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Parents' Knowledge and Practices Regarding Stress Management in School Children of District Rawalpindi, Pakistan

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Abstract

This study aimed to measure the knowledge of parents and identified their practices regarding stress management in their school going children. A cross-sectional descriptive study was carried out in District Rawalpindi, Pakistan using an online questionnaire. The population size consisted of all the parents of school going children in District Rawalpindi. The collected data were analyzed through SPSS software by applying t-test and one-way ANOVA. The difference between parents' knowledge about stress and their stress management strategies was evaluated on the basis of demographic variables. The current study calculated a higher percentage (57.3%) of parents' scores on the overall knowledge scale, although more than half of the parents exhibited poor knowledge on two subscales, that is, stress (52.4%) and stress management strategies (61.2%). The scores of older parents were significantly higher than the younger ones. Good nutrition, proper meals, and proper rest were identified as the most commonly practiced stress management strategies. It was determined that opposite genders and different age groups were practicing similar strategies, with no statistically significant difference in scores on the practices of stress management scale. Lack of proper knowledge and wrong practices indulged in by a large number of parents highlight the need for awareness campaigns to improve parents' knowledge regarding stress and management practices in their children.

***Keywords*:** parents' knowledge, Pakistan, school children, stress management

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Introduction

Stress is considered as an obnoxious condition present in everyone's life. However, according to National Institute of Mental Health (NIMH) all stress is not bad because in non-life-threatening situations, stress can motivate people. Grippo (2016) claims that stress is good for the students as it forces them to study and take their tests seriously to achieve good results. O'Grady (2018) describes stress as a positive gateway that gives a chance to the students to navigate new things. On the other hand, its constant occurrence for a longer period leads to a risk for mental health (National Institute of Mental Health [NIMH], 2020).

Adults can cope with their stress in a better way as compared to children because they can properly express their feelings and control their stress by using different relieving methods (Balog & Balog, 1991). Children; however, may not be able to recognize and describe their feelings. Nevertheless, high levels of chronic stress have been extensively reported in children that can produce potential long-lasting effects (Vanaelst et al., 2012). This highlights the importance of parents' and teachers' role in identifying the symptoms of stress in children and using effective techniques to help them relieving their stress.

Parents can play a significant role in teaching their children stress management skills since, it is impossible to avoid stress completely. Research claims that adults can help children in controlling their intense level of stress by showing commitment and regular care to them in their lives (Youngs, 2011). Similarly, children who feel supported by their parents are less likely to experience emotional distress, eating disorders, consider or attempt suicide, or disengage from school and learning (Resnick et al., 1993; Resnick et al., 1997). Therefore, it is important to know what practices parents use to help their children coping with stress.

In the context of Pakistan, although a high prevalence rate of depression, anxiety and other mental disorders have been found in adults. Moreover, the stress level among children and their parents' knowledge and their role on helping them with managing stress has been a neglected area (Hussain et al., 2000). Unfortunately, in developing countries people think that going

to a psychiatrist or a psychologist signifies that the person is abnormal (Usman, 2012). Another possible reason is the negative thoughts and shame associated with seeking help for mental disorders that prevents people acquiring appropriate treatment (Krans, 2014). Thus, it is completely logical to conduct a Knowledge, Attitude and Practices (KAP) survey in order to reveal misconceptions or misunderstandings that may cause obstacles to the activities that we would like to implement (Gumucio et al., 2011).

The current study therefore provides a snapshot of the parents' knowledge about stress and its management in school going children. Because children are often exposed to potentially stressful events in the presence of their parents (or with their parents nearby), and because parents are often responsible for helping their children coping with these situations, it is not surprising that parents play a vital role in the emotional development of their children (Power, 2004). Parents can help their children in learning that how to express their feelings through instructing, modeling, and guiding them by implementing the skills of emotional management in children's lives (Student Health Service, 2010).

This study aims to measure the knowledge of parents about stress management in their school going children and also to identify the practices they most commonly employ to help their children who are facing stress.

The objectives of this study were

1. To measure the knowledge of parents about symptoms of stress in school children.
2. To measure the knowledge of parents about practices involved in stress management of school children.
3. To identify the parents' practices in helping their school children to cope with stress.

Methods

Research Design

The study was a cross-sectional description using a validated questionnaire to collect relevant data.

Population of the Study

The population for the study consisted of parents with school going children in the district Rawalpindi. Parents were accessed using social media and invited to fill an online questionnaire.

Sample Size and Sampling Technique

Snowball sampling technique was used to meet the minimum sample size of 100 parents of school children in district Rawalpindi. However, considering the possibility of low response rate and rejection during data cleaning, more than 150 invitations were sent.

