



Article

Burnout Among Psychologists: Direct Effects of Work Engagement and the Absence of Mediation by Areas of Worklife

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Abstract

The main aim of this study was to investigate the association between areas of worklife and work engagement in the development of burnout syndrome among self-employed and institutionally employed psychologists. Using a cross-sectional quantitative design, three scales validated for the Brazilian population were applied: the Burnout Assessment Tool (BAT), the Areas of Worklife Survey (AWS), and the Utrecht Work Engagement Scale (UWES). A total of 180 psychology professionals participated, with a predominance of women participants (88.3%); the majority were aged between 24 and 29 years. The hypothesized relationships among variables were tested using Structural Equation Modeling (SEM). The results revealed a strong negative correlation between BAT domains and dimensions assessed by the UWES, confirming the inverse association between engagement and burnout. A positive association between areas of worklife and engagement was also confirmed. However, no negative association between areas of worklife and burnout was found, and no evidence supported a mediating role of these areas in the relationship between engagement and burnout. Although areas of worklife independently influenced both engagement and burnout, their mediating role in this relationship was not supported by the data. These findings point to the complexity of the interactions among these variables and indicate relevant directions for future research.

Keywords: areas of work life; engagement; burnout; psychologists



Academic Editor: Shuchang He

Received: 12 February 2026

Revised: 25 May 2026

Accepted: 26 May 2026

Published: 10 June 2026

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1. Introduction

Historically, work was conceived primarily as a means of survival, representing a basic necessity for subsistence. Over time, however, it assumed a central role in the organization of social life and in the constitution of subjectivity. Beyond an activity performed in exchange for remuneration, work became a space for meaning-making, identity construction, and social recognition [1,2] (pp. 101–111). In this regard, Dejours argues that work transcends mere material exchange: it is through work that individuals construct fundamental aspects of their identity and psychic functioning, in a process inseparable from the body and lived experience [3] (pp. 45–62). When work restricts the power to act, recognition, or interpersonal bonds, it may become a significant source of psychological suffering [1].

Discussions regarding work-related suffering gained greater relevance in the post-industrial period, when mental illness began to be recognized as a possible consequence of working conditions and work organization. In this context, Ehrenberg introduced the

concept of the pathology of performance, suggesting that the inability to meet idealized standards of success may generate feelings of incompetence, anguish, and frustration. Similarly, factors such as stress, lack of interpersonal bonds, insufficient recognition, and moral harassment were identified as significant contributors to psychological distress at work [1].

These transformations are embedded in a broader social shift from disciplinary societies, grounded in repression and strict norms, to performance-oriented societies sustained by a discourse of autonomy and self-realization shaped by neoliberal logic [4–6]. According to Han, this transition produces a more subtle form of coercion, in which performance demands are internalized and individuals come to perceive themselves as solely responsible for their own success or failure [7,8]. The fear of external punishment is replaced by the anxiety of not meeting one's own expectations, generating persistent states of fatigue, anguish, and exhaustion, a dynamic further intensified by social media, which amplifies pressure for professional visibility and success [9].

It is within this scenario that burnout emerges as one of the most prominent expressions of work-related psychological suffering. Unlike classical forms of occupational illness associated with repression, burnout is linked to excess demands and exaggerated positivity [7]. Currently recognized by the WHO as an occupational phenomenon, it is characterized by exhaustion, mental distancing, and reduced professional efficacy [10–13]. Burnout is distinguished from other conditions, such as depression, by its physical symptoms and its origin in the work environment, without underlying psychopathology [14–16]. Impostor syndrome may intensify with burnout [17].

Its measurement has historically relied on the Maslach Burnout Inventory (MBI), which assesses emotional exhaustion, disbelief, and professional efficacy [12,18]; the limitations of this instrument motivated the development of the Burnout Assessment Tool (BAT), which offers a more precise and multidimensional assessment [19,20]. Risk factors include work overload, resource scarcity, problematic interpersonal relationships, lack of autonomy, and absence of reciprocity, as well as individual factors such as age, marital status, and educational level [14,21]. Protective factors include mindfulness practices, physical exercise, cognitive-behavioral therapy, psychological flexibility, and resilience [22–25].

Studies have also demonstrated that negative workplace interactions, such as incivility, are significantly associated with burnout symptoms, as observed among Portuguese hotel employees [26], while authentic leadership and structural empowerment are positively associated with occupational health outcomes [27]. Understanding burnout therefore requires examining not only its individual risk and protective factors, but also the organizational conditions that shape it—particularly, the degree of congruence between workers and their work environment, and the extent to which they remain engaged with their professional role.

The concept of areas of worklife, developed by Maslach and Leiter, organizes six domains—workload, control, reward, community, fairness, and values [21,28]—whose congruence reduces the risk of burnout and whose imbalances increase vulnerability to exhaustion [29,30]. Each area exerts a distinct influence: excessive workload leads to overload and frustration; reward encompasses financial and social recognition [31]; control relates to autonomy and satisfaction; community concerns social support and a sense of belonging; fairness refers to organizational equity; and values concern the alignment between the individual and the organization [30]. International studies confirm that incongruences in these areas are associated with greater emotional exhaustion and burnout [29,32–34] and interventions may be directed at both individual and organizational levels [31].

The relationship between areas of worklife and burnout does not operate in isolation: work engagement plays a central role in this dynamic. Greater congruence across worklife areas is associated with higher levels of engagement, which in turn functions as a protective factor against burnout. Understanding how these three constructs interact is therefore essential to capturing the full complexity of occupational well-being.

Work engagement, in turn, is defined as a positive state of vigor, dedication, and absorption at work [35] (pp. 15–35), considered the opposite construct to burnout in several theoretical models [36,37]. It is measured by the Utrecht Work Engagement Scale (UWES) [38], and its levels are associated with the availability of resources in the work environment—such as autonomy, feedback, social support, and development opportunities [39–41]. The absence of burnout, however, does not automatically imply the presence of engagement [42], which reinforces the need to analyze both constructs independently. High levels of engagement are associated with lower psychological distress, better physical health, and higher performance [43], with work resources serving as the main protective factors against exhaustion [40,44]. Personal life and social support also impact engagement and burnout [45].

Burnout is prevalent among health professionals, especially in countries with fewer resources, and is more common among younger and early-career professionals [16,46], who tend to face higher workloads, fewer resources, and greater vulnerability to occupational exhaustion compared to more experienced colleagues [46]. Factors such as overload, lack of support, conflicts, and high expectations contribute to the development of the syndrome [14,47].

