**Trait Mindfulness and Counterproductive Work Behavior: The Role of Stop and Start Control**

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**Abstract**

This study aimed to examine the antecedents of Counterproductive Work Behavior (CWB) by investigating two dimensions of self-control, namely stop and start control, as mediators between trait mindfulness and CWB. A correlational research design was employed, and the participants were full-time workers aged between 20 and 39 years. The instruments consisted of the Stop Control and Start Control Scale, Mindfulness Attention Awareness Scale (MAAS), and Counterproductive Work Behavior Checklist (CWB-C). The results of the mediation analysis showed that the trait mindfulness had an indirect effect on CWB through stop control \((ab = -0.11, p < .01)\) and start control \((ab = -0.04, p < .01)\), as well as a direct effect on CWB \((c' = -0.07, p < .01; c' = -0.24, p < .01)\). These findings suggested that stop and start control partially mediated the relationship between trait mindfulness and CWB.

**Keywords:** counterproductive work behavior, stop control, start control, trait mindfulness

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**Introduction**

Counterproductive Work Behavior (CWB) has become a significant concern due to its continuous occurrence as an unseen organizational problem (Yiwen & Hahn, 2021). Despite its potential negative impact on organizations, very few organizations consider this behavior (Bennett et al., as cited in Carpenter et al., 2020). CWB is defined as intentional work behavior that can cause damage to various parties, including organizations, clients, colleagues, customers, and superiors (Spector & Fox, as cited in Spector et al., 2006). It is also considered a unidimensional construct consisting of several types of deviant behavior, such as physical and psychological abuse, production deviance, sabotage, theft, and withdrawal (Spector et al., 2006).

CWB has detrimental effects on both workers and organizations. These negative impacts include decreased worker performance, productivity, and politeness in the workplace, with increased costs and lower overall effectiveness (Wei & Si, 2013; Jermier et al., as cited in Krishnakumar & Robinson, 2015). Given that worker productivity is a crucial factor in the success of a company, employees engaging in CWB...
can hinder them from achieving predetermined goals (Piccoli et al., 2017). Therefore, it is imperative to further investigate CWB in organizations and identify factors or variables capable of preventing its occurrence and mitigating its negative impacts.

CWB is a type of behavior linked to individual factors, as it requires an internal process to exhibit certain behaviors. Since individuals have unique personalities and traits, studies explored the relationship between personality and CWB. For example, Ferreira and Nascimento (2016) investigated the correlation between the Big Five Personality Traits and CWB. Additionally, studies in the academic context found that proactive personality and trait mindfulness helped reduce counterproductive behavior (Islam et al., 2018; Schwager et al., 2016). Krishnakumar and Robinson (2015) reported that trait mindfulness, a personality factor, had a negative relationship with CWB. According to Brown and Ryan (2003), trait mindfulness is a natural tendency viewed from two perspectives, namely as a state and a trait.

Trait mindfulness is a tendency to experience mindfulness characterized by awareness and present moment attention. State mindfulness is a mindful condition intervened or trained through yoga, meditation, or breathing exercises (Mesmer-Magnus et al., 2017). However, obtaining both trait and state mindfulness through meditation is possible (Bravo et al., 2018). Traditionally, trait characteristics are relatively more stable (Tang, 2017; Oberleiter et al., 2022). Tang (2017) further stated that traits also change over a prolonged period due to experience and training. According to Oberleiter et al. (2022), having a higher level of trait mindfulness strengthens the effects of mindfulness interventions. It lasts longer, while state mindfulness only occurs in specific situations (Hamaker et al.; Spielberger et al., as cited in Medvedev et al., 2017). It is more appropriate to consider mindfulness as a trait quality, which refers to the habitual patterns of behavior, thinking, and feeling of an individual. Mindless individuals ignore the thoughts, emotions, motives, and objects present (Brown & Ryan, 2003). Those with the trait of mindfulness are usually aware of the present moment.

Mindful workers are capable of exerting self-control over their tasks and performance (van Hooft & Kreemers, 2021). Self-control is restraining undesirable behavior (Tangney et al., 2004) or regulating actions for long-term positive outcomes (de Boer et al., 2011). Chiesi et al. (2020) found a positive correlation between trait mindfulness and self-control. This can be explained by how mindfulness allows individuals to consciously observe and accept their emotions, increasing awareness and sensitivity to thoughts and emotions. Although the strength of self-control is a dynamic concept that fluctuates in the day (Clinton et al., 2020), with trait mindfulness, individuals will be able to reconsider their reactions by controlling negative impacts.

