

Examining the Positive Association Between Self-Efficacy and Emotional Exhaustion:

A Moderation Analysis¹

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Abstract

Burnout is a critical problem among refugee resettlement staff and volunteers. Their job entails emotionally demanding tasks, high caseloads, and exposure to traumatic client histories, resulting in emotional exhaustion, one of the most prominent dimensions of burnout. The current study examines how three psychological resources – hope, optimism, and resilience – mediate the relationship between self-efficacy and emotional exhaustion. Using data from an earlier dissertation, the study included 112 participants who worked or volunteered in refugee resettlement organizations within the United States. Emotional exhaustion was measured with the Maslach Burnout Inventory – Human Services Survey (MBI-HSS), while psychological capital facets were measured with the Psychological Capital Questionnaire (PCQ-24). Moderation analysis was conducted using Hayes' PROCESS macro version 4.2 (Model 2) in SPSS. Contrary to common assumptions, higher self-efficacy was associated with higher emotional exhaustion. This correlation was moderated strongly by hope, however. Individuals with high hope levels were less emotionally exhausted even when their self-efficacy was high. Optimism and resilience were examined but found to have weaker or non-significant moderating effects than hope. These results contradict the assumption that self-efficacy is always beneficial and demonstrate that, in cases of high-stress work, such as refugee support work, self-efficacy can actually become a cause for burnout if individuals lack sufficient psychological resources to offset it. The study highlights the importance of building hope through purposeful support and interventions as a potential way to reduce burnout among humanitarian practitioners.

Key Words:

Burnout, resettlement workers, refugee workers, self-efficacy, emotional exhaustion

1 Introduction

Burnout is a psychological syndrome that results from chronic occupational stress, particularly in human service professions (Maslach & Leiter, 2016). Among its three

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dimensions – emotional exhaustion (EE), depersonalization, and reduced personal accomplishment – emotional exhaustion is the most essential component that has been studied the most (Maslach & Leiter, 2016). Emotional exhaustion is a state of chronic physical and emotional depletion that results from overwork-related demands and interpersonal stressors. Studies have shown that EE negatively impacts job performance, well-being, and retention across various occupations, including those of physicians (West et al., 2018), dentists (Calvo et al., 2021), social workers (Ho & Chan, 2022), and human service professionals (Dyrbye et al., 2019). Refugee resettlement workers and volunteers also are likely to suffer from emotional exhaustion because the work involves extremely emotionally taxing and interpersonally straining tasks in helping displaced people with complicated needs. The same perspective was also shared by Espinosa et al. (2019), Kim (2017), Sagaltici et al. (2022), and Wirth et al. (2019). As a result, refugee workers experience negative consequences, including low compassion satisfaction (Posselt et al., 2019), psychological distress (Posselt et al., 2021), and high turnover intentions (Di Maggio et al., 2021).

In line with this, studies on protective and risk factors for EE have been an important area of research in occupational burnout-related research. One of the most widely used models of psychological resilience at work is Psychological Capital (PsyCap), which comprises hope, self-efficacy, resilience, and optimism (Luthans et al., 2007). Previous research has determined that PsyCap is a protective factor for burnout in various professions (Di Maggio et al., 2021; Virgă et al., 2020). Specifically, research has determined that hope reduces burnout and secondary traumatic stress in pediatricians (Passmore et al., 2020). Optimism has also been shown to enhance the well-being of refugee resettlement workers (Posselt et al., 2021). Resilience reduces burnout in employees who engage with refugees (Tessitore et al., 2023). Self-efficacy is generally associated with lower levels of stress and better coping in challenging professions (Espinosa et al., 2019; Isawi & Post, 2020).

Though self-efficacy has been proposed as a protective factor against emotional exhaustion, prior dissertation research conducted by one of the authors (Kim, 2024) found a contrary positive relationship between self-efficacy and emotional exhaustion in refugee resettlement workers and volunteers. Building on this work, the current study further investigated this relationship. These findings contradict conventional theories that link high self-efficacy with lower burnout, suggesting that in certain contexts, higher self-efficacy may actually contribute to increased emotional exhaustion rather than reducing it.

While PsyCap and burnout have separately been examined, less is documented on the distinct individual elements of PsyCap and how these elements individually relate to aspects of emotional exhaustion in traumatic occupations such as refugee resettlement. This counterintuitive yet positive finding, which is based on a preliminary analysis presented in the earlier dissertation (Kim, 2024), raises several theoretical and practical questions: Why does high self-efficacy contribute to greater emotional exhaustion? When does self-efficacy become a vulnerability rather than a resilience factor? Several theoretical explanations suggest that high self-efficacy may lead to overcommitment, taking on too much work, and maladaptive persistence, all of which can lead to emotional exhaustion rather than decreasing it (Dicke et al., 2015). The current study seeks to expand on the dissertation's findings by further investigating this relationship and

identifying moderators, such as hope, resilience, and optimism, that may influence the strength or direction of this effect.

2 Problem Statement, Objectives, and Hypotheses

Although self-efficacy is widely considered a protective factor against emotional exhaustion, recent findings in the refugee resettlement context suggest that self-efficacy might be a cause of enhanced emotional exhaustion under certain conditions. This contradicts existing theory and represents a critical gap in the literature. The purpose of this research was to examine the relationship between self-efficacy and emotional exhaustion in refugee resettlement workers, investigating whether psychological capital resources – hope, optimism, and resilience – moderate this association and provide burnout prevention recommendations based on these moderating effects.

Based on the literature and theoretical framework, the current research hypothesized various relationships between emotional exhaustion and self-efficacy, as well as potential moderating roles of resilience, hope, and optimism. Hypotheses that were tested and will be addressed hereafter throughout the Results and Discussion, as H1 to H5, have been outlined below. In the first model, model 2A, it was hypothesized that self-efficacy would significantly predict emotional exhaustion (Hypothesis 1). In addition, hope and optimism were expected to each significantly predict emotional exhaustion (Hypotheses 2 and 3). It was further hypothesized that hope would moderate the relationship between self-efficacy and emotional exhaustion, such that individuals with higher levels of hope would experience a weaker association between self-efficacy and emotional exhaustion (Hypothesis 4). Similarly, it was expected that optimism would moderate this relationship, such that the association between self-efficacy and emotional exhaustion would be weaker at higher levels of optimism (Hypothesis 5). In the second model, model 2B, it was hypothesized that self-efficacy, hope, and resilience would each significantly predict emotional exhaustion (Hypotheses 1, 2, and 3). Furthermore, hope was expected to moderate the relationship between self-efficacy and emotional exhaustion, such that this relationship would be weaker when hope was high (Hypothesis 4). It was also hypothesized that resilience would moderate the relationship between self-efficacy and emotional exhaustion, such that individuals with higher resilience would experience less emotional exhaustion associated with high self-efficacy (Hypothesis 5).

