

MEDIA EXPOSURE INDUCED SECONDARY TRAUMATIC STRESS AMONG UNIVERSITY STUDENTS OF PAKISTAN: ROLE OF PERSONAL VARIABLES

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Submitted: November 7, 2022

Accepted: December 27, 2022

ABSTRACT

OBJECTIVE

To assess level of Media Exposure Induced Secondary Traumatic Stress (MEISTS) among university students of Pakistan and to explore the role of personal variables of gender, family structure, experiencing a recent primary trauma, socioeconomic status, social support of family and friends, and levels of religiosity as possible contributing factors in this regard

STUDY DESIGN

Quantitative survey design

PLACE AND DURATION OF STUDY

The study was conducted from March to August 2021 and the data were collected from public and private universities of Karachi

SUBJECT AND METHOD

The sample of 535 university students was collected using a non-probability purposive convenient sampling method. 186 (34.8%) were males and 337 (63.0%) were females, ages ranging from 18 to 25 years, with a mean age of 20.62 ± 1.71 . Secondary Traumatic Stress Media-Induced Questionnaire and demographic form were used for data collection.

RESULTS

Results indicated that 47.9% of the sample scored low on the overall construct of MEISTS, 44.9% came in moderate range while 4.5% showed high levels of MEISTS. On subcomponents of MEISTS, on intrusion, 54.0% scored low, 34.2% scored moderate while 9.7% scored high. On avoidance, 32.1% scored low, 57.6% scored moderate and 9.3% scored in high range. On arousal, 37.4% scored low, 51.0% scored moderate and 10.5% scored high. Out of all the personal variables studied, gender ($p=.001$), experiencing a recent primary trauma ($p=.001$), social support of family ($p=.001$), and levels of religiosity ($p=.009$) showed significant results.

CONCLUSION

The study indicated that as almost 50% of the sample exhibited MEISTS, measures must be taken in order for people to have a better understanding of how media is affecting them.

KEYWORDS

Demographics, Asia, Gender, Religiosity, Social Support

INTRODUCTION

Secondary Traumatic Stress is the term coined by Figley in 1983 as the stress derived from helping others who are suffering or who have been traumatised.¹ Bride in 2007 took this concept forward and described that STS has identical symptoms to Post Traumatic Stress Disorder (PTSD) including intrusions, avoidance, negative mood and cognitions, and hyper-arousal.² In 2017, Comstock and Platania further revised the idea of secondary traumatic stress and linked it to the possibility of a layperson developing it as a result of exposure to traumatic content through television or social media.³

Researches indicated that media exposure induced secondary trauma exists³⁻⁶ and a wealth of studies have affirmed the connection between television exposure and PTSD symptoms in western world,^{7,8} however in Pakistan, such studies are very limited.⁴ Direct exposure to trauma and its implications have been an area of interest for Pakistani researchers in recent past; however, it is rare that studies have focused on the indirectly affected, especially general public who might be traumatised due to viewing potentially traumatic events on media. Along with this, the studies that have been done had children or adolescents as their main population⁹, while emerging adults have been mostly neglected in this regard. Researches have indicated that emerging adulthood is a critical period of an individual's life as it marks the transition from youth to full-fledged adulthood.¹⁰ Exposure to potential traumatic events, either through direct or indirect means, enhances the risk for social, academic, and personal emotional difficulties in emerging adults.¹¹⁻¹² It is hence important that this population is studied in the context of trauma, especially one caused by media exposure. This may lead to creating awareness in the emerging adults about informed viewership of media content and knowing how to safeguard themselves from its potential effects.

A number of researches have also shown that personal variables may be associated with stress related responses to post-traumatic events, even if the individual was indirectly connected to them.¹³ However, most of the researches focused on studying the personal variables only in people exposed to direct trauma. It is very rare that such variables are studied in the context of secondary trauma, especially one caused by media.⁶ Considering the aforementioned rationales, the current research aimed to:

- 1) Identify levels of MEISTS and its sub-components in the university students of Pakistan
- 2) To identify the role of personal variables in the development of MEISTS

SUBJECT AND METHOD

Participants

The sample of 535 university students was collected using a non-probability purposive convenient sampling method from different public and private universities of Karachi. As inclusion criteria, participants were needed to understand English and Urdu languages, they were to belong to a public or private university of Karachi, Pakistan, and they were to be free from any diagnosed mental illness or organic brain damage. It was also ensured that participants who had faced any direct trauma within 1 week of data collected were not included in the study. This was to ensure

that secondary traumatic stress being exhibited was really due to the media, and not due to any current personal circumstances.

