

IMPACT OF STRESS ON SELF EFFICACY AND WORK ENGAGEMENT IN TEACHING AUTISTIC STUDENTS

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ABSTRACT

Stress is common in teachers, it affects teachers' self-efficacy and work engagement. The objectives of study were; to determine the stress that special educators face when teaching children with autism spectrum disorder (ASD) and the impact of stress on self-efficacy and work engagement of teachers. A quantitative design was used with survey method. This study used an interrelation design to investigate relations in the variables stress, work engagement, and teachers' self-efficacy in teaching autistic students. The sample consisted of 100 teachers from Islamabad who were teaching to the students with ASD. The multiple regressions analysis show that the relationship between work engagement and teachers' stress was significant. Teacher self-efficacy was calculated and found statistically significant as shown by p value was 0.000 It was found that time management level and work related stress indicate high level of stress in teachers. Moderate level of stress as in professional manifestation, fatigue manifestation, analysis revealed that teachers' physical responses to stress, e.g., changes in sleep, exhaustion, etc. and low level of teacher's involvement and beliefs regarding his or her job. Stress, self-efficacy, and work engagement have significant relationship. It was concluded that stress has negative effect on self-efficacy. And work engagement has positive effect on self-efficacy.

KEYWORDS: Autism spectrum disorder, self-efficacy, work engagement, Teachers, Special Education

INTRODUCTION

Stress is a physiological and psychological reaction of an individual toward him/herself and external environment as a result of being affected by involved environment and working conditions (Aydin & Kaya, 2016). Special education teachers who teach special needs children in regular classes documented to have high stress levels. stress and low work satisfaction among special education teachers are likely to be preventable if they cope up with stress (Platsidou, 2010).

Teaching is not a simple or straightforward profession but it is one of the most difficult profession. It is a challenging career due to its complexities. Although job-related stress is an issue in all professions, recent research show that teaching is one of the career with

the highest rates of stress (Engel Brecht, Oswald, & Eloff, 2003). Teaching children with ASD is more challenging than teaching students with other impairments, since this group of educators had greater levels of stress and low self-efficacy (Zarafshan, Mohammadi, Ahmadi & Arsalani, 2013). According to the Pakistan Centre for Autism (2020), Pakistan has 350,000 autistic children. Autism affects one out of every sixty-six children, and the number of autistic children is increasing with the passage of time. According to the Autism Society of North Carolina Centers for Disease Control and Prevention, (2019), the CDC stated that the incidence ratio of ASD was one in 68 in 2017, up 30% from one in 88 in 2012. Teacher's position becomes more vital. When working with ASD students in special education, academics must be aware of a variety of disabilities and health concerns. When a special education teacher's workload exceeds to the time availability, work overload is an issue. Teachers are unsure about what to do in specific situations or when expectations are unclear, stress arises (Haydon, Stevens & Leko 2018). As study of Brunsting, Sreckovic and Lane (2014) directed a burnout analysis of teachers from 1979 to 2013. They examined twenty-three studies in which teacher burnout in terms of emotional weariness, depersonalization, and absence of private achievement. Stress management and emotional regulation were found to have an impact on burnout reduction.

Literature Review

According to the findings of Symes and Humphrey (2010) teachers with insufficient training and have weaker interactions with students with ASD, resulting in increased occupational stress. Low levels of self-efficacy and a lack of control are associated to professional stress. Research by Abu Tawilah, (2007) explained in his study focusing to see if there were any variations in burnout levels between educators of autistic students and teachers of hearing-impairment, visual-impairment, and mentally handicapped students. The findings revealed that there were statistical disparities in burnout levels depending on the kind of impairment and the gender of the educator. The level of self-efficacy in 44 teachers who deal autistic kids and reveal a link in teacher stress and classroom management. The result has a size of 0.4, indicating that it is of medium size. In a separate research, forty-seven academics used a newly constructed instrument, the autism self-efficacy scale for instructors, to assess teacher self-efficacy with autistic children, but their goal was to confirm the instrument's reliability. Between-groups, the effect size was considerable (1.5 d). The study provides background material that is necessary for understanding the research's needs (Ruble & McGrew, 2013). Autistic people remain disorganized individuals who differ in their intellectual ability, social skills, verbal communication skills, and sensory reactions. The magnitude of these differences in the number of autistic persons ranges from minor to severe. Furthermore, many traits and abilities are prominent in autistic students, which can lead to mental burnout in their teachers, who are faced with many demanding situations and hardships while teaching their students, and this can shape the main thing of emotional strain and stress. A trained teacher of autistic pupils cannot be just any educator. A good educator of ASD students