Among psychologists—a professional group frequently exposed to high emotional demands, ethical responsibility, and intense interpersonal involvement—burnout is associated with low personal accomplishment, psychological discomfort, and strain, particularly among those working directly with patients [48]. Self-employed psychologists tend to present a lower risk of burnout, although individual and contextual factors also play a determinant role [49–51]. The COVID-19 pandemic further aggravated this scenario, intensifying exhaustion symptoms and requiring adaptation to remote work [52–55]. Despite this, the topic remains underrepresented in the literature, highlighting the need for specific investigations into this professional group [17,56,57].

Although previous studies have examined the relationships between engagement, areas of worklife, and burnout, key questions remain unresolved regarding this phenomenon among psychologists: specifically, whether areas of worklife play a mediating role in the relationship between engagement and burnout, whether engagement is negatively associated with burnout, and whether areas of worklife are associated with both burnout and engagement in this population. This study, conducted within the project “Promoting the Quality of Interpersonal Relationships, Health and Well-being among Health Professionals” at Universidade Autónoma de Lisboa, aims to investigate the influence of areas of worklife and work engagement on burnout syndrome among psychologists, including both self-employed and institutionally employed professionals. The findings are expected to contribute to a deeper understanding of occupational health risks in this group and to support the development of strategies aimed at promoting well-being and sustainable professional practice.

2. Materials and Methods

This study aimed to examine the association between work engagement, areas of worklife, and burnout among Psychology professionals.

A cross-sectional quantitative design was adopted. The investigation focused on analyzing how work engagement and areas of worklife are associated with burnout among

psychology professionals, including both self-employed and institutionally employed practitioners.

Based on the literature, burnout is negatively associated with work engagement [58] and positively associated with workaholism [19]. Furthermore, higher congruence between individuals and their work environment across areas of worklife is associated with lower levels of burnout and higher levels of engagement [59]. Within this framework, areas of worklife are conceptualized as a potential mediating variable between engagement and burnout.

Figure 1 presents the conceptual model guiding this investigation, illustrating the proposed relationships between areas of worklife, engagement, and burnout.

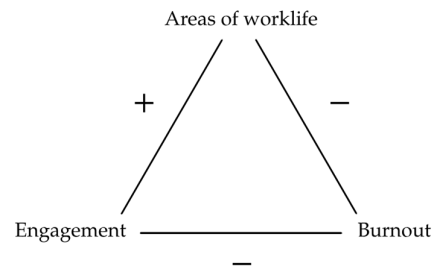


Figure 1. Research Model: association between areas of professional life, engagement and burnout.

The following hypotheses were formulated: H1: Areas of worklife are negatively associated with burnout. H2: Work engagement is negatively associated with burnout. H3: Areas of worklife are positively associated with work engagement. H4: Areas of worklife mediate the relationship between work engagement and burnout.

The sample consisted of 180 psychology professionals. Participants were recruited through the dissemination of a digital questionnaire in WhatsApp groups for psychology professionals and via Instagram. Inclusion criteria were being a practicing psychologist and having internet access to complete the questionnaire. Data collection was concluded upon reaching 180 valid responses, due to the licensing restrictions of one of the instruments used in the study. This sample size is considered statistically adequate for SEM with three latent variables, given that the ratio of indicators to latent variables in the present model substantially exceeds the minimum thresholds recommended in the literature [60].

Although this recruitment strategy provided broad geographic reach, it constitutes a convenience sample, which limits the representativeness of the sample and the generalizability of the findings. The predominance of young participants (with almost half aged between 24 and 29 years) and early-career professionals suggests caution in extrapolating the findings to more experienced psychologists and more diverse organizational contexts. Future studies should consider more heterogeneous samples to enhance the external validity of the results. Participation was voluntary and anonymous, and no financial compensation was offered.

Burnout was assessed using the Burnout Assessment Tool (BAT), work-related version, translated into Portuguese and validated for the Brazilian population [20]. The BAT consists of 33 items assessing primary symptoms—exhaustion, mental distance, cognitive control impairment, and emotional control impairment—and secondary symptoms—psychological and psychosomatic complaints. Items are rated on a 5-point Likert scale, ranging from 1 (never) to 5 (always). The instrument has demonstrated strong psychometric properties and cross-national measurement invariance across multiple countries, including Brazil and Portugal [20,61]. Authorization for its use was obtained from the authors (see Appendix A.1).

Areas of worklife were assessed using the Areas of Worklife Survey (AWS), obtained through a licensed agreement with MindGarden (see Appendix A.2), authorizing data collection from up to 180 participants. The AWS consists of 28 items assessing six areas of worklife: workload, control, reward, community, fairness, and values. Items are answered on a 5-point Likert scale, ranging from strongly disagree (1) to strongly agree (5). The Brazilian version was validated by Porto, demonstrating adequate internal consistency across its dimensions [28].

Work engagement was measured using the Utrecht Work Engagement Scale (UWES), developed by Schaufeli and Bakker. The instrument assesses three dimensions of engagement: vigor, dedication, and absorption [62]. The Brazilian version, validated by Vazquez, consists of 17 items rated on a 7-point frequency scale ranging from 0 (never) to 6 (always), and has demonstrated high reliability in Brazilian samples [63]. Authorization for its use was obtained from the authors (see Appendix A.3).

Data were collected between August and December 2023 using an online questionnaire created in Google Forms (Google LLC, Mountain View, CA, USA), which included the sociodemographic questionnaire and the three psychometric instruments. Participants provided informed consent prior to participation. Responses were collected anonymously, and no identifying information was recorded, in accordance with ethical and confidentiality guidelines.

Data analysis involved descriptive and inferential statistical techniques. Preliminary analyses included assessment of data distribution and verification of assumptions for multivariate modeling, with normality evaluated using the D'Agostino-Pearson test. To test the hypothesized relationships among work engagement, areas of worklife, and burnout, Structural Equation Modeling (SEM) was employed, comprising three latent variables corresponding to the UWES, AWS, and BAT. Areas of worklife were included as a mediating variable between engagement and burnout. Model estimation was performed using the maximum likelihood method with 1000 iterations, using the STATA SEM Builder (StataCorp LLC, College Station, TX, USA). A significance level of $\alpha = 0.05$ was adopted. All statistical analyses were conducted using BioEstat version 5.3 [64] and STATA release 17 [65]. It should be acknowledged that complementary SEM fit indices—such as CFI, TLI, RMSEA, and SRMR—were not calculated in the original analysis, which constitutes a methodological limitation to be considered in the interpretation of the results.

