



The ramification of COVID-19: How work satisfaction mediates the perceived work stress with turnover intention and gender differences among knowledge workers of developing country

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Abstract. *Purpose.* In organizations, employee's work stress is seen as the main problem behind dissatisfaction which ultimately leads towards turnover intention. This research is specific to knowledge workers of private schools registered in the Federal Capital Territory of Pakistan during COVID-19 and empirically examined the influence of perceived work stress on turnover intention and work satisfaction, including investigating the mediation effect of work satisfaction on the association of perceived work stress with turnover intention. Finally, the conditional direct and indirect effect of males and females is also measured. *Design.* Data were gathered from private school's teachers of the Federal Capital Territory of Pakistan in the form of a survey and the final sample of 269 teachers was used to test the hypotheses through structural equation modeling. *Findings.* Perceived work stress positively influenced the turnover intention of knowledge workers but work satisfaction reduces the greater impact of stress on turnover intention and seems to be partially mediated the association of perceived work stress and turnover intention. Finally, gender differences exposed that work satisfaction decreases the greater effect of stress on turnover intention among females strongly than males although the direct effect was already weaker among male teachers than females. *Practical Implications.* This research will assist decision-makers to better understand the consequences of perceived work stress and work satisfaction. Moreover, management can formulate strategies for the retention of employees to minimize the turnover of knowledge workers that are contributing to the welfare of society. Organizations need to emphasize the work satisfaction of employees on priority in any circumstances to utilize their full efforts for better performance as the turnover intention is the main cause of perceived work stress. Work satisfaction minimizes the influence of perceived work stress on turnover intention among knowledge workers especially in the current scenario where almost every organization is affected by the COVID-19 pandemic and official work has been transmitted from physical to online medium which

is generating uncertainties globally. *Value of results.* This research paper thrusts the knowledge about the antecedents of individual's work satisfaction, stress and intention to quit in the field of education.

Keywords: perceived work stress, work satisfaction, turnover intention, knowledge workers, COVID-19.

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Introduction

The COVID-19 pandemic is generating a considerable threat to learning institutions with a great challenge to the educational structures and this aspect provides assistance to knowledge workers on addressing the issue by enhancing the capacity of teaching remotely by taking advantage of asynchronous learning which work best in digital media (Daniel, 2020). Because of the COVID-19 pandemic, the teaching mode has quickly shifted from physical to online, with indistinct boundaries between work and home coupled with ubiquitous anxiety, resulting in increased stress intensity. Nonetheless, psychological fitness, well-being, and handling techniques appear active and approachable, coping with the generated situations, including the emotions elicited, and are associated with positive outcomes (MacIntyre et al., 2020). Prior to the COVID-19 pandemic, when Portuguese teachers were contending with the education system, coronavirus reduced the perception of well-being in the profession, causing concern among knowledge workers about their professional future. Furthermore, as a result of a longer male period of service, more significant teaching problems, and a negative perception of professional future, knowledge workers' well-being is reduced (Alves et al., 2020).

Unusual circumstances have produced due to COVID-19 and social distancing aspect forced education institutions transfer to online learning medium which seems to escalate academic stressors (Li et al., 2021). After mid-March 2020, schools of England were closed for students to most of the students due to COVID-19, and knowledge workers were required to follow the unexpected changes in operational practice. Moreover, educators proposed that after the early phase of uncertainty, they stable into the situation and got the way forward, backed by sturdy associations, persist worries for vulnerable students, and seeking effectiveness from the government through proper planning in this regard, teachers express the ed usage of learning in a health crisis to enhance student's experiences and shared instructor's identity functioned as stressors (Kim, Asbury, 2020).

COVID-19 pandemic influence people's mental health pessimistically, especially females testified at higher risk compared to men in developing indications of stress / anxiety / depression. Still, mindfulness mediation to improve the resilience and wellbeing of Italian knowledge workers leads towards optimistic mental health and may alleviate the adverse psychological outcomes of outbreaks (Matiz et al., 2020). Social support may perform relieving character in acute stress symptoms in corona outbreak. It could minimize it between school teachers by fulfilling particular psychosomatic necessities and enhancing the sense of control (Zhou, Yao, 2020).

Theory and hypotheses development

The outbreak of COVID-19 brought changes in teaching techniques, conditions, and environment that put knowledge workers under great stress with complications of adjustment which lead towards physical and mental issues i.e. depression, lack of confidence, or any negativity. Moreover, an individual's intention to leave is increasing from the long-term accumulation of these issues (Liu et al., 2021). When the behaviors anticipated of an individual are inconsistent, one will

experience stress and dissatisfaction and will not perform effectively. In addition to this, role conflict happens with violation of two traditional principles causing reduced individual satisfaction and less organizational effectiveness. Moreover, role theory describes that role conflict should be more dysfunctional. The individual might have experienced sturdy association with anxiety or propensity to quit. Role stress may not create anxiety in the scenario of leaving possibility or strong aspiration to leave the organization, and flexible behavior minimizes the stress for certain levels of role stress (Rizzo et al., 1970).

Role theory states that role ambiguity, shortage of the essential information accessible to a specified organizational position will consequence in coping behavior to resolve the problem and avoid the causes of stress. Hence, in role theory, ambiguity would maximize the possibility of dissatisfaction of an individual from his role, leading to anxiety and distorting reality directed towards poor performance (Kahn et al., 1964). Work satisfaction of an individual can be forecasted through their specific goals, and one would have to examine wider values directed towards the future after successfully meeting present goals. Moreover, successful and unsuccessful in achieving the essential value generate additional satisfaction and extra dissatisfaction (Locke, 1969). Overall, very little research work was conducted on the education sector during the outbreak, and consequences of the COVID-19 epidemic influence work satisfaction and quitting intention by increasing stress among knowledge workers. So therefore this aspect was almost negligible and the following are the main objectives of this research:

- perceived work stress in education institutions and brings out the constructs which are specifically suitable in assessing stress of knowledge workers;
- elements that increase the work satisfaction in the pandemic scenario that reduce the intention to leave and stress among knowledge workers;
- gender differences in the association of perceived work stress and turnover intentions through work satisfaction.

