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Socio-Demographic Factors as Predictors of Alexithymia and Physical Health Problems in Betrayal Trauma

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Abstract: Trauma perpetrated by someone with whom a victim is close is a form of betrayal trauma and it is strongly associated with a range of emotional and physical health problems outcomes. However, the studies have not examined effect of demographic factors in betrayal trauma on emotional and physical health symptoms.The aim of this current research was to study the effect of socio demographic factors as predictors of alexithymia and physical health problems in the individuals suffered from betrayal trauma among young adults. A Sample of 100 young adults experienced betrayal trauma was taken on purposive sampling technique from Delhi, which comprised of 50 high betrayal traumas and 50 low betrayal traumas. To order to assess the level of betrayal trauma, alexithymia and physical health problems among young adults. The Brief Betrayal Trauma Survey by Goldberg and Freyd. Toronto alexithymia scale by Parker, Bagby, Taylor, Endler and Schmitz, and Pennebaker inventory of limbic languidness by Pennebakerwere used respectively. Independent T-test and Multiple Regression techniques were used to analyses the data. The results indicate that on group there was found significant on alexithymia and physical health symptoms. The high betrayal trauma was found higher on alexithymia and physical health symptoms than low betrayal trauma. Similarly, gender difference was found significant in alexithymia and physical health symptoms. In which females were found higher than males. No significant difference was found on age. Group characterized by high betrayal and low betrayal trauma contributing significantly to the alexithymia and physical health complaints. Similarly, gender was found to be contributing significantly in physical health symptoms but was not found significant contributor in alexithymia. However, age was not found contributing in alexithymia and physical health symptoms.
Keywords: Socio-Demographic, Alexithymia, Physical Health Problems, Betrayal Trauma

INTRODUCTION

Although overall trauma exposure has been linked to psychological and physical health difficulties [1, 2],both theory and research indicate that some forms of trauma may be more deleterious than others [3, 4, 5].Jennifer Freyd introduced the terms "betrayal trauma" and "betrayal trauma theory" in 1991 at a presentation at the Langley Porter Psychiatric Institute.These ideas were further developed and then published in an article betrayal trauma: traumatic amnesia as an adaptive response to childhood abuse [6].The betrayal is the violation of an expressed or perceived trust by a person with whom a person relies upon for some aspect of his life. It is also the violation of a presumptive contract, trust that produces moral and psychological conflict within a relationship amongst individuals or organizations. Often betrayal is the act of supporting a group or it is a break from previously decided upon or presumed norms by one party from the others. Someone who betrays others is commonly called a traitor or betrayer. It has been predicted to have a significant impact on cognitions (Negative attributions for the perpetrator's behavior), affect (sadness), and behavior (demands for retribution).

According to betrayal trauma theory [7, 8], traumas vary in the degree to which they involve betrayal stemming from the victim perpetrator relationship.Betrayal traumas may not threaten death or physical injury, but it can damage to well-being, relationships, self-concept and beliefs about others and the world. Such traumas represent a mismatch between what should be (people do not intentionally harm one another) and what is (you have been harmed by another person) [9]. Freyd and colleagues have suggested that the most complete definition of trauma includes events evoking intense fear, social betrayal, or a combination of both [10, 11, 12]. The both fear and betrayal can be described either ascontinuous or categorical dimensions of trauma. A trauma can be said to either involve in betrayal or not, but can also involve in varying degrees of betrayal(abuse by a babysitter may be less betraying

than abuse by a parent). The degree to which an event is traumatic may relate to the degree of fear and/or betrayal involved. Because betrayal is qualitatively different from of fear or traumas that include elements of betrayal may lead to different outcomes than traumas that are only fear-based.The theory proposes that an emotional and physical health problem is most likely to occur when a trauma is perpetrated by someone with whom the victim has a close relationship [13].

Alexithymia is a lack of words for feelings is a useful construct in investigating emotional awareness [14]. The alexithymia construct contains three elements, difficulty identifying feelings, difficulty describing feelings and an externally oriented cognitive style [15].Alexithymia may be related to an implicit fear of emotions themselves and to a sense that emotions are overwhelming [16, 17]. The modest available research demonstrates links among trauma, alexithymia, maladaptive coping strategies, and psychological and physical health symptoms [18, 19, 20].Alexithymia may exacerbate negative psychological symptoms because individual'sabilities to identify their emotional experiences and to respond appropriately are impaired. Alexithymia refers specifically to limited awareness and ability to describe emotional states. Deficits in emotional awareness are common in invalidating environments, in which caregivers provide inappropriate or insufficient responses totheir needs [21]. However, research on alexithymia remains very limited, particularly compared to other trauma-related outcomes

Socio-demographic conditions may have additive effects which increasing risk for outcomes beyond that associated with trauma exposure [22, 23].However, Socio-demographic status as a moderator, with trauma exposure having more damaging effects with greater adversity. Trauma exposure may also mediate links between socio-demographic risk and mental health: Associations between mental health difficulties and socio-demographic factors may be attributable, at least in part, to increased trauma exposure among disadvantaged populations [24]. However, little is known about the socio demographic factors influencing vulnerability to traumatic stress responses and other negative outcomes in early life.Past studies investigating the relationships among trauma and health but socio demographic variables have not looked at betrayal as a predicting factor.