Generative artificial intelligence tools were used to support language refinement and structural organization of the manuscript. No AI tools were used for data generation, data analysis, or interpretation of results.

3. Results

3.1. Summary of Results

3.1.1. Statistical Report

The sample comprised 180 psychology professionals, with a predominance of women participants (88.3%) and a majority aged between 24 and 29 years (47.8%). Regarding employment status, 52.2% worked exclusively as self-employed, 17.2% exclusively in institutional settings, and 30.6% combined both arrangements. Most participants were single (48.9%), had no children (70.0%), held postgraduate qualifications (67.8%), and reported a monthly income between three and five minimum wages (37.2%). All distributional differences were statistically significant ($p < 0.05$).

3.1.2. Burnout Assessment Tool (BAT)

BAT results revealed moderate to high levels of exhaustion in the sample, with a mean of 54.4 (SD = 17.7) and a median of 56.3. Mental distance showed a mean of 30.4

(SD = 20.2), with non-Gaussian distribution. Cognitive control impairment presented a mean of 41.5 (SD = 19.5), and emotional control impairment a mean of 35.0 (SD = 18.2), the latter also showing non-Gaussian distribution. Secondary symptoms—psychological and psychosomatic complaints—presented means of 45.9 (SD = 19.6) and 38.7 (SD = 18.2), respectively. The exhaustion, cognitive impairment, and psychological and psychosomatic complaint domains followed normal distributions, while mental distance and emotional impairment showed non-Gaussian distributions (Table 1).

Table 1. BAT domains.

BAT Domains	Median	Mean	SD
Exhaustion	56.3	54.4	17.7
Mental distance	25.0	30.4	20.2
Cognitive Control Decline	37.5	41.5	19.5
Emotional Control Decline	35.0	35.0	18.2
Psychological Complaints	45.0	45.9	19.6
Psychosomatic Complaints	35.0	38.7	18.2

3.1.3. Areas of Worklife Survey (AWS)

AWS results indicated relatively adequate levels of congruence across areas of worklife, with control (mean = 74.0; SD = 18.2) and values (mean = 66.6; SD = 20.3) presenting the highest scores. Workload (mean = 61.4; SD = 10.8), community (mean = 63.7; SD = 10.6), and reward (mean = 60.0; SD = 14.0) were situated at intermediate levels. Fairness presented the lowest mean (mean = 56.2; SD = 12.2). The community and fairness domains showed non-Gaussian distributions, while the remaining domains followed normal distributions (Table 2).

Table 2. AWS domains.

AWS Domains	Median	Mean	SD
Workload	60.0	61.4	10.8
Control	75.0	74.0	18.2
Community	65.0	63.7	10.6
Reward	60.0	60.0	14.0
Fairness	60.0	56.2	12.2
Values	65.0	66.6	20.3

3.1.4. Utrecht Work Engagement Scale (UWES)

UWES results indicated medium levels of engagement across all three assessed domains. Dedication presented a median of 4.5, classified as medium level according to the scale manual. Vigor also registered a median of 4.5, equally at medium level. Absorption presented a median of 4.2, also at medium level. All three domains showed non-Gaussian distributions (Table 3).

Table 3. UWES domains.

UWES Domains	Median	Mean	SD
Dedication	4.5	4.2	1.1
Vigor	4.5	4.3	1.1
Absorption	4.2	4.1	0.9

3.1.5. Pearson Correlation—Burnout, Areas of Worklife, and Engagement

Correlation analysis revealed consistent patterns among the constructs assessed. BAT domains showed significant negative correlations with areas of worklife as measured by the AWS, particularly with workload and control, which presented strong to moderate negative correlations with nearly all burnout domains. Fairness also showed significant negative correlations with all BAT domains. Reward was the only domain to present a positive correlation with the BAT, specifically with exhaustion ($r = 0.24$), suggesting an association in the opposite direction to the other areas. Community and values showed weaker and more selective negative correlations with the BAT.

Regarding engagement, the vigor and dedication dimensions of the UWES did not show significant correlations with any BAT domain. Absorption was the only UWES dimension to present significant negative correlations with some burnout domains, including exhaustion, mental distance, emotional impairment, and psychological complaints.

These results partially confirm the inverse association between engagement and burnout, with absorption emerging as the engagement dimension most strongly related to occupational exhaustion (Table 4).

Table 4. Pearson correlation.

		BAT Domains					
		EXH	MENTALD	COGNCD	EMOTCD	PSYCHOLC	PSYCHOSC
AWS	AWS_WOR	−0.5472 ^B	−0.7315 ^A	−0.4815 ^B	−0.4539 ^B	−0.4416 ^B	−0.3975 ^C
	AWS_CT	−0.5380 ^B	−0.7325 ^A	−0.5077 ^B	−0.4686 ^B	−0.4316 ^B	−0.3986 ^C
	AWS_COM	−0.1454	−0.3167 ^C	−0.1799	−0.2114 ^C	−0.0550	−0.1153
	AWS_REW	0.2444 ^C	0.1013	0.1261	0.0636	0.1430	0.1541
	AWS_FAI	−0.4338 ^B	−0.4764 ^B	−0.2833 ^C	−0.3363 ^C	−0.2954 ^C	−0.3491 ^C
	AWS_VAL	−0.1472	−0.2769 ^C	−0.1989	−0.1045	−0.1793	−0.1496
UWES	UWES_DE	−0.1612	−0.1688	−0.0870	−0.1080	−0.1069	−0.0991
	UWES_VI	−0.1171	−0.1504	−0.0296	−0.0422	−0.0751	−0.1216
	UWES_AB	−0.2686 ^C	−0.3729 ^C	−0.1883	−0.2468 ^C	−0.2091 ^C	−0.1674

Note: A: strong and statistically significant negative correlation; B: moderate and statistically significant negative correlation; C: weak but statistically significant correlation.

3.1.6. Structural Equation Model: Testing the Mediating Role of AWS in the UWES-BAT Relationship

The Structural Equation Model was constructed to test the mediating role of areas of worklife in the relationship between engagement and burnout, with UWES, AWS, and BAT as latent variables.

