Influence of Challenge–Hindrance Stressors on Unethical Pro-Organizational Behavior: Mediating Role of Emotions

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Abstract: Unethical pro-organizational behavior (UPB), which threatens the sustainable development of enterprises, has become important research content in organizational management in recent years. Based on the framework of challenge–hindrance stressors, we explored the effect of stress on UPB from an emotional perspective. Multi-mediation models were constructed to reveal the relationship between stressors (challenge and hindrance stressors) and UPB, and the mediating roles of individual anxiety, attentiveness, and anger. The results of 375 questionnaires indicated that challenge stressors had no significant relationship with UPB due to the presence of the suppression effect. Challenge stressors had a positive effect on UPB through anxiety and a negative effect on UPB through attentiveness. Hindrance stressors had a positive effect on UPB through the mediation of anxiety and anger. Managers can benefit from the findings to correctly cope with employees’ emotional reactions and unethical behaviors caused by work stress, and take appropriate management measures to reduce and prevent employees’ UPB.

Keywords: challenge–hindrance stressors; anxiety; attentiveness; anger; unethical pro-organizational behavior

1. Introduction

The rapid development of the social economy has resulted in frequent business scandals, such as the “bribe gate” of Siemens seeking orders, Enron, and Sanlu Company’s melamine incident. The exposure of immoral events hinders the sustainable development of the organization, which makes the value of ethics in the practice of organization management widely concerning [1]. Unethical behavior refers to behaviors that violate generally accepted social moral standards, which are regarded as individual retaliation or complete self-serving [2]. However, many studies in recent years have recognized that employees’ unethical behavior may benefit their organizations [3]. This behavior was named unethical pro-organizational behavior (UPB) by Umphress and Bingham (2011) [4]. Although UPB may initially benefit organizations and individuals, its unethical nature may eventually result in UPB deviating from the original intention, thereby causing adverse or even destructive consequences. UPB can be detrimental to the interests of other stakeholders and the reputation and legal status of organizations, thereby hindering the sustainable development of these organizations [5,6]. To effectively prevent and control this behavior, studies have been conducted to explore the causes of UPB.

To date, studies on the antecedents of UPB have confirmed many individual-level factors, including organizational identification [7], work passion [8], psychological entitlement [9], job insecurity [10,11], job satisfaction [12], moral disengagement [7], and organizational commitment [13]. In addition, leadership factors include transformational [14] and ethical leadership [15]. Moreover, interpersonal-level factors include employee–organization relationship [16] and social exclusion [17].
Lastly, organizational-level factors include performance pressure [18], high-performance work systems [19], and ethical pressure [20]. In particular, job insecurity, ethical and performance pressure, and social exclusion have been highlighted as predictors of increased levels of stress [21]. These findings encourage the further exploration of the relationship between stress and UPB.

Research about stress has indicated that the impact of stress on individuals depends not only on the magnitude of the stress, but also on the nature of stress [22,23]. Cavanaugh et al., (2000) [24] constructed the challenge–hindrance stress framework, in which work stressors are classified into two categories: namely, challenge and hindrance stressors. Challenge stressors refer to work demands that are appraised as beneficial to individual learning, growth, and performance, such as workload, job complexity, and time urgency. Hindrance stressors refer to demands and situations in the workplace that are appraised as impeding the achievement of individual goals and career development, such as role ambiguity and organizational politics [25]. Both types of stressors can trigger employees’ strain and anxiety, but there are differences in their influences on individual emotion, motivation, attitude, performance, and behavior [25,26]. Based on the challenge–hindrance stress framework, this study further explores the influence of stress on employees’ UPB to help enterprises conduct targeted stress management on employees and prevent and control employees’ UPB.

Emotion is an important factor in the study of the stress effect on individual behavior [27,28]. The affective events theory (AET) [29] states that negative or positive events at work will induce individuals to produce the corresponding emotional reactions. Consequently, these reactions will affect their attitudes and behaviors through direct affect and indirect judgment-driven behaviors. Therefore, we suggest that cognitive assessment and emotional experience caused by stress events may be important drivers of UPB. Challenge and hindrance stressors have a certain uncertainty, which can induce individual anxiety and lead to the loss of psychological resources [26]. To escape from an anxious emotional state, individuals may regard UPB as a tool to cope with stressful events [18]. Existing studies have indicated that individuals in certain cases can experience mixed emotions simultaneously [30,31]. Apart from experiencing anxiety, individuals facing challenge stressors experience positive emotions, such as attentiveness [32]. The emergence of positive emotions promotes an upward spiral of personal resources, thereby supplementing the physical and mental resources consumed by individuals in coping with stressors and improving their self-control [33]. In this state, individuals may be considerably sensitive to the long-term costs of UPB, such as reputation damage or reduced social recognition, and tend to develop positive strategies to deal with these stressors. However, individuals under hindrance stressors primarily experience negative emotions, such as anxiety and anger [32]. The self-control theory indicates that resources for self-control are limited [34]. When limited resources are consumed when coping with a high intensity of negative emotions, individuals may experience ego depletion, thereby decreasing their self-control in making moral choices [35]. Individuals are likely to engage in UPB to respond to hindrance stressors owing to emotional drive and the resulting self-control failure. Therefore, based on the emotional perspective, this study was conducted to explore the mediating role of attentiveness and anxiety in the process of the influence of challenge stressors on UPB, and the mediating role of anxiety and anger in the process of the influence of hindrance stressors on UPB.

