

# **Occupational stress and turnover intentions among simultaneous interpreters: the mediating role of burnout and the moderating role of grit**

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## **Abstract**

The study examined the relationship between occupational stress, burnout, grit, and turnover intentions among simultaneous interpreters. Drawing on the Revised Transaction Model of Stress and Coping and the psycho-affective turn of interpreting studies, the study applied structural equation modeling (SEM) to identify the mediating role of burnout in the relationship between occupational stress and turnover intentions and used moderated mediation analysis to examine the impact of grit on this mediation. Data were collected based on 478 completed and valid responses to an online self-reported questionnaire distributed to Chinese simultaneous interpreters. The results indicated that occupational stress positively predicted turnover intentions among Chinese simultaneous interpreters, with burnout acting as a significant mediator. Moreover, grit significantly and negatively moderated the relationship between

occupational stress and burnout. The study implies that stakeholders in the interpreter profession should focus on creating and maintaining a supportive working environment to enhance the psychological well-being of simultaneous interpreters. Additionally, interpreter educators should emphasize fostering and promoting trainees' non-cognitive soft skills to support their sustainable professional development.

**Keywords:** occupational stress; burnout; turnover intentions; grit; simultaneous interpreter

## 1. Introduction

In the contemporary era, interpreters serve not only as “conveyers of language ... and culture” but also as agentic mediators of communication (Okoniewska, 2022, p. 139). Their roles span various critical societal sectors, including the healthcare industry (Kasten et al., 2020), public service (René de Cotret et al., 2020), and the legal system (Karrebæk & Sørensen, 2021). Given the complexity and significance of their roles, interpreters face substantial pressures arising from the high cognitive demands of the profession. These job-related pressures can be further compounded by individual aptitudes and abilities, as well as environmental factors. For instance, interpreters are required to simultaneously comprehend and produce speech while managing frequent attention switching (Ferreira et al., 2020). Additionally, unlike language service providers working in asynchronous environments, simultaneous interpreters cannot correct mistakes or enhance performance in real-time (Baker & Diriker, 2019).

Therefore, it has been argued that simultaneous interpreters are particularly vulnerable to occupational stress, which arises from cognitive overload and suboptimal or error-intolerant working conditions, potentially jeopardizing interpreting quality, interpreters' well-being, and career satisfaction (Riccardi, 2015).

Over the past few decades, extensive research has provided insights into the sources and antecedents of occupational stress faced by interpreters (Cooper et al., 1982), as well as its physiological manifestations (Korpai, 2016; Mackintosh, 2003). From a psychological perspective, employees consistently exposed to stressful working conditions may experience occupational burnout, characterized by emotional exhaustion and cynicism that progressively erode an individual's commitment to their profession (Maslach & Leiter, 2016). Scholarship on stress-related occupational hazards in the interpreting profession emphasizes the importance of coping with challenges like burnout and burnout-induced early career withdrawal to maintain interpreters' psychological well-being and the sustainability of the profession (Alhawamdeh & Zhang, 2021; Chen, 2023; Schwenke et al., 2014). It is well established that the development of burnout is not merely a linear consequence of external pressures and occupational stress, but is also shaped by individual personality traits, such as resilience (Hao et al., 2015) and grit (Kristinsson et al., 2023). Comparatively, a significant gap remains in understanding and coping with interpreting stress: there is limited empirical research exploring how these personality traits influence interpreters' ability to cope with the negative occupational experiences

associated with simultaneous interpreting. Furthermore, the methodological limitations of existing inquiries, which often confine their scope to a limited number of practitioners and the lack of a profession-oriented perspective, exacerbate this gap by leaving a critical void in our understanding of how occupational stress and burnout influence interpreters' long-term occupational expectations, such as their turnover intentions or decisions to quit or remain in the interpreter profession (Asai et al., 2024).

Against the above backdrops, the current study aims to leverage large-scale survey data on Chinese simultaneous interpreters to explore the relationships between occupational stress, burnout, and turnover intentions, as well as the role played by grit on this relationship. Insights from this research could contribute to a comprehensive understanding of how individual personality traits interact with job-related pressures, and inform the development of supportive measures that help interpreters manage the cognitive and emotional demands of their profession, ultimately enhancing their emotional and psychological well-being, job satisfaction, and career sustainability.

### **1.1. Stress among interpreters: shifting research perspectives**

While scholars have made numerous assumptions that interpreting is a highly stressful activity (Korpai, 2016), empirical evidence supporting these claims and a domain-specific definition of stress within the interpreter profession remain limited (Gumul, 2021). In the existing body of scholarship, the term “occupational stress”, often used alongside or interchangeably with other emotional manifestations of stress

such as anxiety, has generally been defined as “a psychological reaction experienced when an individual feels an imbalance between task requirements and the resources available for coping with them” (Lazarus, 1966; Riccardi, 2015, p. 405). Simultaneous interpreting has long been considered a stressful occupation as it requires “the interpreter to simultaneously listen, analyse, comprehend, translate, edit and produce a speaker’s utterance in real-time” (Roziner & Shlesinger, 2010, p. 219).

Literature suggests a shift in focus from linguistic stressors to non-linguistic factors in understanding the occupational stress faced by interpreters. For instance, studies by Adams and Rosales-Domínguez (2017) and Kurz (2003) found that experienced and expert interpreters perceive language-related challenges as a less significant factor in determining occupational stress. In contrast, non-linguistic demands and perceived limitations in decision latitude were more prominent sources of stress for interpreters (Dean & Pollard, 2001). These findings are supported by research on the stressors faced by interpreters, which suggests that stress can stem from environmental, psychological/intrapersonal, and social/interpersonal factors (Cooper et al., 1982; Korpál, 2021; Mackintosh, 2003). Based on the observation of such a shift in research foci and perspectives, Korpál (2016) noted that interpreting studies are increasingly adopting a “psycho-affective turn,” emphasizing the importance of psychological, affective, and emotional factors in the career development and training of competent interpreters who can better manage the cognitive and emotional demands of the profession.

