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Perceived Workload and Burnout among Psychologists Working with Children with Autism Spectrum Disorder in Pakistan: The Moderating Role of Perceived Organizational Support

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ABSTRACT

Psychologists who provide direct clinical and behavioral services to children with Autism Spectrum Disorder (ASD) operate under sustained workload and emotional demand, conditions widely implicated in occupational burnout. Despite this, the specific relationship between perceived workload and client-related burnout, and the role of perceived organizational support in shaping that relationship, has not been examined within a psychologist-specific sample serving the ASD population in Pakistan. The present study investigated whether perceived workload predicts client-related burnout among psychologists working with children with ASD in Lahore and Islamabad/Rawalpindi, and whether perceived organizational support moderates this relationship. Data were collected from psychologists holding a postgraduate qualification in Psychology or Clinical Psychology who were currently providing direct ASD-related services, using the Quantitative Workload Inventory, the client-related burnout subscale of the Copenhagen Burnout Inventory, and the 8-item Survey of Perceived Organizational Support. Moderated regression, following Hayes' PROCESS Model 1 logic, was used to test the proposed model. Perceived workload was positively associated with client-related burnout, and perceived organizational support was negatively associated with client-related burnout; however, organizational support did not significantly moderate the workload–burnout relationship. Findings suggest that while both workload and organizational support independently relate to client-related burnout in this population, organizational support may not function as a buffer in the manner hypothesized. Implications for workforce support and directions for future research are discussed.

Introduction and Literature Review

Burnout is a prolonged psychological response to chronic occupational stressors, and it remains one of the most extensively documented threats to the wellbeing of professionals in human-service roles (Maslach et al., 2001). Among mental health

professionals specifically, burnout is not a marginal concern: a systematic review and meta-analysis across 62 studies and 33 countries estimated that approximately 40% of mental health professionals experience clinically meaningful emotional exhaustion (O'Connor et al., 2018), and interventions targeting provider burnout have shown only modest effectiveness over three decades of accumulated research (Dreison et al., 2018). Workload consistently emerges as one of the most robust predictors of burnout across these studies (O'Connor et al., 2018), which motivates closer examination of workload as a driver of burnout in specific, understudied professional populations.

Psychologists who work directly with children with Autism Spectrum Disorder (ASD) occupy a particularly demanding niche within this broader landscape. Their work combines high caseloads, intensive behavioral demands, and slow, non-linear therapeutic progress, conditions that closely resemble those documented in the special-education workforce, where a synthesis of more than three decades of research linked burnout to role-related demands and limited administrative support (Brunsting et al., 2014). Areas of worklife theory similarly identifies workload as one of the central organizational predictors of burnout across occupations (Leiter & Maslach, 2004), reinforcing workload as a theoretically appropriate starting point for examining burnout in this population.

Workload alone, however, does not translate uniformly into burnout. The Job Demands–Resources (JD-R) model (Demerouti et al., 2001) provides the dominant theoretical account of this variability, proposing that occupational strain results from an imbalance between job demands, which consume energy and contribute to a health-impairment process, and job resources, which sustain motivation and can buffer the effects of demands on strain. Perceived organizational support, defined as employees' global belief that their organization values their contribution and cares about their wellbeing (Eisenberger et al., 1986), functions as precisely this kind of resource within the JD-R framework: subsequent work refined and shortened the original measure into more practical short forms, including the 8-item version used in applied occupational research (Eisenberger et al., 1997).

Figure 1. Job Demands-Resources (JD-R) Theoretical Framework (adapted from Demerouti et al., 2001)

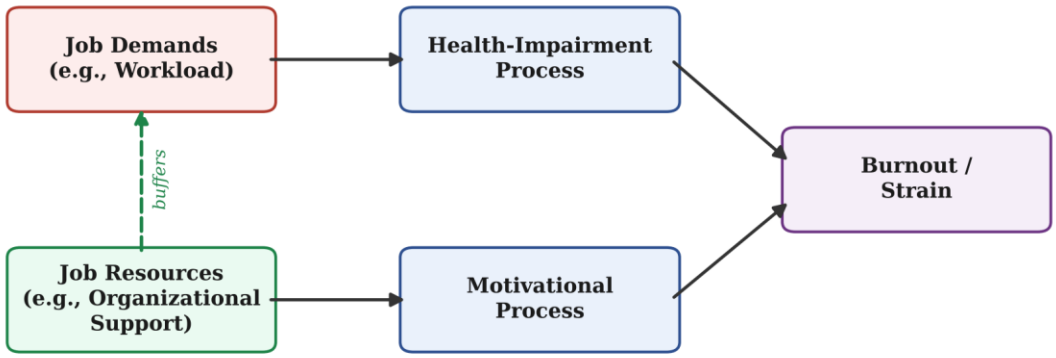

Figure 1. Job Demands–Resources (JD-R) theoretical framework, adapted from Demerouti et al. (2001), illustrating the demand-driven health-impairment process, the resource-driven motivational process, and the buffering role of resources.

