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Lunch Break Autonomy Benefits Employee Creativity: The Mediating Role of Positive Affect

Eddie Limbang Jr¹, Chee-Seng Tan², and Soon-Aun Tan^{1*}

¹ Department of Psychology and Counselling, Faculty of Arts and Social Science,
Universiti Tunku Abdul Rahman, Malaysia

² School of Psychology, College of Liberal Arts, Wenzhou-Kean University, China

Abstract

Experiencing control over lunch breaks has been found to reduce fatigue and promote the well-being of employees. However, the relationship between lunch break autonomy (LBA) and creativity and the underlying mechanism remains to be discovered. Based on the self-determination theory and broaden-and-build theory, we hypothesized that LBA is positively related to employees' creativity, and the relationship is mediated by positive affect. The present study investigated the hypothetical mediation model among working adults in Malaysia utilizing a cross-sectional design. Regression-based mediation analysis of the 191 responses to the Autonomy and Psychological Detachment subscales of the Recovery Experience Questionnaire, Positive Affect subscale of the short-form Positive and Negative Affect Schedule, and Self-Rated Creativity Scale support that LBA was indirectly associated with creativity through positive affect. These findings offer insights into the importance of effective lunch break policies that encourage autonomy and a potential way to cultivate employees' creativity for organizations to consider.

Keywords: lunch break autonomy, creativity, positive affect, psychological detachment

*Corresponding author.
Soon-Aun Tan
Department of Psychology
and Counselling,
Faculty of Arts and Social Science,
Universiti Tunku Abdul Rahman,
Malaysia
E-mail: tansa@utar.edu.my
(S. Tan)

Introduction

Creativity has been conceptualized as generating new and practical solutions (Amabile, 1983) and is widely recognized as a vital ingredient for organizational innovation and long-term success (Anderson et al., 2014; Hammond et al., 2011). In the workplace, creativity not only drives improvements in processes and strategies (Ford & Gioia, 2000; Sia & Appu, 2015) but also contributes to employee well-being, self-concept, and problem-solving abilities (Huang et al., 2021; Tan, Tan et al., 2019; Tan et al., 2021).

Among the many factors that shape creativity at work, autonomy stands out as a consistent and robust predictor (Amabile, 1996; Deci & Ryan, 2000; Liu et al., 2011; Wang & Cheng, 2009). When employees have the freedom to make choices and exercise control over their work, they are more likely to experiment, take initiative, and pursue novel solutions. While much of the literature has focused on broad constructs such as job autonomy or organizational climate, recent research has begun to highlight the importance of everyday experiences, such as opportunities for control and recovery embedded in daily work routines (Fritz et al., 2013; Sonnentag, 2018). These micro-level experiences, though often overlooked, can have meaningful downstream effects on creative performance.

Lunch break autonomy, defined as the extent to which employees can decide how to use their break time, represents one such micro-setting. Although brief, these episodes of autonomy may offer recurring opportunities for employees to exercise choice and self-direction, even in structured environments.

The present study draws upon Self-Determination Theory (SDT; Deci & Ryan, 2000) and Fredrickson's (2001) broaden-and-build theory to provide theoretical support. Importantly, SDT and broaden-and-build theory are not merely sequential but complementary: SDT explains how autonomy satisfaction during lunch breaks can foster positive affect, while broaden-and-build theory provides the mechanism by which positive affect broadens individuals' cognitive and emotional resources, thereby enhancing creativity. By integrating these frameworks, we propose that autonomy experienced in micro-settings such as lunch breaks can have meaningful downstream effects on creative performance via affective pathways. SDT posits that autonomy fosters creativity and contributes to positive affect. Conversely, positive emotions, as emphasized in the broaden-and-build theory, bolster individuals' resource repertoire, thereby enhancing creativity. Based on the two theoretical frameworks and the literature, we hypothesized that positive affect may mediate the relationship between lunch break autonomy and employee creativity. The literature about the relationships between the three target variables is reviewed below.

Lunch break autonomy and creativity

Lunch breaks are generally considered the longest break at work and represent a significant opportunity for employees to recover (Trougakos et al., 2014). A work break is a period when employees are not officially engaged in work (Scholz et al., 2019). It is suggested that work breaks benefit employee health, performance, and well-being (Fritz et al., 2013; Kühnel et al.,

2017; Taylor et al., 2013). Positive associations between work breaks and increased performance, such as sales performance (Kim et al., 2018), could be attributed to employee cognitive and physical gains (Montano et al., 2014). Indeed, it is found that relaxation during employee's lunch breaks can reduce cortisol, a biological indicator of stress (Krajewski et al., 2011).