## **1.2. Relationship between stress, burnout, and turnover intentions: previous studies in interpreting**

In line with the growing focus on the affective/emotional and psychological dimensions of interpreting, researchers have increasingly shifted their attention from short-term physiological responses to stress to its more long-lasting impacts, particularly job dissatisfaction and turnover intentions. For instance, Alhawamdeh and Zhang's (2021) qualitative study highlighted that interpreters' stress and anxiety significantly influenced their intention to leave the profession or distance themselves emotionally from clients. Similarly, Norström et al. (2012) found that occupational stress, particularly caused by unfavorable working conditions, was a common factor behind turnover intentions among Swedish interpreters. These findings are further corroborated by Bower's (2015) large-scale survey of over 400 respondents, which demonstrated that occupational stress prompted a significant number of Video Relay Service interpreters to exit the profession.

Regarding the relationship between occupational stress and burnout among interpreters, several studies have established a connection based on conceptual analyses and small-sample data. For example, Chen (2023) conceptualized job burnout as an affective response to continuous occupational stress, and the qualitative inquiry by Alhawamdeh and Zhang (2021) identified factors like prolonged working hours, uncontrollable intervals, and a lack of social support as contributors to burnout. In the broader literature beyond interpreting, the relationship between occupational stress and

burnout is well documented, with burnout identified as a major consequence of chronic exposure to work-related stress. For example, Lin et al. (2022) reported a relatively strong correlation between stress and burnout ( $r = 0.505$ ) among athletes in their meta-analysis. However, more large-scale studies specifically investigating the relationship between stress and burnout in interpreting are needed.

Moreover, existing research has stated concern that burnout experienced by interpreters would result in early job withdrawal (Schwenke, 2012; Schwenke et al., 2014). Despite this, empirical studies exploring the relationship between burnout and turnover intentions among interpreters are still lacking. Nevertheless, evidence supporting the positive association between burnout and turnover intentions can be found in related language professions. For example, Zhang et al. (2024) found that burnout significantly influenced the turnover intentions of Chinese English language teachers. Additionally, insights can be drawn from translation studies. Başol and Taşkın (2024), for instance, reported significant correlations between work-life imbalance, job overload, and turnover intentions among 216 translators working in Turkey. Similarly, Akbari Motlaq and Tengku Mahadi's (2020) longitudinal study of Iranian pre-service translators found that emotional fatigue and weariness resulted from life stressors led to a decline in positive attitudes and perceptions toward the translation profession.

### **1.3. Grit: the “x-factor” to control burnout and turnover intentions?**

Grit is defined as the passion and perseverance to pursue long-term goals,

maintaining interest and commitment despite challenges, sacrifices, and hardships (Duckworth et al., 2007). It is considered a crucial factor in managing occupational stress and pressure, as well as mitigating symptoms of psychiatric disorders or depression (Jung et al., 2023). In the field of interpreting studies, McCartney (2016) highlighted the “x-factor” role of grit in controlling interpreters’ intention to leave the profession. McCartney (2016) found that higher educational attainment and specific professional certifications are significantly associated with greater grit, which in turn affects interpreters’ decisions to remain in or leave the profession. Thus, in the present study, we operationalized grit as the enduring passion and sustained motivation to stay in the profession and overcome occupational challenges and adversity.

However, further investigation into grit among interpreters is still needed. For example, McCartney (2016) focused primarily on the antecedents of grit such as educational background and professional accreditation, offering limited insight into its impact on coping with stress and turnover intentions. Comparatively, language researchers have recently identified grit as a predictor of success in language learning and teaching, and as a component of overall language aptitude (Teimouri et al., 2024). Additionally, grit is recognized as a personality trait that enhances enjoyment in language learning and teaching, while contributing to psychological well-being (Derakhshan et al., 2022). It is well-established that grit serves as a protective factor, reducing the impact of academic and occupational burnout (Jung et al., 2023; Özhan, 2021). Unfortunately, whether the roles mentioned above exist within the profession of



simultaneous interpreting remains unclear to date.

#### **1.4. Theoretical underpinnings**

In the present study, the interrelationship between occupational stress, burnout, turnover intentions, and grit is examined from the perspectives of the revised transactional model of occupational stress and coping (RTM; Goh et al., 2010) and the “psycho-affective turn” of interpreting studies (Korpai, 2016, p. 299).

First, the psycho-affective turn in interpreting studies offers a comprehensive theoretical lens from which the psychological and emotional dimensions of the interpreter profession could be highlighted. It focuses on how interpreters experience, manage, and are shaped by the emotional and psychological demands inherent in their work. This approach underscores the significance of understanding interpreters’ coping strategies and resilience in navigating the intense cognitive and affective challenges associated with their role. By bringing these dimensions to the forefront, the psycho-affective turn deepens the examination of interpreters’ occupational stress and its broader implications, such as burnout and turnover intentions.

Second, RTM (Goh et al., 2010) complements the broader perspective outlined above by providing a structured framework for examining the stressors interpreters encounter, their appraisal of these stressors, and the coping strategies they employ. RTM inherited the conceptualization of stress as *a process of cognitive appraisal and coping where individuals evaluate the demands of a situation and their resources to manage in*

the original transactional model of stress and coping (Lazarus & Folkman, 1984). RTM narrows the focus to occupational stress and extends this conceptualization by incorporating feedback loops, highlighting the dynamic and iterative nature of stress and coping. In this model, coping outcomes influence subsequent stress appraisals and strategies, creating a continuous cycle of adaptation. Additionally, RTM defines the temporal development of occupational stress outcomes, recognizing that the effects of stress accumulate over time, influencing both psycho-physiological arousal before coping and psycho-physiological experiences after coping (Goh et al., 2010). In the context of the present study, RTM provides an opportunity to understand the developmental process from occupational stress to its psycho-physiological outcomes (i.e., burnout) and career-related consequences (i.e., turnover intentions), emphasizing the role of personal traits (i.e., grit) in coping with and managing occupational stress along the development.