Perceived work stress on turnover intention

School teaching is considered a stressful profession; more significant work stress was linked with low social support during work and larger use of coping by disengagement and suppression of challenging events and proposed that maladaptive feedback in the teaching environment can promote work stress. Moreover, it is supposed that teacher stress emerges from objective sources of demand and pressure in the working environment, and elements like social support and coping moderate the influence of stressors on wellbeing. Furthermore, the teacher's stress perception itself is impressed by social support and coping (Griffith et al., 1999). According to most of the literature, turnover has a pessimistic influence on organizations. Still, literature related to the private sector revealed that turnover may give optimistic benefits to the firms up to some extent. In addition, it is not compulsory that quitting of every individual would be bad, and few firms might become inflexible, which would be unsuccessful to innovate, specifically on extra hard tasks without a mixture of new employees (Meier, Hicklin, 2008).

Social stressors were pessimistically linked with work satisfaction and altruism but optimistically linked with the turnover intention. In addition, high core self-appraisal buffered the pessimistic effect of social stressors on work satisfaction and quitting intention instead of altruism. Administrators require to evaluate social stressors in their company with integrity while recruiting personnel on empty posts as in case of high social stressors; authorities should hunt for people with greater core self-appraisals (Harris et al., 2009). In the context of multinational organizations, employees from both countries, Pakistan and Malaysia, generally revealed stress and stressors, i.e., inadequate resource, ambiguity, conflict, and work overload optimistically linked with absenteeism and intention to turnover (Jamal, 2007).

A study related to social workers presented role stress had an optimistic straight influence on burnout. On the contrary to this, social support and work autonomy showed a pessimistic straight influence on quitting intentions rather than on burnout. The greater role stress of social workers joint with lower work autonomy over challenging circumstances has a greater intensity of burnout. Meanwhile, social support interacts with role stress in describing quitting intentions among employees. In addition, supervisors may assist employees in setting priorities regularly daily, selecting approaches in performing the job and related decision-making tasks, and information sharing hierarchical to support administrators realize how decentralized and supportive working environments would be attained in the organization (Kim, Stoner, 2008).

H1: Perceived work stress has a significant positive influence on turnover intention.

Perceived work stress on work satisfaction

Work stress is multifaceted; time stress and anxiety were detected as two dissimilar dimensions. Job stress is the primary level result of firm and work, which represented an impression of uneasiness that differentiate it from next level consequences of work stress e.g. intensity of satisfaction, motivation, firm commitment, and work performance (Parker, DeCotiis, 1983). In the political marketplace, people get rewards through competition. They accumulate control, and a variety of implication exists due to the nature of the market, i.e., a person's not belonging to the sturdiest cabal and will have difficulties completing their desires. Incomplete aspirations have a and stressful political atmosphere dissatisfying. In addition, unstable and fewer predictable marketplaces due to politics and procedures could change daily, creating uncertainty and leading employees toward less determination regarding their invalid struggle results (Cropanzano et al., 1997).

Currently, work-related stress is maximized with time which directs to the pessimistic outcome, i.e., absenteeism, damaging output, less satisfaction, psychosomatic and physical illness, so locus of control should be beneficial in reducing work-related stress through work satisfaction, growth opportunities, self-esteem, good quality of life and increments (Karimi, Alipour, 2011). Work values had an autonomous influence on work satisfaction; the extent to which staff gain perceived job rewards is imagined their degree of control over their service circumstances. Moreover, understanding an employee's association with work may not be achieved only through conceptual tools given by sociological thought; here require to be augmented by psychological philosophy to realized employee's reactions towards their work (Kalleberg, 1977).

Individuals from different geographically located distributed offices in state agency revealed greater intensity of role clarification had more significant level of job satisfaction and less rate of turnover, greater level of role ambiguity is probably decrease satisfaction, workplaces which have less turnover exhibited greater level of role clarity comparatively to those where turnover rate was high. Moreover, clear work objectives and work expectations enhanced overall role clarity, leading to increased satisfaction and decreased quitting rate (Hassan, 2013). In spite of the extensive inconsistencies, following facets of work constantly play an important role in satisfaction at any point of career which includes freedoms of activities, diversity in tasks, progression in career, pleasant working conditions, and friendly links with colleagues, sensitivity for attainment, safeguard of moral values, proper policies and practices, utilization of individual potential towards creativity, and appreciation and gratitude in case of contributions (Bhattacharya, 2011).

H2: Perceived work stress has a significant negative influence on work satisfaction.

Work satisfaction on turnover intention

In the education sector, the chief challenge is the fascination and retention of educators in rural areas due to competition for rare skills, and the nonexistence of work satisfaction affects the intent to turnover teaching occupation. In addition, the age and tenure of a worker as well as subject specialty

could predict an individual's turnover intentions and school administrations should formulate strategies for those teachers who are less satisfied and committed. Moreover, management should give proper consideration and demonstrate in resolving teachers' issues to minimize the attrition and absence (Kabungaidze et al., 2013).

Work dissatisfaction, role ambiguity, work on family conflict, and dangerousness had a noteworthy influence on life satisfaction but age and life satisfaction had converse linkage with the intention to turnover, the pessimistic experience of work agonize life satisfaction of individuals overall (Pasupuleti et al., 2009). Friendship probabilities can be more closely linked with job-related productivity. Moreover, friendship directly affects work satisfaction and involvement on a large scale than the original presumption but indirectly influences firm commitment and intention to quit (Riordan, Griffeth, 1995). External causes had found about turnover rate related newcomers in both categories from graduate school or different industries and same industry as proposes that background of turnover intention are influenced by previous work-related experience but difficult to determine that previous work experience in the same industry have a straight effect and infer development program to enhance work satisfaction and organizational commitment for staff retention (Kim, 2014).

Supervisor assessment of performance exhibited the sturdiest association with turnover intention followed by self-assessment and objective measures. Moreover, individual nationality and work type performed as moderators, weak performers seem to leave even ensuring work satisfaction and controlling of turnover intention represents involve in quitting without planning comparatively good performers who has little intention to quit (Zimmerman, Darnold, 2009). Individuals explicit aversion to quitting organization for entirely different reasons, work satisfaction is one element which causes intention to leave in spite of authentic intentions, satisfaction with work, promotional prospects, direct superior revealed sturdiest pessimistic link with turnover intention. Moreover, fringe benefits, working atmosphere, and satisfaction with peers also play a role (Lamond et al., 2009).