Research Instrument

An online questionnaire was developed on Google forms. Although the investigators aimed to use an existing, pre-validated questionnaire assessing parents' knowledge and their practices of stress management in children. A questionnaire was developed using the concepts described in earlier research and guides in order to identify such instruments in a thorough literature search (American Academy of Pediatrics, 2012; American Psychological Association, 2019; Balog & Balog, 1991; Compas, et al., 2017; Latona, 2005; Stephens, 2007). The questionnaire consisted of 75 statements which are divided into 2 main sections. The first section consisted of statements about demographic characteristic of parents and their children and the second section assessed parents' knowledge and practices.

The second section was divided into two scales; (i) Knowledge scale (ii) Practices of stress management scale. Knowledge scale contained alternate form questions spread over five sub-scales; stress (11 statements), sources of stress (10 statements), physical signs and symptoms (6 statements), behavioral signs and symptoms (8 statements) and stress managements strategies (13 statements). Practices of stress management scale comprised of 17 statements with 5-point Likert scale ranging from 'Never' to 'Always'

Validity and Reliability

Expert validation method was used to ensure the content validity of the questionnaire prior to data collection. Cronbach's alpha coefficient was

used to determine the internal consistency of the knowledge and practice scales of the questionnaire. An overall value of 0.76 for the questionnaire suggested an acceptable internal consistency.

Data Collection

An online questionnaire design is used to collect data from parents of school going children. Emails and social media like Facebook and WhatsApp groups were used to share link of questionnaire to the parents. A total of 106 responses were received; however, 3 incompletely filled questionnaires were excluded from data after data cleaning.

Data Analysis

Statistical Package for Social Sciences (SPSS) was used for data management and analyses. Descriptive statistics including frequencies, means, and standard deviations (SD) were applied to measure knowledge of parents about stress in children and their practices to manage stress in the school children. Inferential statistics including t-test and one-way ANOVA were performed to evaluate the difference between parents' knowledge about stress and its management strategies on the basis of demographic variables.

For the knowledge section, one score was given for each correct answer and on the basis of total score, parents' knowledge about stress was considered 'poor' if it was equal to or less than the mean and 'good' if it was above the mean. The option 'don't know' was considered as wrong answer as no score was given if a participant claimed that they did not know the answer.

In order to calculate score for practices of stress management section, for any of the positive statements if the participating parents opted 'Never' they were given a score of 0. Similarly, a score of 1 for 'seldom', 2 for 'sometimes', 3 for 'often', and 4 for 'always'. However, coding was reversed for negative statements. Mean score was calculated and a total score of equal to or less than the mean suggested a frequent practice of appropriate stress management strategies by the parents; whereas a lower than mean score was an indicator of infrequent practices.

Results

Demographic Details

Table 1

Demographic Characteristics of the Parents with School going Children

Demographic Variable	Type	Frequency	Percentage
Age (years)	30 and below	12	11.7
	31-35	35	34.0
	36-40	29	28.2
	Above 40	27	26.1
Gender	Male	41	39.8
	Female	62	60.2
Educational level	Matric	1	1
	Bachelor (BA/BSc)	23	22.3
	Master (MA/MSc)	59	57.3
	Doctorate (PhD)	10	9.7
	Other	10	9.7
Total number of children	1	12	11.7
	2	59	57.3
	3	28	27.2
	4	4	3.9
Number of school going children	1	45	43.7
	2	40	38.8
	3	16	15.5
	4	2	1.9
Gender of the main child	Male	61	59.2
	Female	42	40.8
Type of school	Government	14	13.6
	Private	89	86.4

Demographic details of the study participants are listed in Table 1 which shows a higher percentage of female participants (60.2%). More than half of the parents participated in the study had master degree (57.3%). The

majority of the parents (57.3%) had two or more children with 43.7% having only one school going child. The participants who had more than one school going children, they were instructed to select only one child and report the demographic details and practices for that child, referred as 'main child' in this study. The mean age in years of the main child was 8.94±3.77 and the grades in which these children were studying ranged between nursery/kindergarten and grade 12. The highest proportion of the children belonged to the nursery/kindergarten group (22.3%) followed by grade 1 (15.5%), grade 4 (11.7%) and grade 9 (7.8%). The predominant gender of the 'main child' was male (59.2%) and the majority of the children were going to private schools (86.4%).