3 Theoretical Framework

This study is grounded in the Psychological Capital (PsyCap) theory, which comprises four constructs: self-efficacy, hope, resilience, and optimism. Each of these is hypothesized to be a psychological resource that enhances well-being and performance in the face of stress. In very stressful occupations like refugee resettlement, where workers frequently must contend with traumatic stories, chaotic policies, and systemic barriers, these resources are particularly relevant. Specifically, self-efficacy refers to having a belief in one's ability to deal with challenges effectively; hope entails agency and routes to achieve objectives despite adversity; resilience refers to the capacity to recover from stress or adversity; and optimism is a general anticipation that positive things will occur. PsyCap was negatively associated with burnout among other human services workers, including social workers and psychiatric nurses (Kim & Kweon, 2020; Virgă et al., 2020). According to research, PsyCap may act as a mediator between burnout and occupational stress (Kim & Kweon, 2020). However, studies conducted on athletes revealed that the only PsyCap

component that significantly reduced fatigue was hope; other PsyCap components had no discernible benefit (Yang et al., 2023). Self-efficacy is the belief that one can overcome obstacles. It was linked to trauma-informed training and cultural intelligence in refugee resettlement situations (Yalim et al., 2022). In counselors, lower levels of secondary traumatic stress were associated with higher levels of self-efficacy (Isawi & Post, 2020).

Outside of human services, self-efficacy has been shown to improve nurses' job performance (Terry et al., 2019) and exhibit an inverse association with anxiety and depression among firefighters (Duran et al., 2019). Resilient individuals are better equipped to handle stress and recover from setbacks in their professional lives. Resilience among refugee resettlement professionals was positively correlated with work meaning and negatively correlated with workplace stress (Robelski et al., 2020). To remain resilient, volunteers turned to their spiritual identity and social support (Rush et al., 2022). Resilience has been shown to mitigate the effects of secondary traumatic stress and reduce burnout in the healthcare industry (Harker et al., 2016; Ogińska-Bulik & Michalska, 2021). In all human service domains, hope, which is defined as goal-directed motivation, was inversely correlated with burnout. Hope decreased secondary traumatic stress and exhaustion in child abuse physicians (Passmore et al., 2020). Hope influenced emotional tenacity and job engagement in different occupations (Ender et al., 2018; Kang & Jang, 2019). Hopelessness was found to be positively connected with psychological discomfort and burnout in police officers and healthcare personnel (Civillotti et al., 2022; Korkut, 2022).

Studies have found an association between optimism and reduced burnout. Optimism is the tendency to anticipate the greatest potential conclusion from any given scenario. Optimism and self-efficacy enhanced well-being and job retention among refugee resettlement workers (Posselt et al., 2021). Optimism was found to be inversely correlated with depersonalization and emotional weariness in other professions (Theofilou et al., 2023). The association between burnout and antidepressant usage among nurses was mediated by optimism (Martos Martínez et al., 2021). The existing literature has yielded conflicting findings regarding the relationship between self-efficacy and emotional exhaustion. While some authors claim that self-efficacy prevents burnout, others find positive relationships between the two. Given that emotional exhaustion serves as an enhancing mechanism that people create when they must cope with extremely challenging conditions, Dicke et al. (2015) believe that it can eventually foster self-efficacy. Similarly, Bellemans et al. (2023) did not find a mediating effect of self-efficacy on burnout; hence, factors such as workplace problems and crises can influence this relationship from the outside. Such intricacy is supported by an earlier study, which found an unexpectedly positive correlation between emotional exhaustion and self-efficacy in volunteers and staff involved in refugee resettlement (Kim, 2024). This contradicts the widely held belief that self-efficacy always serves as a protective factor against burnout. Given the particular stressors faced by refugee resettlement professionals, it is essential to investigate how psychological resources, such as optimism, hope, and resilience, modulate the aforementioned relationship.

As a result, PsyCap has recently been the subject of increased research from various human service fields, including Di Maggio et al. (2021) and Posselt et al. (2021). Research on its specific function for workers in the context of refugee resettlement is still lacking, nevertheless. Additionally, thresholds beyond which these resources are protective have

not been examined in previous studies; therefore, finer-grained analyses employing moderation techniques, such as the Johnson-Neyman approach, would be necessary to address this gap. To shed light on how psychological resources can protect workers from burnout in high-stress refugee resettlement workplaces, this study examines hope, optimism, and resilience as modifiers of the self-efficacy-emotional exhaustion link. Since hope is a cognitive, psychological, and motivational tool, it was included in both Model 2A (hope and optimism) and Model 2B (hope and resilience). Hope is unique in its combination of goal-oriented motivation and problem-solving coping, as opposed to optimism, which is characterized by broad, positive expectations, and resilience, which is defined as the ability to cope in adverse situations (Snyder, 2002). Due to its close theoretical and empirical ties to optimism and resilience, studying hope in these settings facilitates a deeper understanding of how psychological resources and self-efficacy interact to influence emotional exhaustion.

4 Methods and Materials

4.1 Ethics and Approval

On January 30, 2024, the Institutional Review Board approved this study (Kim, 2024). The Qualtrics XM data-collecting tool was used to recruit participants (Qualtrics, 2024). The link to the Qualtrics online survey, which comprised the demographic questions, online informed consent, study information sheet, and measurement tools discussed in this research, was included in the invitation to participate. This 2024 research study received approval from GCU's Institutional Review Board in accordance with ethical guidelines. The following data, gathered in accordance with the Belmont Report's guidelines, protected human subjects, showed respect for persons, and participants gave their consent to be studied. They were also allowed to leave at any time without jeopardizing their circumstances. Additionally, the research aimed to significantly advance the body of knowledge on psychological capital and exhaustion among refugee resettlement professionals, with a focus on maximizing benefits while minimizing harm. Finally, justice, ensuring fair treatment, and access to study benefits were guaranteed for all eligible participants through equal opportunities.