In public organizations, satisfaction level with family-friendly benefits escalates then it reduces the intention to quit, traditional benefits are optimistically linked with work satisfaction but adversely associated with turnover intention. Moreover, organizations would emphasize the benefits which detect individual specific concerns instead of common benefits provided by most firms in order to establish optimistic employment relations with staff (Ko, Hur, 2014). Organizations can find possible quitters through inspection at numerous points to detect systematic changes in work satisfaction, increasing individual expectation for the future at work can maximize employee retention. Moreover, the intensity of work satisfaction improves with effective interferences which encourage optimistic work satisfaction and decreasing intentions to turnover that direct to increase the tenure of an individual (Chen et al., 2011). Ethical values and optimistic business practices enhance the corporate culture, group creativity and ethical values presented productive linkage and showed association with increased work satisfaction and declined intention to quit (Valentine et al., 2011). Turnover forecasted variations in subsequent employment measures of work satisfaction and mental fitness, individuals who altered their jobs and occupations felt escalation in work satisfaction as well as mental health comparatively those individuals who continued their initial positions or who only altered their jobs (Wright, Bonett, 1992). Learning organizational culture is linked with work satisfaction and encouragement to transfer learning in the staff of information technology, learning culture and work satisfaction has a negative consequence on intentions to quit (Egan et al., 2004).

H3: Work satisfaction has a negative significant influence on turnover intention.

Role of work satisfaction as a mediator

Emotional dissonance is optimistically linked to work exhaustion and not considerably associated with work satisfaction, role ambiguity and work exhaustion influence work satisfaction which has a

further effect on the intention to turnover, and autonomy and conflict do not predict work satisfaction (Rutner et al., 2008). Progressively noteworthy concept of moral stress in workplace's atmosphere and business ethics, research related to employees of financial industry specified moral stress is an important predictor of declined work satisfaction and enlarged employee fatigue and turnover intention (DeTienne et al., 2012). In the perspective of environmental elements i.e. smell, noise, light and color consequences on stress, satisfaction and intentions to turnover. Individuals lean towards performing their work and frequent environmental stressors in the working atmosphere may be tense to the employees and affect their work satisfaction as well as intention to alter job. Moreover, eradicating these elements can enhance work satisfaction and employee retention (Applebaum et al., 2010).

Organizational politics perception and proactive personality association with turnover intention and work satisfaction are arbitrated by surface acting, further optimistic connection of surface acting is found with stress and intent to turnover but showed pessimistic with work satisfaction (Andrews et al., 2016). Career orientation moderate static and dynamic associations of work satisfaction with a turnover intention, as an individual with loyalty, focused seem to respond less on lower work satisfaction with greater turnover intention although generally having a relatively less quitting intention. On contrary to this, an independent individual has greater quitting intention but appears firmly influenced by fluctuations in work satisfaction. Moreover, quitting intention of these employees escalates in a worse situation but reconsider their high preferences for maneuverability to not lose out on better opportunities in present service (Tschopp et al., 2014).

Moral stress seemed to be a considerable forecaster of decreased work satisfaction and increased individual fatigue and intentions to turnover, stress directs to harmful consequences and organizations should take necessary steps to reduce staff fatigue and quitting intentions and enhance work satisfaction, on the other hand, some stressors are out of scope of company actions like family conflict and perception of dead-end job (DeTienne et al., 2012). Work satisfaction increased through health promotion lifestyle. In addition, the greater level of mindfulness has an attractive influence between health promotion lifestyle and satisfaction, and buffering importance between stress and intention to turnover, mindfulness could have an essential function of improving work-related wellness (Lee et al., 2019). Role of causal perceptions, hostile attribution styles are an essential predictor of work satisfaction and intention to turnover but no predicted association of hostile attribution styles with stress (Harvey et al., 2008).

In today's corporate environment, it's not a simple routine for proprietors in the context of Irish trainees to reduce work-related stress and turnover intention and enlarge work satisfaction. In addition, different elements have their own prominence i.e. adequate staff, mentoring and training, standard procedures, dominancy of supervisor, defined roles in minimizing ambiguity and conflicts, concerns related to career development, and exam pressure. Furthermore, through dealing with workloads effectually and concentrating on enhancing the training environment, employers must discover decline in stress and turnover intention, and increase in work satisfaction (Kelly, Barrett, 2011). For low autonomy work, as job complexity increases, work satisfaction, and psychological well-being rises while the intention to turnover declines but contrary to the case of moderate to high job complexity as work satisfaction and psychological well-being reduces, whereas turnover intention is high. Furthermore, in the case of greater work autonomy, moderate to high work complexity is optimistically linked with work satisfaction and psychological well-being (Chung-Yan, 2010).

Greater workplace incivility lessens employee work satisfaction but the higher the job satisfaction lesser the turnover intention. Job satisfaction revealed the whole middle role in the association of workplace incivility and intention to quit as workplace incivility exhibited an indirect effect on the turnover intention with work satisfaction (Chen, Wang, 2019). Stress presented indirect and optimistic influence on turnover intention and work satisfaction play arbitrator role with declining

the positive influence of work stress on intention to turnover, and reward has importance in satisfying the employees. In addition, attractive compensation packages, non-monetary benefits, and healthy working environments would be beneficial in reducing turnover intentions (Liu et al., 2019).

H4: Work Satisfaction mediates the relationship of perceived work stress with turnover intention.

Gender Differences

Females' teachers revealed the greater intensity of work satisfaction comparatively male instructors possibly female have a low expectation regarding job status in contrast to male instructors (Nagar, 2012). A positive association of commuting stress with burnout and intent to leave was found and no direct link is established with work satisfaction but the indirect link was found with work satisfaction and intent to leave through burnout and invariant outcomes for males and females. Individuals and employers are sustaining unseen costs related to commuting stress and this kind of indirect cost may promote individual burnout, turnover intention, and undesirable attitude to work (Amponsah-Tawiah et al., 2016).

In the Indian context, employees of different firms are exposed to adverse links of intrinsic and extrinsic job satisfaction, work involvement, and firm commitment with the turnover intention, further work-related attitudes vary in a different context and have a fluctuating influence on quitting intention. Similarly, age and gender had a pessimistic and optimistic influence on quitting intentions respectively (Shukla et al., 2013). A study related to culinary arts staff showed that gender-wise male employees had a greater extent of internal locus of control comparatively to females, internal locus of control optimistically associated with individuals' satisfaction and their tenure but pessimistically linked with stress and intention to turnover (Huang, 2007).

Detention employees tended to be treatment-focused in old age, highly qualified, limited years of service showed lower job security, whereas younger were punishment-focused and exhibited higher job security. Moreover, turnover intentions were found higher in the female gender who presented lower job security and work satisfaction (Liou, 1998). In predicting intention to turnover among government employees, workplace satisfaction plays a chief role followed by demographic variables and organizational/ relational elements. Moreover, an individual's intention to leave the agency is due to work satisfaction, mental satisfaction with growth opportunities, and age. Further elements of race, ethnicity, age and work satisfaction are the main cause of planning to leave the federal government. Here organizations should address the concerns of employees and explore motivations for the encouragement of individuals' retention (Pitts et al., 2011).