must complete comprehensive education besides high-quality guided experience, which, in turn, develops the educators' own capacities, allowing them to appropriately address their school children (Hallahan & Kauffman, 2016)

For teachers of students with ASD, the challenges and stresses of teaching ASD students are best dealt with when the teacher believes that he/she has the ability to cope with them (self-efficacy), has learned those coping skills via interactions with others in the workplace, whether formal or informal (social cognitive theory), and believes he/she has an influence on the workplace environment (Accardo, Fennegan, Gulkus & Papay, 2017).

Self-efficacy in the context of social cognitive theory: self-efficacy, according to Bandura (1986), is an individual's belief in his/her ability to accomplish a task, perform a function, or achieve a goal. self-efficacy can increase an individual's likelihood of success in that regard (Bandura, 1986). It is an important element of the concept that self-efficacy operates independently of actual ability. A person who is otherwise quite capable of performing a task but has low self-efficacy may fail, while another person who is ostensibly not qualified to perform that task but has high perceived self-efficacy may succeed (Bandura, 1986). This is a critical concept for the present study, as ASD teachers' workplace engagement and job satisfaction are directly related to how well they fulfill their teaching roles, as well as how well they perceive their own abilities to do so (Accardo et al., 2017)

The transactional model of stress among teachers: According to the transactional model of stress (Lazarus & Folkman, 1984), transactional processes between an individual and their environment contribute to the direct or indirect prediction of health outcomes. The model's structure distinguishes three types of factors: explanatory factors, such as social and personal antecedents (the individual's baseline resources); psychological and physiological mediating processes (actions in the face of adversity); and health outcome factors. Applied to stress, the transactional model describes a direct relationship between self-efficacy and stress, work involvement.

Majority of past studies focused on general education teacher's self-efficacy, with special education teachers receiving less attention. This research focused on ASD students (Skaalvik & Skaalvik, 2014). The majority of teachers lack specialized training on how to educate autistic pupils. In a context where many teachers are educating children with autism, most teachers were inexperienced with any of the teaching styles that were explored (Ruble & McGrew, 2011).

Only private institutions are found working in this field in Pakistan, holding seminars and workshops to raise awareness among parents, professionals, and government officials. However, at the federal government, there is just one institute, which was established under a ministry of human rights project for autistic children. It focuses on the management and education of children with autism. There is a need to raise awareness about this illness at the federal level. Additionally, childcare professionals should be familiar with early detection, sensory difficulties, and home-based therapy. This study would help to improve the autistic students' performance by teacher's efficiency.

Teachers' self-efficacy has long been linked to student behavior and outcome. Teachers with high self-efficacy are open to new ideas and are willing to experiment with new methods in relation to work. This study may add to the growing body of knowledge regarding self-efficacy and work engagement in special education teachers. Few research questions were designed to get their satisfactory answers and these were; what is the impact of stress on self-efficacy of the teachers who teach autistic students? What is the impact of stress on work engagement of the teachers who teach autistic students? What is the impact of self-efficacy on work engagement in teaching autistic students? What is the interrelationship between stress, self-efficacy and work engagement?