The overall goal of this study was to investigate the relationship between work stress and UPB. The specific objectives were to establish multi-mediation models to explore the influence of challenge stressors on UPB and the role of attentiveness and anxiety in this process, as well as the influence of hindrance stressors on UPB and the role of anxiety and anger in this process. The proposed model can theoretically broaden the influence scope of dual stressors and deepen the causes of UPB. In practice, suggestions are provided for enterprises to restrain the negative factors that affect the sustainable development of enterprises.
2. Theory and Hypotheses

2.1. Challenge–Hindrance Stressors

Stress refers to a process set in motion when demands in the environment tax or exceed individuals’ resources [27]. The body of research on stress, particularly on the effects of stress, is increasing. Many studies have indicated that work stress is negatively correlated with performance [36–38], but other studies have reported that certain stressful events are positively correlated with individual performance [39,40]. The inconsistencies in the magnitude and direction of the relationship between stress and performance have led scholars to recognize the need to further consider the nature and classification of work stress [22]. Lazarus and Folkman (1984) [27] proposed the transactional theory of stress, which is an important theory used to explain the uncertainty and contradictory results induced by work stress. This theory states that the individuals’ response to stressful demands and the choice of coping strategies are mainly through a two-stage process of cognition and assessment. In the initial evaluation stage, individuals recognize that the stressor is meaningful to them and spontaneously assess the harm, threat, and challenge that such a stressor may bring to them. In the secondary evaluation stage, individuals appraise their available resources and ability to cope with stress. Cavanaugh et al., (2010) [24] extended the transactional theory of stress and developed the challenge–hindrance stressor framework. This framework assumes that although the assessments of demands vary from one person to another, the majority of people tend to view some stressors as a hindrance and others as a challenge [24]. In particular, “challenge stressors” are demands appraised as having the potential to promote personal growth and achieve goals, which include time pressure, workload, responsibility, and job complexity. “Hindrance stressors” are demands appraised as having the potential to constrain personal growth or impede personal gains, which involve demands such as administrative hassles, resource inadequacies, interpersonal conflict, role ambiguity and conflict, and organizational politics [25,41].

2.2. Challenge–Hindrance Stressors and Unethical Pro-organizational Behavior

UPB is defined as “actions that are intended to promote the effective functioning of the organization or its members and violate core societal values, mores, laws, or standards of proper conduct” [4]. For example, an accountant may fix the numbers to reduce tax payments for their organization, a salesperson may exaggerate the effects of products to increase sales rates, and employees may bribe officials to secure large-scale contracts. UPB benefits organizations or their internal members, and may be beneficial to actors as well [4]. Therefore, UPB is not divorced from self-interested views of unethical behavior. Although these actions may appear to be beneficial to organizations in the short term, such actions may not be in the best interest of these organizations, thereby producing nonbeneficial and even destructive outcomes in the long term [5].

In the current business environment, many organizations require their employees to exert their best effort to achieve the organizations’ goals, regardless of the means to achieve such goals [42]. In the case of a strong desire to maintain a long-term employment relationship with organizations or to avoid the negative consequences caused by the failure to meet the requirements of these organizations, employees are likely to break away from moral constraints and regulations to conduct UPB [16,20,43]. Some studies have noted that accountants may compromise ethical standards and engage in UPB under pressure by using questionable accounting techniques [20]. In an environment where unemployment risks exist, employees may resort to UPB to keep their jobs [9]. Employees at risk of exclusion are likely to engage in UPB to mitigate this risk by proving that they can contribute effectively to the group [17]. The common feature of these work situations is their considerable significance to individuals, which makes them feel threatened. Such feelings will increase the stress levels of individuals [21]. Therefore, our point of view indicates that individuals under stress will consider UPB as a self-protective mechanism to cope with stressful demands and situations.
According to the transactional theory of stress [27], employees would have two different types of appraisal on stressful events after evaluating the importance of work demands and situations and the resources they have. One is hindrance appraisal, in which the work demands or situations are considered to be an injury to individuals or potential loss. The other is challenge appraisal, which focuses on the potential for gain or growth inherent in an encounter. Studies in psychology have found that in many psychological phenomena, “bad” things have a stronger impact on people than “good” things [44,45]. Negative stimuli lead to more complex cognitive processing than positive stimuli [46]. Negative events signal to individuals that actions should be taken, thereby triggering more social activity than positive events [44]. Similar results are yielded in moral decision-making studies, in which moral decision-making can be affected by automatic framework. The bounded ethicality theory [47] proposes that individuals facing a moral dilemma are more likely to engage in unethical behaviors when they perceive potential results as losses than when they perceive potential results as gains. Based on the preceding theoretical and associated findings, we supposed that challenge and hindrance stressors positively affect employees’ UPB, and individuals are more likely to engage in UPB when facing hindrance stressors. Therefore, we proposed the following hypotheses:

Hypotheses 1 (H1). Challenge stressors will be positively related to UPB.

Hypotheses 2 (H2). Hindrance stressors will be positively related to UPB.