According to Tangney et al. (2004) and de Boer et al. (2015), self-control can be classified into two types of behaviors, stop and start control. Stop control involves restraining oneself from engaging in short-term attractive behaviors capable of leading to negative long-term consequences, such as gossiping in the office or using the phone while working. Start control, on the other hand, involves initiating unwanted behaviors that lead to positive outcomes or engaging in less attractive behaviors with positive effects, such as accepting negative feedback from a supervisor or promptly responding to an email belonging to someone else. The items in the Brief Self-control Scale (BSC) developed by Tangney et al. (2004) also supported the existence of two different behavior when individuals practice self-control. For instance, the item "I resist bad things for me" reflects the efforts of individuals to restrain themselves, while the item "I can work effectively towards long-term goals" means their ability to initiate action. Both aspects of
self-control are negatively related to workplace deviance (de Boer et al., 2015).

This study postulates that individuals who possess trait mindfulness are better equipped to become aware and sensitive to their emotions and experiences without being judgmental or reacting automatically. This enhanced awareness enables workers to exercise self-control by refraining from engaging in attractive behaviors with negative consequences (stop control) and initiating actions that can lead to positive outcomes (start control). Workers with good stop-and-start control are more likely to avoid engaging in behaviors that can cause damage to themselves and others, such as workplace deviance, by regulating their actions to align with long-term goals (de Boer et al., 2015). However, there is still a lack of research on the relationship between mindfulness, self-control (stop and start control), and workplace deviance. This study aims to investigate whether stop and start controls mediate the relationship between trait mindfulness and workplace deviance.

Methods

This is a non-experimental correlational study with data collected from the participants only once. The participants were from Jakarta, Bogor, Depok, Tangerang, and Bekasi, with the following characteristics: 1) Male and female workers, as both genders have the potential to engage in CWB, 2) Aged between 20-39 years because those in this age range are assumed to have entered early adulthood and have increased responsibilities (Putri, 2019), which made them to consciously control their behavior at work, and 3) Full-time workers who worked 40 hours per week are assumed to have greater responsibility than part-time workers.

Data were collected using a convenience sampling technique, which involved selecting participants based on their availability to fill out a questionnaire distributed offline and online through Google Forms. This study also included informed consent, which allowed participants to voluntarily agree to fill out the questionnaire based on their true feelings. Out of the 280 offline and 182 online questionnaires collected, only 172 and 155 were usable, respectively. The data that could not be used were either due to non-compliance with the target participants' characteristics or incomplete demographic data. Based on 327 usable data, a normality test was conducted to eliminate outliers or extreme data, thereby 306 participants being used for analysis.

The measurement tool for CWB was Counterproductive Work Behavior Checklist (CWB-C) developed by Spector et al. (2006). The instrument comprised a 32-item checklist encompassing five types of deviant behavior, including abuse, production deviance, sabotage, theft, and withdrawal. Participants rate the frequency of these behaviors on a five-point Likert scale, ranging from 1 (never) to 5 (every day). Example statements from the checklist include "Insulting someone's job performance at work" and "Coming to work late without permission".

The measurement tool used for self-control was developed by de Boer et al. (2011). It consisted of 17 items, comprising 9 stop control items and 8 start control items. Participants rated the agreement with the statements on a six-point Likert scale, ranging from 1 (strongly disagree) to 6 (strongly agree). Example statements from the measurement tool included "I always think about the actions I take beforehand" and "Even if I do not like it, I can complete tasks that need to be accomplished."

Mindfulness Attention Awareness Scale (MAAS) developed by Brown and Ryan in 2003 was used to measure trait mindfulness. The scale comprised of 15 statements that assessed an individual's level of attention and awareness in the present moment. The participants were asked to rate each statement on a six-point Likert scale ranging from 1 (almost always) to 6 (almost never). For instance, sample statements in the scale included "I have trouble staying focused on what is happening right now" and "I
sometimes experience various emotions without being conscious of them until later”.

A pilot test was conducted with 49 participants who met the predefined characteristics. CWB-C and MAAS instruments were found to be unidimensional, as opposed to self-control, which was multidimensional. MAAS instrument had been translated into Indonesia from a preliminary study conducted by Yusainy et al. (2019). Meanwhile, CWB-C and self-control instruments were translated from English into Indonesian. Back translation was performed to ensure the equivalence of meaning. Content validity was tested through expert judgment involving two Industrial and Organizational Psychology experts. The instrument was reviewed again to ensure the words were easily understandable before finalization. Cronbach Alpha testing on the pilot study results showed reliability coefficients of .92 (CWB-C), .83 (MAAS), .75 (Start Control Scale), and .57 (Stop Control Scale).