Parents' Knowledge

In terms of knowledge of parents about stress in children, the highest number of correct responses were received for the statement 'The causes of stress were the same for every child' where 96.1% of the parents correctly believed that the cause of stress in every child was different. Contrary to this, the lowest percentage was obtained for the statement 'Adults were more susceptible to be stressed on a daily basis than children' where only 18.4% of the parents correctly believed that children were more susceptible to be stressed on a daily basis than adults.

The highest number of correct responses were obtained for the item with regards to the source of stress. 'Worrying about schoolwork or grades' (90.3%), whereas the item 'Birth of brother or sister' yielded the lowest correct response' (43.7%).

The assessment of knowledge on physical signs and symptoms of stress suggested that the statement 'sleep disturbances' was correctly identified by the majority of the participants (90.3%); however, only (46.6%), of the parents correctly identified 'new or recurrent bed-wetting' as one of the physical signs and symptoms of stress in children. In terms of parents' knowledge about behavioral signs and symptoms, highest percentage of correct responses was obtained for the item 'aggressive or stubborn behavior' (91.3%). On the contrary (58.3%) of the parents correctly identified 'Going back to behaviors present when a younger age' as one of the behavioral signs and symptoms of stress.

Regarding knowledge on stress management strategies, all 103 (100%) parents believed that 'spending calm relaxing time with your children' was one of the useful strategies to manage stress in children. However, only 35% of the parents correctly believed that 'teaching the child that stress is a sign of weakness and they should never feel stressed' was not a useful strategy to manage stress among their children.

Table 2

Level of Parents' Knowledge on Stress and its Management

Knowledge domain	Level of knowledge (% of parents)	
	Good	Poor
Overall	57.3	42.7
Stress	47.6	52.4
Sources of stress	66	34
Physical signs and symptoms of stress	53.4	46.6
Behavioral signs and symptoms of stress	55.3	44.7
Stress management strategies	38.8	61.2

Table 2 shows the findings of knowledge scale. It is evident that more than half (57.3%) of the parents had a good knowledge on stress and its management strategies. Higher proportion of parents were also found to have good knowledge on sources of stress (66%), physical signs and symptoms (53.4%), and behavioral signs and symptoms (55.3%). However, more parents showed low level knowledge under sub-scales 'stress' (52.4%) and 'stress management strategies' (61.2%).

The calculation of mean score of parents on different domains of knowledge revealed an overall figure of 37.05±6.14. The knowledge scores on sub-scales stress, sources of stress, physical signs and symptoms, behavioral signs and symptoms, and management strategies were 8.26±1.50, 7.96±1.81, 4.40±1.45, 6.32±1.87, and 10.10±1.72 respectively. A minimum score of zero was also obtained in two sub-scales, namely physical signs and symptoms of stress and behavioral signs and symptoms of stress.

Table 3

Independent Sample t-Test for Parents' Knowledge about Stress Management in terms of Gender

Knowledge Domains	Gender		p-Value
	Male	Female	
	Mean ± SD	Mean ± SD	
Overall	36.80 ± 5.10	37.22 ± 6.78	0.73
Stress	8.34 ± 1.33	8.20 ± 1.61	0.66
Sources of stress	7.95 ± 1.58	7.96 ± 1.97	0.96
Physical signs and symptoms	4.29 ± 1.43	4.48 ± 1.46	0.51
Behavioral signs and symptoms	6.34 ± 1.65	6.30 ± 2.02	0.92
Stress management strategies	9.87 ± 1.61	10.25 ± 1.78	0.27

Table 4

ANOVA for Parents' Knowledge about Stress Management in terms of Age

Knowledge Domains	Age groups				p-Value
	30 and below	31-35	36-40	Above 40	
	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD	
Overall	36.00 ± 5.25	36.17 ± 7.17	37.00 ± 5.65	38.74 ± 5.51	0.38
Stress	8.25 ± 1.13	7.77 ± 1.71	8.34 ± 1.39	8.81 ± 1.30	0.05
Sources of stress	8.00 ± 1.85	7.77 ± 1.98	7.86 ± 1.78	8.29 ± 1.65	0.71
Physical signs and symptoms	3.91 ± 1.83	4.31 ± 1.47	4.51 ± 1.40	4.62 ± 1.30	0.51
Behavioral signs and symptoms	6.08 ± 1.37	6.42 ± 1.89	6.34 ± 2.09	6.25 ± 1.87	0.95

Stress management strategies	9.75 ± 2.37	9.88 1.76	±	9.93 1.38	±	10.74 1.58	±	0.16

$p \leq 0.05$ † Marginally statistically significant $p \leq 0.05$

Tables 3 and 4 draws a comparison between the knowledge scores of parents in terms of gender and age respectively. The gender-based comparison suggested no significant difference in both male and female parents in terms of their scores on overall knowledge scale and its sub-scales. Nevertheless, the score on one of the sub-scales entitled 'stress' showed marginally significant difference (p=0.055) among age groups. Upon further investigating the marginally significant difference by applying post HOC Tukey analysis, it was found that the difference in the age categories of '31-35' with 'Above 40'was significant at the 0.033 value.