The direct relationship between UWES and BAT was highly significant (path coefficient = -0.7021 ; $p < 0.0001$), confirming the negative association between engagement and burnout. The relationship between UWES and AWS was also significant (path coefficient = 0.6124 ; $p < 0.0001$), indicating that higher levels of engagement are associated with greater congruence across areas of worklife. However, the direct relationship between AWS and BAT was not statistically significant (path coefficient = -0.0249 ; $p = 0.79$).

Analysis of indirect effects—testing the mediating role of AWS—revealed that the inclusion of AWS in the model did not significantly reduce the relationship between UWES and BAT (indirect effect = -0.2014 ; $p = 0.79$), and the total effect of AWS on BAT was also non-significant ($p = 0.79$). Based on these results, the mediation hypothesis was not confirmed—the areas of worklife did not act as mediators in the relationship between engagement and burnout in this sample.

The model presented an $R^2 = 96.29\%$, a value that warrants careful consideration. Although it indicates excellent overall model fit to the data, such a high R^2 may reflect conceptual overlap between constructs or shared method variance, given that all data were collected simultaneously through self-report. This limitation should be considered in the interpretation of the results, and future studies should consider longitudinal designs or multiple data sources to replicate these findings.

3.1.7. Reliability of Indicators

The reliability of the measurement model was assessed through four indicators within the confirmatory factor analysis implemented in the SEM. Factor loadings were significant across all three latent constructs, indicating adequate associations between observed indicators and their respective latent variables. Regarding internal consistency, the BAT demonstrated good reliability ($\alpha = 0.8869$) and the UWES also showed good reliability ($\alpha = 0.7655$). The AWS, however, presented only marginally acceptable internal consistency ($\alpha = 0.6767$), falling below the conventionally recommended threshold of 0.70. This limitation is relevant to the interpretation of findings related to areas of worklife—particularly the non-significant association between AWS and BAT—as marginal reliability may have attenuated the detection of meaningful relationships between this construct and burnout. Extracted variance, reflected by the R^2 coefficient, indicated that indicators were generally well associated with their latent constructs, though the exceptionally high overall R^2 (96.29%) warrants caution, as discussed in the SEM section. Measurement errors remained within acceptable limits, supporting the adequacy of the model specification, though residuals should be interpreted in light of the non-normal distributions observed in some domains.

4. Discussion

The following section discusses the results obtained for each hypothesis, examining their consistency with the existing literature and exploring possible explanations for unexpected findings.

The first hypothesis, H1 (areas of worklife are negatively associated with burnout), was not supported. Although the results did not sustain this direct association, it is important to consider the contributions of the literature for a deeper understanding of the phenomenon. According to authors [28,30], incongruences or imbalances in areas of worklife are associated with the development of burnout: when individuals experience inconsistencies or a lack of balance in their professional domains, they may become more vulnerable to burnout. Leiter and Maslach [59] further reinforce this perspective by emphasizing the six areas of worklife as critical sources influencing burnout, arguing that mismatches in any of these areas may contribute to the development of the syndrome. Therefore, even though H1 was not supported by the findings of this study, the relevance of areas of worklife remains essential in discussions surrounding burnout.

The non-confirmation of H1 can be interpreted in light of three specific factors. First, sample characteristics deserve attention: the predominance of young and early-career participants, with almost half aged between 24 and 29 years, suggests that this group may not yet have accumulated sufficient exposure to incongruences in areas of worklife for these to translate into measurable burnout, as younger professionals tend to present greater initial tolerance to adverse working conditions. Early-career psychologists may be particularly susceptible to worklife incongruences given their limited professional experience, reduced autonomy, and fewer established coping resources, factors that may interact differently with engagement and burnout compared to more experienced professionals [66].

Second, the marginally acceptable reliability of the AWS ($\alpha = 0.6767$) may have limited the instrument's ability to detect real associations, introducing measurement error that attenuates observed correlations. Third, suppression effects within the structural equation model may have masked the association between AWS and BAT, given that the strong relationship between UWES and BAT may have absorbed much of the explained variance, leaving little room for the AWS to demonstrate an independent effect on burnout.

The second hypothesis, H2 (engagement is negatively associated with burnout), was confirmed, with a highly significant path coefficient ($\beta = -0.7021$; $p < 0.0001$). This finding is consistent with theoretical frameworks that conceptualize engagement as a construct opposite to burnout. As observed in the literature, work engagement is closely related to the availability of resources in the work environment: the greater the availability of resources such as autonomy, vigor, sense of belonging, and competence, the higher the likelihood that individuals will experience positive emotions and the lower their risk of developing exhaustion, as their basic psychological needs are met [41].

Bakker and Leiter [67] emphasize that engagement results from a strong identification with work, characterized by vigor and dedication, whereas burnout is associated with emotional exhaustion and cynicism: constructs frequently considered opposites, reinforcing the importance of analyzing them independently [42]. Studies further indicate that the core dimensions of engagement (vigor and dedication) contrast with the central dimensions of burnout (exhaustion and cynicism) [37], suggesting that highly engaged individuals tend to experience fewer burnout symptoms, while those with lower engagement levels are more susceptible to professional exhaustion. The results of this study therefore reinforce the understanding that work engagement is inversely associated with burnout, highlighting the importance of promoting job resources to foster engagement and prevent burnout. Absorption emerged as the engagement dimension most strongly correlated with burnout domains, suggesting that the state of deep immersion in work may be particularly relevant in protecting against occupational exhaustion.

The third hypothesis, H3 (areas of worklife are positively associated with engagement), was also confirmed ($\beta = 0.6124$; $p < 0.0001$), corroborating the findings of Leiter and Maslach [59]. According to these authors, the greater the consistency experienced by individuals in relation to areas of worklife, the higher the likelihood of their engagement with work. This understanding is further supported by Cho [68], who observed that balanced areas of worklife are closely associated with lower levels of emotional exhaustion and, consequently, higher organizational commitment. The positive association between areas of worklife and engagement underscores the importance of considering not only negative aspects, such as imbalance or incongruence, but also factors that promote consistency and harmony across these domains. Among the domains assessed, control and values presented the highest means in the sample, suggesting that the perception of autonomy and the alignment between personal and organizational values may be the most relevant factors for engagement among psychologists. Investing in work environments that foster such alignment may therefore constitute an effective strategy for promoting professional well-being.

The fourth and final hypothesis, H4 (areas of worklife positively mediate the relationship between engagement and burnout), was not confirmed. According to Leiter and Maslach [59], inadequate areas of worklife increase the risk of burnout within organizations. However, despite the associations between areas of worklife and burnout identified in previous studies, the present investigation did not find evidence supporting a mediating role of these areas in the relationship between engagement and burnout.