Furthermore, a consistency test was performed on the measurement items. According to Clark & Watson (1995), a corrected item-total coefficient (CrIT) value above .20 was considered acceptable. This threshold value was selected to strike a balance between not being too low or too high. The results showed that all items in MAAS had T However, two items in CWB-C had CrIT values below .20, namely item 7 (.012) and 13 (.183), while the remaining two in the Stop Control Scale including item 3 (.121) and 4 (.018), had low CrIT values. These items were removed from CWB-C and Stop Control Scale during data analysis. In the Stop Control Scale, two items were also revised with the hope of improving reliability. These included item 2 (.170, originally "I can always focus on my tasks even if I do not like them" revised to "I stay focused on the tasks I work on even if I do not like them") and item 6 (.132, originally "I know I can track my behavior when I try to achieve a goal" revised to "I can monitor my behavior to achieve a goal").

The reliability and consistency of the measurement items were retested on all the instruments used by 306 participants. The results showed that MAAS, CWB-C, Stop Control Scale, and Start Control Scale had reliability coefficients of .85, .87, .70, and .71, respectively. This indicated that all measurement instruments had good internal consistency in measuring their respective constructs. The test results revealed that MAAS, CWB-C, and Stop Control Scale had good CrIT coefficients, while the Start Control Scale were low (below .20) for items 9 and 10, and excluded from data analysis.

Several steps were taken to reduce the occurrence of bias (common method variance - CMV). Firstly, the questionnaire was divided into two distinct groups. The questionnaire containing the criteria variable (CWB), named the "Employee Work Performance Questionnaire", and another consisting of the predictor variable (Trait Mindfulness) and mediator variables (Stop Control and Start Control), labeled the "Employee Work Productivity Questionnaire". This strategy aimed to create the impression that the predictor variable was not directly linked to the outcome variable. Secondly, participants were assured that their identity could be written anonymously or using initials. It was ensured that the data received were kept confidential and not intended for individual evaluation or linked to the company. Participants were also informed that there were no right or wrong answers but were promoted to provide honest responses based on their personal experiences and emotions rather than relying on social standards.

This study employed several techniques for data analysis, including descriptive statistical analysis, Pearson correlation, and the PROCESS program in the Hayes SPSS software. The mediation model used was a simple mediation model (model 4). The collected data were processed using SPSS version 25, and to ensure that the measuring instruments were comparable, the total scores were converted into z-scores.
Results and Discussion

This study involved a total of 306 participants between the ages of 20-39 and are employed as full-time workers, working a minimum of 40 hours per week.

Tables 1 and 2 indicate a significant positive correlation between trait mindfulness and both stop control (a = .44, p < .01) and start control (a = .24, p < .01). It can be concluded that individuals with higher levels of trait mindfulness are likely to have greater stop and start control. Furthermore, the mediation analysis showed a significant negative association between stop control and CWB (b = -.26, p < .01), as well as start control and CWB (b = -.16, p < .01). This indicates that higher levels of stop and start control correspond with lower incidences of CWB. Finally, the analysis revealed a negative relationship between trait mindfulness and CWB (c = -.28, p < .01), suggesting that individuals who possessed greater levels of trait mindfulness were less prone to engage in CWB.

In Figures 1 and 2, the mediation analysis shows that there is an indirect effect of trait mindfulness on CWB through stop (ab = -.11, p < .01) and start (ab = -.04, p < .01) controls. These data support the hypothesis that stopping and initiating control mediates the relationship between trait mindfulness and CWB. Based on the results of the mediation analysis, there is still a direct effect of trait mindfulness on CWB (c' = -.17, p < .01 and c' = -.24, p < .01). Therefore, both controls have a partial mediating effect on the relationship between trait mindfulness and CWB. The higher the trait mindfulness of an individual, the greater the stop and start controls, hence the lower the probability of conducting CWB. The nature of trait mindfulness can also relate to CWB directly without involving stop and start controls.

Table 1

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R² = .19
F(1.304)=71.43, p<.01

Table 2

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<th>Antecedents</th>
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R² = .19
F(1.304)=71.43, p<.01
Discussion

The data analysis results support the hypothesis that there is a role for stop and start control partially mediating the relationship between trait mindfulness and CWB. This can be explained using the Self Control theory developed by van Hooft and Kreemers (2021). In the workplace, self-control is needed when workers perceive a discrepancy between their current situation and desired goals/standards, which motivates them to engage in goal-directed behavior (van Hooft & Kreemers, 2021). Self-control consists of two forms, namely (1) goal-directed action, which involves initiating action (start control), and (2) actions directed at goals requiring inhibiting distractions/temptations capable of interfering with goal attainment (stop control). This theory also suggests that individuals personality traits influence their level of self-control positively or negatively. Overall, the study supports the importance of self-control in workplace behavior and its association with trait mindfulness and CWB (van Hooft & Kreemers, 2021).