### **1.5. The study**

Based on the theoretical underpinnings and the literature reviewed above, the study is guided by the following logic. First, occupational stress, when perceived as unmanageable, can lead to burnout—characterized by emotional exhaustion and reduced efficacy—which, in turn, increases turnover intentions as interpreters may consider leaving the profession to escape chronic stress. Second, grit may buffer the impact of stress on burnout, thereby reducing the likelihood that burnout will lead to turnover intentions. Third, the role of grit may be dynamic at different stages: from

altering stress perception early on to sustaining coping efforts later, or consistently reinforcing resilience throughout the process. Therefore, this study proposes that burnout mediates the relationship between occupational stress and turnover intentions, with grit moderating the mediation effect (**Figure 1**).

<insert figure 1 here>

Specifically, the research proposes the following hypotheses:

**Hypothesis 1:** Occupational stress is positively associated with turnover intentions among simultaneous interpreters.

**Hypothesis 2:** Burnout mediates the relationship between occupational stress and turnover intentions among simultaneous interpreters.

**Hypothesis 3:** Grit moderates the mediating effect of burnout on the relationship between occupational stress and turnover intentions among simultaneous interpreters.

## **2. Materials and method**

### **2.1. Procedure and participants**

To recruit a representative sample of simultaneous interpreters in China, the study employed a gatekeeper sampling strategy (Lamprianou, 2022). Researchers reached out to 52 stakeholders, including 15 regional administrators of translator and interpreter associations, 21 executives of interpreting service providers, and 16 experienced interpreter trainers from 7 universities involved in China's language service industry.

An online questionnaire, hosted on the Credamo platform, was then distributed to the target simultaneous interpreters through these industry stakeholders between November 2023 and March 2024. The anonymous questionnaire included an explanation of the purpose of research, assurance of confidentiality, and a reminder of respondents' right to withdraw at any time.

After excluding 89 invalid questionnaires due to anomalous responses, a total of 478 valid questionnaires were collected. The sample is considered sufficient as a priori power analysis indicated that a minimum of 395 participants was required to identify small-sized effects ( $f^2 = 0.02$ ) in a multiple linear regression model, with a significance level of 0.05 and a power of 0.80 (Faul et al., 2009). The sample consisted of 175 female (36.6%) and 303 male (63.4%) interpreters, with an average age of 36.7 years ( $SD = 3.47$ ) and an average service duration of 8.4 years ( $SD = 2.45$ ). For interpreting settings, 84 interpreters (17.6%) worked in the healthcare industry, 189 interpreters (39.6%) served in public service agencies, 48 interpreters (10.0%) worked with educational institutions, and 94 interpreters (19.7%) provided interpreting services in the legal sector. Only 117 interpreters (24.5%) have obtained professional interpreter training degrees (referred to as Masters/Bachelors of Translation and Interpreting in China). Among the participants, 215 (45%) practiced interpreting as a permanent job, while 263 (55%) worked as freelancers or part-time practitioners. The participants, all of whom were L1 Chinese speakers, included 242 English-Chinese interpreters (50.6%), 89 Japanese-Chinese interpreters (18.6%), 34 French-Chinese interpreters (7.1%), 21

Spanish-Chinese interpreters (4.4%), and others specializing in interpreting Austroasiatic languages (e.g., Vietnamese: n=31; 6.5% and Khmer: n=7; 1.5%) and Austronesian languages (i.e., Indonesian/Malay: n=54; 11.3%).

## 2.2. Measures

The questionnaire in this study comprised four scales assessing occupational stress, burnout, grit, and turnover intentions among Chinese simultaneous interpreters. Participants rated all items on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). All the original instruments were empirically validated in previous studies with good psychometric properties (e.g., He et al., 2021; Pei et al., 2020). All subscales demonstrated good reliability and validity (construct, convergent, and discriminant) for the sample of the present study (**Table 1**).

In terms of the construct of *Occupational stress (OS)*, we used two subscales (3 items measuring effort and 7 items measuring reward) from the short form effort–reward imbalance questionnaire (ERI; Siegrist et al., 2009). Noticeably, a 4-point Likert scale measurement was suggested when applying the ERI questionnaire in its entirety, since 4-point Likert scale was used in measuring “overcommitment” while “effort” and “reward” were measured using a 5-point scale (Siegrist et al., 2009). However, we followed the approach of Schmidt et al. (2015), who applied a 5-point scale when using items from the effort and reward subscales. A sample item reads: “Over the past few years, my job has become more and more demanding”. With the participant of the

present study, the psychometric properties of the subscales were good (Cronbach's  $\alpha$  effort = .82, reward = .77).

To assess *Burnout*, the Maslach Burnout Inventory-General Survey (MBI-GS; Maslach et al., 1997) was used. The 9-item instrument encompassed three factors: (1) exhaustion; (2) cynicism; and (3) professional efficacy. A sample item reads: "I feel used up at the end of the interpreting workday".

With regard to the measurement of *Grit*, we applied the 8-item Short Grit Scale (Grit-S; Duckworth & Quinn, 2009). The instrument included two dimensions: (1) consistency of interest; and (2) perseverance of effort. A sample item reads: "I often set a goal about the interpreting jobs but later choose to pursue a different one".

Finally, *Turnover intention (TI)* was measured using an adapted version of the 5-item scale developed by Vanderpool and Way (2013). We revised the original items, changing their general-purpose descriptions to better focus on the turnover intentions of simultaneous interpreters. A sample item in the questionnaire reads: "If I have it my own way, I will not be working as a simultaneous interpreter one year from now." Before psychometrically testing the adapted scale, we consulted a three-member expert panel to assess its content validity and appropriateness to the research context through cognitive interviews (Willis, 2015).

### **2.3. Data analysis**

The study employed structural equation modeling (SEM) and mediation analysis

using R (version 4.3), with the *lavaan* (version 0.6) and *mediation* (version 4.5) packages. Prior to model fitting, data were assessed for normality, multicollinearity, and outliers, with no violations detected. Harman's single-factor test indicated no significant common method bias, as the principal factor explained only 28.6% of the variance, below the 50% threshold (Hair et al., 2009).

SEM analysis followed a two-step approach, including both measurement and structural models, as recommended by Hoyle (2011). Confirmatory factor analysis (CFA) validated the relationships between observed variables and their latent construct. The structural model was then used to test hypotheses by evaluating path coefficients and mediating effects. Model fit was assessed using the cutoffs suggested by Hu and Bentler (1999): CFI > 0.90, SRMR < 0.08, RMSEA < 0.10, and TLI > 0.90. Multiple regression was applied post-SEM to identify potential moderated mediating effects, which were further confirmed through moderated mediation analysis. To strengthen confidence in assessing standard errors and confidence intervals for indirect effects of the models, bias-corrected non-parametric bootstrapping with 5,000 iterations was employed (Hayes, 2009).