Although this result may initially appear as a limitation, it offers a theoretically relevant contribution. The absence of mediation suggests that engagement and burnout

may operate along relatively independent trajectories from the structural work conditions assessed by the AWS. One possible explanation lies in the complexity of the relationship between the two constructs: while some models suggest that engagement and burnout represent opposite poles of a single continuum, others argue that they are relatively distinct constructs [62]. Engagement appears to act more proximally on burnout, as the relationship between the professional's motivational state and exhaustion is direct and robust, without requiring the mediation of structural organizational conditions. Additionally, Maslach [14] emphasize the importance of considering burnout antecedents, including both situational and individual factors. Individual factors such as personality traits, coping strategies, and social support may play a more central role in this relationship than areas of worklife [69], and the non-inclusion of these factors in the model may have contributed to the lack of support for H4.

This study contributes to the literature by examining burnout and engagement specifically among psychology professionals, including both institutionally employed and self-employed individuals. This focus addresses an important gap and provides a more nuanced understanding of occupational well-being in this professional group, given the scarcity of research directed at psychologists as subjects of investigation rather than practitioners.

The findings reinforce theoretical models that distinguish engagement and burnout as opposing constructs and highlight the relevance of work resources and alignment across areas of worklife in promoting engagement. Moreover, the methodological approach enabled access to a diverse sample in terms of employment arrangements, strengthening the applicability of the findings to different professional contexts within psychology.

5. Conclusions

The results of this investigation partially confirmed the formulated hypotheses, revealing significant associations between engagement, areas of worklife, and burnout, while also producing findings that warrant careful interpretation. No direct association was identified between areas of worklife and burnout, contrary to some findings in the existing literature. This finding indicates that the influence of these areas on professional exhaustion may occur indirectly or depend on specific contextual dynamics, shaped by individual characteristics, career stage, and measurement properties, reinforcing the need for further investigation into the mechanisms underlying this relationship.

A negative association between engagement and burnout was confirmed, supporting theoretical models that conceptualize these constructs as opposites. This result underscores the protective role of work engagement and highlights the importance of job resources such as autonomy, recognition, and skill development in promoting professional well-being. Furthermore, a positive association was observed between areas of worklife and engagement, indicating that greater balance and congruence across these areas are related to higher levels of work engagement, pointing to the relevance of organizational strategies that foster work environments aligned with professionals' needs and values.

No evidence was found to support the mediating role of areas of worklife in the relationship between engagement and burnout, suggesting that other variables not examined in this study, including individual factors such as personality traits and coping strategies, may play a more central role in this dynamic. Taken together, these findings reinforce the notion that access to organizational resources and positive interpersonal climates may function as protective factors against occupational strain, supporting theoretical models that link work resources to engagement and lower levels of burnout [27]. The relevance of investigating occupational health and psychosocial factors among psychology professionals is further underscored by broader discussions in the international scientific community regarding work environments and professional well-being in healthcare settings [70].

6. Limitations and Implications for Future Research and Practice

Despite the relevance of the findings, several limitations should be acknowledged, which also inform directions for future research.

First, the cross-sectional design limits the ability to establish causal relationships between work engagement, areas of worklife, and burnout. Although structural equation modeling was used to test theoretically grounded associations, the absence of temporal sequencing precludes conclusions regarding directionality or reciprocal effects. Future research employing longitudinal and prospective designs would provide stronger evidence regarding the causal mechanisms underlying these relationships.

Second, the reliance on a non-probabilistic convenience sample, recruited primarily through digital platforms, may have introduced self-selection bias. The predominance of young, early-career psychologists further limits the generalizability of the findings to more experienced professionals and diverse organizational contexts. Future studies should include more heterogeneous samples to enhance the external validity of the results.

A third limitation concerns the pronounced gender imbalance in the sample. While this reflects the feminization of the psychology profession, it restricts the examination of gender-specific patterns of burnout and work engagement. Future research with more balanced samples would allow for a more comprehensive analysis of these dynamics.

With respect to measurement, the marginal internal consistency of the AWS suggests potential heterogeneity across its dimensions or cultural specificities not fully captured by the instrument. In addition, the exclusive use of self-report measures raises concerns about common method variance and response bias. Future research adopting multimethod approaches, combining self-report tools with objective indicators and multi-source assessments, would strengthen the methodological rigor of findings in this area.

From an analytical perspective, although the structural equation model explained a substantial proportion of variance, the very high coefficient of determination raises concerns about potential construct overlap between burnout and work engagement when assessed via self-report measures. Future research should further refine theoretical models and measurement strategies to better differentiate between core dimensions of occupational well-being.

Furthermore, the mediation analysis was not conducted using bootstrapping procedures, which are currently recommended as the most robust method for testing indirect effects, particularly when data deviations from normality are present. The mediation was assessed through indirect effect estimation within the SEM framework using maximum likelihood, which, while valid, provides less precise confidence intervals for the mediation inference. Future studies should employ bootstrapping-based mediation testing to strengthen the robustness of conclusions regarding the mediating role of areas of worklife.

Finally, the absence of individual variables such as personality traits, coping strategies, and psychological flexibility, as well as organizational variables such as workload, perceived organizational support, and job security, limits the understanding of more complex mechanisms underlying burnout and engagement. Future research incorporating these variables would provide more robust evidence regarding the factors that mediate or moderate the relationship between engagement and burnout.

Taken together, these limitations underscore the need for future research employing longitudinal designs, diverse and representative samples, multimethod assessment strategies, and theoretically refined models to support evidence-based occupational health research and practice.

Author Contributions: Conceptualization, J.H.; methodology, T.L.; investigation, S.A.; writing—original draft preparation, J.H.; formal analysis, Y.F.; writing—review and editing, T.L., J.H. and S.A. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki and approved by the Universidade Autónoma de Lisboa (6 April 2022).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The datasets generated and analyzed during the current study are not publicly available due to ethical and privacy considerations. Data were collected anonymously from human participants, and access is restricted to protect participant confidentiality. The data may be made available by the corresponding author upon reasonable request.

Acknowledgments: The authors would like to acknowledge the institutional support provided by Universidade Autónoma de Lisboa. During the preparation of this manuscript, the authors used ChatGPT (OpenAI, San Francisco, CA, USA; GPT-5) for purposes of language revision and translation. The authors have reviewed and edited the output and take full responsibility for the content of this publication.

