooper GL (editors). *Emotions at Work: Theory, Research and Applications for Management*. John Wiley & Sons; 2001. pp. 45–81.

22. Tangney JP. Shame and guilt in interpersonal relationships. In: Tangney JP, Fischer KW (editors). *Self-conscious Emotions: The Psychology of Shame, Guilt, Embarrassment, and Pride*. Guilford Press; 1995. pp. 114–139.

23. Tangney JP. Dearing RL. *Shame and Guilt.* Guilford Press; 2002.

24. Friedman HS, Booth-Kewley S. Personlaity, type A behavior, and coronary heart disease: The role of emotional expression. *Journal of Personality and Social Psychology* 1987; 53(4): 783–792. doi: 10.1037/0022-3514.53.4.783

25. Steptoe A. Stress and the cardiovascular system: A psychosocial perspective. In: Stanford SC, Salmon P, Gray JA (editors). *Stress: From Synapse to Syndrome*. Academic Press; 1993. pp. 119–141.

26. Werner EE, Smith RS. *Overcoming the Odds: High Risk Children from Birth to Adulthood*. Cornell University Press; 1992. 280p.

27. Block J, Kremen AM. IQ and ego-resiliency: Conceptual and empirical connections and separateness. *Journal of Personality and Social Psychology* 1996; 70(2): 349–361. doi: 10.1037/0022-3514.70.2.349

28. Connor KM, Davidson JR. Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety* 2003; 18(2): 76–82. doi: 10.1002/da.10113

29. Fletcher D, Sarkar M. Psychological resilience: A review and critique of definitions, concepts, and theory. *European Psychologist* 2013; 18(1): 12–23. doi: 10.1027/1016-9040/a000124

30. Fredrickson BL, Tugade MM, Waugh CE, Larkin GR. What good are positive emotions in crisis? A prospective study of resilience and emotions following the terrorist attacks on the United States on September 11th, 2001. *Journal of Personality and Social Psychology* 2003; 84(2): 365–376. doi: 10.1037/0022-3514.84.2.365

31. Meng H, Luo Y, Huang L, et al. On the relationships of resilience with organizational commitment and burnout: A social exchange perspective. *The International Journal of Human Resource Management* 2019; 30(15): 2231–2250. doi: 10.1080/09585192.2017.1381136

32. Ollier-Malaterre A. Contributions of work—Life and resilience initiatives to the individual/ relationship. *Human Relations* 2010; 63(1): 41–62. doi: 10.1177/0018726709342458

33. Shin J, Taylor MS, Seo MG. Resources for change: The relationships of organizational inducements and psychological resilience to employees' attitudes and behaviors toward organizational change. *Academy of Management Journal* 2012; 55(3): 727–748. doi: 10.5465/amj.2010.0325

34. Youssef CM, Luthans F. Positive organizational behavior in the workplace: The impact of hope, optimism, and resilience. *Journal of Management* 2007; 33(5): 774–800. doi: 10.1177/0149206307305562

35. Edmondson A. Psychological safety and learning behavior in work teams. *Administrative Science Quarterly* 1999; 44(2): 350–383. doi: 10.2307/2666999

36. Singh B, Winkel DE, Selvarajan TT. Managing diversity at work: Does psychological safety hold the key to racial differences in employee performance?. *Journal of Occupational and Organizational Psychology* 2013; 86(2): 242–263. doi: 10.1111/joop.12015

37. Singh B, Shaffer MA, Selvarajan TT. Antecedents of organizational and community embeddedness: The roles of support, psychological safety, and need to belong. *Journal of Organizational Behavior* 2018; 39(3):339–354. doi: 10.1002/job.2223

38. Nembhard IM, Edmondson AC. 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* 2006; 27(7): 941–966. doi: 10.1002/job.413

39. Cho I, Park H, Dahlgaard-Park SM. The impacts of organisational justice and psychological resilience on employee commitment to change in an M&A context. *Total Quality Management & Business Excellence* 2017; 28(9–10): 989–1002. doi: 10.1080/14783363.2017.1303890

40. Lee H, Chui J. The mediating effect of interactional justice on human resource practices and organizational support in a healthcare organization. *Journal of Organizational Effectiveness: People and Performance* 2019; 6(2): 129–144. doi: 10.1108/JOEPP-10-2018-0085

41. Mathieu JE, Zajac DM. A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin* 1990; 108(2): 171–194. doi: 10.1037/0033-2909.108.2.171

42. O'Reilly CA, Chatman J. Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of Applied Psychology* 1986; 71(3): 492–499. doi: 10.1037/0021-9010.71.3.492