### 3. Results

**Table 1** presents the means, standard deviations, and Pearson correlation coefficients of the constructs under investigation. The results indicated significant and free of multicollinearity correlations ( $r_s < 0.9$ ,  $p_s < .01$ ) between all the constructs (Kline,

2023).

**Table 1** also shows the reliability, construct, and convergent validity coefficients for all the constructs. All constructs showed internal consistency coefficients ( $\alpha_{os} = 0.80$ ;  $\alpha_{TI} = 0.73$ ;  $\alpha_{burnout} = 0.91$ ; and  $\alpha_{grit} = 0.76$ ) above the acceptable value of 0.7 (Cronbach & Meehl, 1955); while composite reliability (CR) values ( $CR_{os} = 0.84$ ;  $CR_{TI} = 0.76$ ;  $CR_{burnout} = 0.92$ ; and  $CR_{grit} = 0.77$ ) were higher than the recommend threshold of 0.6 (Hair et al., 2014). Convergent validity was assessed through Average Variance Extracted (AVE) for each latent construct. All the AVE measurements ( $AVE_{os} = 0.63$ ;  $AVE_{TI} = 0.51$ ;  $AVE_{burnout} = 0.78$ ; and  $AVE_{grit} = 0.52$ ) exceeded the threshold of 0.5, suggesting strong convergence between the constructs and their indicators (Anderson & Gerbing, 1988; Kline, 2023). Finally, all the square roots of AVE values of all constructs were larger than the correlation coefficients, indicating discriminant validity (Fornell & Larcker, 1981).

<insert table 1 here>

A mediation model was tested to examine the mediating role of burnout in the relationship between occupational stress and turnover intentions. The model demonstrated a good fit to the data ( $\chi^2/df=2.58$ ; RMSEA = 0.076; CFI = 0.96; TLI = 0.92; SRMR = 0.059). The results indicate that occupational stress positively predicts burnout ( $\beta = 0.391$ , 95% CI [0.304, 0.478],  $p < .001$ ) and turnover intentions ( $\beta = 0.448$ , 95% CI [0.376, 0.521],  $p < .001$ ), while burnout also positively correlates with turnover



intentions ( $\beta = 0.569$ , 95% CI [0.501, 0.636],  $p < .001$ ). Moreover, the indirect effect of occupational stress on turnover intentions through burnout is significant ( $\beta = 0.222$ , 95% CI [0.171, 0.274],  $p < .001$ ). The 95% bootstrap confidence interval for the mediating effect does not include 0, suggesting that burnout mediates the relationship between occupational stress and turnover intentions.

To assess whether grit has a moderated mediating effect, we conducted a series of multiple regression analyses, adjusting for confounding variables across each path of the mediation model (**Table 2**). Notably, only regression model 3 revealed that the interaction between occupational stress and grit significantly influenced burnout ( $\beta = -0.09$ , 95% CI [-0.03, -0.16],  $p < .05$ ), indicating a moderating effect of grit on the relationship between occupational stress and burnout. To further investigate this effect, we applied Hayes' (2022) PROCESS Model 7 to further examine the moderated mediating effect. Grit yielded a significant index of moderated mediation effect on the indirect relationship between occupational stress and turnover intentions (Index = -0.132, SE = 0.035, 95% CI [-0.201, -0.063],  $p < .001$ ). To reveal how grit moderates the effects of occupational stress on burnout, a simple slope test was conducted. Specifically, as the visualization of the simple effect analysis in **Figure 2**, at a high level of grit ( $M + 1SD$ ), occupational stress exhibited a significant negative predictive effect with a stronger effect size on burnout ( $\beta_{\text{simple slope}} = -0.197$ , SE = 0.041,  $t = -4.799$ ,  $p < .001$ ). In contrast, at a lower level of grit ( $M - 1SD$ ), occupational stress did not have a statistically significant effect on burnout, and the negative effect was comparatively

weaker ( $\beta_{\text{simple slope}} = -0.067$ ,  $SE = 0.044$ ,  $t = -1.524$ ,  $p = 0.128$ ). Taken together, the results suggest that grit weakens the effect of occupational stress on burnout.

<insert table 2 here>

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#### 4. Discussion and conclusions

Drawing on RTM (Goh et al., 2010) and the psycho-affective turn of interpreting studies (Korpai, 2016), the study examined the association between occupational stress, burnout, and turnover intentions, and how the above relationship was moderated by grit among Chinese simultaneous interpreters. The results demonstrated that burnout positively mediated the relationship between occupational stress and turnover intentions, while the effects of occupational stress on burnout were negatively moderated by grit.

The results show that occupational stress positively predicts turnover intentions, thus supporting **H1**. This suggests that simultaneous interpreters who experienced an imbalance between job demands and the available resources are more likely to leave the profession. This finding could be explained by the core theoretical tenets of RTM (Goh et al., 2010) that individuals' appraisal of stressors and their coping resources shape their responses to stress, which might ultimately develop into high-stakes decisions such as intentions to leave the profession. Empirically, this finding supports the viewpoints held by Alhawamdeh and Zhang (2021) that occupational stress and its

associated emotional responses contribute to the formation of intention to leave the profession among interpreters. Given that the existing body of scholarship has dominantly focused on the physiological hazards of occupational stress on the well-being of interpreters (Korpal, 2016; Kurz, 2003; Mackintosh, 2003), this study sheds light on the professional hazards of occupational stress, especially when interpreters could not effectively tackle the development of stress outcomes, which in turn harms the collective sustainability and stability of the interpreter profession. Furthermore, this study expands existing knowledge by demonstrating that turnover intentions driven by occupational stress overload is prevalent among spoken language simultaneous interpreters. Previous research reaching similar conclusions has been limited to specific societal contexts (e.g., during the Covid-19 pandemic in Alhawamdeh & Zhang, 2021), particular types of interpreter professions (e.g., Video relay service interpreters in Bower, 2015), or small and unrepresentative samples (e.g., 26 community Swedish interpreters in Norström et al., 2012).