Instruments

Demographic Form

It was filled by participants to give information regarding the potentially traumatic events they viewed on media, personal variables of gender, family structure, experiencing a recent primary trauma, socioeconomic status, social support of family and friends, and levels of religiosity.

Secondary Traumatic Stress Media-Induced Questionnaire (STSM-IQ)³

STSM-IQ was used to determine the levels of MEISTS in university students. This scale has 16 items: 4 are about intrusion, 6 about avoidance and remaining 6 about arousal. Minimum score on each item can be 1 and maximum 5, leading to a minimum overall score of 16 and maximum of 80. The score is divided into three levels: low, moderate, and high. The internal consistency of STSM-IQ is good with overall Cronbach's Alpha to be .90, .78 for avoidance subscale, .81 for the arousal subscale, and .77 for intrusion subscale.

Procedure

Once the research was approved, potential participants from 3 public and private universities of Karachi, Pakistan, were approached for data collection using purposive convenient sampling. They were provided with a consent form and the purpose and importance of the current research was explained to them. Once they agreed to be part of the study, they were provided with STSM-IQ and the demographic form to fill.

RESULTS

The data was analysed using the SPSS-22 version. Descriptive statistics, Cronbach's Alpha Reliability, Independent Sample t-test, and One-way ANOVA were utilised to analyze the data.

Table 1

Demographics Characters of the Participants (N=535)

	<i>f(%)</i>	<i>M(SD)</i>
Age		20.62(1.71)
Gender		
Male	186(34.8)	
Female	337(63.0)	
Missing	12(2.2)	
Family Structure		
Nuclear	366(68.4)	
Joint	145(27.1)	
Other	9(1.7)	
Missing	15(2.8)	
Socioeconomic Status		
Lower Middle Class	8(1.5)	
Middle Class	292(54.6)	
Upper Middle Class	213(39.8)	

Upper Class	10(1.9)
Missing	12(2.2)
Primary Trauma	
Yes	79(14.8)
No	448(83.7)
Missing	8(1.5)
Family Support	
Not at all Supportive	14(2.6)
Somewhat Supportive	45(8.4)
Supportive	78(14.6)
Often Supportive	95(17.8)
Highly Supportive	295(55.1)
Missing	8(1.5)
Friends Support	
Not at all Supportive	22(4.1)
Somewhat Supportive	51(9.5)
Supportive	97(18.1)
Often Supportive	132(24.7)
Highly Supportive	223(41.7)
Missing	10(1.9)
Level of Religiosity	
Not at all Religious	10(1.9)
Somewhat Religious	58(10.8)
Religious	222(41.5)
Often Religious	171(32.0)
Very Religious	64(12.0)
Missing	10(1.9)

Table 1 gives description of the demographic characteristics of the sample.

Table 2

Descriptive Statistics and Alpha Reliability Coefficients, Univariate Normality of Study Variables (N=535)

Variables	Items	α	M	SD	Skewness	Kurtosis	Range	
							Actual	Potential
MEISTS	16	.865	38.43	11.07	0.33	-0.16	15-72	16-80
Intrusion	4	.661	9.41	3.51	0.48	-0.35	4-20	4-20
Avoidance	6	.669	16.06	4.81	0.21	-0.40	6-29	6-30
Arousal	6	.735	15.56	5.15	0.37	-0.32	6-30	6-30

Note. MEISTS=Media Exposure Induced Secondary Traumatic Stress

Table 2 indicates that the data is normally distributed¹⁴ and Cronbach alpha reliabilities are also in acceptable range.¹⁵

Table 3

Trends of Media Exposure Induced Secondary Traumatic Stress among University Students (N=535)

Variables	Low	Moderate	High
	<i>f</i> (%)	<i>f</i> (%)	<i>f</i> (%)
MEISTS	256 (47.9)	240 (44.9)	24 (4.5)
Intrusion	289 (54.0)	183 (34.2)	52 (9.7)
Avoidance	172 (32.1)	308 (57.6)	50 (9.3)
Arousal	200 (37.4)	273 (51.0)	56 (10.5)

Note. MEISTS=Media Exposure Induced Secondary Traumatic Stress

Table 3 indicates that the majority of the sample reported to have MEISTS and its sub-components.