Conflicts of Interest: The authors declare no conflicts of interest.

Abbreviations

The following abbreviations are used in this manuscript:

H1, H2, H3, H4.	Hypotheses
BAT	Burnout Assessment Tool
AWS	Areas of Worklife Survey
UWES	Utrecht Work Engagement Scale

Appendix A

Appendix A.1



Figure A1. Authorization for use of the Burnout Assessment Tool (BAT).

Appendix A.2

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Areas of Worklife Survey
Instrument and Scoring Guide

License to Administer

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Figure A2. License agreement for use of the Areas of Worklife Survey (AWS), obtained through MindGarden.

Appendix A.3

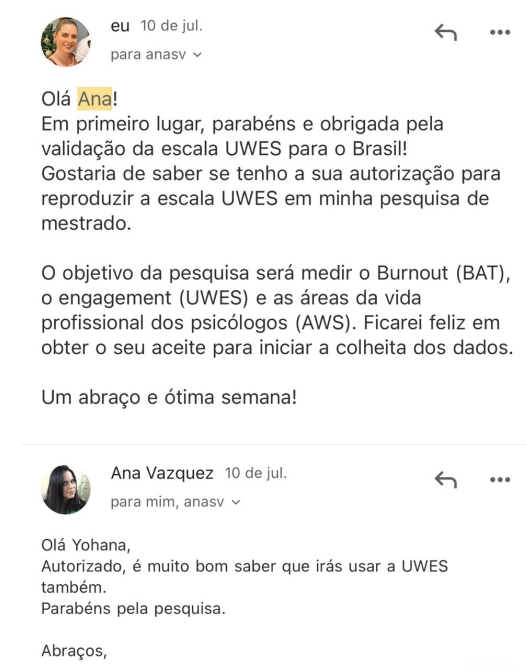


Figure A3. Authorization for use of the Utrecht Work Engagement Scale (UWES).

References

- Bendassoli, P.F. Mal estar no trabalho: Do sofrimento ao poder de agir. *Rev. Mal-Estar Subj.* **2011**, *11*, 1.
- De Vries, M.F.R.K. Creating Authentizotic Organizations: Well-Functioning Individuals in Vibrant Companies. *Hum. Relat.* **2001**, *54*, 101–111. [\[CrossRef\]](#)
- Dejours, C. Subjectivity, Work, and Action. *Crit. Horiz.* **2006**, *7*, 45–62. [\[CrossRef\]](#)
- Foucault, M. *Nascimento da Biopolítica*; Collège de France: Paris, France, 1978.
- Boltanski, L.; Chiapello, E. *O Novo Espírito do Capitalismo*; Martins Fontes: São Paulo, Brazil, 2009.
- Mocellim, A.D. Psicopolítica e mal-estar da contemporaneidade. *Civ. Rev. Ciênc. Sociais* **2021**, *21*, 94–107. [\[CrossRef\]](#)
- Han, B. *Psicopolítica: O Neoliberalismo e as Novas Técnicas de Poder*; Âyiné: Sao Paulo, Brazil, 2018.
- Han, B. *Sociedade do Cansaço*; Vozes: Petrópolis, Brazil, 2019; Volume 2.
- Han, B. *Sociedade da Transparência*; Vozes: Petrópolis, Brazil, 2017.
- Burn-Out An “Occupational Phenomenon”: International Classification of Diseases. 2019. Available online: <https://www.who.int/news/item/28-05-2019-burn-out-an-occupational-phenomenon-international-classification-of-diseases> (accessed on 9 February 2026).
- Murcho, N.Á.C.; Pacheco, J.E.P. Caracterização do Burnout em profissionais de saúde em Portugal: Um artigo de revisão. *Psique* **2021**, *16*, 8–23. [\[CrossRef\]](#)
- Leiter, M.P.; Maslach, C.; Frame, K. Burnout. In *The Encyclopedia of Clinical Psychology*; John Wiley & Sons, Ltd.: Hoboken, NJ, USA, 2015; pp. 1–7.
- Bendassoli, P.F.; Borges-Andrade, J.E. *Dicionário de Psicologia do Trabalho e das Organizações*; Casa do Psicólogo: São Paulo, Brazil, 2015.
- Maslach, C.; Schaufeli, W.B.; Leiter, M.P. Job Burnout. *Annu. Rev. Psychol.* **2001**, *52*, 397–422. [\[CrossRef\]](#) [\[PubMed\]](#)
- Hammen, C. Stress and Depression. *Annu. Rev. Clin. Psychol.* **2005**, *1*, 293–319. [\[CrossRef\]](#)
- Verkuilen, J.; Bianchi, R.; Schonfeld, I.S.; Laurent, E. Burnout–Depression Overlap: Exploratory Structural Equation Modeling Bifactor Analysis and Network Analysis. *Assessment* **2021**, *28*, 1583–1600. [\[CrossRef\]](#)
- Clark, P.; Holden, C.; Russell, M.; Downs, H. The Impostor Phenomenon in Mental Health Professionals: Relationships Among Compassion Fatigue, Burnout, and Compassion Satisfaction. *Contemp. Fam. Ther.* **2022**, *44*, 185–197. [\[CrossRef\]](#)
- Maslach, C.; Goldberg, J. Prevention of burnout: New perspectives. *Appl. Prev. Psychol.* **1998**, *7*, 63–74. [\[CrossRef\]](#)
- Schaufeli, W.B.; Desart, S.; Witte, H.D. Burnout Assessment Tool (BAT)—Development, Validity, and Reliability. *Int. J. Environ. Res. Public Health* **2020**, *17*, 9495. [\[CrossRef\]](#)
- Sinval, J.; Vazquez, A.C.S.; Hutz, C.S.; Schaufeli, W.B.; Silva, S. Burnout Assessment Tool (BAT): Validity Evidence from Brazil and Portugal. *Int. J. Environ. Res. Public Health* **2022**, *19*, 1344. [\[CrossRef\]](#)
- Leiter, M.P. Key worklife areas contributing to health care burnout: Reflections on the ORCAB project. *Br. J. Health Psychol.* **2015**, *20*, 223–227. [\[CrossRef\]](#) [\[PubMed\]](#)
- Reed, B.N.; Lebovitz, L.; Layson-Wolf, C. How Resilience and Wellness Behaviors Affected Burnout and Academic Performance of First-Year Pharmacy Students During COVID-19. *Am. J. Pharm. Educ.* **2023**, *87*, 185–190. [\[CrossRef\]](#) [\[PubMed\]](#)
- Nash, C. Team Mindfulness in Online Academic Meetings to Reduce Burnout. *Challenges* **2023**, *14*, 15. [\[CrossRef\]](#)
- Romani, M.; Ashkar, K. Burnout among physicians. *Libyan J. Med.* **2014**, *9*, 23556. [\[CrossRef\]](#)
- Ortiz-Fune, C.; Kanter, J.W.; Arias, M.F. Burnout in Mental Health Professionals: The Roles of Psychological Flexibility, Awareness, Courage, and Love. *Clin. Health* **2020**, *31*, 85–90. [\[CrossRef\]](#)
- Laneiro, T.; Ribeiro, L.; Nitzsche, M.; Hipólito, J.; Queiróz, S.; Jesus, S. Workplace Incivility and Burnout Among Portuguese Healthcare Professionals. 2017. Available online: <http://hdl.handle.net/11144/3046> (accessed on 9 February 2026).
- Ribeiro, L.; Laneiro, T.; Kulari, G.; Osatuke, K.; Mouta, I. Studying the relationships between authentic leadership, structural empowerment, and civility in the palliative care sector in Portugal. *Leadersh. Health Serv.* **2022**, *35*, 355–371. [\[CrossRef\]](#)
- Porto, A. Áreas da Vida no Trabalho Como Predictoras da Síndrome de Burnout: Tradução, Adaptação Transcultural e Validação do Modelo AWS-MBIGS. Ph.D. Thesis, Universidade Federal de Santa Maria, Santa Maria, Brazil, 2019.
- El-Ibiary, S.Y.; Salib, M.; Lee, K.C. Assessment of Areas of Worklife Among Pharmacy Educators. *Am. J. Pharm. Educ.* **2022**, *86*, 8671. [\[CrossRef\]](#)
- Brom, S.S.; Buruck, G.; Horváth, I.; Richter, P.; Leiter, M.P. Areas of worklife as predictors of occupational health—A validation study in two German samples. *Burn. Res.* **2015**, *2*, 60–70. [\[CrossRef\]](#)
- Maslach, C.; Leiter, M.P. New insights into burnout and health care: Strategies for improving civility and alleviating burnout. *Med. Teach.* **2017**, *39*, 160–163. [\[CrossRef\]](#) [\[PubMed\]](#)
- Karapinar, P.B.; Camgoz, S.M.; Ekmekci, O.T. The Mediating Effect of Organizational Trust on the Link between the Areas of Work Life and Emotional Exhaustion. *Educ. Sci. Theory Pract.* **2016**, 1947–1980. [\[CrossRef\]](#)
- Chudzicka-Czupala, A.; Stasiła-Sieradzka, M.; Rachwaniec-Szczecińska, Ż.; Grabowski, D. The severity of work-related stress and an assessment of the areas of worklife in the service sector. *Int. J. Occup. Med. Environ. Health* **2019**, *32*, 569–584. [\[CrossRef\]](#)