4.2 Participants

A total of 112 participants were working or volunteering for refugee resettlement organizations across the United States at the time of data collection. Convenience sampling was used for initial recruitment in a non-probability purposive sample, and snowball sampling was used to maximize responses. Peer recommendations, professional Facebook groups, and emails inviting refugee resettlement agencies have all been used to recruit participants. Participants who were 18 years of age or older, employed by or volunteered for a refugee resettlement organization, and had at least six months of experience resettling refugees in the United States met the eligibility requirements. Participants willingly provided their email address for use in the prize draw procedure in exchange for an incentive of four \$25 Amazon e-gift cards.

4.3 Measures

4.3.1 Demographics

Participants provided information on their location, years of experience, age, and gender. Most of the respondents fell into the following categories: Northeast (36.4%), with more than two years of experience (60%), between the ages of 25-34 years (42%), and female (70.9%). Each demographic variable was measured at the nominal or ordinal level, with frequencies and percentages reported. Demographic information is summed up in Table 1.

Table 1: Demographic Variables, Region, Years of Experience, Age, and Gender

Demographics		<i>n</i>	Percent
Region	Northeast	40	36.4
	Midwest	21	19.1
	South	27	24.5
	West	22	20
Years of Experience	6 months to 2 years	43	39.1
	2 years or more	66	60
	Prefer not to say	1	.9
Age	18-24	19	17
	25-34	47	42
	35-54	34	30.4
	55 and older	9	8
	Prefer not to say	3	2.7
Gender	Male	28	25.5
	Female	78	70.9
	Other	3	2.7
	Prefer not to say	1	.9

N = 112

4.3.2 Maslach Burnout Inventory – Human Services Survey (MBI-HSS)

The MBI-HSS is one of the most widely used instruments for assessing burnout among human service professionals (Maslach & Jackson, 1981). For the current study, only the emotional exhaustion (EE) subscale served as the outcome variable. The EE subscale comprises nine items that assess the frequency of feelings of emotional overextension and fatigue related to work. Response scores range from 0 (Never) to 6 (Every day) on a 7-point Likert scale, with higher scores indicating higher emotional exhaustion. The internal consistency reliability (Cronbach's alpha) for the EE subscale in this study was .88, reflecting good reliability as reported in previous studies.

4.3.3 Psychological Capital Questionnaire (PCQ-24)

The PCQ-24 is a valid measure of Psychological Capital (PsyCap), which is a positive psychological resource comprising four components: self-efficacy (six items), individual belief in one's capability to succeed. Hope (six items): Goal determination and persistence.

Resilience (six items): Capability for recovery from misfortune. Optimism (six items): The perceived capability to pull oneself through difficult situations, with positive expectations about the future. Responses were recorded on a six-point Likert scale, ranging from 1 (Strongly Disagree) to 6 (Strongly Agree) (Luthans et al., 2007).

The current study focuses on self-efficacy as the key predictor, while investigating hope, resilience, and optimism as potential moderators of its relationship with emotional exhaustion. Reliability testing of the PCQ-24 subscales was conducted: self-efficacy showed very good internal consistency, with Cronbach's alpha of .81. Hope turned out to be a fairly valid construct, Cronbach's alpha being .82. In resilience, Cronbach's alpha was .68, a bit below the threshold of .70, but comparable with already published studies. The Cronbach's alpha in the case of optimism was .62 – internally valid with low consistency, and that forms one of the limitations admitted in the present study. The overall PCQ-24 has shown very good reliability with a Cronbach's alpha of .90, whereas the aggregate PsyCap was not considered as part of a multiple regression, as this research only focuses on investigating the moderating role of particular PsyCap elements. As Suárez Álvarez et al. (2018) outlined, the lower reliability in some subscales, such as resilience and optimism, may be due to the inclusion of both positive and reversed items, which diminish internal consistency and add secondary variance. Despite slight disparities in reliability among subscales, the internal consistency of the MBI-HSS (EE subscale) and PCQ-24 was appropriate for measuring burnout and psychological capital, respectively, which ensured the validity of the results in this study.

5 Procedure

5.1 Statistical Power Analysis

We performed a priori power analysis using G*Power 3.1 to determine the appropriate sample size for identifying interaction effects resulting from moderation analysis (Faul et al., 2007). According to Aguinis and Stone-Romero (1997), for testing moderation effects in multiple regression, the recommended approach includes two power analyses: one to examine the interaction effect of a single moderator and another to assess the combined effect of two moderators. In the detection of a small-to-moderate effect size- $f^2=.15$ - with five predictors, for 80% power and $\alpha=.05$, sample sizes were 55 for the interaction effect. Thus, with a final sample size of 112, statistical power was sufficient to detect the hypothesized moderation effects.

5.2 Data Preparation

Workers and volunteers involved in refugee resettlement across the United States make up the study's sample. In February 2024, 14 refugee resettlement agencies and eight Facebook groups were contacted using convenience and snowball sampling. Agency leadership received a recruitment mail with a link to the survey, which was also posted in Facebook groups that had been approved. Informed consent was acquired before the survey was completed, and participation was entirely optional. The survey included optional demographic questions, the Psychological Capital Questionnaire (PCQ-24), which measures self-efficacy, hope, resilience, and optimism, and the Maslach Burnout Inventory-Human Services Survey (MBI-HSS), which assesses emotional exhaustion. Participants aged 18 years or older who had been working or volunteering in refugee resettlement for at least six months were considered to fit the inclusion criteria. They were allowed to take the survey, which took approximately 15 to 20 minutes.