An interesting study related to diversity revealed individuals in diverse workgroups directed towards greater turnover probability, supervisors and executives had less intention to quit and were highly satisfied with their work but comparatively female gender and minorities individuals have lower work satisfaction. On the other hand, minority individuals showed greater turnover intention in contrast to the female who's represented marginally lower intention to quit so therefore it is proposed that women are less likely to quit their job even in case of dissatisfaction (Choi, 2009). Individual features directly influence the employee turnover intention and through interceding work stress and satisfaction, work span and gender have a direct effect on turnover intention (Pradana, Salehudin, 2015). Work-family conflict influences female individual's work stress more powerfully compared to males, family-work conflict and work stress have a sturdier influence on intention to turnover between feminine service employees (Huang, Cheng, 2012).

H5a: Direct effect of perceived work stress on turnover intention is stronger for females than males.

H5b: Indirect effect of perceived work stress on turnover intention via work satisfaction is stronger for females than males.

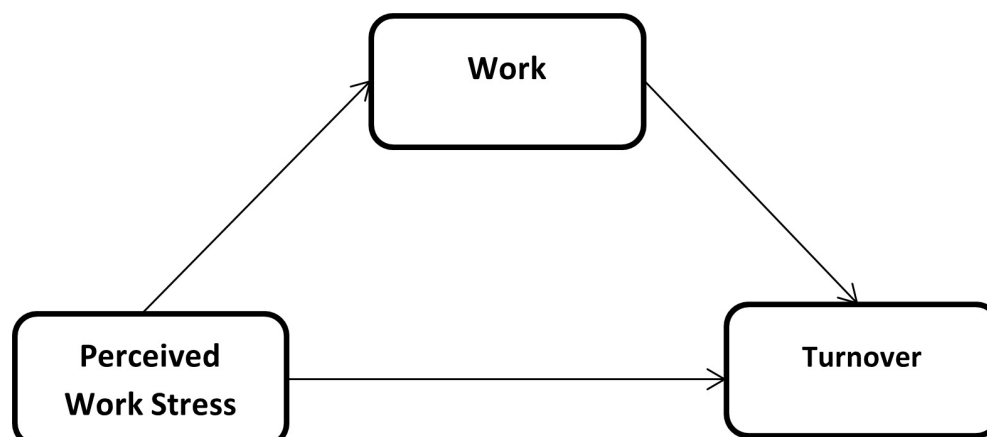


Figure 1. Research model

Methods

Sample and procedure

In a developing country like Pakistan, Covid-19 affected the lives of common people as inflation and unemployment are increasing gradually which hit the private sector severely. Especially teachers of the private school have limited options and compromise with the difficult working condition to retain their service. We opted to gather data from particular private school teachers of the Federal Capital Territory of Pakistan through the self-administrated survey in the first half of the year 2020. For this study, we opted convenience sampling and the final sample of 269 respondents was considered out of which 55.4% were female and 44.6% were male. Different characteristics detail is given below in Table 1, which include qualification in which graduate participants were mainly 68%, postgraduate was 20.4% and undergraduate were 11.5% respectively. Moreover, participants with 1 to 4 years of experience were 33.8%, experience with 5 to 8 years was 24.9%, less than 1 year of experience was 32.7% and above 8 years of experience were only 8.6%. Furthermore, the 26 to 40 years of age group were 49.8% of majority employees, 25 years or under were 43.5% and above 40 were only 6.7% of respondents.

Table 1. Sample Characteristics

Sample Characteristics	%	Sample Characteristics	%
Gender		Qualification	
Male	44.6	Undergraduate	11.5
Female	55.4	Graduate	68
		Post Graduate	20.4
Age		Experience	
25 years or under	43.5	< 1 year	32.7
26 to 40 years	49.8	1 – 4 years	33.8
Above 40	6.7	5 – 8 years	24.9
		Above 8 years	8.6

Measures

Different reliable measures by former researchers used already in different researches were used to test the hypothesis. Work satisfaction is measured using the six-item satisfaction scale (Brayfield & Rothe, 1951), and perceived work stress is measured using the four-item scale of (Bluedorn, 1982), and the four-item scale of turnover intention by (Cohen et al., 1983). Moreover, 5 points Likert scale from strongly disagree = 1 to strongly agree = 5 are used for Work Satisfaction and Turnover Intention, and Never = 1 to Very Often = 5 is used for perceived work stress.

Data Analysis and Results

Structural Equation Modeling (SEM) is used for data analysis and Confirmatory Factor Analysis (CFA) was performed for instrument validity.

Measurement and validity

For all variables, Average Variance Extracted (AVE) and Construct Reliability (CR) were measured and the factor loading of each item more than or equal to 0.50 would be valid (Cua et al., 2001). All fourteen items were valid, which is shown in the below path diagram in figure 2. AVE more than 0.50 represents instrument is valid (Fornell, Larcker, 1981).