34. Coetzee, J.F. Kluyts Burnout and Areas of Work-Life Among Anaesthetists in South Africa Part 2: Areas of Work-Life. Southern African Journal of Anaesthesia and Analgesia. Available online: <https://journals.co.za/doi/10.36303/SAJAA.2020.26.2.2359> (accessed on 9 February 2026).
35. Truss, C.; Alfes, K.; Delbridge, R.; Shantz, A.; Soane, E. (Eds.) *Employee Engagement in Theory and Practice*; Routledge: London, UK, 2013. [CrossRef]
36. Bakker, A.B.; Schaufeli, W.B.; Leiter, M.P.; Taris, T.W. Work engagement: An emerging concept in occupational health psychology. *Work Stress* **2008**, *22*, 187–200. [CrossRef]
37. González-Romá, V.; Schaufeli, W.B.; Bakker, A.B.; Lloret, S. Burnout and work engagement: Independent factors or opposite poles? *J. Vocat. Behav.* **2006**, *68*, 165–174. [CrossRef]
38. Magnan, E.D.S.; Vazquez, A.C.S.; Pacico, J.C.; Hutz, C.S. Normalization of the Brazilian Utrecht Work Engagement Scale. *Rev. Aval. Psicológica* **2016**, *15*, 133–140. [CrossRef]
39. Schaufeli, W.B.; Bakker, A.B. *Defining and Measuring Work Engagement: Bringing Clarity to the Concept*; Psychology Press: East Sussex, UK, 2010.
40. Bakker, A.B. Daily Fluctuations in Work Engagement: An Overview and Current Directions. *Eur. Psychol.* **2014**, *19*, 227–236. [CrossRef]
41. Van Den Broeck, A.; Vansteenkiste, M.; De Witte, H.; Lens, W. Explaining the relationships between job characteristics, burnout, and engagement: The role of basic psychological need satisfaction. *Work Stress* **2008**, *22*, 277–294. [CrossRef]
42. Martins, J.N.C. Validação da Versão Portuguesa do Questionário Utrecht Work Engagement Para Medir o Engagement no Trabalho nos Profissionais dos Cuidados de Saúde Primários. Master's Thesis, Instituto Universitário de Lisboa, Lisbon, Portugal, 2013. Available online: <https://repositorio.iscte-iul.pt/handle/10071/6322> (accessed on 9 February 2026).
43. Seppälä, P.; Mauno, S.; Kinnunen, M.-L.; Feldt, T.; Juuti, T.; Tolvanen, A.; Rusko, H. Is work engagement related to healthy cardiac autonomic activity? Evidence from a field study among Finnish women workers. *J. Posit. Psychol.* **2012**, *7*, 95–106. [CrossRef]
44. Bakker, A.B.; Hakanen, J.J.; Demerouti, E.; Xanthopoulou, D. Job resources boost work engagement, particularly when job demands are high. *J. Educ. Psychol.* **2007**, *99*, 274–284. [CrossRef]
45. Chambel, M.J.; Carvalho, V.S.; Cesário, F.; Lopes, S. The work-to-life conflict mediation between job characteristics and well-being at work: Part-time vs full-time employees. *Career Dev. Int.* **2017**, *22*, 142–164. [CrossRef]
46. Wright, T.; Mughal, F.; Babatunde, O.; Dikomititis, L.; Mallen, C.; Helliwell, T. Burnout among primary health-care professionals in low- and middle-income countries: Systematic review and meta-analysis. *Bull. World Health Organ.* **2022**, *100*, 385–401A. [CrossRef] [PubMed]
47. dos SM de, A.D. Regulação Emocional, Funcionamento Familiar e Burnout em Cuidadores Informais de Pessoas com Demência. 18 December 2020. Available online: <http://hdl.handle.net/11144/5055> (accessed on 9 February 2026).
48. Gómez Acosta, A.; Sierra Barón, W.; Vinaccia Alpi, S.; Clavijo Bolívar, M.E.; Salcedo, K.; Andrade, Y.F. Evaluación del Burnout en Psicólogos de la Ciudad de Neiva, Colombia. *Psicol. Desde El Caribe* **2023**, *39*, 40–58. [CrossRef]
49. Emery, S.; Wade, T.D.; McLean, S. Associations Among Therapist Beliefs, Personal Resources and Burnout in Clinical Psychologists. *Behav. Change* **2009**, *26*, 83–96. [CrossRef]
50. Lasalvia, A.; Bonetto, C.; Bertani, M.; Bissoli, S.; Cristofalo, D.; Marrella, G.; Ceccato, E.; Cremonese, C.; De Rossi, M.; Lazzarotto, L.; et al. Influence of perceived organisational factors on job burnout: Survey of community mental health staff. *Br. J. Psychiatry* **2009**, *195*, 537–544. [CrossRef]
51. Rupert, P.A.; Morgan, D.J. Work Setting and Burnout Among Professional Psychologists. *Prof. Psychol. Res. Pract.* **2005**, *36*, 544–550. [CrossRef]
52. Franc-Guimond, J.; Hogues, V. Burnout among caregivers in the era of the COVID-19 pandemic: Insights and challenges. *Can. Urol. Assoc. J.* **2021**, *15*, S16–S19. [CrossRef]
53. Northwood, K.; Siskind, D.; Suetani, S.; McArdle, P. An assessment of psychological distress and professional burnout in mental health professionals in Australia during the COVID-19 pandemic. *Australas. Psychiatry* **2021**, *29*, 628–634. [CrossRef]
54. Mat Rifin, H.; Danaee, M. Association between Burnout, Job Dissatisfaction and Intention to Leave among Medical Researchers in a Research Organisation in Malaysia during the COVID-19 Pandemic. *Int. J. Environ. Res. Public Health* **2022**, *19*, 10017. [CrossRef]
55. Alkhamees, A.A.; Assiri, H.; Alharbi, H.Y.; Nasser, A.; Alkhamees, M.A. Burnout and depression among psychiatry residents during COVID-19 pandemic. *Hum. Resour. Health* **2021**, *19*, 46. [CrossRef]
56. Rodriguez, S.Y.S.; Marques, V.D.S.; Taube, M.E.; Carlotto, M.S. Síndrome de Burnout em Psicólogos: Revisão Sistemática da Literatura. *Context. Clínicos* **2021**, *13*, 967–991. [CrossRef]
57. Sadusky, A.; Spinks, J. Psychologists' engagement in reflective practice and experiences of burnout: A correlational analysis. *Reflective Pract.* **2022**, *23*, 593–606. [CrossRef]
58. Schaufeli, W.; De Witte, H. Outlook Work Engagement: Real and Redundant! *Burn. Res.* **2017**, *5*, 58–60. [CrossRef]