METHODS

Participant and procedure

In this study we applied quantitative design by using survey method. This study used an interrelation design which investigates relations between the variables i.e. stress, work engagement, and teacher self-efficacy in teaching autistic students. Teachers stress is an independent variable, whereas teacher's self-efficacy and work management are dependent variables. The teachers stress and teacher self-efficacy are compared in terms of their job status, and educational level, Behavioral manifestations. Data collected from special education school of Islamabad autism resource center. The population of study is comprised of special educators working with autistic students. Technique of random sampling was adopted for the selection of the sample. The sample was consisted of 100 teachers from Islamabad. The teachers of the special education were the sample of this research. Data was collected through standardized tools. The survey was made up of three parts including demographic data and three other tools. The Teacher Stress Inventory and the Autism Self-Efficacy Teacher Scale, along with the Utrecht Work Engagement and a researcher-developed demographic information sheet, were included in the survey. The collected data was analyzed by statistical technique such as mean SD correction and multiple regression analysis.

Measures

Teacher Stress Inventory (TSI). Teacher Stress Inventory is a questionnaire that assesses the level of stress Dr. Michael Fimian produced the Teacher Stress Inventory (TSI), a 49-item inventory designed to capture characteristics of teacher stress that previous stress instruments haven't been able to assess. "Sources of Stress" and "Manifestations of Stress" are the two broad categories that make up the TSI. In which stress is exhibited within each category there are five subscales. The first five subscales, which are categorized as Sources of Stress, contain questions relating to discipline, work-related stressors, time management, professional stressors, and professional investment. Other five categorized as Manifestations of Stress, stomach ailments, cardiovascular disease, excessive exhaustion, or through emotional or behavioral materialization (Fimian, 1987).

ASSET. The ASSET is a 30-item self-report measure of teachers' beliefs about their

ability to implement appropriate teaching strategies when working with students with ASD (Ruble, Toland, et al., 2013). Teachers were asked to rate their efficacy to carry out several different assessment, intervention, and classroom-based practices relevant to the needs of students with ASD. Teachers rated their self-efficacy to execute a range of duties regarding a specific student with ASD in their class using a scale from 0 (cannot do at all) to 100 (highly certain can do). The 100-point rating scale was used based on Bandura's guidelines for constructing self-efficacy scales. The total score was score across the 30 items. Scale internal consistency was .98. Total scores were used for all data analyses (higher total scores demonstrating higher self-efficacy beliefs).

Utrecht Work Engagement Scale (UWES) The Utrecht Work Engagement Scale (UWES) was developed by Schaufeli et al. (2002). It contains 17 items on a seven-point Likert scale and three subscale measures, including vigor, dedication, and absorption (0 = never, 6 = always). Vigor is characterized by high levels of energy, resilience, and persistence in the face of obstacles and difficulties. Dedication refers to a sense of enthusiasm and inspiration. Absorption means full concentration on one's teaching tasks. The total score ranges from 0 to 102, with high scores indicating greater levels of work engagement. The Chinese version of UWES has good reliability and validity (Li et al., 2015). In the current study, the Cronbach's alpha coefficient for the UWES was 0.88.

RESULTS

A survey was directed to search the impact of stress on self-efficacy and work engagement in teaching autistic students. Data was collected using a questionnaire using a Likert scale, which was then analyzed and interpreted in tables.

Table 1: Descriptive Statistics

Descriptive Statistics									
	N	Min	Max	Mean	Std. Deviation	Skewness		Kurtosis	
Teacher Stress Inventory	100	30	198	148.76	35.906	-.982	.241	.904	.478
Autism Self-Efficacy	100	20	92	53.49	17.862	-.149	.241	-.754	.478
Work Engagement	100	13	73	52.80	14.521	-.645	.241	-.817	.478

Table 1 Describe that 100 respondent participate in this research. The minimum stress of teachers is 30 & maximum is 198.the average stress is 148.76 among teachers. Standard deviation measures the dispersion among data. The variation among teacher's stress is 35.9. The minimum level of self-efficacy is 20 and maximum is 92 in teachers. Self-efficacy Mean =17.6 and SD= 17.8. another variable work engagement minimum value is 13 & maximum value is 73. Average level of work engagement is 52.8 and variation among teachers work engagement is 14.5.all variables descriptive shows having left skewed distribution and not follows kurtosis distribution.