Empirical tests of this buffering hypothesis in occupations structurally comparable to psychological service provision have produced mixed but generally small effects. In a cross-sectional study of intensive care unit nurses, perceived organizational support significantly moderated the relationship between work frustration and burnout, though the interaction effect was small ($\Delta R^2 = .011$; Yanbei et al., 2023). A moderated-mediation study of management consultants similarly found a significant workload × organizational-support interaction predicting the cynicism dimension of burnout, again with a modest effect (Bernard et al., 2026). Within Pakistan specifically, a study of healthcare workers examined an analogous workload–support–burnout structure, providing local evidence that this theoretical configuration has been investigated in Pakistani occupational samples, although differences in its measurement and reporting limit its use as a precise effect-size benchmark (Altaf & Khattak, 2025). No published study, to the authors' knowledge, has directly tested this moderation model within a psychologist-specific sample serving children with ASD, which constitutes the central gap addressed by the present study.

Burnout itself is not a unitary construct. Rather than aggregating burnout into a single score, the Copenhagen Burnout Inventory (CBI) explicitly separates personal, work-related, and client-related burnout as independent dimensions (Kristensen et al., 2005), a distinction with direct relevance to psychologists whose occupational strain is plausibly concentrated in the demands of the client relationship itself rather than in generalized personal or organizational fatigue. The present study accordingly isolates client-related burnout as the outcome of theoretical interest, departing from the more common practice in the broader burnout literature of treating burnout as globally undifferentiated (Maslach et al., 2001).

Workload, correspondingly, was operationalized using the Quantitative Workload Inventory (QWI), a brief, well-established measure of the pace, amount, and intensity of work demands (Spector & Jex, 1998). The QWI does not capture demands unique to ASD-specific clinical practice; it measures generic quantitative workload within whatever occupational context it is administered. This is an explicit and acknowledged scope limitation of the present study rather than an oversight, and it is revisited in the Limitations section.

Integrating these strands, the present study proposes that perceived workload predicts client-related burnout among psychologists working with children with ASD, that perceived organizational support independently predicts lower client-related burnout, and that organizational support moderates the workload–burnout relationship such that the positive association between workload and burnout is weaker among psychologists who perceive higher organizational support.

Figure 2. Conceptual Model of the Present Study
(Hayes' PROCESS Model 1: Simple Moderation)

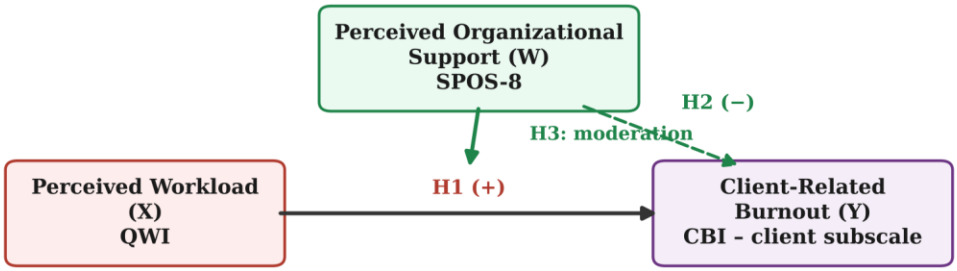

Figure 2. Conceptual model of the present study, tested using Hayes' PROCESS Model 1 (simple moderation).

Objectives

(1) To examine the relationship between perceived workload and client-related burnout among psychologists working with children with ASD; (2) to examine the relationship between perceived organizational support and client-related burnout; and (3) to examine whether perceived organizational support moderates the relationship between perceived workload and client-related burnout.

Hypotheses

H1: Perceived workload is positively associated with client-related burnout. H2: Perceived organizational support is negatively associated with client-related burnout. H3: Perceived organizational support moderates the relationship between perceived workload and client-related burnout, such that the positive relationship is weaker at higher levels of perceived organizational support.

Methodology

Research Design

A cross-sectional, correlational design was used, employing moderated regression consistent with the PROCESS Model 1 framework (Hayes, 2022).