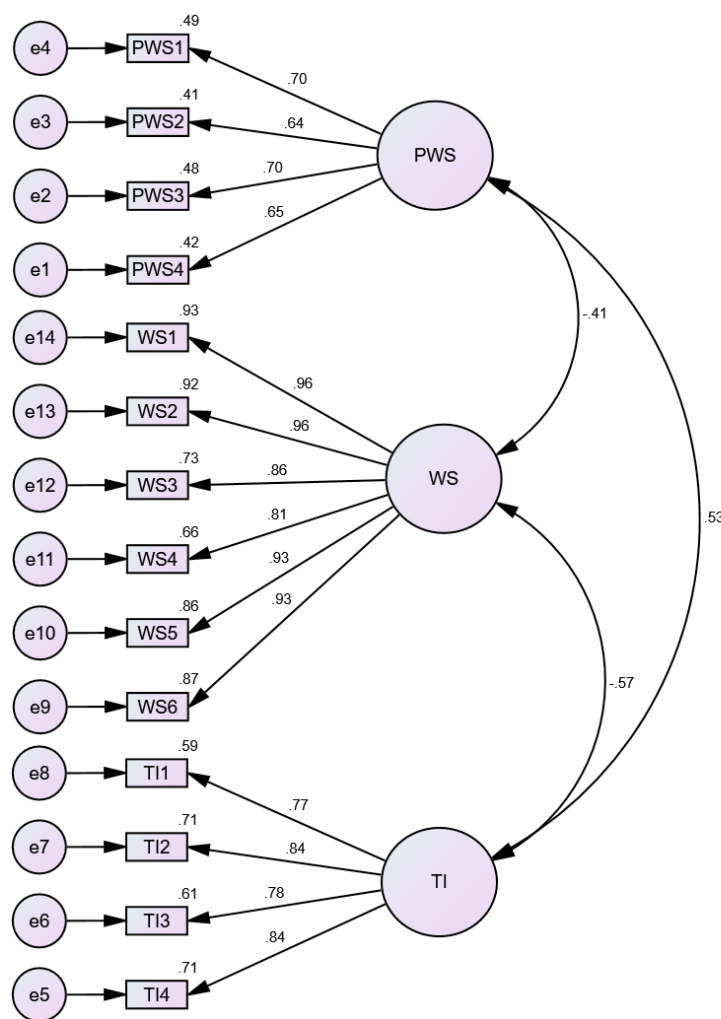


Figure 2. Path diagram

Table 2. Descriptive Statistics, Reliability and Correlation Analysis

	Mean	S.D	PWS	WS	TI
PWS	2.3039	.82683	(0.766)		
WS	2.4108	1.32503	-.348**	(0.966)	
TI	2.6087	1.02648	.441**	-.535**	(0.833)

Where N = 269, PWS = perceived work stress, WS = work satisfaction, TI = turnover intention. **p < 0.01

Descriptive statistics are given below in table 2, correlation and reliability of variables are mentioned which shows mean values of perceived work stress and work satisfaction are essential

factors for turnover intention. In correlation analysis, the weak association of Perceived Work Stress and Turnover Intention was found but negatively between Perceived Work Stress and Work Satisfaction and Work Satisfaction and Turnover Intention, which confirms no multicollinearity issue. Cronbach’s Alpha reliability of each variable is mentioned in the above table i.e. Perceived Work Stress (0.766), Work Satisfaction (0.966), and Turnover Intention (0.833) which lies between the range of 0.70 – 0.90; therefore, that shows results are reliable (Hair et al., 1998).

Results and Discussion

SEM is performed to examine the links between perceived work stress, work satisfaction, and turnover intention, and mediating influence of work satisfaction between perceived work stress and turnover intention. Finally, conditional direct and indirect effect sub-group approach male and female is measured gender-wise.

In 2000, J. B. E. M Steenkamp and H. Baumgartner described the CFA approach to measure the strength and weakness of latent variables (Steenkamp, Baumgartner, 2000). The psychometric properties which were generally comprised of Adjusted Goodness of Fit Index (AGFI), Chi-Square, Goodness of Fit Statistic (CMIN/DF), Comparative Fit Index (CFI), the Goodness of Fit Index (GFI), Root Mean Square Error of Approximation (RMSEA), Tucker-Lewis Index (TLI). The model seems to be fit if the RMSEA value were 0.08 or less. In addition to this value of AGFI, CFI, GFI and TLI were closer to 0.95 or higher and CMIN/DF would be from 3.0 to 5.0 (Bentler, Bonett, 1980; path analysis, structural equation modeling, and related multivariate statistical methods are based on maximum likelihood or generalized least squares estimation developed for covariance structure models (CSMsHu, Bentler, 1999)which includes using the maximum likelihood (ML. Model fitness index direct and indirect effects are shown in table 3.

Table 3. Model fit index

Indexes of fit factors	Direct effect	Indirect effects values
χ^2/df	2.070	2.484
AGFI	.939	.880
TLI	.967	.957
RMSEA	.063	.074
GFI	.968	.916
CFI	.977	.965

We hypothesized that perceived work stress leads to turnover intention among teachers, the direct influence of perceived work stress on turnover intention without mediation is shown below in figure 3. Our results state that perceived work stress influences the turnover intention positively therefore, it supports hypothesis 1 and demonstrates perceived work stress is an essential predictor of turnover intention. and details are mentioned in table 4.

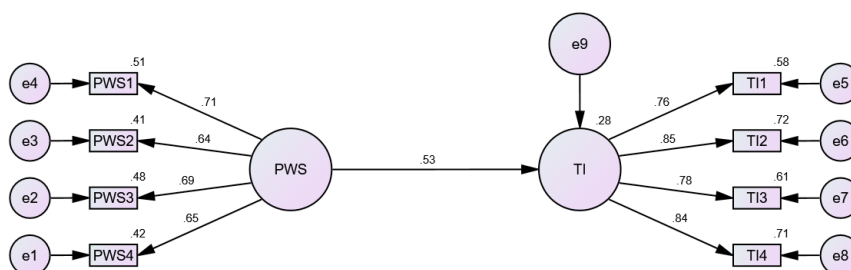


Figure 3. Direct effect without mediation

Similarly, we hypothesized that perceived work stress minimizes work satisfaction and further work satisfaction minimizes the turnover intention among teachers. The indirect influence of perceived work stress on turnover intention without the mediation of work satisfaction is shown below in figure 4. Here, our results state that perceived work stress negatively influences work satisfaction and work satisfaction and negatively influences turnover intention. Therefore, it supports hypothesis 2 and hypothesis 3, and details are mentioned in table 4.