According to Spector et al. (2006), five forms of behavior constitute CWB (Spector et al., 2006). The first is abuse, which involves committing physical or psychological damage against a co-worker. These manifest as unkind remarks, threats, ignoring their presence, or preventing them from working effectively. The second is sabotage, which entails damaging or destroying physical property in the work environment (Chen & Spector, as cited in Spector et al., 2006). The third is production irregularities, where intentional actions fail to perform work effectively and accurately. The fourth is withdrawal, a deliberate reduction in work time resulting in a discrepancy between the expected and actual amount of work completed for the organization (Spector et al., 2006). Examples of withdrawal behavior include excessive absences, arriving late to work, or leaving earlier than scheduled. Finally, the fifth form of CWB is theft, which involves intentionally
stealing assets or belongings of superiors or co-workers (Wei & Si, 2013).

The results indicate a negative relationship between trait mindfulness and CWB. Individual factors affecting CWB include low trait mindfulness (Khrisnakumar & Robinson, 2015). CWB occurs when employees lack the motivation or ability to comply with company policies or try to exploit vulnerable organizational systems for personal gain (Searle & Rice, 2018). The previous study by Khrisnakumar & Robinson (2015) also found a negative relationship between trait mindfulness and CWB. Brown and Ryan (2003) stated that individuals fully aware of their present experiences are more likely to regulate their emotions and behaviors. This led to the avoidance of unproductive activities and habits capable of causing damage to themselves and others.

Kao et al. (2019) stated that individuals with higher trait mindfulness are more likely to comply with safety regulations and actively participate in workplace safety, with reduced risk of work accidents. Mindful workers are attentive, self-aware, and able to make informed choices, which allows them to maintain control over their actions and work towards achieving set goals (Kao et al., 2019). Additionally, trait mindfulness is associated with reduced impulsive and immoral behavior (Georgiou et al., 2019). Workers with higher trait mindfulness are less likely to experience negative emotions and exhibit counterproductive behavior, even in the face of unfair treatment, as they are more aware and less affected by external events (Long, Christian, as cited in Babalola et al., 2019). On the other hand, workers with unstable emotions are likely to experience emotional exhaustion, which can increase the likelihood of engaging in CWB (Chen et al., 2020).

In Psychology, mindfulness is used in three ways, firstly, to describe a state, as in the mode of awareness entered during mindfulness meditation. Secondly, as an intervention, individuals learn mindfulness meditation, and thirdly as a trait that shows stable qualities in individuals (Cosme & Wiens, 2015). Mindfulness can reduce affective reactivity, such as individual reactions to events that cause affective conditions (Desbordes et al., as cited in Cosme & Wiens, 2015). Mindfulness helps individuals to maintain their attention on the present moment by cultivating an attitude of acceptance towards their experiences, creating a space between the stimulus and the response (Desborders et al., as cited in Cosme & Wiens, 2015). This ability to slow down and not react too quickly to a situation can lead to more thoughtful and appropriate responses to the environment, indicating that mindful individuals possess a heightened level of awareness. Individuals with trait mindfulness are able to consciously recognize their current condition and reduce their reactive behavior accordingly (Cosme & Wiens, 2015).

The results indicate a positive association between trait mindfulness and self-control in both the stop-control and start-control dimensions. Mindfulness is an approach that directs individuals to control themselves rather than focusing on suppressing emotions (Liang et al., 2016). These conditions can provide higher awareness and self-control behavior (Brown & Ryan, 2003; Brown et al., as cited in Liang et al., 2016). The nature of mindfulness can increase individual confidence in their ability to deal with work and life challenges (Mesmer-Magnus et al., 2017). Workers with low trait mindfulness will also have low self-control (Morley et al., 2021). The nature of trait mindfulness and self-control can improve the ability of an individual to manage time when taking exams (Osgood et al., 2017). In addition, previous studies found the ability of mindfulness to improve emotion regulation (Peters et al.; Tangney et al.; Eisenlohr-Moul et al., as cited in Garofalo et al., 2019). Emotion regulation differs from self-control, a component of emotion regulation (Gillebaart, 2018).