Population and Sampling

The target population comprised psychologists working with children with ASD in Pakistan. The accessible population was restricted to eligible psychologists practicing in Lahore, Islamabad, and Rawalpindi. Non-probability sampling was used, combining purposive recruitment through autism centers, rehabilitation and child-development centers, hospitals, special-education settings, and private clinics with snowball sampling, in which enrolled participants were invited to refer other eligible psychologists within their professional networks. Snowball sampling was adopted given the absence of a centralized registry of psychologists working specifically with children with ASD in Pakistan. Findings are not claimed to be nationally representative. The minimum sample size was determined a priori using the workload × organizational support interaction reported among management consultants ($f^2 \approx .036$; Bernard et al., 2026) as the effect-size anchor; with $\alpha = .05$, power = .80, and three predictors in the model, a minimum of 220 participants was required to detect the interaction term. The achieved sample (N = 250) exceeded this requirement.

Eligibility Criteria

Inclusion criteria required participants to (a) hold a postgraduate qualification (MS/MPhil/PhD or equivalent) in Psychology or Clinical Psychology, (b) currently provide direct psychological, behavioral, or therapeutic services to children with ASD, and (c) currently practice in Lahore, Islamabad, or Rawalpindi. Professionals working in ASD-service settings who did not hold a qualifying psychology credential (e.g., ABA therapists, special educators, speech-language pathologists, occupational therapists) were excluded regardless of setting. No minimum duration of ASD-specific professional experience was imposed as a screening threshold; years of ASD-related experience were instead recorded as a continuous variable.

Instruments

Perceived workload was measured using the 5-item Quantitative Workload Inventory (Spector & Jex, 1998), rated on a 5-point frequency scale. Higher scores indicate greater perceived workload. Client-related burnout was measured using the 6-item client-related burnout subscale of the Copenhagen Burnout Inventory (Kristensen et al., 2005); the personal and work-related CBI subscales were not administered, consistent with the study's focus on client-related burnout specifically. Items were rated on a 5-point scale and averaged to yield a mean score ranging from 1 to 5, with higher scores indicating greater client-related burnout, rather than being transformed to the original 0–100 metric. Perceived organizational support was measured using the 8-item short form (Eisenberger et al., 1997) of the Survey of Perceived Organizational Support (Eisenberger et al., 1986); items were rated on a 5-point agreement scale (1 = strongly disagree, 5 = strongly agree), four items were reverse-scored, and a mean score was computed, with higher scores indicating greater perceived organizational support. All instruments were administered in their original English versions, on the basis that postgraduate psychology training and clinical practice in Pakistan are conducted in English. Internal consistency reliability for all three scales in the present sample is reported in the Results section (Table 2).

Procedure

Data were collected primarily through an online questionnaire, with paper administration available at sites that requested it. The questionnaire began with an eligibility screen; participants who did not meet all three inclusion criteria did not proceed further. Eligible participants provided informed consent, completed a demographic and work-information form, and then completed the three scales in fixed order (QWI, CBI client-related subscale, SPOS-8). Participation was voluntary, and participants were informed of their right to withdraw at any stage without penalty.

Data Analysis

Preliminary analyses included data screening and reliability analysis (Cronbach's alpha) for all three scales. Descriptive statistics were computed for demographic and work-information variables. Bivariate Pearson correlations were examined among perceived workload, client-related burnout, and perceived organizational support. The primary analysis followed the logic of PROCESS Model 1 (Hayes, 2022): predictor and moderator variables were mean-centered, an interaction term was computed as their product, and a hierarchical ordinary least squares regression was estimated predicting client-related burnout from workload, organizational support, and their interaction. A 95% confidence interval for the interaction coefficient was obtained via bootstrapping (5,000 resamples). City of practice was examined as a covariate in a sensitivity analysis rather than as a moderator or a fourth substantive predictor, consistent with the study's pre-specified analytic protocol.

Ethical Considerations

All procedures performed in this study were conducted in accordance with established ethical standards for research involving human participants, and all ethical procedures were followed by the authors.

Results

A total of N = 250 participants who met all eligibility criteria completed the questionnaire. Table 1 presents demographic and work-related characteristics of the sample.