Lunch breaks constitute a significant portion of an employee's work break during working hours and, therefore, present a significant opportunity for recovery of personal resources (Fritz et al., 2013; Trougakos & Hideg, 2009). For recovery to occur, employees must perceive a sense of control (i.e., experiencing autonomy) (Bosch et al., 2018; Trougakos et al., 2014). The experience of control during lunch breaks can be conceptualized as perceived autonomy that an individual feels they have over the lunch break (Bosch et al., 2018). Trougakos and colleagues (2014) used multi-source experience sampling methods and found that lunch break autonomy predicted decreased fatigue at the end of the workday. Bosch et al. (2018) posit that the perceived control during leisure time, which is also recognized as one of the core recovery experiences (Sonnentag & Fritz, 2007), plays a role in facilitating the replenishment of resources during the lunch break that decreases fatigue at the end of the workday.

Unlike general job autonomy, which refers to the overall freedom employees have in how they perform their work tasks, lunch break autonomy is a situational or context-specific form of autonomy. It specifically concerns the freedom to choose how to spend one's break time within the workday. This micro-setting of autonomy is particularly salient because it offers employees a discrete, recurring opportunity to exercise choice and self-direction, even in otherwise highly structured or controlled work environments.

Although lunch break autonomy is brief, recovery and resource-based theories suggest that even short episodes of autonomy can help replenish psychological resources, reduce stress, and foster a positive mindset. This refreshed mental state may, in turn, enhance cognitive flexibility and openness, which are qualities that are conducive to creative thinking. Thus, while lunch break autonomy is limited in duration, its recurring nature and immediate psychological benefits may contribute to employees' overall creative self-perceptions.

Studies have found that autonomy is positively associated with creativity (Amabile, 1996; Deci & Ryan, 2000; Ghosh, 2015; Sia & Appu, 2015). In a meta-analysis of the relationships between individual, motivational, job-related, and contextual variables and employee creativity, results showed that autonomy is one of the critical factors of innovation in workplace (Hammond et al., 2011). Likewise, other studies that explored the antecedents of creativity also appear to indicate a positive correlation between autonomy and creativity (Liu et al., 2011; Wang & Cheng, 2009). For instance, using the data collected from 386 supervisor-subordinate dyads in China, Xie et al. (2020) found that leadership support for autonomy (indexed by leadership-member exchange reported by employees) is positively associated with employee creative performance rated by supervisors.

Based on the consistent relationship between autonomy and creativity, it is hypothesized that

H1: Lunch break autonomy is positively related to creativity.

Lunch break autonomy and positive affect

Self-Determination Theory (SDT; Deci & Ryan, 2000) posits that fulfilling psychological needs such as autonomy is essential to individuals' well-being. For instance, Bosch et al. (2018) found that experiencing control of one's lunch break is associated with afternoon well-being. Notably, the benefits of satisfaction of autonomy on well-being outcomes transcend differing cultural backgrounds (Chen et al., 2015) and contexts such as sports, classroom, and work (Cheon & Reeve, 2013; Neufeld & Malin, 2020; Núñez & León, 2015).

As well-being is characterized and measured by vitality and positive affect (Deci & Ryan, 2000), it is reasonable to expect a positive relationship between autonomy and positive affect, which refers to feelings of happiness, contentment, excitement, or enthusiasm, and a product of a pleasurable interaction with the environment (Clark et al., 1989; Pressman & Cohen, 2005). Indeed, past studies have shown a positive correlation between autonomy-related constructs and positive affect (Levine et al., 2020; Oriol-Granado et al., 2017; Ryan et al., 2010; Tummers et al., 2018). Based on the SDT perspective and empirical findings, it is assumed that

H2: Lunch break autonomy is positively related to positive affect.

Positive affect and creativity

Past studies on the antecedents of creativity found two notable aspects that play a role in employee creativity: the mastery of the knowledge related to the task and the affect the employee experiences when doing the task (Mainemelis, 2001; Muñoz-Doyague et al., 2008; Shalley et al., 2004). Indeed, a positive correlation has been continuously observed between positive affect and employee creativity (Parke et al., 2015; Tan & Qu, 2015; Tavares, 2016; Xie et al., 2020). For example, a study that assessed participants under positive affect, humor, and neutral conditions found that those in the positive affect and humor conditions performed better on creative tasks (Lee et al., 2022).