Chiesi et al. (2020) reported that trait mindfulness and self-control share a moderately positive relationship. Self-control is considered a fundamental emotional
process, and as mindfulness impacts emotions, it is likely to influence self-control (Elkins-Brown et al., 2017). Moreover, it is a conscious process (Hagger et al., 2021), and trait mindfulness encompasses aspects of attention and awareness, suggesting that individuals with higher trait mindfulness may exhibit greater self-control. Schuman-Olivier et al. (2020) also highlighted that mindfulness can impact self-regulation, including emotional regulation, self-processing, and attention and cognitive control, leading to behavioural changes. Mindfulness has been found to improve inhibition control (Grundy et al., 2018).

The results indicate that there is a negative relationship between stop and start control with CWB (Galić & Ružojčić, 2017). Workers who possess higher levels of stop and start control are less likely to engage in CWB, including behaviors that can damage and disadvantage the company, clients, or colleagues (de Boer et al., 2015). Stop control, which involves resisting the temptation to engage in short-term, attractive behaviors such as working slowly, is negatively related to CWB (de Boer et al., 2015; van Hooft & Kreemers, 2021). According to Chiesi et al. (2020), the relationship between trait mindfulness and self-control predict rejection to act based on self-desires. This means individuals with trait mindfulness have self-control to think more about the behavior displayed.

The results show that although stop and start control can mediate the relationship between trait mindfulness and CWB, the role of stop control as a mediator is much greater. This was in line with the previous study by de Boer et al. (2011), stating that the separation of self-control into two dimensions was used to examine individual behavior outcomes. Stop control is much more needed to control oneself from negative behavior, such as CWB. van Hooft and Kreemers (2021) reported that stop control was negatively related to CWB dimensions of withdrawal and abuse. Workers who exhibit high levels of stop control are able to refrain from engaging in aggressive actions when they are frustrated (van Hooft & Kreemers, 2021). Meanwhile, start control is more crucial in initiating behaviors that can bring positive consequences, such as Organizational Citizenship Behavior (van Hooft & Kreemers, 2021).

The results show that trait mindfulness has a direct relationship with CWB and
mediated by stop and start control. This means that trait mindfulness can either directly reduce CWB or require workers to exercise self-control to avoid engaging in such behaviors. Trait mindfulness is considered a stable capacity that can help reduce counterproductive behavior (Schwager et al., 2016), although it changes slowly over time (Tang, 2017). In this case, the role of trait mindfulness can also reduce CWB because workers consciously control themselves. These results are expected to serve as a reference for organizations to consider the conditions of workers, hence, they are trained to have trait mindfulness or self-control, avoiding CWB.

Similar to other reports, this study has some limitations that should be addressed. One limitation is that stop control is found to have a stronger mediating role than start control in the relationship between trait mindfulness and CWB. Based on its concept, start control is self-control to initiate behavior that yields positive results. This self-control is more likely to contribute to positive behavior because the result is considered good behavior. Therefore, future studies need to investigate positive behavioral outcomes, such as Organizational Citizenship Behavior (OCB), in the context of trait mindfulness and start control. This is important because while mindfulness has been found to be positively related to OCB in some studies (van Hooft & Kreemers, 2021; Nauly et al., 2022), it has not been consistently related in other studies, such as Soni & Dwivedi (2021). Therefore, there is need for further exploration of potential mediators, including start control, in the relationship between mindfulness and positive behaviors.

Based on demographic data, only participants residing in the Greater Jakarta area were considered, hence, future studies need a broader scope. However, this study can be a starting point given that Greater Jakarta is the largest urban area in Indonesia. Employment issues in big cities have become an important that need to be analyzed by considering the diverse workplace issues, including the role of mindfulness and self-control in reducing the impact of CWB in the workplace, specifically for workers.

Conclusion

In conclusion, this study examined the possibility of stop and start control to serve as a mediator in the relationship between trait mindfulness and CWB. The analysis results showed that both stop and start control partially mediated the relationship between trait mindfulness and CWB. These findings suggested that practical application in the workplace, such as mindfulness at work training facilitated by the organization, could be implemented to enhance mindfulness among workers. This, in turn, would help workers maintain focus on their tasks, avoid distractions, and exert better self-control to prevent unproductive behaviors capable of causing damage to themselves, their workgroup, or the company. The results also suggested that higher levels of mindfulness were associated with greater levels of self-control (stop and start control), capable of mitigating CWB. Additionally, future studies needed to consider exploring other variables, such as Organizational Citizenship Behavior (OCB), as potential mediators in the relationship between start control and CWB from a theoretical perspective.

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