Table 1; **Demographic and Work-Related Characteristics of Participants (N = 250)**

Variable	Category	n	%
Gender	Male	93	37.2
	Female	151	60.4
	Prefer not to say	6	2.4
Highest Qualification	MS/MPhil Psychology	48	19.2
	MS/MPhil Clinical Psychology	123	49.2
	PhD Psychology	31	12.4
	PhD Clinical Psychology	48	19.2
City of Practice	Lahore	136	54.4
	Islamabad	67	26.8
	Rawalpindi	47	18.8
Employment Setting	Autism/ABA center	68	27.2
	Rehabilitation/child-development	52	20.8
	Hospital/clinical psychology dept.	40	16.0
	Special-education school	25	10.0
	Private clinic/practice	39	15.6
	Other	26	10.4
Employment Sector	Public	53	21.2
	Private	163	65.2
	NGO/non-profit	34	13.6

Employment Status	Full-time	212	84.8
	Part-time	38	15.2

Note. Age: M = 32.14, SD = 5.44; Total professional experience (years): M = 5.93, SD = 4.82; ASD-specific experience (years): M = 3.19, SD = 2.89; ASD caseload: M = 13.34, SD = 7.31; Working hours/week: M = 39.08, SD = 5.30.

The sample was predominantly female, held postgraduate clinical psychology qualifications, and was drawn more heavily from Lahore than from the two other accessible cities, consistent with Lahore's designation as the primary recruitment site.

Table 2; Descriptive Statistics and Internal Consistency Reliability for Study Variables

Variable	M	SD	Possible Range	α
Perceived Workload (QWI)	3.06	0.98	1–5	.869
Client-Related Burnout (CBI)	3.25	0.97	1–5	.881
Perceived Organizational Support (SPOS-8)	3.00	1.02	1–5	.935

Note. QWI = Quantitative Workload Inventory; CBI = Copenhagen Burnout Inventory (client-related subscale); SPOS-8 = 8-item Survey of Perceived Organizational Support. α = Cronbach's alpha computed in the present sample.

All three scales demonstrated good to excellent internal consistency in the present sample, meeting conventional reliability thresholds for research use.

Table 3; Bivariate Correlations Among Study Variables

Variable	1	2	3
1. Perceived Workload	—		
2. Client-Related Burnout	.422**	—	
3. Perceived Organizational Support	-.241**	-.364**	—

Note. ** p < .001.

Perceived workload was significantly positively correlated with client-related burnout, and perceived organizational support was significantly negatively correlated with both perceived workload and client-related burnout, in the directions consistent with H1 and H2.

Table 4; **Moderated Regression Analysis Predicting Client-Related Burnout (PROCESS Model 1)**

Predictor	b	SE	t	p	95% CI
Constant	3.254	0.055	59.572	< .001	[3.147, 3.362]
Perceived Workload (X)	0.350	0.056	6.253	< .001	[0.240, 0.461]
Organizational Support (W)	-0.265	0.054	-4.907	< .001	[-0.371, -0.159]
Workload × Support (X×W)	0.035	0.050	0.695	.488	[-0.064, 0.134]

Note. R^2 = .253, F(3, 246) = 27.72, p < .001. ΔR^2 for the interaction term = .0015, $f^2 \approx .002$. Bootstrapped 95% CI for the interaction coefficient (5,000 resamples) = [-0.065, 0.134]. A sensitivity analysis including city of practice as a covariate did not materially change the interaction coefficient (b = 0.032, p = .526).

Perceived workload significantly and positively predicted client-related burnout, supporting H1. Perceived organizational support significantly and negatively predicted client-related burnout, supporting H2. The workload × organizational support interaction

term was not statistically significant, and its bootstrapped confidence interval included zero, indicating that H3 was not supported at the achieved sample size.

Discussion

The present study examined whether perceived organizational support moderates the relationship between perceived workload and client-related burnout among psychologists working with children with ASD in Pakistan. Consistent with H1 and with the health-impairment pathway proposed by the Job Demands–Resources model (Demerouti et al., 2001), perceived workload was positively and significantly associated with client-related burnout. This finding aligns with the broader burnout literature identifying workload as one of the most consistent determinants of burnout among mental health professionals (O'Connor et al., 2018) and among special-education professionals whose work overlaps closely with ASD service delivery (Brunsting et al., 2014). Consistent with H2, perceived organizational support was significantly and negatively associated with client-related burnout, in line with organizational support theory's proposition that employees who believe their organization values their contribution and wellbeing experience reduced occupational strain (Eisenberger et al., 1986).