The broaden-and-build theory (Fredrickson, 2001) offers a theoretical perspective on the positive association between positive affect and creativity. Specifically, the experience of positive affect broadens one's current mindset and leads to the consideration of engagement with an activity that would not have been considered in the first place if given the lack of positive affect. In addition to that, this broadening of mindset involves expanding attention and cognition, allowing adaptive and creative thought processes to occur (Fredrickson, 2004).

With these findings and the broaden-and-build theory in mind, it is proposed that.

H3: Positive affect is positively related to creativity.

The mediating role of positive affect

As reviewed above, the SDT (Deci & Ryan, 2000) posits that individuals are likely to report higher well-being (e.g., positive affect) when autonomy is satisfied. Meanwhile, the broaden-and-build theory (Fredrickson, 2004) indicates that the experience of positive affect facilitates one's creativity. Based

on these theories and empirical findings, we hypothesize that positive affect may mediate the relationship between lunch break autonomy and creativity. Specifically, when the need for autonomy is satisfied during the lunch break, employees are expected to experience a higher level of positive affect than usual (Bosch et al., 2018; Deci & Ryan, 2000). This positive affect, in turn, facilitates thought processes conducive for creativity to occur at work through broadening (Fredrickson, 2004).

While much of the literature demonstrates a robust link between broad job autonomy and creativity, the mechanism by which a short, situational autonomy episode such as a lunch break translates into self-rated creative performance is less clear. It is plausible that lunch break autonomy may reduce stress and fatigue or restore energy, which in turn could facilitate creative thinking. However, given the brief and context-specific nature of lunch break autonomy, it is theoretically more plausible that its effect on creativity is primarily indirect, operating through its impact on employees' affective states. Specifically, we propose that lunch break autonomy increases positive affect, which then broadens cognitive resources and supports creative self-perceptions, consistent with the broaden-and-build theory. Thus, while we hypothesize a positive relationship between lunch break autonomy and creativity, we expect the direct effect to be weaker than the indirect effect through positive affect. This rationale underpins our mediation model. Taken together, it is hypothesized that:

H4: Lunch break autonomy is positively and indirectly related to creativity through positive affect.

The Present Study

The present study aimed to clarify the relationships between lunch break autonomy, positive affect, and creativity in the Malaysian workplace context. Guided by the self-determination theory and broaden-and-build theory, a mediation model was proposed and tested to examine (i) the relationship between lunch break autonomy and creativity, (ii) the relationship between lunch break autonomy and positive affect, (iii) the relationship between positive affect and creativity, and (iv) the mediating role of positive affect in the relationship between lunch break autonomy and creativity. It is worth noting that this study utilizes self-rated creativity to measure creativity. Self-perceptions of creativity are theoretically relevant because they reflect an individual's confidence and self-efficacy in generating novel ideas and solutions (Tierney & Farmer, 2002). Such self-assessments are important predictors of actual creative behavior, as individuals who believe in their creative abilities are more likely to engage in creative processes and persist in the face of challenges (Bandura, 1997; Karwowski et al., 2013).

Psychological detachment from work during non-work periods is theorized to play a crucial role in employee well-being and recovery (Sonnentag & Fritz, 2007). In this study, psychological detachment is included as a covariate because it may independently influence both positive affect and creativity. Employees who are better able to mentally disengage from work during breaks may experience greater affective recovery and, consequently, enhanced creative functioning (Sonntag & Fritz, 2014; Bosch et al., 2018). Controlling for

psychological detachment allows us to more precisely isolate the unique contribution of lunch break autonomy to positive affect and creativity, beyond the general benefits of recovery experiences. Furthermore, psychological detachment is also regarded as a marker variable in the present study. Including it as a covariate variable helps mitigate the common method bias (CMB) (Williams & McGonagle, 2016).

The results of this study are expected to broaden the literature on recovery at work by clarifying whether the facilitative effect of control over lunch breaks extends to creativity. The findings are essential for researchers and organizations to understand the importance of lunch-break autonomy for creativity at work. In addition, testing the mediating role of positive affect would offer insight into the underlying process of the relationship between lunch break autonomy and creativity.