Practices of Stress Management

Table 5

Parents' Practice of Stress Management Strategies for their School going Children

No.	Practice statements	f (%)				
		Never	Seldom	Sometimes	Often	Always
1.	I advise my child to see the positive side of things.	1 (1.0)	0(0)	9 (8.7)	29 (28.2)	64 (62.1)
2.	I leave my child to deal with his/her stress in order for him/her to learn coping with stress.	34 (33.0)	24 (23.3)	31 (30.1)	10 (9.7)	4 (3.9)
3.	I encourage the child to face his/her fears, and not run away from them.	6 (5.8)	3 (2.9)	18 (17.5)	31 (30.1)	45 (43.7)
4.	I punish my child for their wrongdoings to help preventing stress in future.	34 (33.0)	18 (17.5)	25 (24.3)	12 (11.7)	14 (13.6)

5.	I get help or advice from a health care provider, counsellor, or therapist.	51 (49.5)	15 (14.6)	21 (20.4)	8 (7.8)	8 (7.8)
6.	I try to spend more time with my child.	0 (0)	4 (3.9)	10 (9.7)	32 (31.1)	57 (55.3)
7.	I teach my child that stress is a sign of weakness and he/she should never feel stressed.	24 (23.3)	11 (10.7)	14 (13.6)	23 (22.3)	31 (30.1)
8.	I make time to listen to my child without being critical and let him/her share with me the stresses and challenges he/she is facing.	1 (1.0)	5 (4.9)	14 (13.6)	24 (23.3)	59 (57.3)
9.	I encourage my child to increase physical activity/sports	0 (0)	1 (1.0)	7 (6.8)	22 (21.4)	73 (70.9)
10.	I encourage good nutrition/proper meals.	0 (0)	1 (1.0)	5 (4.9)	28 (27.2)	69 (67.0)
11.	I encourage my child to take good rest.	0 (0)	0 (0)	7 (6.8)	24 (23.3)	72 (69.9)
12.	I try to change the routine of my child such as by taking him/her out or going for movie.	0 (0)	4 (3.9)	18 (17.5)	39 (37.9)	42 (40.8)
13.	I advise my child to pray that things will get better.	2 (1.9)	3 (2.9)	8 (7.8)	30 (29.1)	60 (58.3)
14.	I teach my child to calm him/herself down such as by taking deep breaths.	4 (3.9)	9 (8.7)	32 (31.1)	31 (30.1)	27 (26.2)

15.	I ask my child not to tell anyone how he/she is feeling and keep it to him/herself.	40 (38.8)	17 (16.5)	20 (19.4)	15 (14.6)	11 (10.7)
16.	I ask my child to listen to music, watch a movie or play some game.	6 (5.8)	9 (8.7)	33 (32.0)	41 (39.8)	14 (13.6)
17.	I teach my child problem solving skills.	4 (3.9)	8 (7.8)	15 (14.6)	34 (33.0)	42 (40.8)

Table 5 presents the findings of practices of stress management scale. It is obvious that 'encouraging good nutrition and proper meals' was one of the most common strategy (collectively 94.2% with 27.2% 'often' and 67.0% 'always') practiced by the parents to manage stress in their children followed by 'encouraging child to take good rest' (collectively 93.2% with 23.3% 'often' and 69.9% 'always'). On the other hand, 'leaving child to deal with their stress on their own' was one of the most uncommon practice as reported by the participating parents (collectively 86.4% with 33.0% 'never', 23.3% 'seldom' and 30.1% 'sometimes'). Similarly, 'seeking help from a therapist' was also not a common practice among parents (collectively 84.5%with 49.5% 'never', 14.6% 'seldom' and 20.4% 'sometimes').

Table 6

Independent Sample t-Test on Parents' Practice for Stress Management in Children on the Basis of Gender and Age

Variables	Stress management practices	
	Mean ± SD	p-Value
Gender		
Male	48.39 ± 6.61	0.23
Female	49.95 ± 6.36	

Age groups		
30 and below	48.00 ± 5.62	0.84
31-35	49.91 ± 6.19	
36-40	49.06 ± 7.43	
Above 40	49.44 ± 6.35	

p< 0.05

Table 6 compares the stress management practices of parents in terms of their gender and age groups. No significant difference was found in the practices of parents of opposite genders and from different age groups for stress management in their school children.