To safeguard respondents' privacy, data gathering was anonymized, and no IP addresses were recorded. Email addresses were gathered independently from survey replies in order to offer a raffle with a \$25 Amazon gift card in exchange for completing the survey. Qualtrics was used to collect data anonymously, with no personally identifiable information gathered. Responses from all participants were kept completely private; no names were gathered. Only pseudonyms such as Participant 1 and Participant 2 were used to ensure anonymity. The consent form stated that only the researcher, committee members, IRB, and approved reviewers would have access to the data. A computer that required a password to access was used to store electronic data. After being safely stored for three years, the electronic data will be permanently erased. Regarding this study, no conflicts of interest have been found. To guarantee the reliability and repeatability of the results, the researcher closely adhered to ethical guidelines. Following data gathering, a thorough cleaning process was carried out. Qualtrics identified 327 examples out of the 559 initial responses as possibly bot submissions and removed them from the dataset. 120 responses were eliminated through additional human cleaning because they contained duplicate entries, unreal reaction times, incomplete responses, and failed attention checks. 112 valid replies were left for examination after exclusions. The dataset was scanned for quality control when it was finished. Duplicate or incomplete responses, as well as those that failed attention check questions, were eliminated. IBM SPSS Statistics, Version 29, was used to clean, code, and analyze the data (IBM Corp, 2022). Imputation techniques were used in SPSS to impute missing values. Variables were combined, and reverse-coded items were altered in accordance with regular scoring protocols. Only the researcher and approved reviewers had access to the password-protected PC where all of the data was kept. To maintain confidentiality and adhere to ethical research norms, data will be kept for three years before being totally erased.

6 Statistical Analysis

Two distinct sets of assumptions were investigated independently in this study. A Bonferroni adjustment was no longer required for this investigation due to a better knowledge of the application of alpha value corrections. Significant findings were identified using an alpha value of less than .05. Every important regression assumption was examined and found to be true.

- Linearity: A linear relationship was confirmed by the scatter plot of residuals, which had no discernible pattern. Error Independence: There was no autocorrelation, according to the Durbin-Watson statistic (1.925).
- Multicollinearity: There was no multicollinearity, as evidenced by tolerance values over 0.1 and VIF values (1.652–2.634) below 10.
- Normality: The residuals were approximately normally distributed, with skewness (-0.053) and kurtosis (-0.534) within acceptable ranges.
- Homoscedasticity: Residual variance was constant across predictor levels, confirming homoscedasticity.
- Outliers & Influential Cases: Cook's Distance (<0.075) and leverage values indicated no undue influence from outliers.

Overall, the model satisfies the necessary assumptions, ensuring valid regression results. This study examines the moderating effects of hope, optimism, and resilience on the relationship between self-efficacy (EFF) and emotional exhaustion (EE) using PROCESS

Model 2 (Hayes, 2013). A moderation model investigates whether the effect of an independent variable (self-efficacy) on a dependent variable (emotional exhaustion) depends on the levels of one or more moderators (hope, optimism, and resilience).

Moderation Model 2 Equation: The moderation model follows this regression equation:

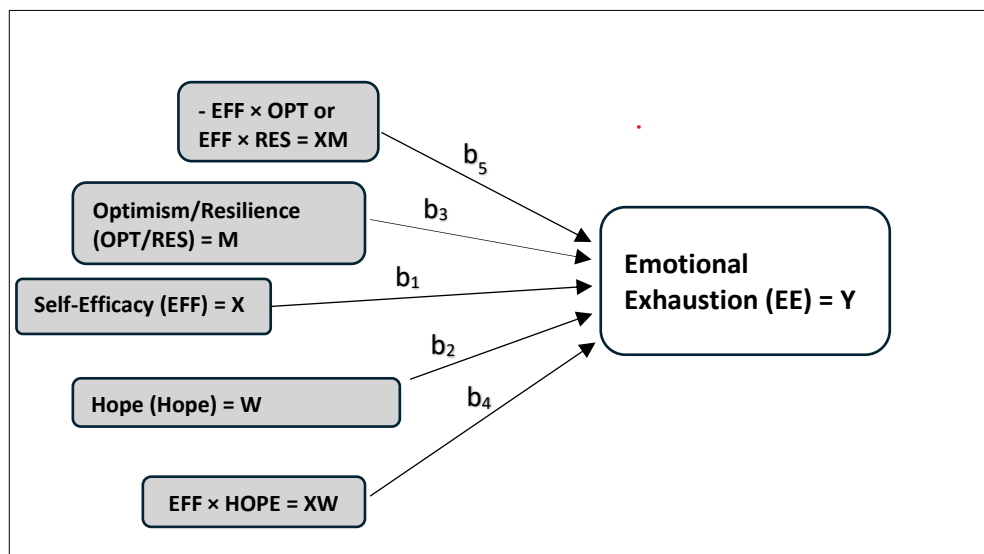
$$y = b_0 + b_1(X) + b_2(W) + b_3(Z) + b_4(XW) + b_5(XZ) + e$$

Where:

- Y (emotional exhaustion - EE) → The dependent variable, measuring burnout or fatigue.
- X (self-efficacy - EFF) → The independent variable, representing one's belief in their ability to handle tasks effectively.
- W (Moderator 1: hope - HOPE) → The first moderator, measuring one's expectation for positive outcomes.
- M (Moderator 2: optimism - OPT or resilience - RES) → The second moderator, either optimism (Model A) or resilience (Model B).
- XW (Interaction between self-efficacy and hope - EFF × HOPE) → Measures whether hope changes the strength of the relationship between self-efficacy and emotional exhaustion.
- XM (Interaction between self-efficacy and optimism/resilience - EFF × OPT or EFF × RES) → Measures whether optimism or resilience moderates the effect of self-efficacy on emotional exhaustion.
- b₀ (Intercept) → The baseline level of emotional exhaustion when all predictors are zero.
- e (Error Term) → Represents unexplained variance in the model.

By testing these moderation effects, we aim to determine whether psychological resources such as hope, optimism, and resilience buffer the impact of self-efficacy on emotional exhaustion. A moderation analysis was selected to examine whether the self-efficacy and emotional exhaustion connection would be impacted by either of the two PsyCap variables: optimism or hope and resilience (Figure 1). Using multiple linear regression and Hayes' PROCESS macro (Hayes, 2013), Model 2's moderation analysis evaluated the effects of self-efficacy with two-way interactions on hope, resilience, and optimism in relation to emotional exhaustion. This approach will try to determine how each psychological capital component affects the link between emotional exhaustion and self-efficacy as moderators. 5000 bootstrap samples and SPSS v.29 were used for the analyses.