2.3. Challenge–Hindrance Stressors and Emotions

Weiss and Cropanzano (1996) [29] proposed the affective event theory (AET), which takes affective response as the core, and systematically studied the causes and consequences of affective response, as well as emotional structure. AET states that affective response consists of two components: namely, mood and emotion [29]. Emotion is an important component of affective response, which is defined as a strong emotional experience resulting from whether the objective reality satisfies individuals’ needs [48]. Emotion is characterized by short duration and is goal-centered [49]. The two emotional dimensions are positive and negative. Positive emotion refers to the emotion that makes people feel happy because individual needs are satisfied. Negative emotion is a negative psychological experience, in which individuals’ needs are not met and they fall into unpleasant situations [50]. AET provides an important proposition on how individuals interpret and react to workplace events. This theory indicates that organizational environmental factors may lead to “boring” negative events or “exciting” positive events. Negative and positive events will directly affect the emotional response of employees [50]. Challenge stressors are positive events in the work environment that are assessed to promote individual development, whereas hindrance stressors are negative events in the workplace that are assessed as impeding the achievement of individual goals and constraining individual development. In addition, Lazarus and Folkman (1984) [27] proposed the transactional theory of stress and found a close relationship between stress appraisal and emotions. According to this theory, emotions assess, interpret, and respond to stressors. Although uncertainty exists in challenge stressors, the self-esteem of individuals can be continuously boosted and their various needs satisfied [51,52]. Hence, the positive emotional experience of individuals will be enhanced [32]. However, hindrance stressors can damage individual needs, such as security and self-actualization, thereby placing individuals in an unpleasant situation and leading to negative emotions [53,54].

Positive and negative emotions are higher order dimensions of emotions, which refer to the valence of emotion descriptors [55]. Two-dimensional higher order emotions include a variety of specific emotions, which are low-order dimensions of emotions and describe the specific contents of emotions. In particular, positive emotions include happiness, gratitude, attentiveness, and pride, among others. Negative emotions include anger, anxiety, and sadness, among others [54,55]. According to AET, specific emotions are explanations and reactions to specific workplace events. Given that emotions have extensive connotations and different emotions convey different social information, focusing on specific types of emotions and investigating their effects may make the research comprehensive and
accurate [48]. Studies in the field of emotion found that multiple emotions—or even cross-valence mixed emotions—can exist simultaneously [30,31]. For this reason, this study draws on Rodell and Judge’s research and selects attentiveness in positive emotions and anger and anxiety in negative emotions to explore the differences that may be exerted by challenge–hindrance stressors to employees’ UPB [32].

Attentiveness is a positive emotion that refers to feelings of alertness, concentration, and determination [32]. Challenge stressors are perceived by individuals as meaningful to themselves in a beneficial form. Individuals facing challenge stressors believe that if they focus on these stressors and work hard to deal with them, then the stressors are likely to be overcome [56]. Once these challenge stressors are overcome, individuals will be rewarded [57]. The expectation of reward leads to individuals working hard and becoming alert to their surroundings during this process [28,58]. Feelings of alertness, concentration, and determination are the manifestations of individual attentiveness [32]. Consequently, individuals who are faced with a challenge stressor activate their emotional experience of attentiveness. From the definition of anger, this emotion is a response to an evident threat or specific attack that undermines people’s basic values [32]. Hindrance stressors, such as role conflict, are threats to individuals’ existing resources, which can limit the achievement of one’s goals and harm one’s interests. These impeding conditions or situations are beyond the people’s control, and no evident strategy can be used to deal with them [28]. Lazarus (1991) [59] emphasized that individuals’ anger can be heightened by the perception that an event or situation appears to be a hindrance. Moreover, the positive relationship between anger and several hindrance stressors, such as role ambiguity and conflict, and job insecurity, has also been demonstrated [59,60]. Accordingly, we uphold that anger is the product of hindrance stressors. Unlike anger, anxiety is more complex because of negative and neutral characteristics [61]. Anxiety is a response to uncertainty, which arises from the actual or potential threat to individual values [61,62]. The hindrance stressors are work events and situations that prevent individuals from obtaining valuable results. These obstacles cause individuals to have a serious sense of threat [54], thereby leading to individual anxiety. Although challenge stressors benefit individuals, they also contain a degree of uncertainty that potentially threaten their growth and development [27]. For example, the organization requires an important task to be completed within a specified time. If people cannot complete the work on time, they may be criticized by the leader, and their work performance may even be affected. Individuals exposed to challenge stressors may experience anxiety owing to potential threats. To this end, we assume that anxiety is the product of challenge and hindrance stressors. These relationships have also been demonstrated in previous studies [32]. In summary, this study proposed the following hypotheses:

**Hypotheses 3a (H3a).** Challenge stressors will be positively related to anxiety.

**Hypotheses 3b (H3b).** Challenge stressors will be positively related to attentiveness.

**Hypotheses 4a (H4a).** Hindrance stressors will be positively related to anxiety.

**Hypotheses 4b (H4b).** Hindrance stressors will be positively related to anger.

### 2.4. Mediating Role of Emotions

Research in the field of emotion has shown that rational processing and emotional drive are important causes of employees’ workplace behavior [63]. Emotional experience is a type of information, which timely and comprehensively reflects the safety and variability of the current environment [64,65]. Moreover, emotional experience enables individuals to reconstruct the priority order of behavior choices when encountering environmental changes to enhance their chances of survival and development [64,65]. Affected by emotions, individuals in a certain emotional state will select and process information consistent with it, thereby showing the priming effect of such emotions [63,65]. Emotions have a significant impact on job involvement and performance, as well as innovation, organizational citizenship, and counterproductive behaviors [32,50]. Emotion is also an
important factor affecting individual moral judgment [53]. The core hypothesis of AET is that emotions play a mediation role in how work events affect employees’ work reactions [29]. Dual stressors, as positive or negative work events, can induce specific emotional reactions of employees and have a corresponding impact on their attitudes and behaviors [32].