**H2** is also accepted as the study finds that burnout mediated the relationship between occupational stress and turnover intentions. The finding supports the conceptualization that burnout is both interpreters' responses to continuous occupational stress and a predictor of their withdrawal from the profession (Chen, 2023). From a theoretical perspective, this aligns with RTM's emphasis on the temporal and cyclical nature of stress and coping, wherein prolonged exposure to occupational stress triggers a depletion of interpreters' psychological and physiological resources, leading

to burnout, which in turn serves as a critical mechanism linking stress to turnover intentions (Goh et al., 2010). The significant and positive indirect effects observed in this study offer valuable quantitative empirical evidence for understanding occupational stress and its psychological and career-related impacts on simultaneous interpreters. This addresses a critical gap in the literature, which has been predominantly conceptual or limited by small sample sizes (e.g., Alhawamdeh & Zhang, 2021) or narrow scopes, often in non-spoken language interpreting contexts (e.g., Schwenke, 2012; Schwenke et al., 2014). On the one hand, the mediation model indicates that the formation of turnover intentions resulting from long-term exposure to occupational stress is a developmental process jointly shaped by environmental and individual characteristics, thus supporting the applicability of the RTM model in the context of the interpreter profession (Goh et al., 2010). On the other hand, the mediating role of burnout in the relationship between occupational stress and turnover intentions echoes the major themes in the “psycho-affective turn” of interpreting studies, where the psychological and physiological well-being of interpreters is significant and the coping abilities of interpreters plays a role in shaping their professional aptitude/competence (Chabasse & Kader, 2014; Korpál, 2016).

For **H3**, the hypothesis is partially supported. The study finds that grit moderates the indirect effects of burnout on the relationship between occupational stress and turnover intentions by buffering the impact of occupational stress on burnout. On a broader scale, this result aligns with key arguments from the psycho-affective turn in

interpreting studies, which suggest that non-cognitive soft skills, such as stress resistance, coping strategies, and occupational determination and perseverance (Chabasse & Kader, 2014), contribute to the formation of competent and stress-resistant interpreters (Korpál, 2016). Specifically, the study reveals that simultaneous interpreters with higher levels of grit are better equipped to manage and cope with burnout induced by occupational stress. On one hand, this finding echoes previous research showing that grit is a negative predictor and effective controlling measure of burnout among employees, students, and language teachers (Derakhshan et al., 2022; Jung et al., 2023; Özhan, 2021). On the other hand, it offers new insights into our understanding of occupational stress in the interpreter profession, where existing literature has insufficiently explored the transition from experienced stress to psychological symptoms and occupational risks, as well as the specific role of personality traits during the development of sustained occupational stress (e.g., McCartney, 2016).

The study offers two major takeaways for practitioners in simultaneous interpreting. First, since occupational stress is a significant predictor of burnout and turnover intentions, it is crucial for interpreting service providers and stakeholders in the language service industry to ensure supportive and caring working conditions. As Riccardi (2015) argued, suboptimal working conditions have long contributed to simultaneous interpreters' dissatisfaction and emotional stress. Lessons could be learned from exiting studies on the effectiveness of ergonomic optimization (van

Egdom et al., 2020) and social support (Asai et al., 2024) in mitigating interpreters' occupational stress and burnout. Second, non-cognitive abilities should be considered in interpreter training. The study highlights that stress-coping personality traits, such as grit, can help interpreters manage occupational stress and burnout. In recent years, although personality characteristics such as personality hardiness (Xing & Zeng, 2022) has been frequently emphasized in scholarly works, there still remains a tendency in actual training settings to narrowly conceptualize interpreter competence as a predominantly cognitive construct (Chabasse & Kader, 2014; Shang et al., 2023). Therefore, interpreting trainers and curriculum designers should adopt a comprehensive approach to conceptualizing, measuring, and enhancing interpreter competence in their training programs.

While this study provides significant insights into the relationship between occupational stress, grit, and turnover intentions among Chinese simultaneous interpreters, it is not without limitations that warrant attention in future research. First, the cross-sectional design of this study constrains the ability to establish definitive causal relationships among the constructs under investigation. Employing longitudinal or experimental designs in future research would afford a more nuanced understanding of the dynamic interactions among these variables over time and facilitate the establishment of clearer causal connections. Second, the study's reliance exclusively on self-report measures from a specific cohort of interpreters may limit the robustness of the data. Future studies would benefit from adopting a mixed-methods approach to

enhance data triangulation and provide a more comprehensive perspective on the phenomena under examination. Third, the focus on Chinese spoken-language simultaneous interpreters may restrict the generalizability of the findings. Replicating the study in varied cultural or professional contexts could enhance the applicability and robustness of the results, thereby contributing to a more thorough understanding of the issues addressed. Fourth, as an initial effort to provide an overarching view of the relationships between the key variables, this study did not consider participants' demographic information as potential moderators in the analysis. Future research is encouraged to explore how individual or group characteristics of interpreters influence their levels of occupational stress and their corresponding coping strategies. Finally, the study only explored the role of grit in combating hazardous outcomes of sustained occupational stress. Researchers are advised to examine the effects of other non-cognitive/psycho-affective factors on the relationship between burnout and turnover intentions among interpreters.