While the present study focuses on positive affect as a mediator between autonomy and creativity, it is important to acknowledge that the relationship between affect and creativity is complex and multifaceted. Although positive affect has been widely shown to broaden cognitive resources and facilitate creative thinking (Fredrickson, 2001; Baas et al., 2008), research also demonstrates that under certain conditions, negative affect can spur creativity, particularly when it motivates individuals to engage in problem-solving or when the task requires critical evaluation (George & Zhou, 2002; Kaufmann & Vosburg, 1997). Thus, positive affect should be considered as one of several possible pathways linking autonomy to creativity, and future research may explore how different affective states interact with contextual and individual factors to influence creative outcomes.

Method

Research Design and Participants

This quantitative study utilized a cross-sectional survey design. Responses were collected via online self-report questionnaires on Qualtrics. The target population of this study was 18- to 60-year-old full-time Malaysian employees with at least 1 year of experience working in one of the creative industries (e.g., Media, Arts & Culture, Marketing) as defined by the Department for Culture, Media and Sport (2016).

A total of 251 responses were collected using purposive and snowball sampling. However, 60 responses were excluded from the study for not meeting the inclusion criteria, not completing more than one of the measurements, or other reasons (e.g., not providing consent). For the remaining 191 responses (101 men and 90 women), 119 participants fell in the 20 to 34 years age range (62.3%), while the other 72 participants were in the 35 to 50 years age range (37.7%). Their average age was 34.5 years ($SD = 11.4$). Finally, 149 participants were full-time employees (78%), followed by 34 freelancers (17.8%) and eight part-timers (4.2%).

Procedure

Participants who met the criteria were approached and invited to complete an online survey via social networking sites such

as Facebook, WhatsApp, and Instagram. Participants were directed to the information sheet and provided digital informed consent before completing the survey in the following order: demographics form, psychological detachment and lunch-break autonomy, positive affect, and the self-rated creativity scale. Finally, participants were thanked for their voluntary participation and encouraged to share the survey link with those who fulfilled the study's criteria. This study was reviewed and approved by the university's ethics review board (reference no: U/SERC/94/2022).

Measurements

Four instruments were used to collect data on lunch-break autonomy, positive affect, psychological detachment, and creativity. The instructions to respondents were adapted to specify the time frame for the measured variables. For instance, the phrase "during my lunch break" was added to the instruction section of the lunch autonomy measurement to adequately capture the lunch-break autonomy experience. In addition, the phrase "in the past two weeks" was added to the instruction section for all measurements to specify the time frame and capture participants' experiences during that period.

Lunch break autonomy: Lunch break autonomy was measured using three items adopted by Trougakos et al. (2014). The three items ("I felt like I decided for myself what to do," "I did exactly what I wanted to do," and "I took care of things the way that I want them done") are derived from the control subscale from the Recovery Experience Questionnaire (REQ; Sonnentag & Fritz, 2007). The items were rated on a 5-point Likert scale (1: I do not agree at all, 5: I fully agree). A higher total score would indicate a higher lunch break autonomy.

Positive affect: Positive affect was measured using five items from the positive affect subscale of the short-form Positive and Negative Affect Schedule (I-PANAS-SF; Thompson, 2007). Items have five positive affective states: active, determined, attentive, inspired, and alert. Participants were instructed to rate the extent to which they feel each of these states using a 5-point Likert scale ranging from 1 (*very slightly*) to 5 (*extremely*). A higher total score would indicate a higher positive affect.

Creativity: Creativity was measured using the 12-item Self-rated Creativity Scale (SRCS; Tan & Ong, 2019). Sample items are "I am a good source of creative idea" and "I exhibit creativity on the work when given the opportunity to". Participants rated each statement using a 5-point Likert scale (1: strongly disagree, 5: strongly agree). A higher total score would indicate higher creativity.

Psychological detachment: The psychological detachment was measured using three items adapted from the psychological detachment subscale of the Recovery Experience Questionnaire (REQ; Sonnentag & Fritz, 2007). The three items were "I forget about work," "I don't think about work at all," and "I distance myself from work," and were rated on a 5-point Likert scale (1: I do not agree at all, 5: I fully agree). A higher total score here would indicate higher psychological detachment.

Statistical analysis

SPSS Version 26.0 was utilized to analyze the data. The internal consistency of the instruments was evaluated using Cronbach's Alpha coefficient. Pearson correlation was conducted to examine the relationships among the three variables, and Model 4 of the PROCESS Macro for SPSS Ver 4.10 (Hayes, 2022) was used to examine the indirect effect of lunch break autonomy on creativity via positive affect, with psychological detachment included as a covariate. The indirect effect is considered statistically significant if a zero value is not included in the 95% confidence interval (CI).