Figure 1: Conceptual Representation of Moderation in a Statistical Diagram



7 Results

Table 2 reports the descriptive statistics for the study variables: emotional exhaustion (EE), hope (HOPE), self-efficacy (EFF), resilience (RES), and optimism (OPT). It also shows the minimum and maximum value, mean (M), standard deviation (SD), median (Mdn), skewness, and kurtosis of each variable. EE: The average score for EE was 36.67 (SD = 11.95), ranging between 9.00 and 60.00. The skewness statistic was -0.053, which is close enough to zero to consider the distribution symmetric. The kurtosis statistic was -0.534, indicating a distribution close to normal. Hope: The participants' hope level ranged from a mean of 26.27, with an SD of 5.41. The skew was slightly negative (-0.137), which showed that scores were fairly evenly distributed. The mean of the self-efficacy score was 28.24 (SD = 5.39), and the skewness was slightly negative, -0.334, showing a slight positive asymmetry. Resilience: The average score of resilience was 26.18 (SD = 4.70). The distribution of this scale showed relatively low skewness, -0.337, and kurtosis, -0.172, indicating an approximately normal distribution. The average score for optimism was 22.90 (SD = 4.83), and the distribution was somewhat negatively skewed (-0.572), indicating that more cases had higher optimism scores. However, the kurtosis statistic is 0.679, which indicates a relatively peaked distribution compared to the standard curve. Skewness and kurtosis for none of the variables are extreme; hence, the normality assumptions are met approximately, which is a prerequisite for the planned moderation analyses. The standard deviation indicates the general average variability of all participants, while emotional exhaustion has the largest spread of participants' scores. This descriptive overview is essential before the main moderation analyses on how psychological resources, in this case, hope, resilience, and optimism, act as moderators between self-efficacy and emotional exhaustion.

Table 2: Original Data Descriptive Statistics of Study Variables

Variable	Min	Max	M	SD	Mdn	Skewness Statistic	Kurtosis Statistic
Emotional Exhaustion	9.00	60.00	36.67	11.95	36.00	-.053	-.534
Hope	14.00	36.00	26.27	5.41	26.50	-.137	-.553
Self-efficacy	14.00	36.00	28.24	5.39	29.00	-.334	-.667
Resilience	13.00	35.00	26.18	4.70	26.50	-.337	-.172
Optimism	6.00	32.00	22.90	4.83	23.00	-.572	.679

N = 112

In both models, the overall model significance of moderated multiple regression is obtained by the F-statistic and R^2 values.

7.1 Model 2A: Self-Efficacy, Hope, and Optimism

A hierarchical multiple regression analysis was conducted to examine the moderating effects of hope and optimism on the relationship between self-efficacy and emotional exhaustion, using Hayes' Model 2 in PROCESS (Hayes, 2013). The full model was significant: $F(5,106) = 9.56, p < .001, R^2 = .3107$, suggesting that 31.07% of the variance in emotional exhaustion was explained by predictors (Table 3).

Table 3: Model 2A: Model Summary

Model	R	R^2	MSE	F	df1	df2	p
1	.557	.311	103.031	9.557	5	106	<.000

In the Model 2A analysis, H1 was supported as self-efficacy (EFF) line describes the effect of EFF within the model and is expressed as a significant predictor of emotional exhaustion ($b_1 = 2.672, t(106) = 3.022, p = .003$). The HOPE line describes the effect of hope within the model and was not a significant predictor of emotional exhaustion ($b_2 = 2.045, t(106) = 1.628, p = .107$), failing to support H2. The Int_1 line describes the interaction effect (moderation) between self-efficacy and hope within the model and it was marginally significant ($b_4 = -0.084, t(106) = -1.965, p = .052$), partially supporting H4. The OPT line describes the effect of optimism within the model and optimism was not a significant predictor of emotional exhaustion ($b_3 = -1.447, t(106) = -1.074, p = .285$), failing to support H3. The Int_2 line describes the interaction effect (moderation) between self-efficacy and optimism within the model and it was not significant ($b_5 = .006, t(106) = .140, p = .889$), failing to support H5. These results that high level of self-efficacy is associated with greater emotional exhaustion, but hope had a weak influence on that relationship, while optimism did not buffer the effects of self-efficacy on emotional exhaustion. Table 4 provides a visualization of the interaction coefficients.

Table 4: Model 2A: Interaction Coefficient

Predictor	Coeff	SE	t	p	LLCI	ULCI
Constant	.544	24.411	.022	.982	-47.854	48.941
EFF	2.672	.884	3.022	.003	.919	4.424
HOPE	2.045	1.256	1.628	.107	-.445	4.535
Int_1	-0.084	.043	-1.965	.052	-0.169	0.000
OPT	-1.447	1.347	-1.074	.285	-4.117	1.223
Int_2	.006	.046	.140	.889	-0.085	0.097

Note: EFF = self-efficacy, OPT = optimism

The test of highest-order unconditional interactions of self-efficacy and hope ($X*W$) showed a marginally significant effect of moderation on the overall model ($F(1,106) = 3.863$, $p = .052$, $\Delta R^2 = .025$), indicating that the interaction accounts for 2.51% of the variance in emotional exhaustion. The interaction of self-efficacy and optimism ($X*Z$) did not show a significant moderating effect ($F(1,106) = 0.020$, $p = .889$, $\Delta R^2 = .000$), explaining only 0.01% of the variance in emotional exhaustion. However, when both interactions (self-efficacy \times hope and self-efficacy \times optimism) are considered together, the model shows a significant overall moderation effect ($F(2,106) = 3.103$, $p = .049$, $\Delta R^2 = .040$). The findings indicated that optimism and self-efficacy, in combination, influenced the relationship between self-efficacy and emotional exhaustion rather than acting as separate moderating variables. Although hope had a marginal influence in mitigating exhaustion when paired with self-efficacy, optimism did not have any influence; however, their combined influence was substantial, suggesting that the two variables, when paired, play a role in reducing emotional exhaustion. Table 5 provides the model summary.