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#### **References**

Adams, H., & Rosales-Domínguez, L. (2017). Three perspectives on interpreters and

- stress: The experts, the novices, and the trainees. In A. Łyda & K. Holewik (Eds.), *Interdisciplinary encounters: Dimensions of interpreting studies* (pp. 60–71). Wydawnictwo Uniwersytetu Śląskiego.
- Akbari Motlaq, M. D., & Tengku Mahadi, T. S. (2020). The multiple life stressors' effect on burnout and career optimism throughout translation on the first year of working as a translator. *Cogent Education*, 7(1), 1832178. <https://doi.org/10.1080/2331186X.2020.1832178>
- Alhawamdeh, S., & Zhang, C. (2021). Wellness of interpreters: Stress-related occupational hazards and possible solutions. *New Voices in Translation Studies*, 24(1), 82–93. <https://doi.org/10.14456/nvts.2021.6>
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411–423. <https://doi.org/10.1037/0033-2909.103.3.411>
- Asai, Y., He, J., Suzuta, S., Yang, J., Niyonsaba, F., Ono, N., & Ikeda, A. (2024). An investigation into the prevention of turnover of medical interpreters. *Juntendo Medical Journal*, 70(4), 289–299. <https://doi.org/10.14789/jmj.JMJ24-0007-OA>
- Baker, M., & Diriker, E. (2019). Conference and simultaneous interpreting. In *Routledge Encyclopedia of Translation Studies* (3rd ed., pp. 95–101). Routledge.
- Başol, O., & Taşkın, B. (2024). Taking the pulse of the professional translators in Turkey: A comprehensive study on work attitude. *KMÜ Sosyal ve Ekonomik Araştırmalar Dergisi*, 26(46), 302–318.
- Bower, K. (2015). Stress and burnout in video relay service (VRS) interpreting. *Journal of Interpretation*, 24(1). <https://digitalcommons.unf.edu/joi/vol24/iss1/2>
- Chabasse, C., & Kader, S. (2014). Putting interpreting admissions exams to the test: The MA KD Gernersheim project. *Interpreting*, 16(1), 19–33. <https://doi.org/10.1075/intp.16.1.02cha>
- Chen, T. (2023). The interplay between psychological well-being, stress, and burnout: Implications for translators and interpreters. *Heliyon*, 9(8), e18589. <https://doi.org/10.1016/j.heliyon.2023.e18589>
- Cooper, C. L., Davies, R., & Tung, R. L. (1982). *Interpreting stress: Sources of job stress among conference interpreters*. 1(2), 97–108. <https://doi.org/10.1515/mult.1982.1.2.97>
- Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin*, 52(4), 281–302. <https://doi.org/10.1037/h0040957>
- Dean, R. K., & Pollard, R. Q., Jr. (2001). Application of demand-control theory to sign language interpreting: Implications for stress and interpreter training. *Journal of Deaf Studies and Deaf Education*, 6(1), 1–14. <https://doi.org/10.1093/deafed/6.1.1>
- Derakhshan, A., Dewaele, J.-M., & Azari Noughabi, M. (2022). Modeling the contribution of resilience, well-being, and L2 grit to foreign language teaching enjoyment among Iranian English language teachers. *System*, 109, 102890.



- <https://doi.org/10.1016/j.system.2022.102890>
- Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, 92(6), 1087–1101. <https://doi.org/10.1037/0022-3514.92.6.1087>
- Duckworth, A. L., & Quinn, P. D. (2009). Development and validation of the short grit scale (grit-S). *Journal of Personality Assessment*, 91(2), 166–174. <https://doi.org/10.1080/00223890802634290>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G\*power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149–1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Ferreira, A., Schwieter, J. W., & Festman, J. (2020). Cognitive and neurocognitive effects from the unique bilingual experiences of interpreters. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.548755>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.1177/002224378101800104>
- Goh, Y. W., Sawang, S., & Oei, T. P. S. (2010). The revised transactional model (RTM) of occupational stress and coping: An improved process approach. *The Australasian Journal of Organisational Psychology*, 3, 13–20. <https://doi.org/10.1375/ajop.3.1.13>
- Gumul, E. (2021). Reporting stress in simultaneous interpreting. The analysis of trainee interpreters' retrospective reports and outputs. *Onomázein*, 16–42.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate data analysis* (7th edition). Pearson.
- Hair, J. F., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106–121. <https://doi.org/10.1108/EBR-10-2013-0128>
- Hao, S., Hong, W., Xu, H., Zhou, L., & Xie, Z. (2015). Relationship between resilience, stress and burnout among civil servants in Beijing, China: Mediating and moderating effect analysis. *Personality and Individual Differences*, 83, 65–71. <https://doi.org/10.1016/j.paid.2015.03.048>
- Hayes, A. F. (2009). Beyond baron and kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4), 408–420. <https://doi.org/10.1080/03637750903310360>
- Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (Third edition). The Guilford Press.
- He, C., Wu, D., Yang, L., Yang, L., & Yue, Y. (2021). Psychometric properties of the grit-S in Chinese nurses. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.766055>
- Hoyle, R. (2011). *Structural equation modeling for social and personality psychology*. SAGE Publications Ltd. <https://doi.org/10.4135/9781446287965>

- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling-a Multidisciplinary Journal*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Jung, S., Shin, Y. C., Lee, M. Y., Oh, K.-S., Shin, D.-W., Kim, E. S., Kim, M.-K., Jeon, S.-W., & Cho, S. J. (2023). Occupational stress and depression of Korean employees: Moderated mediation model of burnout and grit. *Journal of Affective Disorders*, 339, 127–135. <https://doi.org/10.1016/j.jad.2023.07.045>
- Karrebæk, M. S., & Sørensen, S. H. (2021). Interpreting as creating a potential for understanding: Insights from a Danish courtroom. *International Journal of Speech Language and The Law*, 28(1), 59–97. <https://doi.org/10.1558/ijssl.19649>
- Kasten, M. J., Berman, A. C., Ebright, A. B., Mitchell, J. D., & Quirindongo-Cedeno, O. (2020). Interpreters in health care: A concise review for clinicians. *American Journal of Medicine*, 133(4), 424-428.e2. <https://doi.org/10.1016/j.amjmed.2019.12.008>
- Kline, R. B. (2023). *Principles and practice of structural equation modeling* (5th ed., pp. xvii, 534). Guilford Press.
- Korpala, P. (2016). Interpreting as a stressful activity: Physiological measures of stress in simultaneous interpreting. *Poznan Studies in Contemporary Linguistics*, 52(2), 297–316. <https://doi.org/10.1515/psicl-2016-0011>
- Korpala, P. (2021). Stress and emotion in conference interpreting. In *The Routledge Handbook of Conference Interpreting*. Routledge.
- Kristinsson, K., Gudjonsson, S., & Kristjansdottir, B. (2023). Tough times require tough people: The benefits of grit for reducing employee burnout. *International Journal of Environmental Research and Public Health*, 20(11), 6024. <https://doi.org/10.3390/ijerph20116024>
- Kurz, I. (2003). Physiological stress during simultaneous interpreting: A comparison of experts and novices. *The Interpreters' Newsletter*, 12, 51–67.
- Lamprianou, I. (2022). Surveying through gatekeepers in social research: Methodological problems and suggestions. *International Journal of Social Research Methodology*. <https://doi.org/10.1080/13645579.2021.1940775>
- Lazarus, R. S. (1966). *Psychological stress and the coping process*. McGraw-Hill.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping* (1st edition). Springer Publishing Company.
- Lin, C.-H., Lu, F. J. H., Chen, T.-W., & Hsu, Y. (2022). Relationship between athlete stress and burnout: A systematic review and meta-analysis. *International Journal of Sport and Exercise Psychology*, 20(5), 1295–1315. <https://doi.org/10.1080/1612197X.2021.1987503>
- Mackintosh, J. (2003). The AIIC workload study. *Forum*, 1(2), 189–214. <https://doi.org/10.1075/forum.1.2.09mac>
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1997). Maslach burnout inventory: Third