Contrary to H3, perceived organizational support did not significantly moderate the relationship between workload and client-related burnout in this sample. The interaction effect was not only statistically non-significant but numerically very small ($f^2 \approx .002$), well below both comparable effect sizes identified in the literature search that informed this study's power planning: the small interaction reported among intensive care unit nurses (Yanbei et al., 2023) and the somewhat larger interaction reported among management consultants (Bernard et al., 2026). Because the achieved sample size in this study was adequate to detect an effect of the magnitude reported in the consultants study, this null result is better characterized as a reasonably precise absence of the hypothesized buffering effect in this population and outcome, rather than as a simple failure to reach significance due to insufficient power.

Several explanations may account for this divergence from prior moderation findings. First, the workload measure used in this study captures generic quantitative job demand — the pace, amount, and intensity of work — rather than demands specific to ASD-focused clinical practice, such as behavioral crisis management, communication barriers, or the emotional demands of slow, non-linear therapeutic progress. It is plausible that organizational support buffers workload of this generic kind less effectively than it buffers demands more specific to the clinical relationship itself, which the client-related burnout outcome in this study was designed to capture. Second, it is possible that organizational support operates on client-related burnout in this population through a mechanism other than moderation — for instance, as an independent predictor operating in parallel with workload, which is consistent with the significant direct effect observed for H2 even in the absence of a significant interaction. Third, the local Pakistani evidence available prior to this study (Altaf & Khattak, 2025) could not be used as a precise effect-size benchmark because of differences in measurement and reporting, leaving this study without a directly comparable local anchor against which to interpret the present null interaction finding.

Taken together, these findings suggest that while workload and organizational support both independently relate to client-related burnout among psychologists serving children with ASD in Pakistan, the specific buffering mechanism proposed by the Job Demands–Resources model may not generalize to this population and outcome in the form tested here. This does not undermine the broader relevance of organizational support to this population's wellbeing; rather, it suggests that its protective role may operate through more direct or structurally different pathways than those captured by a simple interaction model.

Limitations

Several limitations qualify the present findings. First, the cross-sectional design precludes causal inference; the observed associations between workload, organizational support, and burnout cannot establish directionality or rule out reverse or reciprocal relationships. Second, non-probability sampling, combining purposive and snowball recruitment restricted to Lahore, Islamabad, and Rawalpindi, limits the generalizability of findings to psychologists practicing in other regions of Pakistan or under different service-delivery conditions. Third, all measures were self-reported and collected at a single time point, raising the possibility of common-method variance inflating observed associations among predictors and the outcome. Fourth, the Quantitative Workload Inventory captures generic quantitative workload and does not assess demands specific to ASD-focused clinical practice, a scope limitation acknowledged prior to data collection and revisited here as a substantive interpretive constraint on the null moderation finding. Fifth, this study examined only the client-related dimension of the Copenhagen Burnout Inventory; personal and work-related burnout were not measured, limiting direct comparability with studies that report a composite or multidimensional burnout score. Finally, all instruments were administered in English only; while this was judged appropriate given the population's

postgraduate training background, subtle comprehension differences relative to participants' first working language cannot be fully ruled out.

Implications

Theoretically, this study extends tests of the Job Demands–Resources buffering hypothesis to a previously unexamined population — psychologists serving children with ASD — and suggests that the buffering effect of organizational support may be boundary-limited by the specificity of the workload measure used and the burnout dimension examined, a boundary condition worth testing directly in future moderation research using population-specific demand measures. Practically, the significant direct effects of both workload and organizational support on client-related burnout suggest that organizations serving ASD populations should not rely solely on general organizational-support initiatives as a buffer against workload-driven burnout; direct workload-management strategies, such as caseload limits or structured clinical supervision, may be equally or more important levers for reducing client-related burnout in this workforce. For research, future studies should consider testing organizational support as a parallel or mediating variable rather than solely as a moderator, developing or adapting workload measures specific to ASD-focused clinical demands, and replicating this design with a larger, multi-city sample drawn from additional regions of Pakistan.

Conclusion

This study examined the relationship between perceived workload and client-related burnout among psychologists working with children with ASD in Pakistan, and tested whether perceived organizational support moderates this relationship. Workload was positively related to client-related burnout, and organizational support was negatively related to client-related burnout, but organizational support did not moderate the workload–burnout relationship in this sample. These findings suggest that both occupational demand and organizational support matter independently for this workforce's wellbeing, even where a simple buffering mechanism between them was not supported. Given the cross-sectional design and regionally restricted sample, longitudinal replication across additional regions of Pakistan is recommended before these findings are treated as conclusive.

Declarations

Data availability: The data supporting the findings of this study are available from the corresponding authors upon reasonable request.

Conflict of interest: The authors declare no conflicts of interest.

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