Table 4

Independent Sample t-test showing the effect of Personal Variables on Media Exposure Induced Secondary Traumatic Stress among University Students (N=535)

Variables	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>t</i> (<i>df</i>)	<i>p</i>	95% <i>CI</i>	
					<i>LL</i>	<i>UL</i>
Gender	Male <i>n</i>=186	Female <i>n</i>=337				
MEISTS	35.01(9.42)	40.36(11.50)	-5.68(437)	.001	-7.20	-3.50
Intrusion	8.30(3.11)	10.01(3.60)	-5.64(419)	.001	-2.31	-1.11
Avoidance	14.84(4.35)	16.75(4.93)	-4.56(417)	.001	-2.73	-1.08
Arousal	14.30(4.57)	16.32(5.33)	-4.53(424)	.001	-2.89	-1.14
Family Structure	Nuclear <i>n</i>=366	Joint <i>n</i>=145				
MEISTS	38.43(11.14)	38.38(11.02)	.047(502)	.962	-2.10	2.21
Intrusion	9.32(3.51)	9.66(3.52)	-.973(502)	.331	-1.02	.34
Avoidance	16.04(4.78)	16.11(4.91)	-.142(508)	.887	-.99	.86
Arousal	15.65(5.16)	15.31(5.09)	-.668(507)	.505	-.65	1.33
Primary Trauma	Yes <i>n</i>=79	No <i>n</i>=448				
MEISTS	45.35(12.00)	37.19(10.41)	-6.26(517)	.001	-10.72	-5.60
Intrusion	11.40(3.72)	9.04(3.35)	-5.65(517)	.001	-3.18	-1.54
Avoidance	18.51(5.01)	15.63(4.63)	-5.02(523)	.001	-4.00	-1.75
Arousal	19.12(5.34)	14.95(4.85)	-6.93(522)	.001	-5.35	-2.99

Note. MEISTS=Media Exposure Induced Secondary Traumatic Stress

Table 4 indicates that there was a significant difference in MEISTS and its sub-components between genders, and people exposed to primary trauma compared to those who were not. However, there was no significant difference between nuclear and joint family set-ups.

Table 5 (a)

One-way ANOVA showing the effect of Personal Variables on Media Exposure Induced Secondary Traumatic Stress among University Students (N=535)

	<i>M(SD)</i>	<i>M(SD)</i>	<i>M(SD)</i>	<i>M(SD)</i>	<i>M(SD)</i>	<i>F</i>	<i>p</i>
SES	LMC(n=8)	MC(n=291)	UMC(n=211)	UC(n=10)	-		
MEISTS	32.75(13.61)	38.57(10.71)	38.52(11.38)	38.10(14.65)	-	.72	.540
Intrusion	7.00(3.81)	9.45(3.41)	9.39(3.58)	9.80(4.96)	-	1.30	.274
Avoidance	14.25(5.70)	16.08(4.71)	16.16(4.94)	15.90(4.97)	-	.40	.748
Arousal	14.25(5.70)	15.65(4.91)	15.59(5.44)	14.70(6.88)	-	.29	.831
FS	NAAS(n=14)	SS(n=45)	Sup (n=78)	OS(n=95)	HS(n=293)		
MEISTS	47.50(12.20)	44.20(11.45)	38.64(11.06)	38.46(11.13)	37.03(10.47)	6.87	.001
Intrusion	11.78(4.64)	10.33(3.59)	9.78(3.67)	9.26(3.50)	9.09(3.34)	3.31	.011
Avoidance	19.28(5.39)	18.44(5.08)	15.89(4.76)	16.16(4.76)	15.56(4.61)	5.32	.001
Arousal	20.07(5.01)	18.62(5.33)	15.79(4.95)	15.58(5.24)	14.83(4.88)	8.61	.001
FRS	NAAS(n=22)	SS(n=51)	Sup (n=97)	OS(n=132)	HS(n=221)		
MEISTS	40.52(14.36)	40.64(10.83)	37.27(11.08)	37.68(9.61)	38.75(11.52)	1.15	.329
Intrusion	9.38(4.47)	9.84(3.33)	9.31(3.63)	9.09(3.06)	9.54(3.67)	.55	.697
Avoidance	17.95(5.59)	17.25(4.72)	15.55(4.76)	15.83(4.35)	16.00(4.97)	1.99	.093
Arousal	16.63(6.10)	16.19(5.58)	14.87(4.95)	15.38(4.68)	15.78(5.29)	.99	.410
Religiosity	NAAR(n=10)	SR(n=58)	Reg (n=221)	OR(n=171)	VR(n=63)		
MEISTS	41.10(11.86)	43.20(12.43)	37.43(10.91)	37.96(9.82)	38.61(12.35)	3.43	.009
Intrusion	9.60(4.24)	10.27(3.52)	9.08(3.49)	9.32(3.31)	9.95(3.92)	1.76	.135
Avoidance	17.40(5.10)	18.43(5.37)	15.53(4.78)	15.90(4.26)	16.12(5.11)	4.54	.001
Arousal	16.90(5.89)	17.37(5.85)	15.25(5.06)	15.58(4.73)	14.93(5.50)	2.42	.047