Individual emotional response and cognitive evaluation are found in different parts of the brain. However, they stimulate each other on the integration circuit of the brain mechanism [49,66]. A certain degree of uncertainty is found in challenge and hindrance stressors, which will make individuals feel actual or potential threats, thereby stimulating their anxious emotional response [32]. AET [29] upholds that the influence of events on individual behavior affects the individual thinking process and makes individuals attempt to reduce negative emotions or increase positive emotions. Individuals with anxiety are extremely sensitive to potential threats in the environment and will take timely actions to respond to threatening events to escape and relieve the emotional pressure caused by these situations [62,67,68].

In addition, anxiety as a negative emotion will lead to the loss of individual psychological resources [69]. To avoid actual and potential losses, individuals will actively strive to acquire, protect, and maintain the resources they value [70]. The altruistic behavior of individuals plays an important role in the process of individual emotion repair [71]. In the organizational environment, UPB can bring temporary benefits to organizations or their internal members and can also be an opportunity to improve their own survival adaptability and achieve personal goals [16,20]. Individuals who experience anxiety may use UPB as a tool to cope with stressful events. Li et al., (2018) [18] found that in coping with the performance pressure and the resulting anxiety, organizational employees would disregard ethical constraints and take the initiative to adopt UPBs that can meet the requirements of organizations. To this end, the current study suggests that individuals will generate anxiety, owing to the potential or actual threat of challenging and obstructive stressors. Individuals are likely to engage in UPB to relieve anxiety and improve their ability to survive in the workplace. Therefore, the following hypotheses were proposed:

**Hypotheses 5a (H5a).** Challenge stressors will have a positive indirect relationship with UPB, as mediated by anxiety.

**Hypotheses 6a (H6a).** Hindrance stressors will have a positive indirect relationship with UPB, as mediated by anxiety.

AET proposes that although emotions trigger the corresponding reactions, people consider the costs and consequences of the reactions [72]. When employees consider stressors as an important method to demonstrate their abilities, enhance their value, and improve their job satisfaction, their level of attentiveness will also be enhanced. Furthermore, they will respond to these stressful events and situations with concentration, determination, and alertness [32]. Attentiveness is a classic positive emotion. The broaden-and-build theory indicates that positive emotional experience can activate action, broaden cognition, and relieve stress [73]. In particular, when faced with challenge stressors, individuals who experience attentiveness are in a state of high energy awakening and full of vitality [74,75]. Thus, the willingness to grasp the opportunities of development and growth are enhanced. Moreover, individuals in this positive emotional state are alert. Thus, their attention scope will expand and subsequently focus on the positive and negative effects or harms [76,77].

Furthermore, the emergence of positive emotions, such as attentiveness, can create an upward spiral of personal resources [78], thereby replenishing the various self-resources (including self-regulating resources) consumed by individuals in response to challenging stressors, and restoring the body and mind to an appropriate level. In this state, individuals’ cognitive flexibility is enhanced, the sequence of thinking activities and scope of action are expanded, and self-control level is improved [33,77]. Individuals with high levels of self-control can effectively resist the current temptation and tend to complete tasks and achieve goals by formulating strategies and increasing efforts compared with acting on opportunism or impulsiveness [35]. UPB can serve organizations and become a temporary tool for individuals to cope with stressful events [5]. However, once exposed, UPB will cause serious and
long-term harm, owing to its unethical nature. When employees consider the costs and consequences of their stress response behavior, they will attempt to avoid conducting UPB even when they have the opportunity to do so. Hence, we suggest that when the challenge stressors place individuals in the experience of attentiveness, individuals will invest the energy to adopt substantially active, problem-focused styles of coping. Thus, these individuals would not engage in UPB, which has moral hazards and may damage their professional reputation and the sustainable development ability of the enterprise. Thus, we formulated the following hypothesis:

Hypotheses 5b (H5b). Challenge stressors will have a negative indirect relationship with UPB, as mediated by attentiveness.

When individuals assess work events and situations as obstacles to their growth and development, they will feel threatened and offended, which will result in anger [32]. Anger is a type of high-intensity negative emotion, thereby limiting the thought–behavior repertoire and narrowing the scope of individual attention [79]. Unlike other negative emotions, anger has the attribute of approach motivation [80,81]. Approach motivation is related to the heuristic system and tends to make decisions empirically and immediately, thereby leading to impulsive behavior [79]. One study has directly identified that anger, as an emotional state, can drive individuals to prefer risky activities and impulsive behaviors to feel the subjective experience brought by anger [79]. UPB is a type of unethical behavior that has unprincipled risks but may fulfill organizational requirements. Although UPB is ostensibly beneficial to organizations, this situation may be a shortcut to complete tasks and achieve personal goals. Individuals experiencing negative emotions often do not have the energy to deal with hindrances [26]; therefore, they are likely to impulsively engage in UPB.

In addition, the awakened individual emotions can directly drive individual behaviors and affect individual behaviors during stress assessment by influencing individual cognition, motivation, and attitude [79]. The self-control theory states that exhibiting self-control requires the use of a finite pool of self-regulatory resources [34]. Individuals will suffer serious depletion when their limited resources are consumed by coping with high-intensity negative emotions [35,82]; individuals in a state of depletion are considerably sensitive to immediate rewarding stimuli [83]. Moreover, in this state, individuals are prone to self-control failure and highly likely to have moral disengagement in subsequent tasks [35]. Therefore, individuals whose self-control decline is caused by anger are sensitive to the temporary benefits of UPB. These individuals are likely to use UPB as a tool for coping with stressful events, and may subconsciously attribute the potential harm and moral responsibility of this behavior to organizations or other stakeholders to eliminate self-deterrents to harmful behavior and remove their moral dilemma. In summary, this study hypothesized that the intense negative emotional experience of anger would be activated when the individual assessed the stressor as an obstacle to the achievement or development of individuals’ goals. Given the direct drive of anger and failure of self-control caused by it, individuals are likely to engage in UPB. Accordingly, this study proposed the following hypothesis:

Hypotheses 6b (H6b). Hindrance stressors will have a positive indirect relationship with UPB, as mediated by anger.