- edition. In *Evaluating stress: A book of resources* (pp. 191–218). Scarecrow Education.
- Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: Recent research and its implications for psychiatry. *World Psychiatry, 15*(2), 103–111. <https://doi.org/10.1002/wps.20311>
- McCartney, J. L. (2016). Is grit the ‘X-factor’ for interpreters leaving the profession? *Translation & Interpreting, 8*(1), 30–52.
- Norström, E., Fioretos, I., & Gustafsson, K. (2012). Working conditions of community interpreters in Sweden: Opportunities and shortcomings. *Interpreting, 14*(2), 242–260. <https://doi.org/10.1075/intp.14.2.06nor>
- Okoniewska, A. M. (2022). Interpreters’ roles in a changing environment. *Translator, 28*(2), 139–147. <https://doi.org/10.1080/13556509.2022.2124712>
- Özhan, M. B. (2021). Academic self-efficacy and school burnout in university students: Assessment of the mediating role of grit. *Current Psychology, 40*(9), 4235–4246. <https://doi.org/10.1007/s12144-021-02023-9>
- Pei, P., Lin, G., Li, G., Zhu, Y., & Xi, X. (2020). The association between doctors’ presenteeism and job burnout: A cross-sectional survey study in China. *BMC Health Services Research, 20*(1), 715. <https://doi.org/10.1186/s12913-020-05593-9>
- René de Cotret, F., Beaudoin-Julien, A.-A., & Leanza, Y. (2020). Implementing and managing remote public service interpreting in response to COVID-19 and other challenges of globalization. *Meta: Journal Des Traducteurs / Meta: Translators’ Journal, 65*(3), 618–642. <https://doi.org/10.7202/1077406ar>
- Riccardi, A. (2015). Stress. In F. Pochhacker (Ed.), *Routledge encyclopedia of interpreting studies* (pp. 405–407). Routledge. <https://doi.org/10.4324/9781315678467>
- Roziner, I., & Shlesinger, M. (2010). Much ado about something remote: Stress and performance in remote interpreting. *Interpreting, 12*(2), 214–247. <https://doi.org/10.1075/intp.12.2.05roz>
- Schmidt, B., Bosch, J. A., Jarczok, M. N., Herr, R. M., Loerbroks, A., van Vianen, A. E. M., & Fischer, J. E. (2015). Effort–reward imbalance is associated with the metabolic syndrome—Findings from the mannheim industrial cohort study (MICS). *International Journal of Cardiology, 178*, 24–28. <https://doi.org/10.1016/j.ijcard.2014.10.115>
- Schwenke, T. (2012). Sign language interpreters and burnout. *Journal of Interpretation, 20*(1). <http://digitalcommons.unf.edu/joi/vol20/iss1/7>
- Schwenke, T., Ashby, J. S., & Gniska, P. B. (2014). Sign language interpreters and burnout: The effects of perfectionism, perceived stress, and coping resources. *Interpreting, 16*(2), 209–232. <https://doi.org/10.1075/intp.16.2.04sch>
- Shang, X., Russo, M., & Chabasse, C. (2023). Introduction to the special issue: Revisiting aptitude testing for interpreting. *The Interpreter and Translator Trainer, 17*(1), 1–6. <https://doi.org/10.1080/1750399X.2023.2170042>

- Siegrist, J., Wege, N., Pühlhofer, F., & Wahrendorf, M. (2009). A short generic measure of work stress in the era of globalization: Effort–reward imbalance. *International Archives of Occupational and Environmental Health*, 82(8), 1005–1013. <https://doi.org/10.1007/s00420-008-0384-3>
- Teimouri, Y., Tahmouresi, S., & Tabandeh, F. (2024). The interplay of mindsets, aptitude, grit, and language achievement: What role does gender play? *Studies in Second Language Acquisition*, 1–24. <https://doi.org/10.1017/S0272263124000330>
- van Egdom, G.-W., Cadwell, P., Kockaert, H., & Segers, W. (2020). A turn to ergonomics in translator and interpreter training. *Interpreter and Translator Trainer*, 14(4), 363–368. <https://doi.org/10.1080/1750399X.2020.1846930>
- Vanderpool, C., & Way, S. A. (2013). Investigating work–family balance, job anxiety, and turnover intentions as predictors of health care and senior services customer-contact employee voluntary turnover. *Cornell Hospitality Quarterly*, 54(2), 149–160. <https://doi.org/10.1177/1938965513478682>
- Willis, G. B. (2015). *Analysis of the cognitive interview in questionnaire design*. Oxford University Press.
- Xing, X., & Zeng, H. (2022). Exploring the effects of personality hardiness on interpreters' performance with interpreting anxiety as a mediator: An explanatory sequential mixed-methods study. *Across Languages and Cultures*, 23(2). <https://doi.org/10.1556/084.2022.00218>
- Zhang, H., Shi, Y., & Teng, L. S. (2024). Exploring relationships of job satisfaction and burnout with turnover intention among Chinese English language teachers. *Asia-Pacific Education Researcher*, 33(3), 587–601. <https://doi.org/10.1007/s40299-023-00755-9>

## Tables in the paper

Table 1. Correlations and descriptive statistics.