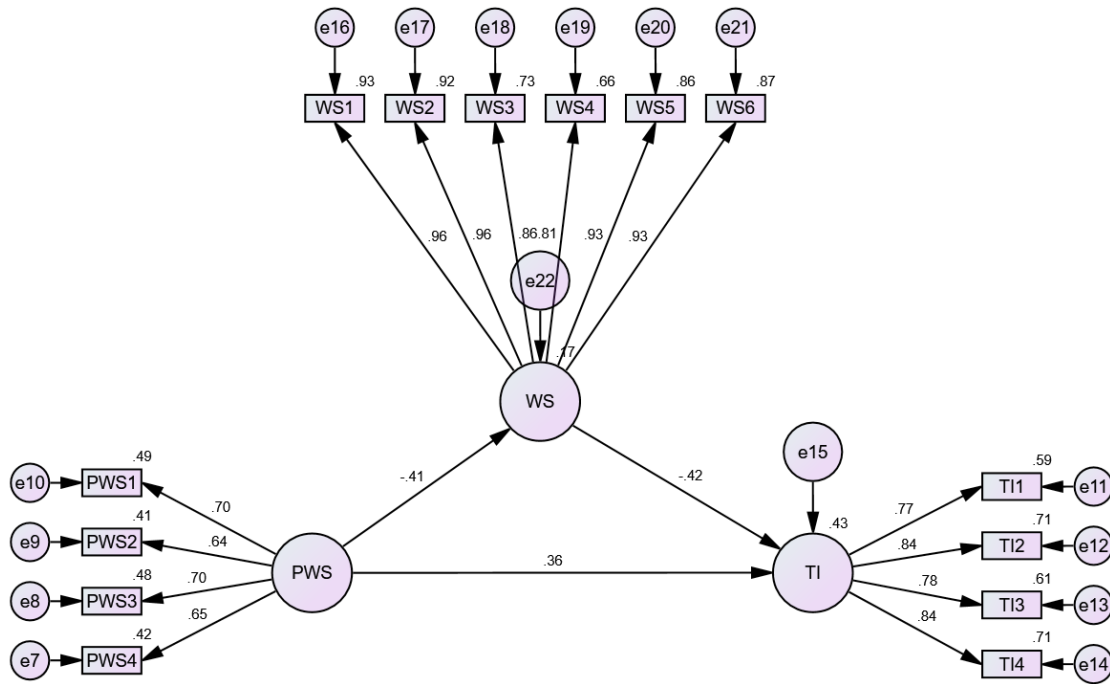


Figure 4. Indirect effect with mediator (Work Satisfaction)

Likewise, to confirm the mediation hypothesis requires direct, indirect, and total effects under mediation analysis are shown in table 4. Moreover, the presence of mediator i.e. work satisfaction between perceived work stress and turnover intention, the indirect effect is significant but reduced compared to the direct effect of perceived work stress on turnover intention, and the decrease in beta indicates the occurrence of partial mediation, so, therefore, it support hypothesis 4 and details are mentioned in the following table.

Table 4. Mediation Analysis

Model 1 Total Effect			Model 2 Direct Effect			Model 3 Indirect Effect	
Path	Coefficient	SE	Path	Coefficient	SE	Path	Coefficient
PWS → TI	.532***	.11	PWS → TI	.359***	.10	PWS → WS → TI	.173***
PWS → WS	.408***	.15					
WS → TI	-.424***	.04					

Finally, conditional effect subgroup approach, male and female is measured directly and indirectly, however, perceived work stress among female teachers influence turnover intention sturdier comparatively to male, therefore, it supports the hypothesis 5a but contrary to it, indirect influence of perceived work stress on turnover intention via work satisfaction among female are comparatively weaker than male, thus it doesn't support hypothesis 5b and beta reduced suddenly in the female scenario than the male which shows work satisfaction has more influence among female than male as given in following table 5.

Table 5. Conditional Effect (Sub Group Approach, Male and Female)

Total Effect			Direct Effect			Indirect Effect	
Path	Coefficient	S.E	Path	Coefficient	S.E	Path	Coefficient
Female							
PWS → TI	.575***	.13	PWS → TI	.404***	.12	PWS → WS → TI	.171***
PWS → WS	-.501***	.16					
WS → TI	-.341***	.06					
Male							
PWS → TI	.391***	.22	PWS → TI	.199***	.17	PWS → WS → TI	.191***
PWS → WS	-.349***	.33	WS → TI	-.549***	.05		

Conclusion

Institutions must adopt different strategies to enhance knowledge workers' adaptability and release stress to tackle the higher quitting intentions by ensuring incessant enhancement and healthy development of virtual teaching (Liu et al., 2021). In every sector, many changes are occurring due to the COVID-19 crisis, and most of the physical official work has been transforming into the online medium which is creating many ambiguities among employees in performing their job which badly hit the mental health of individuals in this scenario. The school teacher's stress of the private sector in developing countries like Pakistan leave different consequences, especially during COVID-19.

We found that perceived work stress directly affects turnover intention of knowledge workers of the private education sector in federal capital territory but seems that an increase in work satisfaction among educators weakens the association of perceived stress and turnover intention. Moreover, gender differences revealed a unique contribution in the female situation which exhibited that work satisfaction declines the influence of stress on turnover intention in greater amount instead of males. In female teacher's satisfaction with their job demonstrated the reduction in turnover intention related to employment.

Overall, the results should assist the management of the organization to take precautionary measures for their employees for better performance by increasing their satisfaction through addressing the concerns of staff during pandemics i.e training, usage, awareness, and efficiency of a variety of tools in online teaching, etc. Management of institutions with their leadership should adopt strategies for implementation to get desired results.

Limitations

The main limitation of this research is that it was carried out in the federal capital territory of Pakistan which is an urban area that is included in the highest positive rate of Corona affected cities, therefore it is confined to the capital territory. Future studies should focus on different regions with other jurisdictions locally or internationally more affected regions.

References

- Alves, R., Lopes, T., Precioso, J. (2020). Teachers' well-being in times of Covid-19 pandemic: factors that explain professional well-being. *IJERI: International Journal of Educational Research and Innovation*, 15, 203–217. DOI: 10.46661/ijeri.5120
- Amponsah-Tawiah, K., Annor, F., Arthur, B. G. (2016). Linking commuting stress to job satisfaction and turnover intention: The mediating role of burnout. *Journal of Workplace Behavioral Health*, 31(2). DOI: 10.1080/15555240.2016.1159518
- Andrews, M. C., Kacmar, K. M., Valle, M. (2016). Surface acting as a mediator between personality and attitudes. *Journal of Managerial Psychology*, 31(8). DOI: 10.1108/JMP-11-2015-0414