Results

Descriptive analysis

Table 1 shows the variables' means and standard deviations and their intercorrelations. The Cronbach's alpha coefficient was greater than 0.80 for the four measurements, suggesting that all measurements have good internal consistency. The results of the Pearson correlation analysis showed that all variables were positively correlated with each other, except for psychological detachment, which was positively correlated only with lunch break autonomy. The correlation between positive affect and creativity was the highest, $r(189) = .532, p < .001$, while the relationship between lunch break autonomy and psychological detachment was the lowest, $r(189) = .146, p = .044$.

An online Monte Carlo power analysis for indirect effects (Schoemann et al., 2017) was employed to examine if the sample size has sufficient statistical power. Using the correlation coefficients and SDs reported in Table 1, the result showed that the sample size achieved a power of .97.

Tab. 1. Descriptive statistics, reliability, and intercorrelation for all variables

Variables	1	2	3	4
1. Lunch break autonomy	-			
2. Positive affect	.276**	-		
3. Psychological detachment	.146*	.074	-	
4. Creativity	.273**	.532**	.078	-
M	3.89	3.40	2.78	3.68
SD	.90	.76	.97	.52
Skewness	-.982	.008	.421	-.067
Kurtosis	1.192	-.516	-.391	.177
Cronbach's alpha	.867	.809	.803	.865

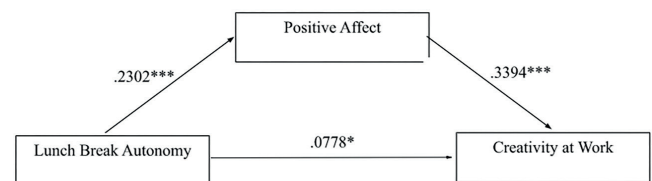
Note. N = 191. M = mean, SD = standard deviation; * $p < .05$, ** $p < .01$

Mediation analysis

A mediation analysis was conducted with lunch-break autonomy as the predictor variable, positive affect as the mediator, creativity as the outcome variable, and psychological detachment as the covariate variable. The results (see Figure 1) showed that the total effect of lunch break autonomy on creativity was statistically significant: (unstandardized coefficient) $B = .16, SE = .0414, p < .001$. Further inspection showed that lunch break autonomy was positively related

to positive affect ($B = .23, SE = .06, t = 3.83, p < .001$) and creativity ($B = .08, SE = .04, t = 2.08, p = .04$) (i.e., direct effect), respectively. A positive relationship was also observed between positive affect and creativity ($B = .34, SE = .04, t = 7.75, p < .001$). Finally, the indirect effect of lunch break autonomy on creativity also appeared to be statistically significant: $B = .0781, SE = .0254, 95\% CI [.03, .13]$. Indirect effect was tested using bias-corrected bootstrapping with 5,000 resamples, as recommended by Hayes (2022).

Fig. 1. Mediation model showing the relationship between lunch-break autonomy and creativity, with positive affect as a mediator. Direct effect is shown on the main path; total effect is presented in parentheses. Indirect effect tested using 5,000 bootstrap resamples.



Note : Direct Effect: $B = .08^*$; Total Effect: $B = .16^{***}$; Values presented are the unstandardized coefficients from SPSS; * $p < .05$, *** $p < .001$

Additional Analysis

It is noteworthy that all data were collected using self-reporting in the present study and using a single method could bias the result. Although the marker variable design was used to minimize the bias, we also conducted Herman's single-factor test to further examine the extent to which our results are prone to the CMB. All items of the three target variables (i.e., lunch break autonomy, positive affect, and creativity) were submitted to a factor analysis using principal axis factoring. The unrotated solution revealed five factors. The first factor explained 29.97% of the total variance, suggesting that the results are less likely to be confounded by common method bias.

Including psychological detachment as a covariate did not substantially change the pattern of results. When the covariate was included, the indirect effect of lunch break autonomy on creativity through positive affect remained significant ($B = .078, 95\% CI [.031; .128]$), and the direct effect was positive and significant ($B = .080, p = .041$). Excluding the covariate produced comparable results: the indirect effect remained significant ($B = .081, 95\% CI [.034; .130]$), and the direct effect was slightly higher but still significant ($B = .090, p = .030$). The total effect of lunch break autonomy on creativity was also significant in both models ($B = .160, p < .001$). Given these negligible differences, we reported the simpler model without the covariate for clarity and parsimony.