Table 5: Model 2A: Unconditional Interactions

Interaction Term	R^2 Change	F	$df1$	$df2$	p -value
$X*W$	0.025	3.863	1	106	0.052
$X*Z$	0.000	.020	1	106	0.889
BOTH	0.040	3.103	2	106	0.049

Table 6 presents the Johnson-Neyman probing results, illustrating how hope and optimism moderated the relationship between self-efficacy (EFF) and emotional exhaustion (EE) at different percentiles. At low levels of hope and optimism (16th percentile: HOPE = 21, OPT = 18.08), self-efficacy was significantly associated with increased emotional exhaustion ($b = 1.019$, $p < .001$), indicating that individuals with high self-efficacy were more prone to burnout when these psychological resources were insufficient. At moderate levels (50th percentile: HOPE = 26.5, OPT = 18), the effect weakened ($b = 0.556$, $p = .078$) but remained marginally significant, suggesting a partial buffering effect. At high levels of hope and optimism (84th percentile: HOPE = 32.92, OPT = 18.08), the effect becomes non-significant ($b = 0.0154$, $p = .976$), indicating that when psychological resources are abundant, self-efficacy no longer contributes to emotional exhaustion. These findings suggest that hope and optimism played a protective role in mitigating emotional exhaustion, with their buffering effect becoming stronger as their levels increase.

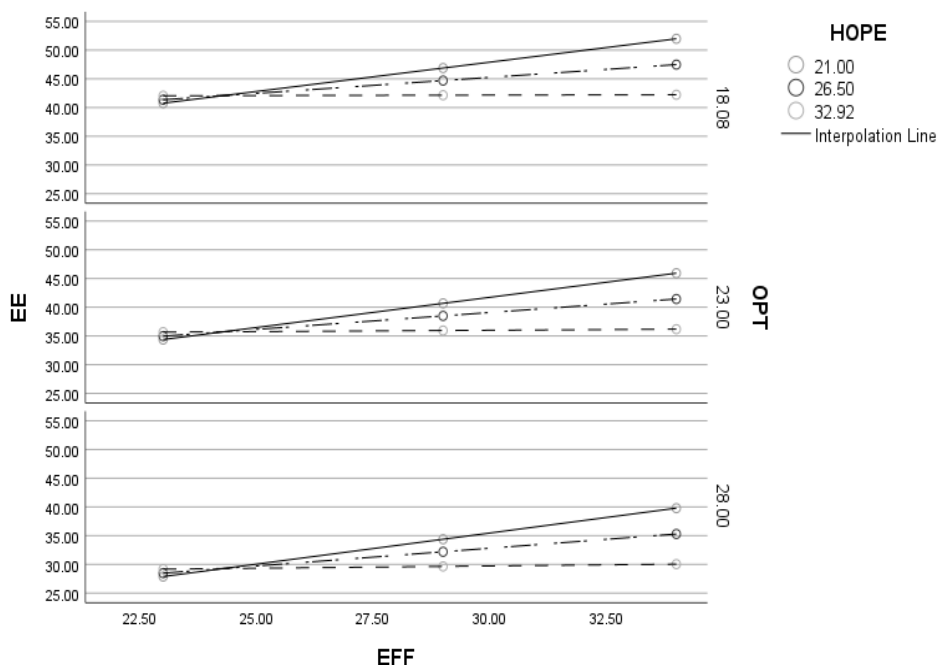
Table 6: Johnson-Neyman Probing of the Moderating Effects of Hope and Optimism on the Relationship Between Self-Efficacy and Emotional Exhaustion

Percentile	HOPE Level	OPT Level	Effect	SE	t	p	95% CI LLCI	95% CI ULCI
16th	21	18.08	1.0191	0.2763	3.6881	0.0004	0.4713	1.567
50th	26.5	23	0.556	0.3119	1.7829	0.0775	-0.0623	1.1743
84th	32.92	28	0.0154	0.512	0.0302	0.976	-0.9996	1.0304

Note: OPT = optimism

The graph (Figure 2) demonstrates the interaction effects of self-efficacy (EFF), hope (HOPE), and optimism (OPT) on emotional exhaustion (EE). Each panel corresponds to three different levels of emotional exhaustion (18.08, 23.00, and 28.00), while different line styles depict the different levels of hope (21.00, 26.50, and 32.92). The relationship between self-efficacy and higher levels of emotional exhaustion was stronger in lower levels of hope and optimism, indicating that higher levels of self-efficacy cause emotional exhaustion when psychological resources are low. Higher levels of these psychological resources decreased or eliminated the effect of self-efficacy on emotional exhaustion because the slope flattened out as hope and optimism increased. This does support the idea that hope and optimism might act as a buffer, lowering the likelihood of burnout in those with high levels of self-efficacy.

Figure 2: Conditional Effects of Self-efficacy (EFF) on Emotional Exhaustion (EE) Moderated by Hope (HOPE) and Optimism (OPT)



Note: The interpolation lines represent estimated slopes for different levels of the moderators.

7.2 Model 2B: Self-Efficacy, Hope, and Resilience

In the Model 2B analysis, the overall model was significant, $F(5,106) = 4.23$, $p = .002$, $R^2 = .166$, indicating that 16.62% of the variance in emotional exhaustion is explained by the predictors, supporting H1 (Table 7).

Table 7: Model B: Model Summary

Model	R	R ²	MSE	F	df1	df2	p
1	.408	.166	124.635	4.236	5	106	.00

In the Model 2B analysis, self-efficacy (EFF) was not a significant predictor of emotional exhaustion ($b_1 = 1.677$, $t(106) = 1.532$, $p = .129$), failing to support H1. The HOPE line describes the effect of hope on emotional exhaustion, and it was not significant within the model ($b_2 = 1.861$, $t(106) = 1.357$, $p = .178$), failing to support H2. The Int_1 line represents the interaction effect (moderation) between self-efficacy and hope on emotional exhaustion, which was statistically significant ($b_4 = -0.104$, $t(106) = -2.21$, $p = .029$), supporting H4 and suggesting that hope plays a buffering role in reducing the impact of self-efficacy on emotional exhaustion. The resilience line described the effect of resilience on emotional exhaustion within the model ($b_3 = -1.535$, $t(106) = -1.010$, $p = .315$), and it was not significant, failing to support H3. The Int_2 line represents the interaction effect (moderation) between self-efficacy and resilience, which was non-significant ($b_5 = 0.062$, $t(106) = 1.156$, $p = .251$), failing to support H5. These results suggest that a higher level of self-efficacy did not directly predict emotional exhaustion in this model, but hope significantly buffered this relationship. At the same time, resilience did not moderate the self-efficacy and emotional exhaustion relationship. Table 8 provides a visualization of the interaction coefficients.