43. Allen NJ, Meyer JP. Affective, continuance, and normative commitment to the organization: An examination of construct validity. *Journal of Vocational Behavior* 1996; 49(3): 252–276. doi: 10.1006/jvbe.1996.0043

44. Suman S, Srivastava AK. Antecedents of organisational commitment across hierarchical levels. *Psychology and Developing Societies* 2012; 24(1): 61–83. doi: 10.1177/09713336110240010

45. Hulin CL, Roznowski M, Hachiya D. Alternative opportunities and withdrawal decisions: Empirical and theoretical discrepancies and an integration. *Psychological Bulletin* 1985; 97(2): 233–250. doi: 10.1037/0033-2909.97.2.233

46. Morris JH, Sherman JD. Generalizability of an organizational commitment model. *Academy of Management Journal* 1981; 24(3): 512–526. doi: 10.5465/255572

47. Meyer JP, Stanley DJ, Herscovitch L, Topolnytsky L. Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior* 2002; 61(1): 20–52. doi: 10.1006/jvbe.2001.1842

48. Iun J, Huang X. How to motivate your older employees to excel? The impact of commitment on older employees' performance in the hospitality industry. *International Journal of Hospitality Management* 2007; 26(4): 793–806. doi: 10.1016/j.ijhm.2006.08.002

49. Sinclair RR, Tucker JS, Cullen JC, Wright C. Performance differences among four organizational commitment profiles. *Journal of Applied Psychology* 2005; 90(6): 1280–1287. doi: 10.1037/0021-9010.90.6.1280

50. Pathak RD. Job involvement: Its relationships to certain variables among bank officers in India. *Prajnan* 1982; 11(4): 269–282.

51. Chrobot-Mason D, Armovich N. Employee perceptions of an affirming climate for diversity and its link to attitudinal outcomes: A comparison of racial and gender groups. In: Proceedings of the Academy of Management Annual Meeting 2004; 5–11 August 2004; New Orleans, LA, USA.

52. Chrobot-Mason D, Aramovich NP. The psychological benefits of creating an affirming climate for workplace diversity. *Group & Organization Management* 2013; 38(6): 659–689. doi: 10.1177/105960111350983

53. Denzin NK. *Interpretive Interactionism*, 2nd ed. Sage; 2001. 187p.

54. Saldana J. *The Coding Manual for Qualitative Researchers*, 2nd ed. Sage; 2013. 328p.

55. Hayes AF. *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, 3rd ed. The Guilford Press; 2022. 732p.

56. Fernando JW, Kashima Y, Laham SM. A multiple-method analysis of appraisal—Emotion relationships: The case of the prosocial intergroup emotions. *Asian Journal of Social Psychology* 2019; 22(3): 227–243. doi: 10.1111/ajsp.12360

57. Branscombe NR, Miron AM. Interpreting the ingroup's negative actions toward another group: Emotional reactions to appraised harm. In: Tiedens LZ, Leach CW (editors). *The Social Life of Emotions*. Cambridge University Press; 2004. pp. 314–335.

58. Iyer A, Schmader T, Lickel B. Why individuals protest the perceived transgressions of their country: The role of anger, shame, and guilt. *Personality and Social Psychology Bulletin* 2007; 33(4): 572–587. doi:10.1177/0146167206297402

59. Siemer M, Mauss I, Gross JJ. Same situation—Different emotions: How appraisals shape our emotions. *Emotion* 2007; 7(3): 592–600. doi:10.1037/1528-3542.7.3.592

60. Jung Y, Sohn YW, Kim MY. Emotion regulation and job stress: The mediating effect of relationship quality in the US and Korean samples. *Current Psychology* 2020; 39: 1106–1115. doi: 10.1007/s12144-018-9997-1

61. May DR, Gilson RL, Harter LM. The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology* 2004; 77(1): 11–37. doi: 10.1348/096317904322915892

62. Coyle-Shapiro JA, Pereira Costa S, Doden W, Chang C. Psychological contracts: Past, present, and future. *Annual Review of Organizational Psychology and Organizational Behavior* 2019; 6: 145–169. doi: 10.1146/annurev-orgpsych-012218-015212

63. Rousseau DM. Psychological and implied contracts in organizations. *Employment Responsibilities Rights Journal* 1989; 2(2): 121–139. doi: 10.1007/BF01384942

64. Rousseau DM, McLean PJ. The contracts of individuals and organizations. *Research in Organization Behavior* 1993; 15: 1–43.

65. Mantaring MA, Bello MS, Agulto TJ, et al. Behavioral design interventions for the promotion of wellbeing among Filipino healthcare workers during the COVID-19 pandemic. *The Lancet Regional Health–Western Pacific* 2022; 29: 100627. doi: 10.1016/j.lanwpc.2022.100627