Additionally, an exploratory analysis was conducted to examine potential gender and age effects. Independent samples t-tests revealed no significant differences between male ($n = 101$) and female ($n = 90$) participants in lunch break autonomy, positive affect, or creativity: lunch break autonomy, $t(189) = .84, p = .40$; positive affect, $t(189) = 1.12, p = .26$; creativity, $t(189) = 0.58, p = .56$. Similarly, Pearson correlations indicated no

significant associations between age and lunch break autonomy ($r = .07, p = .32$), positive affect ($r = .05, p = .48$), or creativity ($r = .09, p = .21$). These findings suggest that the observed relationships are consistent across gender and age groups.

Discussion

The present study investigated the relationship between lunch break autonomy and creativity, and the underlying mechanism, among working adults in Malaysia. These findings extend prior research by highlighting how even brief, recurring experiences of autonomy, such as those afforded during lunch breaks can accumulate to influence creative self-perceptions and behaviors in the workplace. By adopting a two-week retrospective measure of positive affect, this study aims to capture a broader, more stable representation of employees' typical affective experiences. This approach is particularly relevant in organizational contexts, where both autonomy and creativity could be shaped by patterns that unfold over time, rather than by isolated daily fluctuations. Aggregating affective experiences over a meaningful period helps reduce the influence of transient moods or atypical events, providing a more reliable perspective on the general relationship among lunch-break autonomy, positive affect, and creativity. Moreover, this method aligns with the study's cross-sectional design and focus on general tendencies, and is consistent with prior research examining well-being and creative outcomes in the workplace (Bosch et al., 2018; Tan & Ong, 2019).

The results of this study support all hypotheses and the mediating role of positive affect in the relationship between lunch break autonomy and creativity. Supporting our first hypothesis, lunch-break autonomy was found to be positively related to creativity. In other words, employees who experience autonomy during a lunch break tend to rate themselves as more creative. Autonomy during lunch breaks could play a role in shaping employees' creative self-perceptions. While most research focuses on job-level autonomy, these findings suggest that even brief, recurring episodes of autonomy embedded in the workday may yield psychological benefits. Theoretically, this is consistent with self-determination theory, which proposes that autonomy is a fundamental psychological need that could be satisfied across various contexts and timeframes (Deci & Ryan, 2000). When employees perceive control over how they spend their lunch breaks, they may be afforded opportunities for self-direction and choice, which could facilitate the replenishment of psychological resources, reduce stress, and foster a mindset conducive to creative thinking (Fritz et al., 2013; Bosch et al., 2018). Over time, these situational experiences of autonomy might accumulate, potentially enhancing employees' confidence in their creative abilities and their willingness to engage in creative processes.

Furthermore, the observation that employees who feel autonomous during their lunch break tend to rate themselves as more creative could be further clarified by considering the possible roles of self-efficacy and resource recovery. Autonomy during lunch breaks may not directly result in immediate creative output, but it might contribute to a broader sense

of creative self-efficacy—namely, employees' belief in their capacity to generate novel ideas (Tierney & Farmer, 2002). This is consistent with self-determination theory, which suggests that autonomy satisfaction could enhance intrinsic motivation and self-perceptions of competence, both of which are foundational to creativity. Thus, our results may indicate that even short, context-specific experiences of autonomy could have cumulative effects on how employees perceive their own creativity, underscoring the potential importance of supporting autonomy not only in core job tasks but also in the structure of daily work routines. The findings are consistent with the literature on autonomy satisfaction (Bartholomew et al., 2011) and SDT (Deci & Ryan, 2000) that the satisfaction of autonomy during an employee's lunch break allows recuperation of mental resources (Bosch et al., 2018; Fritz et al., 2013) and the use of recovered resources for innovation in their job.

Similarly, the results support the second hypothesis that lunch-break autonomy is positively associated with positive affect. In line with the SDT and autonomy satisfaction literature (Levine et al., 2020; Oriol-Granado et al., 2017), employees who reported experiencing autonomy satisfaction during the lunch break tend to experience higher levels of positive affect. The finding implies that autonomy satisfaction gained from a lunch break not only allows employees to recover resources spent on job demands but also experience positive affect as they are not overburdened by the stress and strain associated with job demands (Trougakos et al., 2014).