Table 8: Model 2B: Interaction Coefficient

Predictor	Coeff	SE	t	p	LLCI	ULCI
Constant	13.507	29.717	.455	.650	-45.410	72.424
EFF	1.677	1.095	1.532	.129	-0.494	3.847
HOPE	1.861	1.372	1.357	.178	-0.858	4.580
Int_1	-0.104	.047	-2.214	.029	-0.198	-0.011
RES	-1.535	1.519	-1.010	.315	-4.547	1.478
Int_2	.062	.053	1.156	.251	-0.044	0.168

The test of highest-order unconditional interactions of self-efficacy and hope ($X*W$) showed a significant moderation effect on the overall model ($F(1,106) = 4.902$, $p = .029$, $\Delta R^2 = .0386$), indicating that the interaction accounts for 3.86% of the variance in emotional exhaustion. The interaction of self-efficacy and resilience ($X*Z$) did not show a significant moderating effect ($F(1,106) = 1.335$, $p = .251$, $\Delta R^2 = .011$), explaining only 1.05% of the variance in emotional exhaustion. When both interactions (self-efficacy \times hope and self-efficacy \times resilience) were considered together, the model did not reach statistical significance, $F(2,106) = 2.533$, $p = .084$, $\Delta R^2 = .040$, suggesting that the combined moderating effects of hope and resilience were present but not strong enough to influence emotional exhaustion significantly. Table 9 provides the model summary.

Table 9: Model 2B: Unconditional Interactions

Interaction Term	R ² Change	F	df1	df2	p-value
X*W	0.039	4.902	1	106	0.029
X*Z	0.011	1.335	1	106	0.251
BOTH	0.040	2.533	2	106	0.084

Conditional effects of self-efficacy on emotional exhaustion were significantly moderated by hope, but not by resilience. Table 10 presents the results of the Johnson-Neyman analysis, illustrating the influence of hope and resilience on the self-efficacy (EFF) - emotional exhaustion (EE) relationship at three significant percentiles (16th, 50th, and 84th). The results showed that, at low hope and resilience levels (16th percentile: HOPE = 21, RES = 22), self-efficacy was strongly associated with higher emotional exhaustion ($b = 0.843$, $p = .010$). This implies that individuals with high self-efficacy may suffer from greater burnout when lacking adequate psychological resources. At moderate levels of hope and resilience (50th percentile: HOPE = 26.5, RES = 26.5), the effect is reduced ($b = 0.547$, $p = .060$), suggesting a partial buffering effect, even though the relationship remains marginally significant. When hope and resilience are high (84th percentile: HOPE = 32.92, RES = 22), the effect was rendered non-significant ($b = -0.401$, $p = .493$), so that at high levels of these resources, self-efficacy was no longer predictive of emotional exhaustion.

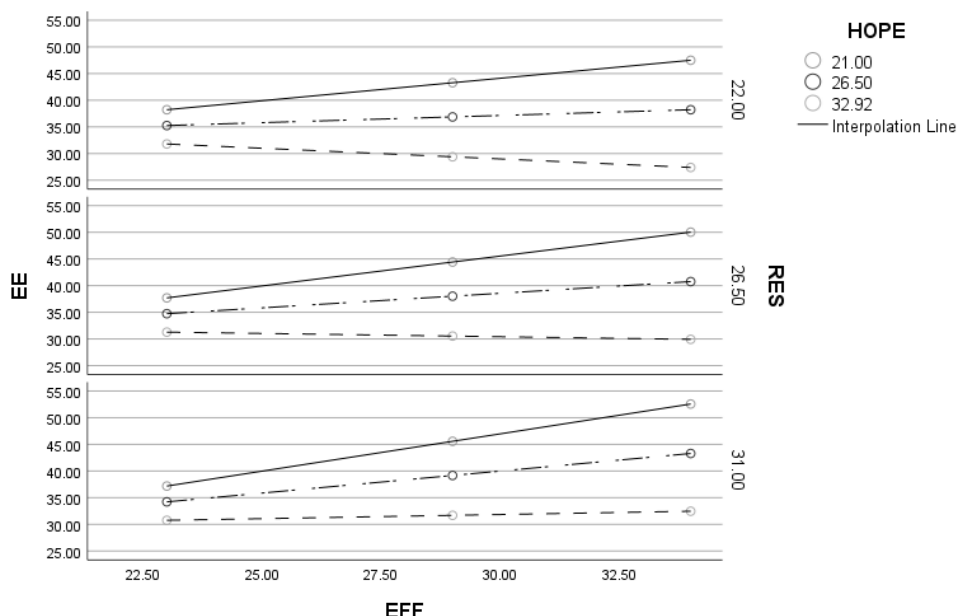
Table 10: Johnson-Neyman Probing of the Moderating Effects of Hope and Resilience on the Relationship Between Self-Efficacy and Emotional Exhaustion

Percentile	HOPE Level	RES Level	Effect	SE	t	p	95% CI LLCI	95% CI ULCI
16th	21	22	0.843	0.321	2.627	0.010	0.207	1.479
50th	26.5	26.5	0.547	0.287	1.904	0.060	-0.023	1.116
84th	32.92	22	-0.401	0.583	-0.68	0.493	-1.556	0.755

Note: RES = resilience

Figure 3 graphically displays these conditional effects, plotting the difference in the relation between self-efficacy and emotional exhaustion at varying levels of hope and resilience. With low hope and resilience, the high slope confirms that there was a strong positive relationship between self-efficacy and emotional exhaustion, supporting the contention that those who were high in self-efficacy were susceptible to burnout when psychological resources were lacking. As hope and resilience grew, the slope decreased, and there was evidence of a buffering effect against burnout. Interestingly, when hope and resilience were high, the slope approached a horizontal relationship, which suggested that these psychological strengths actually buffered the risk of emotional exhaustion involved with high self-efficacy.