- Bentler, P. M., Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3). DOI: 10.1037/0033-2909.88.3.588
- Bhattacharya, A. (2016). Predictability of job-satisfaction: An analysis from age perspective author(s): anshuman bhattacharya published by: Shri ram centre for industrial relations and human resources stable. *Predictability of Job-S*. 46(3), 498–509.
- Bluedorn, A. C. (1982). A Unified Model of Turnover from Organizations. *Human Relations*, 35(2). DOI: 10.1177/001872678203500204
- Brayfield, A. H., Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology*, 35(5). <https://doi.org/10.1037/h0055617>
- Chen, G., Ployhart, R. E., Thomas, H. C., Anderson, N., Bliese, P. D. (2011). The power of momentum: A new model of dynamic relationships between job satisfaction change and turnover intentions. *Academy of Management Journal*, 54(1), 159–181. DOI: 10.5465/amj.2011.59215089
- Chen, H. T., Wang, C. H. (2019). Incivility, satisfaction and turnover intention of tourist hotel chefs: Moderating effects of emotional intelligence. *International Journal of Contemporary Hospitality Management*, 31(5), 2034–2053. DOI: 10.1108/IJCHM-02-2018-0164
- Choi, S. (2009). Diversity in the US federal government: Diversity management and employee turnover in federal agencies. *Journal of Public Administration Research and Theory*, 19(3), 603–630. DOI: 10.1093/jopart/mun010
- Chung-Yan, G. A. (2010). The nonlinear effects of job complexity and autonomy on job satisfaction, turnover, and psychological well-being. *Journal of Occupational Health Psychology*, 15(3). DOI: 10.1037/a0019823
- Cohen, S., Kamarck, T., Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4). DOI: 10.2307/2136404
- Cropanzano, R., Howes, J. C., Grandey, A. A., Toth, P. (1997). The relationship of organizational politics and support to work behaviors, attitudes, and stress. *Journal of Organizational Behavior*, 18(2). DOI: 10.1002/(SICI)1099-1379(199703)18:2<159::AID-JOB795>3.0.CO;2-D
- Cua, K. O., McKone, K. E., Schroeder, R. G. (2001). Relationships between implementation of TQM, JIT, and TPM and manufacturing performance. *Journal of Operations Management*, 19(6). DOI: 10.1016/S0272-6963(01)00066-3
- Daniel, S. J. (2020). Education and the COVID-19 pandemic. *Prospects*, 49(1–2). DOI: 10.1007/s11125-020-09464-3
- DeTienne, K. B., Agle, B. R., Phillips, J. C., & Ingerson, M. C. (2012). The impact of moral stress compared to other stressors on employee fatigue, job satisfaction, and turnover: An empirical investigation. *Journal of Business Ethics*, 110(3), 377–391. DOI: 10.1007/s10551-011-1197-y
- Egan, T., Yang, B., Bartlett, K. (2004). The effects of organizational learning culture and job satisfaction on motivation to transfer learning and turnover intention. *Human Resource Development Quarterly*, 15(3), 279–301.
- Fornell, C., Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1). DOI: 10.2307/3151312
- Harris, K. J., Harvey, P., Kacmar, K. M. (2009). Do social stressors impact everyone equally? An examination of the moderating impact of core self-evaluations. *Journal of Business and Psychology*, 24(2), 153–164. DOI: 10.1007/s10869-009-9096-2
- Hassan, S. (2013). The Importance of Role Clarification in Workgroups: Effects on Perceived Role Clarity, Work Satisfaction, and Turnover Rates. *Public Administration Review*, 73(5), 716–725. DOI: 10.1111/puar.12100
- Hu, L. T., Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1). DOI: 10.1080/10705519909540118

- Huang, H. I. (2007). Understanding culinary arts workers: Locus of control, job satisfaction, work stress and turnover intention. *Journal of Foodservice Business Research*, 9(2–3). DOI: 10.1300/J369v09n02_09
- Huang, M. H., Cheng, Z. H. (2012). The effects of inter-role conflicts on turnover intention among frontline service providers: Does gender matter? *Service Industries Journal*, 32(3). DOI: 10.1080/02642069.2010.545391
- Jamal, M. (2007). Job stress and job performance controversy revisited: An empirical examination in two countries. *International Journal of Stress Management*, 14(2), 175–187. DOI: 10.1037/1072-5245.14.2.175
- Kabungaidze, T., Mahlatshana, N., Ngirande, H. (2013). The impact of job satisfaction and some demographic variables on employee turnover intentions. *International Journal of Business Administration*, 4(1), 53–65. DOI: 10.5430/ijba.v4n1p53
- Kalleberg, A. L. (1977). Work values and job rewards: A theory of job satisfaction. *American Sociological Review*, 42(1), 124–143.
- Karimi, R. (2011). Reduce Job stress in Organizations: Role of Locus of Control. *International Journal of Business and Social Science*, 2(18), 232–236.
- Kelly, T., Barrett, M. (2011). the Leading Causes and Potential Consequences of Occupational Stress: a Study of Irish Trainee Accountants. *Irish Accounting Review*, 18(2).
- Kim, H., Stoner, M. (2008). Burnout and turnover intention among social workers: Effects of role stress, job autonomy and social support. *Administration in Social Work*, 32(3), 5–25. DOI: 10.1080/03643100801922357
- Kim, L. E., Asbury, K. (2020). ‘Like a rug had been pulled from under you’: The impact of COVID-19 on teachers in England during the first six weeks of the UK lockdown. *British Journal of Educational Psychology*, 90(4), 1062–1083. DOI: 10.1111/bjep.12381
- Kim, N. (2014). Employee turnover intention among newcomers in travel industry. *International Journal of Tourism Research*, 16(1). DOI:10.1002/jtr.1898
- Ko, J., Hur, S. (2014). The impacts of employee benefits, procedural justice, and managerial trustworthiness on work attitudes: Integrated understanding based on social exchange Theory. *Public Administration Review*, 74(2), 176–187. DOI: 10.1111/puar.12160
- Kuotsai, T. L. Employee turnover intention and professional orientation : a study of detention workers. *Public administration quarterly*, 22(2), 161–175.
- Lee, J. H., Hwang, J., Lee, K. S. (2019). Job satisfaction and job-related stress among nurses: The moderating effect of mindfulness. *Work*, 62(1). DOI: 10.3233/WOR-182843
- Li, H., Hafeez, H., Zaheer, M. A. (2021). COVID-19 and pretentious psychological well-being of students: a threat to educational sustainability. *Frontiers in Psychology*, 11(January). DOI: 10.3389/fpsyg.2020.628003
- Liu, F., Chen, H., Xu, J., Wen, Y., Fang, T. (2021). Exploring the relationships between resilience and turnover intention in chinese high school teachers: Considering the moderating role of job burnout. *International Journal of Environmental Research and Public Health*, 18(12). DOI: 10.3390/ijerph18126418
- Liu, J., Zhu, B., Wu, J., Mao, Y. (2019). Job satisfaction, work stress, and turnover intentions among rural health workers: a cross-sectional study in 11 western provinces of China. *BMC Family Practice*, 20(1), 1–11. DOI: 10.1186/s12875-019-0904-0
- Locke, E. A. (1969). What is job satisfaction? *Organizational Behavior and Human Performance*, 4(4). DOI: 10.1016/0030-5073(69)90013-0
- MacIntyre, P. D., Gregersen, T., Mercer, S. (2020). Language teachers’ coping strategies during the Covid-19 conversion to online teaching: Correlations with stress, wellbeing and negative emotions. *System*, 94, 102352. DOI: 10.1016/j.system.2020.102352