2.5. Research Model

Based on the literature discussed above, the research models are shown in Figure 1. Individual emotions mediate between challenge–hindrance stressors and UPB. In particular, challenge stressors influences individuals’ UPB through anxiety and attentiveness (Figure 1a). Hindrance stressors influence individuals’ UPB through anxiety and anger (Figure 1b).
3. Methods

3.1. Sample and Procedure

In this study, questionnaires were distributed to employees of six enterprises in Nanjing and Shanghai, China, which involved professional service and real estate industries. Prior to the questionnaire survey, the researchers conducted interviews with employees and managers in the sample enterprises and learned that UPBs are prevalent in the workplace, but remain relatively hidden. During the questionnaire survey, the participants were informed of the confidentiality of the research process and the academic use of the survey results. The researchers distributed paper questionnaires on site and collected and sealed the questionnaires in time. In this survey, only 421 questionnaires were recovered out of the 473 total questionnaires distributed. After eliminating the invalid questionnaires, 375 valid questionnaires were obtained, with an effective recovery rate of 79.28%. In terms of gender, males and females accounted for 53.8% and 46.2%, respectively. In terms of age, employees under 20 years old accounted for 5.3%; between 21 and 30 years old, 51.0%; between 31 and 40 years old, 32.0%; between 41 and 50 years old, 6.1%; and over 51 years old, 5.6%.

3.2. Measures

This study adopted a mature scale that has been empirically tested many times in the domestic and foreign background. To ensure the validity of the scale, all items in the questionnaire were generated by "translation and back-translation." The specific process was as follows. First, three doctoral students translated the original English scale into Chinese and back into English thereafter. Second, a professor of human resource management was asked to correct the translation, identify the differences between the English and the original, and revise the Chinese items. Third, according to expert advice, the version was adjusted and improved for the final copy. All items were measured using five-point Likert scales.

3.2.1. Challenge–Hindrance Stressors

Challenge–hindrance stressors were measured using an 11-item scale developed by Cavanaugh et al., (2000) [24]. Six items measured the challenge stressors (e.g., "the volume of work that must be accomplished in the allotted time"). Five items were used to measure hindrance stressors (e.g., "the amount of red tape I need to go through to get my job done"). The participants were informed that the list of challenge and hindrance stressor items were "work-related items that may or may not affect your stress level," and were instructed to use a five-point scale from "1 = no stress" to
“5 = extreme stress” to “indicate your perception of the following statements.” The Cronbach’s alpha of the challenge and hindrance stressors were 0.893 and 0.754, respectively.

3.2.2. Emotions

Emotions were measured using a seven-item scale developed by Rodell et al., (2009) [32] from the positive and negative affect schedule-expanded form (PANAS–X). This scale mainly involves three types of emotions: namely, attentiveness, anxiety, and anger. Attentiveness was measured using three adjectives: attentive, alert, and determined. Two items were used to measure anxiety: nervous and anxious. Two items were used to measure anger: anger and hostility. The participants were provided with a list of adjectives and instructed to “indicate to what extent you recently experienced the following states” on a five-point scale ranging from 1 = very slightly or not at all to 5 = very much. The Cronbach’s alphas of attentiveness, anxiety, and anger were 0.800, 0.790, and 0.783, respectively.

3.2.3. UPB

UPB was measured using a six-item, five-point (ranging from “1 = strongly disagree” to “5 = strongly agree”) scale adopted from Umphress et al. (2010) [5]. Sample items included “if it would help my organization, I would misrepresent the truth to make my organization look good” and “if my organization needed me to, I would withhold issuing a refund to a customer or client accidentally overcharged.” This study was consistent with previous studies and used the individual self-report method to measure the intention of employees’ UPB. The Cronbach’s alpha was 0.732.

3.2.4. Control Variables

To control for alternative explanations for variance in the dependent variable, UPB, we controlled for employee age, gender, and job level. These variables were chosen as control variables because they may influence employees’ willingness to engage in unethical behavior at work [5,8,84].

3.3. Common Method Bias Testing

The anonymous survey method was used in this study to minimize common methods bias (CMB). Detailed information was provided in the opening instructions to reduce the subjects’ suspicion [85]. However, CMB in the data may exist because all questions in the questionnaire were filled in by only one person. For this reason, the test of common methods bias was performed on the sample data before the hypothesis test. In this study, the Harman single-factor test method was adopted and SPSS 22.0 was used for a principal component factor analysis of all the items in the questionnaire. The test results showed that one single factor accounted for 24.97% of the variance, which is below 50%, thereby indicating no major CMB issues.