Figure 3: Conditional effects of self-efficacy (EFF) on emotional exhaustion (EE) moderated by hope (HOPE) and resilience (RES).



Note: The interpolation lines represent estimated slopes for different levels of the moderators.

8 Discussion

The present study used moderated multiple regression analyses (Model 2A: hope and optimism; Model 2B: hope and resilience) to investigate the moderator effects of hope, optimism, and resilience on the association between self-efficacy (EFF) and emotional exhaustion (EE). The results have significant implications for our understanding of how psychological resources can mitigate the negative consequences of burnout resulting from low self-efficacy. Hope is intentionally included in Models 2A and 2B because of its established role as a fundamental psychological resource that affects resilience and optimism. According to Snyder's (2002), Hope Theory and other theoretical frameworks, hope can take two forms: paths, or the capacity to solve issues, and agency, or the drive to achieve goals. Because of this, hope is different from optimism and resilience, but it also serves as a vital link between the two. While resilience is the ability to handle hardship, optimism is typically characterized by wide, positive hopes about future outcomes. In turn, hope surely has both cognitive and motivational components. Thus, we may better capture the interaction between different psychological resources and self-efficacy on emotional exhaustion by analyzing hope in conjunction with optimism (Model 2A) and resilience (Model 2B).

In Model 2A, hope and optimism were hypothesized to be moderating variables in the self-efficacy and emotional exhaustion relationship. The results showed that hope provided a better buffering effect than optimism. More specifically, hope demonstrated a borderline significant interaction effect with self-efficacy ($p = .052$), whereas optimism did not reveal a significant moderating effect ($p = .285$). Nonetheless, simultaneous examination of

hope and optimism showed their interaction with self-efficacy to be statistically significant ($p = .049$, $\Delta R^2 = .040$), indicating that the synergistic effect of the two resources has a higher resilience towards burnout. This was supported by the Johnson-Neyman (J-N) analysis, which showed that under low levels of hope and optimism, self-efficacy was highly related to higher emotional exhaustion ($b = 1.02$, $p < .001$). As hope and optimism grew, the impact of self-efficacy on emotional exhaustion decreased, becoming non-significant at high levels of these psychological resources.

In Model 2B, hope and resilience were tested as moderators. As in Model 2A, hope once more proved to be a significant protective factor, showing a stronger buffering effect than resilience. The interaction between hope and self-efficacy was statistically significant ($p = .029$, $\Delta R^2 = .039$); in contrast, resilience was not found to have a significant independent effect. However, the interaction between resilience and hope approached significance ($p = .0842$, $\Delta R^2 = .0399$), suggesting a synergistic effect in reducing emotional exhaustion. The J-N analysis indicated that at low levels of hope and resilience, self-efficacy was strongly associated with high emotional exhaustion ($b = 0.843$, $p = .010$). At the moderate levels, the association weakened but was still marginally significant ($b = 0.547$, $p = .060$). However, in the presence of high hope and resilience, the effect of self-efficacy on burnout became non-significant ($b = -0.401$, $p = .493$), indicating that psychological resources acted as buffering factors.

The results of this study support psychological resource theory by showing that self-efficacy by itself may not always provide protection from burnout. In fact, great self-efficacy may contribute to increased emotional exhaustion when hope and resilience are low. This can occur because people with high self-efficacy tend to overextend themselves when they don't have the right coping mechanisms. Though optimism and resilience had additional, less reliable buffering effects, hope was consistently the biggest protective component in both models. This speaks to the special function of hope as an internal psychological resource that can create a bright future, drive for objectives, and adaptability, making it a crucial component in preventing emotional exhaustion. Practically speaking, the findings suggest that interventions aimed at boosting hope and resilience can be highly successful in preventing burnout. The development of psychological interventions that boost people's sense of hope through goal-directed tasks, cognitive restructuring, and resilience training should be a top priority for mental health practitioners and organizations. The synergistic effect of optimism and hope suggests that encouraging both hopeful and optimistic thinking can have an additive protective effect, even though optimism alone does not reduce emotional exhaustion.

Despite these benefits, a few limitations must be noted. First and foremost, causal inference is limited by the study's use of cross-sectional data. In order to ascertain the temporal impact of psychological resources on burnout, future studies must employ longitudinal designs. Second, although hope, optimism, and resilience were given priority in the studies, it is important to recognize that other psychological resources, such as social support, emotional intelligence, and coping mechanisms, may also have an impact on the relationship between self-efficacy and emotional exhaustion. Future research should take these additional factors into account. Finally, the results may not be as broadly applicable as they may be due to the very small sample size ($N = 112$). More convincing proof of these moderating effects might be provided by future studies with bigger and more representative participant groups.

9 Implications

The findings of this research suggest that interventions aimed at reducing emotional exhaustion among refugee resettlement staff need to extend beyond encouraging self-efficacy alone. Hope-building, resilience-strengthening programs, in combination with self-efficacy, could be more protective against burnout. Training that incorporates hope-oriented cognitive-behavioral processes, goal setting, and adaptive coping may buffer against the potentially detrimental effects of overcommitment, particularly in individuals with high self-efficacy. Additionally, organizations would benefit from integrating the development of psychological capital into onboarding and supervision. To extend this research, subsequent research could measure these interventions longitudinally and examine other possible moderating variables, such as social support and emotional intelligence.

10 Conclusion

This study shows that the relationship between emotional exhaustion and self-efficacy is complex and depends on the presence of other psychological resources such as optimism, resilience, and hope. High self-efficacy is frequently viewed as positive, but if working individuals lack the psychological resources to cope with job-related demands, it can also result in increased emotional exhaustion. According to our research, optimism and resilience provide some additional, albeit less reliable, buffering effects against emotional exhaustion, but hope appears to be the most important protective factor. In essence, self-efficacy alone did not protect against emotional exhaustion in refugee resettlement workers and volunteers, but when combined with hope, its negative outcomes were reduced. This emphasizes how crucial it is to foster optimism, resilience, and hope in burnout prevention programs. Findings underscore the value of incorporating hope-based resilience training into refugee worker support systems to reduce burnout and enhance long-term service delivery outcomes. These findings also offer important results for organizations and mental health professionals to create focused interventions that improve stress management for working individuals.

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