- Matiz, A., Fabbro, F., Paschetto, A., Cantone, D., Paolone, A. R., Crescentini, C. (2020). Positive impact of mindfulness meditation on mental health of female teachers during the COVID-19 outbreak in Italy. *International Journal of Environmental Research and Public Health*, 17(18), 1–22. DOI: 10.3390/ijerph17186450
- Meier, K. J., Hicklin, A. (2008). Employee turnover and organizational performance: Testing a hypothesis from classical public administration. *Journal of Public Administration Research and Theory*, 18(4), 573–590. DOI: 10.1093/jopart/mum028
- Parker, D. F., DeCotiis, T. A. (1983). Organizational determinants of job stress. *Organizational Behavior and Human Performance*, 32(2). DOI: 10.1016/0030-5073(83)90145-9
- Pasupuleti, S., Allen, R. I., Lambert, E. G., Cluse-Tolar, T. (2009). The impact of work stressors on the life satisfaction of social service workers: A preliminary study. *Administration in Social Work*, 33(3). DOI: 10.1080/03643100902988141
- Pitts, D., Marvel, J., Fernandez, S. (2011) So Hard to Say Goodbye? Turnover Intention among US Federal Employees. *Public Administration Review*, 71, 751–760.
- Pradana, A., Salehudin, I. (2015). Work overload and turnover intention of junior auditors in greater jakarta, indonesia. *The South East Asian Journal of Management*, 9(2). DOI: 10.21002/seam.v9i2.4950
- Riordan, C. M., Griffeth, R. W. (1995). The opportunity for friendship in the workplace: An underexplored construct. *Journal of Business and Psychology*, 10(2), 141–154. DOI: 10.1007/BF02249575
- Rizzo, J. R., House, R. J., Lirtzman, S. (2016). Role conflict and ambiguity in complex organizations. *Johnson Graduate School of Management*, 15(2), 150–163.
- Shukla, A., Srinivasan, R., Chaurasia, S. (2017). Impact of work related attitudes on turnover intention. *Indian Journal of Industrial Relations*, 49(1), 111–122.
- Steenkamp, J. B. E. M., Baumgartner, H. (2000). On the use of structural equation models for marketing modeling. *International Journal of Research in Marketing*, 17(2–3). DOI: 10.1016/S0167-8116(00)00016-1
- Tian-Foreman, W. (2009). Job satisfaction and turnover in the Chinese retail industry. *Chinese Management Studies*, 3(4), 356–378. DOI: 10.1108/17506140911007503
- Tschopp, C., Grote, G., Gerber, M. (2014). How career orientation shapes the job satisfaction-turnover intention link. *Journal of Organizational Behavior*, 35(2), 151–171. DOI: 10.1002/job.1857
- Valentine, S., Godkin, L., Fleischman, G. M., Kidwell, R. (2011). Corporate ethical values, group creativity, job satisfaction and turnover intention: the impact of work context on work response. *Journal of Business Ethics*, 98(3), 353–372. DOI: 10.1007/s10551-010-0554-6
- Wright, T. A., Bonett, D. G. (1992). The effect of turnover on work satisfaction and mental health: support for a situational perspective. *Journal of Organizational Behavior*, 13(6), 603–615.
- Zhou, X., Yao, B. (2020). Social support and acute stress symptoms (ASSs) during the COVID-19 outbreak: deciphering the roles of psychological needs and sense of control. *European Journal of Psychotraumatology*, 11(1). DOI: 10.1080/20008198.2020.1779494
- Zimmerman, R. D., Darnold, T. C. (2009). The impact of job performance on employee turnover intentions and the voluntary turnover process: A meta-analysis and path model. *Personnel Review*, 38(2), 142–158. DOI: 10.1108/00483480910931316

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Последствия COVID-19: как удовлетворённость работой опосредует связь воспринимаемого рабочего стресса с намерением уволиться среди работников умственного труда в развивающихся странах

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Аннотация. *Цель.* В организациях рабочий стресс рассматривается как основная причина неудовлетворённости, которая в конечном итоге приводит к текучести кадров. Это исследование посвящено работникам умственного труда частных школ, зарегистрированных в Федеральной столичной территории Пакистана во время COVID-19. Эмпирически изучалось влияние воспринимаемого рабочего стресса на намерение уволиться и удовлетворённость работой, включая изучение эффекта медиации удовлетворённости работой на связь воспринимаемого рабочего стресса с намерением уволиться. В итоге было измерено прямое и косвенное влияние пола. *Дизайн исследования.* Данные были собраны у учителей частных школ Федеральной столичной территории Пакистана в форме опроса. Окончательная выборка состояла из 269 учителей. Гипотезы проверялись с помощью моделирования структурными уравнениями. *Результаты.* Воспринимаемый стресс на работе положительно влияет на намерение работников умственного труда сменить работу, но удовлетворённость работой снижает влияние стресса на намерение уволиться и, по-видимому, частично опосредует связь воспринимаемого рабочего стресса и намерения уволиться. Наконец, половые различия показали, что удовлетворённость работой снижает влияние стресса на намерение сменить работу среди женщин сильнее, чем среди мужчин, хотя прямое влияние уже было слабее среди учителей-мужчин, чем среди женщин. *Практические последствия.* Это исследование поможет лицам, принимающим решения, лучше понять последствия воспринимаемого рабочего стресса и удовлетворённости работой. Более того, руководство может сформулировать стратегии удержания сотрудников, чтобы свести к минимуму текучесть кадров умственного труда, которые вносят свой вклад в благосостояние общества. Организации должны уделять преимущественное внимание удовлетворённости работой сотрудников при любых обстоятельствах, чтобы приложить все усилия для повышения производительности, поскольку намерение уволиться является основной причиной воспринимаемого рабочего стресса. Удовлетворённость работой сводит к минимуму влияние воспринимаемого рабочего стресса на намерение уволиться среди работников умственного труда, особенно в текущем сценарии, когда почти каждая организация затронута пандемией COVID-19, а официальная работа была перенесена из физической в онлайн-среду, что порождает неопределённость во всем мире. *Ценность результатов.* В этой исследовательской работе излагаются новые знания о предпосылках индивидуальной удовлетворённости работой, стресса и намерения уволиться в сфере образования.

Ключевые слова: воспринимаемый рабочий стресс, удовлетворённость работой, намерение сменить место работы, работники умственного труда, COVID-19.