Note. SES=Socioeconomic Status, LMC=Lower Middle Class, MC=Middle Class, UMC=Upper Middle Class, UC=Upper Class, MEISTS=Media Exposure Induced Secondary Traumatic Stress, BO=Birth Order, FS=Family Support, NAAS=Not At All Supportive, SS=Somewhat Supportive, Sup=Supportive, OS=Often Supportive, HS=Highly Supportive, FRS=Friends Support, NAAR=Not At All Religious, SR=Somewhat Religious, Reg= Religious, OR=Often Religious, HR=Highly Religious

Table 5a indicates that there was a significant difference in MEISTS and its sub-components between different levels of family support and degrees of religiosity. However, there was no significant difference between friend's support and socioeconomic statuses.

Table 5 (b)

Post-hoc Analysis showing between group effect of Personal Variables on Media Exposure Induced Secondary Traumatic Stress among University Students (N=535)

			95%CI		
i-j		MD(i-j)	SE	LL	UL
Family Support					
Intrusion	NAAS>HS	2.70	0.95	0.09	5.31
	NAAS>HS	3.71	1.29	0.17	7.25
Avoidance	SS>S	2.54	0.88	0.12	4.96
	SS>HS	2.87	0.75	0.80	4.94
	NAAS>S	4.27	1.45	0.29	8.25
Arousal	NAAS>OS	4.48	1.43	0.55	8.40
	NAAS>HS	5.23	1.37	1.48	8.98
Religiosity					
Avoidance	SR>R	2.89	0.69	0.98	4.81
	SR>OR	2.52	0.72	0.55	4.49
Arousal	SR>R	2.12	0.75	0.05	4.19

Note. NAAS=Not At All Supportive, SS=Somewhat Supportive, S=Supportive, OS=Often Supportive, HS=Highly Supportive, NAAR=Not At All Religious, SR=Somewhat Religious, R=Religious, OR=Often Religious, HR=Highly Religious

Table 5b indicates that those who perceived their families to be highly supportive had lower symptoms of intrusion, avoidance and arousal. Similarly, people with reportedly high levels of religiosity had lower symptoms of avoidance and arousal.

The results indicated that the sample was normally distributed, and almost 50% of the sample reported having MEISTS. It was further identified that out of all the personal variables studied, significant differences were found between genders, people having and not having primary traumas, the perceived level of family support, and the reported levels of religiosity. Whereas, support of friends, socioeconomic status of the participants, and the type of family structure participants belonged to did not come across to have significant differences.

DISCUSSION

The results of the first objective indicated that almost 50% of the sample reported having MEISTS (Table 3). In the demographic form, 57.4% of participants reported having viewed something that might be considered as potentially traumatic content in the last 7 days. The type of media content considered traumatic for the participants ranged from man-made mass level wars to natural disasters, with the most disturbing events being graphic details of accidents and human physical abuse.