Constructs	OS	TI	Burnout	Grit
OS	<b><i>0.79</i></b>			
TI	.60	<b><i>0.71</i></b>		
Burnout	.36	.60	<b><i>0.88</i></b>	
Grit	-.61	-.58	-.36	<b><i>0.72</i></b>
$\alpha$ /CR	0.802/0.838	0.734/0.76	0.908/0.918	0.761/0.765
Mean	3.66	3.93	4.22	2.25
SD	0.74	0.59	0.65	0.71

Note: OS: occupational stress; TI: turnover intentions;  $\alpha$ : Cronbach's alpha; CR: Composite reliability; All square roots of the average variance extracted values (AVEs) are shown on the diagonal (bold and italicized); All correlations are significant at the 0.01 level\*\* (2-tailed).

Table 2. Results of moderated mediation analysis.

Constructs	Model1: TI			Model 2: TI			Model 3: Burnout		
	B	$\beta$	<i>t</i>	B	$\beta$	<i>t</i>	B	$\beta$	<i>t</i>
OS	0.33	0.20***	3.47	0.29	0.18***	7.53	0.11	0.08	0.87
Burnout	0.41	0.37***	12.31	0.24	0.22*	2.47			
Grit	-0.21	-0.17	-1.59	-0.56	-0.47**	-3.33	-0.69	-0.64***	-3.89
OS $\times$ Grit	-0.04	-0.01	-0.36				-0.18	-0.09*	-1.70
Burnout $\times$ Grit				-0.09	-0.06	-1.87			
R <sup>2</sup>	0.567			0.574			0.468		

Note: OS: occupational stress; TI: turnover intentions; \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

## Figures in the paper

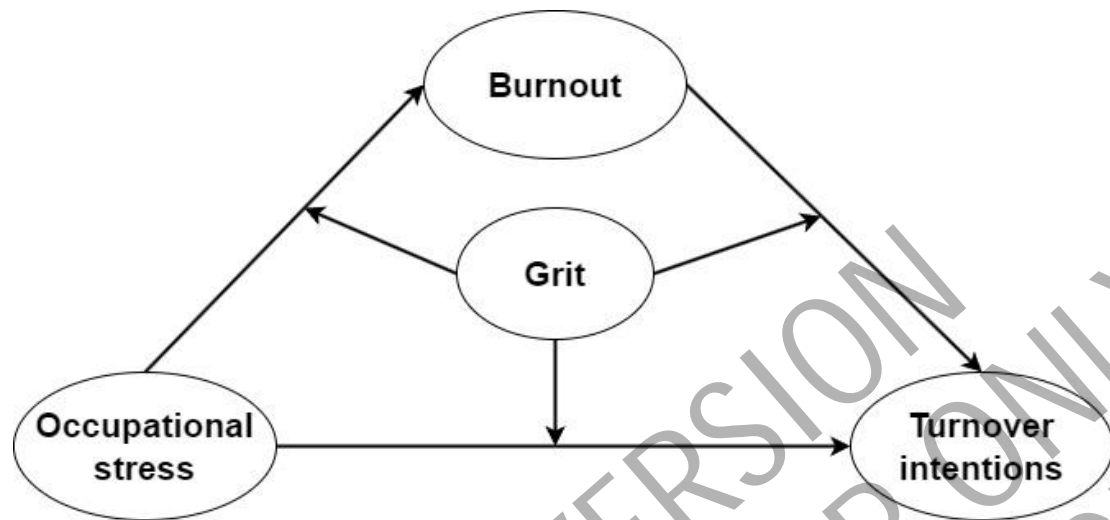


Figure 1. Hypothesized model.

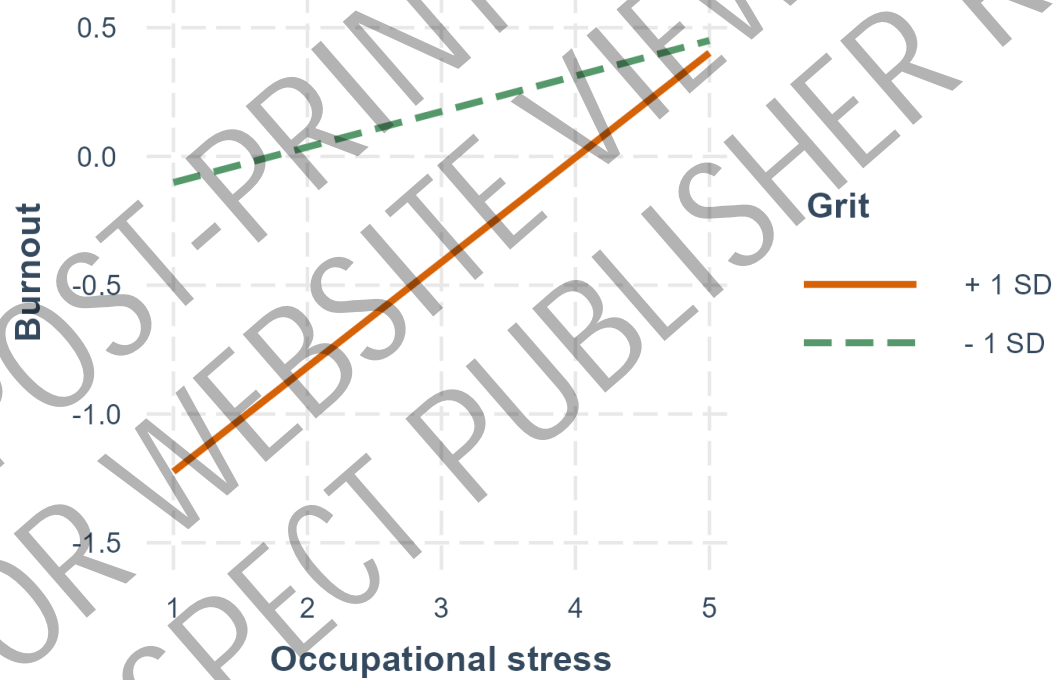


Figure 2. The interaction of occupational stress and grit on burnout.