3.4. Data Analysis

This study used SPSS 22.0 and MPLUS 17.0 for the statistical analysis. An initial test was conducted using correlation analysis. The data were then analyzed in two steps following Anderson and Gerbing (1988) [86], with the measurement model considered first, followed by a structural model. Specifically, a confirmatory factor analysis (CFA) was used to verify the appraisal of the factor-structure and create a measurement model confirming the independence of the study constructs. The structural equation model (SEM) was established to test the hypothesis. When testing mediation effects, the bias-corrected bootstrap method of the coefficient product method provided the most accurate confidence interval estimation with the highest statistical power [87,88]. The maximum likelihood estimation and bias-corrected bootstrap method were applied to test hypotheses using MPLUS 17.0.
4. Results

4.1. Descriptive Statistics and Correlations

Table 1 presents the means, standard deviations, and correlation coefficient matrix of the variables in this study. Evidently, challenge stressors were significantly positively correlated with attentiveness \((r = 0.200, p < 0.01)\) and anxiety \((r = 0.445, p < 0.01)\). Hindrance stressors were significantly positively correlated with anxiety \((r = 0.376, p < 0.01)\) and anger \((r = 0.432, p < 0.01)\) were significantly positively correlated with UPB. The correlation between hindrance stressors and UPB \((r = 0.299, p < 0.01)\) was found to be positive and significant, but the correlation between challenge stressors and UPB \((r = 0.036)\) was found to be non-significant. In addition to the hypothesis that the relationship between the challenge stressors and the employees’ UPB is inconsistent, the relationship between other variables was as described in the hypothesis, thereby providing a basis for further data analysis.

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<td>2 Age</td>
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<td>3 Job level</td>
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<td>4 Challenge stressors</td>
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<td>−0.040</td>
<td>0.194 **</td>
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<td>5 Hindrance stressors</td>
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<td>−0.060</td>
<td>0.426 **</td>
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<td>6 Attentiveness</td>
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<td>−0.046</td>
<td>0.152 *</td>
<td>0.200 **</td>
<td>−0.122</td>
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<tr>
<td>7 Anxiety</td>
<td>−0.049</td>
<td>−0.034</td>
<td>0.096</td>
<td>0.445 **</td>
<td>0.376 **</td>
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<td>8 Anger</td>
<td>0.127 *</td>
<td>0.029</td>
<td>−0.144 *</td>
<td>0.131</td>
<td>0.336 **</td>
<td>−0.114</td>
<td>0.487 **</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>9 Unethical pro-organizational behavior</td>
<td>0.066</td>
<td>0.003</td>
<td>−0.212 **</td>
<td>0.036</td>
<td>0.299 **</td>
<td>−0.150 *</td>
<td>0.366 **</td>
<td>0.432 **</td>
<td>—</td>
</tr>
<tr>
<td>Mean</td>
<td>1.460</td>
<td>2.560</td>
<td>1.430</td>
<td>3.140</td>
<td>2.823</td>
<td>3.578</td>
<td>2.818</td>
<td>2.107</td>
<td>2.410</td>
</tr>
<tr>
<td>SD</td>
<td>0.500</td>
<td>0.904</td>
<td>0.734</td>
<td>0.734</td>
<td>0.798</td>
<td>0.783</td>
<td>0.778</td>
<td>0.881</td>
<td>0.753</td>
</tr>
</tbody>
</table>

Note: N = 375, ** p < 0.01, * p < 0.05.

4.2. Confirmatory Factor Analysis (CFA)

Before verifying the hypotheses, the convergent and discriminant validities of the measurement model were tested using a CFA. There were two measurement models, including Model 1 and Model 2. Model 1 contained four variables: challenge stressors, attentiveness, anxiety, and UPB; Model 2 also contained four variables: hindrance stressors, anxiety, anger, and UPB. Table 2 showed that the goodness-of-fit indexes of the four-factor benchmark model of Model 1 and Model 2 reached the recognized standards and were obviously better than other nested models. The benchmark model of Model 1 and Model 2 had good discriminant validity, thereby providing research support for the next hypothesis test.

<table>
<thead>
<tr>
<th>Model</th>
<th>χ²</th>
<th>df</th>
<th>χ²/df</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>CS, AS, AR, UPB</td>
<td>294.379</td>
<td>113</td>
<td>2.605</td>
<td>0.908</td>
<td>0.903</td>
</tr>
<tr>
<td></td>
<td>CS + AS, AR, UPB</td>
<td>468.170</td>
<td>116</td>
<td>4.036</td>
<td>0.765</td>
<td>0.731</td>
</tr>
<tr>
<td></td>
<td>CS + AS + AR, UPB</td>
<td>536.276</td>
<td>118</td>
<td>4.545</td>
<td>0.704</td>
<td>0.687</td>
</tr>
<tr>
<td></td>
<td>CS + AS + AR + UPB</td>
<td>694.034</td>
<td>119</td>
<td>5.832</td>
<td>0.528</td>
<td>0.434</td>
</tr>
<tr>
<td>Model 2</td>
<td>HS, AR, AY, UPB</td>
<td>151.473</td>
<td>84</td>
<td>1.803</td>
<td>0.923</td>
<td>0.911</td>
</tr>
<tr>
<td></td>
<td>HS + AR, AY, UPB</td>
<td>273.286</td>
<td>87</td>
<td>3.141</td>
<td>0.815</td>
<td>0.777</td>
</tr>
<tr>
<td></td>
<td>HS + AR + AY, UPB</td>
<td>401.426</td>
<td>89</td>
<td>4.510</td>
<td>0.670</td>
<td>0.611</td>
</tr>
<tr>
<td></td>
<td>HS + AR + AY + UPB</td>
<td>569.558</td>
<td>90</td>
<td>6.328</td>
<td>0.514</td>
<td>0.445</td>
</tr>
</tbody>
</table>

Note: CS = challenge stressors, HS = hindrance stressors, AS = attentiveness, AR = anxiety, AY = anger, UPB = unethical pro-organizational behavior; CFI = comparative fit index, TLI = Tucker–Lewis Index, RMSEA = root mean-square error of approximation; CFI and TLI values greater than 0.9 indicate good fit; for the RMSEA, a value less than 0.1 is indicative of good fit.
4.3. Test of Hypothesis