The results are alarming: It has been repeatedly established that university students have often reported experiencing stress, anxiety, symptoms of depression, eating problems and other

psychological issues, which have a significant negative impact on their academic performance and their mental health.^{10, 16} Along with these factors, exposure to potential traumatic events, either through direct or indirect means, enhances the risk of social, academic, and personal emotional difficulties upon entrance into university.^{11,12} Regarding personal variables studied in the research, gender, experiencing a recent primary trauma, social support of family, and levels of religiosity showed significant results. Family structure, socioeconomic status, and social support of friends were found not to be significant in exhibiting MEISTS (Tables 4 and 5).

Gender wise, females exhibited higher levels of MEISTS and its sub-components (Table 4). This is in line with previous trauma studies.¹⁷ Multiple explanations have been provided in the western world regarding the likely causes of the gender differences with respect to trauma effects, ranging from physiological differences between the genders¹⁸ to females' greater tendency to report emotional distress.¹⁹ Along with these, differences in subjective experience of fear²⁰ and the greater tendency in women to ruminate about disturbing issues²¹ have also been established. As secondary traumatic stress (STS) is conceptually similar to PTSD with difference in etiology², the same explanations are applicable to secondary traumatic stress as well, with only empathy being a distinct contributing factor towards STS.²² These explanations may be equally contributing towards the results of current study with the difference that they are being put forward not for health care providers but rather are found to be possibly true for the general population as well whose trauma is media exposure induced.

Social support in this paper was studied in the context of family and friends. It was found that individuals who perceived their families to be supportive significantly reported less MEISTS, intrusion, avoidance and arousal symptoms, whereas the support of friends did not come out to be a significant factor in protection against MEIST or its components (Table 5). Previous literature suggests social support to have a protective as well as a remedial role against trauma²³ and the perception of whether the available support can serve a purpose of coping or protection against trauma or not decides whether individuals would benefit from it or not.²⁴ In the context of Pakistan, the results of current research relating to social support are typical. Pakistan, being a collectivistic society, places great significance on interpersonal relations and looking out for each other.²⁵ Although the country is experiencing a shift from a typical joint family system to a more nuclear approach,²⁶ but the core fabric of this society is still woven with the threads of families caring for each other and supporting family members in hard times regardless of personal differences.

Next variable that came out to have significant results was experience of primary trauma in the recent past. Individuals who reported having experienced any type of direct trauma right before the data collection indicated high levels of MEISTS (Table 4). This finding is again corroborating with prior literature. It is established that direct exposure to a traumatic event is found to be a major risk factor for STS.¹⁷ If a person has a lifetime history of experiencing any primary trauma, this increases the chances of that individual developing secondary traumatic stress in the wake of any indirect exposure to subsequent traumatic content, either through client's verbatim in case of mental health workers²⁷ or through being exposed to it through media.³

Lastly, the level of religiosity in the sample showed mixed results. The unique finding was that, though MEIST, arousal, and avoidance symptoms differed significantly with levels of religiosity, there was no significant difference found in the intrusion symptoms. Previous literature supports the findings that religion may be utilized by people as a coping mechanism against trauma as well as leading people to be safeguarded against being affected by trauma in the first place.²⁸ Pakistan, especially being the second most populated Muslim country²⁹, here religion has a key role in the lives of almost 98% majority Muslim population. In times of trouble, people tend to seek guidance from religion and they practice religion as a coping strategy when faced with stress and problems.³⁰ Hence, the research findings are in line with the existing literature.

Limitations of the study

The main limitation of the study was that it was conducted only in one city of Pakistan, that is, Karachi. Though Karachi is a mega polis catering to the largest population in all across the country, leading to arguably a fair representation of emerging adults of Pakistan³¹, it is still recommended that future researches cater to other cities of Pakistan as well to ensure representativeness of the sample. Another limitation was that, as all the groups were not equal in size, care should be exercised in future research to ensure better comparisons.

CONCLUSION

The findings of current research indicated that almost 50% of the sample were affected by media exposure and exhibited media exposure induced secondary traumatic stress. Gender, family support, primary trauma and religiosity were found to have significance in this regard.

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Undertaking

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