59. Leiter, M.; Maslach, C. Areas of Worklife: A Structured Approach to Organizational Predictors of Job Burnout. *Res. Occup. Stress Wellbeing* **2004**, *3*, 91–134.
60. Westland, J.C. Lower bounds on sample size in structural equation modeling. *Electron. Commer. Res. Appl.* **2010**, *9*, 476–487. [[CrossRef](#)]
61. de Beer, L.T.; Schaufeli, W.B.; De Witte, H.; Hakanen, J.J.; Shimazu, A.; Glaser, J.; Seubert, C.; Bosak, J.; Sinval, J.; Rudnev, M. Measurement Invariance of the Burnout Assessment Tool (BAT) Across Seven Cross-National Representative Samples. *Int. J. Environ. Res. Public Health* **2020**, *17*, 5604. [[CrossRef](#)]
62. Schaufeli, W.B.; Bakker, A.B. *UWES–Utrecht Work Engagement Scale: Preliminary Manual*; Utrecht University: Utrecht, The Netherlands, 2003.
63. Vazquez, A.C.S.; Magnan, E.D.S.; Pacico, J.C.; Hutz, C.S.; Schaufeli, W.B. Adaptation and Validation of the Brazilian Version of the Utrecht Work Engagement Scale. *Psico-USF* **2015**, *20*, 207–217. [[CrossRef](#)]
64. Ayres, M.; Ayres, D.L.; Santos, A.A.S. Bioestat v.5.3. Aplicações Estatísticas Nas Áreas das Ciências Biológicas e Médicas–ScienceOpen. Available online: <https://www.scienceopen.com/book?vid=485fe6d7-7c13-4d78-ac5e-2b0bb735b26c> (accessed on 9 February 2026).
65. StataCorp. *Stata Statistical Software*; StataCorp: College Station, TX, USA, 2021.
66. Dorociak, K.E.; Rupert, P.A.; Zahniser, E. Work life, well-being, and self-care across the professional lifespan of psychologists. *Prof. Psychol. Res. Pract.* **2017**, *48*, 429–437. [[CrossRef](#)]
67. Leiter, M. Work Engagement: A Handbook of Essential Theory and Research edited by Arnold B. Bakker. Michael P. Leiter. *Pers. Psychol.* **2012**, *65*, 204–207. [[CrossRef](#)]
68. Cho, J.; Spence Laschinger, H.; Wong, C. Workplace Empowerment, Work Engagement and Organizational Commitment of New Graduate Nurses. *Nurs. Leadersh.* **2006**, *19*, 43–60. [[CrossRef](#)]
69. Mojsa-Kaja, J.; Golonka, K.; Marek, T. Job burnout and engagement among teachers–Worklife areas and personality traits as predictors of relationships with work. *Int. J. Occup. Med. Environ. Health* **2015**, *28*, 102–119. [[CrossRef](#)]
70. Laneiro, T. CISBETI 2019-International Congress of Health, Well-Being, Technology and Innovation: Foz de Iguaçu, Brazil. 4–6 April 2019. *BMC Health Serv. Res.* **2019**, *19*, 448. [[CrossRef](#)]

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