In SEM 1, challenge stressors were used as independent variables and UPB as the dependent variable. The results showed that the model fitted poorly ($\chi^2$/df = 6.589 > 3, comparative fit index (CFI) = 0.703, Tucker–Lewis index (TLI) = 0.654, root mean-square error of approximation (RMSEA) = 0.150). The effect of challenge stressors on UPB was non-significant after controlling for age, gender, and job level ($\beta$ = 0.065). Hence, H1 was not supported. In SEM 2, hindrance stressors were taken as independent variables and UPB as the dependent variable. The results showed that the model fit the data well ($\chi^2$/df = 1.822 < 3, CFI = 0.940, TLI = 0.923, RMSEA = 0.058). When controlling for the effects of age, gender, and job level, the positive effect of the hindrance stressors on UPB was significant ($\beta$ = 0.388, $p < 0.01$). Thus, H2 was supported.

SEM 3 was established with anxiety and attentiveness as mediating variables to test the mediating mechanism of challenge stressors on employees’ UPB (Figure 2). The fit of this model was good ($\chi^2$/df = 2.936 < 3, CFI = 0.905, TLI = 0.900, RMSEA = 0.078). By using the bootstrap method, the mediation effect was tested by 2000 bootstrap samples. The total effect of the challenge stressors on UPB was 0.067, 95% Confidence interval (CI) = [–0.058, 0.210]. The total mediation effect of the challenge stressors on UPB was 0.209, 95% CI = [0.094, 0.372], excluding 0 (Table 3). The results showed that both the direct effect and the mediation effect of challenge stressors on UPB were significant. The opposite direction of direct effect and mediation effect made the total effect of challenge stressors on UPB non-significant (suppression effect) [87–89]. Furthermore, the test results for the specific mediation effects were as follows. Challenge stressors were significantly associated with anxiety ($\beta$ = 0.461, $p < 0.001$). Thus, H3a was supported. The path coefficient from anxiety to UPB was 0.526 ($p < 0.001$), and the mediation effect of challenge stressors on UPB through anxiety was significant (indirect effect = 0.243, 95% CI = [0.128, 0.403], excluding 0) (Table 3). Hence, H5a was supported. Consistent with H3b, challenge stressors positively predicted individual attentiveness ($\beta$ = 0.189, $p < 0.05$). The path coefficient from attentiveness on UPB was −0.179 ($p < 0.01$), and the mediation effect of attentiveness upon the relationship between challenge stressors and UPB was significant (indirect effect = −0.034, 95% CI = [−0.107, −0.007], excluding 0) (Table 3). These findings supported H5b.

![Figure 2. Parameter estimation of the effect of challenge stressors on UPB. Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$; the model controls for age, gender, and job level.](image)

<table>
<thead>
<tr>
<th>Model</th>
<th>Project</th>
<th>Effect Size</th>
<th>Bias Corrected 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenge stressors → unethical pro-organizational behavior</td>
<td>Total mediation effect</td>
<td>0.209</td>
<td>CI = [0.094, 0.372]</td>
</tr>
<tr>
<td></td>
<td>Specific mediation effect</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Path 1: Challenge stressors → attentiveness→ unethical pro-organizational behavior</td>
<td>−0.034</td>
<td>CI = [−0.107, −0.007]</td>
</tr>
<tr>
<td></td>
<td>Path 2: Challenge stressors → anxiety → unethical pro-organizational behavior</td>
<td>0.243</td>
<td>CI = [0.128, 0.403]</td>
</tr>
<tr>
<td>Hindrance stressors → unethical pro-organizational behavior</td>
<td>Total mediation effect</td>
<td>0.398</td>
<td>CI = [0.212, 0.698]</td>
</tr>
<tr>
<td></td>
<td>Specific mediation effect</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Path 1: Hindrance stressors → anxiety → unethical pro-organizational behavior</td>
<td>0.150</td>
<td>CI = [0.037, 0.384]</td>
</tr>
<tr>
<td></td>
<td>Path 2: Hindrance stressors → anger → unethical pro-organizational behavior</td>
<td>0.248</td>
<td>CI = [0.114, 0.491]</td>
</tr>
</tbody>
</table>
SEM 4 was established with anxiety and anger as mediating variables to test the mediating mechanism of hindrance stressors on employees’ UPB. As the direct path coefficient from hindrance stressors to UPB was not significant, we deleted this path and constructed a selection model (Model 5). The selection model (Model 5) compared with the benchmark model (Model 4) did not change the fitting index significantly. Therefore, the reduced model (Model 5) ($\chi^2$/df = 2.114 < 3, CFI = 0.908, TLI = 0.899, RMSEA = 0.067) was selected as the best matching model (Figure 3). With the bootstrap method, the mediation effect was tested by 2000 bootstrap samples. The total effect (total mediation effect) between hindrance stressors and UPB was found at 95% CI, and did not include 0 ($\beta = 0.398$, 95% CI = [0.212, 0.698]) (Table 3). As predicted in H4a, hindrance stressors were positively related to anxiety ($\beta = 0.647$, $p < 0.001$). A significant positive correlation was shown between anxiety and UPB ($\beta = 0.231$, $p < 0.05$). The mediation effect of anxiety in the relationship between hindrance stressors and UPB was 0.150, 95% CI = [0.037, 0.384], excluding 0 (Table 3). Thus, H6a was supported. As stated in H4b, a significant positive correlation was observed between hindrance stressors and anger ($\beta = 0.631$, $p < 0.01$). The path coefficient from anger to UPB was 0.393 ($p < 0.01$), and the mediation effect of anger in the link between hindrance stressors and UPB was 0.248, 95% CI = [0.114, 0.491], excluding 0 (Table 3). Thus, H6b was supported.