Supporting our third hypothesis, the results showed that positive affect is positively correlated with creativity. The results are aligned with past studies (e.g., Baas et al., 2008; Parke et al., 2015) and the broaden-and-build theory (Fredrickson, 2004). In the context of the present study, the finding suggests that employees are likely to perceive themselves as more creative when they experience positive emotions induced by lunch-break autonomy.

Finally, consistent with our hypothesis, positive affect mediated the relationship between lunch break autonomy and creativity. Our findings provide the first empirical evidence to support the hypothetical mediation model. It can be inferred that employees whose autonomy satisfaction is fulfilled during the lunch break tend to experience positive affect. Positive affect, in turn, broadens the mindset by expanding attention and cognitive flexibility (Baas et al., 2008) and enhances creative thought processes at work.

Implications

Our study contributes to the growing body of research on work breaks by examining the relationship between lunch-break autonomy and creativity. Building on prior work showing a positive relationship between autonomy and creativity (Sia & Appu, 2015; Xie et al., 2020), we examine how this relationship applies specifically to lunch breaks. Notably, our findings reveal that positive affect mediates the relationship between lunch break autonomy and creativity, shedding light on the underlying mechanism. By doing so, our study contributes to the theoretical frameworks of Self-Determination Theory (SDT; Deci & Ryan, 2000) and

broaden-and-build theory (Fredrickson, 2004), demonstrating how these concepts intersect to explain the dynamics between lunch break autonomy and creativity.

In practical terms, our research offers valuable insights into organizational management. Firstly, it underscores the importance of recognizing the role of lunch break autonomy in fostering both positive affect and creativity among employees. Acknowledging and catering to employees' autonomy needs during lunch breaks can significantly enhance their well-being and creative output. To facilitate this, organizations are encouraged to implement policies that support lunch break autonomy, such as providing designated spaces and encouraging employees to engage in activities of their choice. By doing so, organizations can create a conducive environment that not only promotes employee satisfaction but also boosts creativity in the workplace.

Furthermore, our findings lay the groundwork for future research endeavors. By establishing empirical evidence of the beneficial effects of lunch break autonomy on creativity, our study suggests a new direction for future studies to develop a comprehensive model that clarifies the conditions under which lunch break autonomy may either strengthen or hinder creative performance. This avenue of inquiry holds promise for advancing our understanding of the complex interplay between autonomy, positive affect, and creativity in organizational settings.

Beyond practical implications, our findings may contribute to SDT by suggesting that autonomy in micro-settings such as lunch breaks could play a meaningful role in employee well-being and creativity. While SDT traditionally emphasizes autonomy in broader work contexts, these results indicate that even brief, recurring opportunities for choice and self-direction may satisfy autonomy needs and foster positive outcomes. Future research could examine how autonomy in everyday micro-settings interacts with broader job autonomy to influence motivation and performance.

At the same time, cultural context warrants attention. Although autonomy is theorized as a universal need within SDT, its expression and impact may differ across cultures. In collectivistic settings such as Malaysia, where harmony and interdependence are emphasized, autonomy during lunch breaks could be perceived differently than in individualistic cultures. This cultural backdrop may amplify positive effects when autonomy aligns with social norms or attenuate them when autonomy is viewed as conflicting with collective expectations. Future studies should explore these cultural moderators to determine whether the LBA–positive affect–creativity link generalizes across diverse work cultures.

Limitations and future directions

There are several limitations in this study. First, it is essential to note that the responses were collected simultaneously through employees' self-reports. The findings cannot illuminate the causal relationships between the variables and are prone to social desirability bias. Future studies may consider experimental and longitudinal designs, as well as objective measures of creativity (e.g., supervisor ratings), to address the methodological gap.

Second, the reliance on self-reported, two-week retrospective measures of positive affect and creativity presents further

limitations. While this approach offers a cumulative perspective on employees' experiences, it may not fully distinguish between state-like (momentary, context-dependent) and trait-like (stable, dispositional) components of these constructs. This ambiguity has implications for interpreting the mediation effect: it remains unclear to what extent the observed relationships reflect short-term, situational changes versus enduring personal characteristics. As such, the mediation observed in this study may be influenced by both transient experiences and more stable individual tendencies. Future research should employ designs that can disentangle these effects, such as daily diary or experience sampling methods, to clarify whether the mediating role of positive affect operates primarily at the state or trait level. Such approaches would provide a more nuanced understanding of how lunch-break autonomy influences creativity through affective processes and inform whether interventions should target immediate experiences, long-term dispositions, or both.