Table 2: Correlations

Correlations				
		Teacher Stress Inventory Scale	Autism Self-Efficacy Scale	Work Engagement Scale
Teacher Stress Inventory Scale	Pearson Correlation	1	-.374**	.151
	Sig. (2-tailed)		.000	.133
	N	100	100	100
Autism Self-Efficacy Scale	Pearson Correlation	-.374**	1	-.375**
	Sig. (2-tailed)	.000		.000
	N	100	100	100
Work Engagement Scale	Pearson Correlation	.151	-.375**	1
	Sig. (2-tailed)	.133	.000	
	N	100	100	100
**. Correlation is significant at the 0.01 level (2-tailed).				

Table.2 show the 100 teachers participate in this study. result revealed Teacher stress is negatively highly significant correlated with self-efficacy. Its mean low level of stress increases the teacher self-efficacy. And high level of stress indicates low self-efficacy level in teachers. There was significant positive correlation in stress and work engagement its reflect high level of stress in teachers, help towards more engagement with students. If the stress level low teacher's engagement or involvement with student's level also low. It was found that as Table also shows the **. Correlation is significant at the 0.01 level (2-tailed) with each variable stress, self-efficacy and work engagement.

The multiple regressions reported in table 3 that the predictor work engagement and teacher stress is independent variables found to be significant. The standardized estimate (beta weight) of -0.325 indicates that one unit increased in teacher stress, having a negative effect on the dependent variable Autism teacher self-efficacy with estimated t value (-3.637) was considered statistically significant as the p value (0.000), which is less than 0.0.

Table 3: Regression Analysis

Coefficients						
Model		Unstandardized Coefficients		Standardized coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	98.726	8.258		11.956	.000
	Teacher Stress Inventory Scale	-.162	.044	-.325	-3.637	.000
	Work Engagement Scale	-.401	.110	-.326	-3.655	.000
a. Dependent Variable: Autism self-efficacy scale						

The standardized estimate (beta weight) of -0.326 indicates that one unit increased in work engagement, having a negative effect on the dependent variable Autism teacher self-efficacy with estimated t value (-3.655) was considered statistically significant as the p value (0.000), which is less than 0.0.

DISCUSSION

To our knowledge, this is the first study to investigate the inter relationship between stress, self-efficacy and work engagement among teachers responsible for pupils with ASD. It sheds light on how to both improve teacher wellbeing and support their ability to manage these pupils. In fact, the quality of the teaching received by children with ASD is closely linked to teacher wellbeing. Another finding was that teacher stress was negatively related to self-efficacy. That is, teachers who are less stressed also report higher levels of self-efficacy for teaching students with ASD. This is consistent with previous studies reporting a decrease in teacher stress and an increase in coping when teacher self-efficacy increases (Zee & Koomen, 2016). We examined the strength of relationship between self-efficacy for teaching students with ASD and teacher stress, teacher engagement. Results indicated a positive and significant relationship between self-efficacy, engagement. Teachers who believed they could teach students with ASD also were more likely to engage positively with their students with ASD. The results of this study complement those of previous ones that demonstrated a relationship between self-efficacy and stress in various professionals without exploring the underlying mechanisms. Moreover, these results contribute to the existing literature, which has focused solely on regular teachers (i.e., those not teaching children with ASD), by specifically investigating teachers of pupils with ASD, viewed through the transactional model of stress. School inclusion of children with ASD represents a major issue in Pakistan's current educational policies regarding children with disabilities. This study enriches the scarce literature concerning teachers involved in school inclusion. These results lead us to suggest that cognitive behavioral interventions to improve self-efficacy would be relevant for these teachers, and it would be worth studying the effects of these interventions on both teacher well-being and teaching quality. It would be particularly interesting to observe over the longer term the effects of these interventions on the progress in school learning and social inclusion of students with ASD.

CONCLUSION

The current study focus on the impact of stress on self-efficacy and work engagement in teaching autistic students. It is concluded that there is a highly non-significant relationship between stress, teacher self-efficacy and work engagement. It was concluded that stress has a negative effect on self-efficacy. And work engagement has a positive effect on self-efficacy. Which was statistically significant.

Declaration of Competing Interest: The authors declare that they have no competing interests.

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