![Figure 3](image-url) **Figure 3.** Parameter estimation of the effect of hindrance stressors on UPB. Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$; the model controls for age, gender, and job level.

5. Discussion

5.1. General Discussion

This study discusses the influence of dual stressors on UPB and the mediation effect of emotions. The conclusion is as follows. Hindrance stressors have a significant positive effect on employees’ UPB through the mediation effect of anxiety and anger. The influence of challenge stressors on UPB is non-significant, but complex mechanisms exist between them. Challenge stressors have a positive effect on UPB through anxiety and a negative effect on UPB through attentiveness.

5.2. Theoretical Implications

Our findings have theoretical implications for stress theory and ethical decision-making, as well as practical implications for how organizations design interventions to prevent UPB in the workplace. The theoretical contribution of this study is as follows.

First, we recognized that work stress is an important reason for employees to engage in UPB, and the impact of work stress on employees’ UPB is closely related to the types of stressors. That is, when individuals evaluate the potential result of stressors as loss, they are more likely to conduct UPB when completing work tasks than when evaluating the result of stressors as gain. The results further validated the two-dimensional structure of stressors and extended the framework of challenge and hindrance stressors. Meanwhile, the results revealed the “bounded rationality” of conducting UPB [47] and developed the bounded ethicality theory.

Second, we discussed the impact of dual stressors on employees’ UPB from the perspective of emotion by combining the transactional theory of stress and affective event and self-control theories. Hence, the exploration of the causes of UPB was three-dimensional and comprehensive. This study showed that in stressful situations, individual cognitive and emotional responses interweave and
affect employees’ UPB. In a stressful situation, individuals in a state of anxiety may exert their best effort to meet organizational requirements and contribute to the organization to reduce uncertainty and improve survival adaptability [18]. However, not all individuals in this emotional state will engage in UPB. When individuals appraise stressors as challenges, their attentiveness is simultaneously activated. This positive emotional experience will supplement the psychological resources consumed by the individual in response to stressful demands. Given the improvement of individual alertness and self-control, individuals are more inclined to seek better solutions to problems through their efforts, rather than engaging in UPB that may damage their honor and the sustainable development ability of the organization. However, individuals experience anxiety and anger when they appraise stressors as obstacles. The high intensity of negative emotions will lead to a serious loss of self-control resources. Given the direct drive of anger and the resulting failure of self-control, individuals are more likely to conduct impulsive UPB that can temporarily cope with hindrance stressors. This study analyzed the relationship between dual stressors and employees’ UPB from the perspective of emotion. Thus, we expanded the function scope of emotion and revealed the dual characteristics of “controlled processing” and “automatic processing” in the production process of UPB.

5.3. Practical Implications

This research brings significant implications for management. First, in view of the conclusion that challenge and hindrance stressors have different effects on work results, managers should exert their best effort to completely understand different stressors and effectively distinguish and treat them. In particular, organizations should attempt to prevent the emergence of obstructive stressors in system design, leadership behavior, and corporate culture. Second, companies must conduct moral stipulation. UPB, in which individuals contribute to organizations, may be merely a tool for individuals to deal with hindrance stressors or negative emotions, with serious long-term harm. If possible, managers should establish public policies that restrict the completion of individual tasks and contributions to organizations that are against ethical standards, as well as create opportunities for employees to contribute to organizations, thereby reducing the possibility of individuals performing UPB. For example, organizations can create a rule-ethical climate to enhance the moral awareness of employees when performing tasks. Third, in daily management, organizations should formulate specific help plans for employees. Managers can learn about stress by communicating effectively with employees or by regularly measuring their stress levels. Based on the grasping of the stress situation of employees, managers can adjust management methods in a timely way and provide targeted support to employees. In addition, the organization should strengthen psychological counseling for employees, improve their ability to cope with adverse work situations, and deal with anxiety and other bad emotions. Subsequently, such measures can prevent the extreme deterioration of bad emotions, thereby preventing the occurrence of UPB and other negative behaviors.

5.4. Limitations and Future Research

Although the empirical analysis has drawn enlightening conclusions, limitations are presented in the following two aspects. First, cross-sectional data were used in this study, owing to the limitation of sampling conditions. However, given the importance of individual perceptions of the environment, different individuals have different responses to stress, and individual responses to stress (emotional response) may be a dynamic process. Therefore, the follow-up study can include individual differences in the research on the impact of pressure on employees’ UPB. The experience sampling method can be adopted to collect the instantaneous response of individuals at multiple time points to enhance the accuracy of research results. Second, the theory of interactive pressure indicates that the formation of individual stress and its results can be influenced by external situational variables. Therefore, follow-up studies can further explore the boundary conditions, under which stressors affect employees’ UPB. Although the direct relationship between challenge stressors and employees’ UPB is non-significant, the relationship also has complex mechanisms. Follow-up research can detail work stressors and
further explore the psychological process that work stressors affect employees’ UPB in combination with motivation or individual cognition.

**Author Contributions:** Theoretical model design, L.X.; data collection, J.W.; methodology, L.X. and J.W.; software, L.X.; writing—original draft, L.X.; writing—review & editing, L.X. and J.W. All authors have read and agreed to the published version of the manuscript.

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**Conflicts of Interest:** The authors declare no conflict of interest.

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