Additionally, the present study focused on employees in creative industries. The findings may not be generalizable to other industries. Researchers are encouraged to replicate the present study with employees across different industries to clarify the benefits of lunch break autonomy. One promising area is exploring whether lunch-break autonomy can promote employee performance beyond creativity in industries or job positions with low task novelty.

The study results could also be confounded by a segment of the study's sample with different working arrangements. Mainly, a segment of the sample population comprises freelancers or business owners who may have greater freedom over their working arrangements (including lunch breaks) than their counterparts employed by others. Several studies have found a link between self-employment and autonomy (Danziger & Valency, 2006; Prottas, 2008). This raises the possibility that the greater freedom these self-employed individuals possess could provide them with more opportunities to experience lunch-break autonomy by choosing when and how they take lunch breaks. In the same vein, some companies and organizations have integrated remote work into employee work arrangements since the COVID-19 pandemic and continue this practice in the post-pandemic era. Introducing new working arrangement schedules, such as flexible working hours, could have influenced autonomy satisfaction during lunch breaks as employees may utilize them differently. For instance, certain employees may have spent their lunch breaks at home on particular days of the week, which gave them fewer opportunities for social activities with colleagues. This may have affected employees' ability to cope with perceived stress and support their well-being (Luo et al., 2022). Moreover, some employees might experience lower satisfaction with autonomy during the lunch break. As a result, they experience less positive affect and lose out on creativity due to perceived stress from a lack of social interaction during the lunch break. We did not test for measurement invariance across these groups, limiting the interpretability of mean and path comparisons. Future studies should examine whether the scales function equivalently across employment types before comparing structural relationships. Beyond that, examining the potential impacts of self-employment and flexible working arrangements on the relationship between lunch break autonomy and creativity could also be useful.

Finally, the present study did not take into consideration other intrapersonal variables that are associated with creativity such as the personality trait of openness (e.g., Petrou et al., 2023), creative process engagement (Machado et al., 2023; Tan, Lau, & Lee, 2019), intrinsic motivation (Tan, Lau, Kung, & Kailsan, 2019; Yesuf et al., 2023), hope (Tan, Cheng, et al., 2025; Tan, Ramsay, et al., 2025), and executive functioning (Nasir et al., 2021). Future studies are warranted to expand the present study to clarify whether the positive relationship between lunch break autonomy and creativity can be maintained after controlling for the effects of the abovementioned variables and other job-related variables such as job engagement (Lee et al., 2022) and organizational culture (Gencer et al., 2023) that play a role in employee performance. In the same vein, it is also essential to consider lifestyle differences such as the practice of not eating lunch due to certain dietary plans.

Conclusion

In summary, the present study offers empirical evidence of an unexplored hypothetical relationship between lunch break autonomy and creativity and provides insight into the mediating role of positive effect in the relationship. While our findings provide preliminary evidence of a possible link between lunch break autonomy, positive affect, and creativity, these results should be interpreted with caution. The cross-sectional design precludes causal inference, and the sample drawn from Malaysian creative industries limits generalizability. Future research using longitudinal or experimental approaches and diverse occupational contexts is needed to confirm whether these relationships hold across settings. Thus, our conclusions reflect an initial step toward understanding how micro-level autonomy experiences could influence creativity, rather than definitive evidence. Finally, future researchers can further investigate the impact of lunch break autonomy on employees' performance and well-being based on the findings and limitations of the present study.

Ethical Approval

All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national). Ethics approval was granted by the Scientific and Ethical Review Committee (Ref: U/SERC/94/2022). Informed consent was obtained from all individual participants included in the study.

Data Availability Statement

The data of the present study are available upon request to the corresponding author.

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Conflict of Interests

The authors have no conflicts of interest to declare relevant to this article's content.

Author Contributions

Conceptualization: Eddie Limbang Jr.; Formal analysis: Eddie Limbang Jr. ; Writing - original draft: Eddie Limbang Jr.; Writing - review & editing, Supervising: Chee-Seng Tan & Soon-Aun Tan. All authors have read and agreed to the published version of the manuscript.

Supplementary material

Not applicable

Declaration about the use of generative AI and AI-assisted technologies in the writing process

During the preparation of this manuscript, the authors used ChatGPT 3.5 to improve the spelling, grammar, clarity, conciseness, and overall readability of the text. After using this tool, the authors reviewed and edited the content as needed and took full responsibility for the content of the publication.

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