Discussion and Recommendations

Findings of the current study suggest that a large number of study participants had a poor knowledge regarding stress and its signs and symptoms. Similarly, a higher percentage had a low level of knowledge about stress management strategies. We found some misconceptions about stress in parents. For example, a majority of parents (55.3%) considered stress as bad. However, psychologists are of the view that feeling stressed isn't necessarily bad (Grippo, 2016; O'Grady, 2018). Rather, stress is a normal part of life and positive stress keeps one motivated. It becomes problematic when it gets out of control and begins to affect the concerned person negatively.

Similarly, only a small proportion of the parents (18.4%) correctly identified that stress is more common in children than in adults. The majority of the parents thought that adults are more prone to experience stress. According to a survey conducted in America by Bethune (2014) found that children especially teens are more stressed than their parents. The findings of this study are in aligning with the report of Villines (2015) which suggests that kids may be more stressed than their parents. This could be because children often struggle with stress, when their parents do not correctly identify their symptoms (Villines, 2015).

Regarding the sources of stress among children, the findings of the study coincide with those of APA survey in 2014, where the majority (53%) of the parents reported schoolwork and homework as the major cause of stress in children. APA survey also shows a high percentage of parents claiming

their children's friends and the ones who are bullying them as the important causes of stress just like this study.

In another finding, less than half (43.5%) of the parents considered the birth of a sibling as a stressful event which is difficult to explain as the literature suggests otherwise (Volling, 2012). In this study, despite the majority (88.3%) of the parents had more than one child and, lesser number of parents considered the birth of a sibling as a stressful event. The author; however, claims from personal experience that children feel stressed with the birth of a sibling. This has also been reported as one of the main factors associated with stress among school going children in rural Nawabshah, Pakistan (Parpio et al., 2012).

It is evident from the findings that many parents generally had a good knowledge about physical and behavioral signs and symptoms of stress in children; however, a many of them had lower level of knowledge about stress management strategies. For example, the majority of the parents considered punishing a child, maintaining strict rules and teaching a child that stress is a sign of weakness as useful strategies to manage stress in children. Such findings vindicate the efforts to improve awareness among parents on the use of effective stress management techniques.

In terms of practices, parents were found to be using a variety of practices to help their children facing the stress. A finding worth mentioning is the help of a therapist who is rarely sought to aid children dealing with stress. The therapy is required by Children when they can't cope with the stress on their own or parents' and teachers' help is not effective for them. The finding can be attributed to small sample size and possibly none of the children in this small sample experienced stress to the level where it requires professional help. Another possible reason is the negative thoughts and shame associated with seeking help for mental disorders that prevents people from receiving an appropriate treatment (Krans, 2014). Unfortunately, in developing countries people think that visiting a psychiatrist or a psychologist signifies that the person is abnormal (Usman, 2012). Such thinking patterns need to be altered to develop a healthy society.

From this study we learned that the parents of school going children generally had a good knowledge about stress in children, its sources, and its physical and behavioral signs and symptoms; however, some gaps in their knowledge on stress management strategies were observed. Furthermore, no statistically significant difference in overall knowledge between opposite genders and among different age groups was recorded. Anyhow, a significantly higher knowledge score was found in 'above 40' age group than those who were aged between 31 and 35. Encouraging good nutrition, taking proper meals, and, encouraging child to take a good rest, were found to be some of the most common practices employed by the parents to help their children coping with stress. However, opposite genders and different age groups were found to be using similar practices with no statistically significant difference in practice scores. Awareness campaigns targeting at the weak areas of knowledge may help narrowing the knowledge gaps.

Limitations and Future Directions

The current study had a number of limitations. Firstly, it's small sample size due to the time constraint and limited resources may not be fully representative of Pakistan. Secondly, the sample of this study represented mainly the educated members of the society who were able to fill online questionnaires written in English. This further limit the generalizability of the findings. A similar study can be conducted in national or regional languages having average parents with respect to their literacy level.

The findings suggest that there is a room for improvement in parents' knowledge about stress and its management among school going children in order to contribute in their children's emotional development. This can be achieved through designing and implementing the public awareness campaigns. Teachers can also play an effective role not only in child stress management but also in parents' learning of child stress management strategies. Awareness campaign should also be focused on highlighting the importance of qualified therapists in managing stress and changing this perception that consulting a psychologist or a psychiatrist for stress management is perfectly normal.

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