MATERIAL AND METHODS

Aim and objectives

The primary aim of this research was to study the effect of socio demographic factors aspredictors of alexithymia and physical health problems in the individuals suffered from betrayal trauma among young adults.

Sample

A Sample of 100 young adults trauma experienced for the present study was taken on purposive basis from different areas of Delhi, which comprised of 50 high betrayal traumas and 50 low betrayal traumas. High betrayal trauma as well as low betrayal trauma were further divided according to their gender, thus each group consisted of 25 males and 25 females. Age group of the sample ranged from 20-30 years, therefore sample represented young adults only.

Measures

Socio-demographic Factors

It was used to collect information on the socio-demographic factors which are relevant in the context of experienced and witnessed trauma. It includes factors like gender (male & female); age (20-25 and 26-30 years).

Betrayal trauma (High & Low Betrayal Trauma)

It was measured bythe brief betrayal trauma survey (BBTS) by Goldberg and Freyd in 2006 [25]. It is a 14-item self-report, measures trauma exposure and betrayal at two time-points before age 18 years and after 18 years of age, using a 3-point scale "never" "1 or 2 times" and "more than that. The respondents are to indicate how many times they have experienced different interpersonal and non-interpersonal traumas both before and after age 18. This scale was included to assess traumatic events other than parent or caregiver maltreatment, since a range of traumatic experiences impacts psychological functioning. Items were categorized into two levels of betrayal: High betrayal trauma exposure (e.g., traumas perpetrated by someone with whom the respondent was very close) and it was calculated by summing the number of traumas relatively high in betrayal to which the participant reported being exposed at least one time (possible scores range from 0 to 5); low betrayal trauma exposure (e.g., traumas Perpetrated by someone with whom the respondent was not very close) and it was calculated by summing the number of traumas with relatively low betrayal to which the participant reported exposure (possible scores range from 0 to 7), with α score =.79 [26].

Alexithymia

It was measured by the toronto alexithymia scale (TAS-20) by Parker, Bagby, Taylor, Endler and Schmitz in 1993 [27]. It is the most frequently used measure of alexithymia [28]. Participants respond to statements regarding their thinking about and discussion of emotional content using Likert scales that range from 1-5, with higher scores representing a greater degree of alexithymia, except for reversed-scored items. The TAS-20 contains three subscales: Difficulty Identifying Feelings (DIF; α = .73 - .83), Difficulty Describing Feelings (DDF; α =.61 - .78), and Externally Oriented Thinking (EOT; α = .60 - .71). Total Toronto alexithymia (TAS-20) scores α =.74-.84 [27].

Physical Health Problem

It was measured by pennebaker inventory of limbic languidness (PILL) by Pennebaker in 1982 [29]. It is a 54-item scale that assesses common physical symptoms and sensations over the past month. The PILL Total Score is calculated by summing participants' reports of the frequency of each of these problems using a Likert-type scale ranging from 0 (almost never) to 5 (almost daily).

Procedure

Before application of the instruments, the researcher had an interaction with the respondents in order to build rapport, consent seeking and to make the respondents aware about the aim and objectives of the study.After getting socio-demographic information by using socio-demographic data sheet and ensuring that the respondent is meeting the exclusion criteria (being betrayal trauma) for study, first of all brief betrayal trauma survey (BBTS) was administered to identify the subjects as high betrayal trauma and low betrayal trauma. It was followed by administering of Toronto alexithymia scale (TAS-20), Pennebaker inventory of limbic languidness (PILL). In order to overcome the difficulty of contacting the respondent who was identified as being trauma experienced.There was BBTS evaluated on spot to ensure whether the person is a target sample or not. Whenever an individual was found to be target sample the set of other three questionnaires was given to him to get their scores of psychological and physical heath and the rest of the respondents who were identified to be non target sample were left out.

Statistical Analyses

Independent Sample t-test was used to find out the difference between various groups, gender and age of participants on alexithymia and physical health problems. Multiple regressionswere applied to identify the important predictors (i.e. various socio demographic variables) of alexithymia and physical health problems. Data was analyzed using the software package SPSS version 21.

RESULTS

Table 1: Mean and SD of high betrayal trauma and low betrayal trauma on alexithymia and its dimensions (N=100).

Variables	Groups	N	Mean	Std. Deviation	t-value	Cohen's d
Difficulty Identifying Feelings	High Betrayal Trauma	50	20.18	3.34	6.56***	1.32
	Low Betrayal Trauma	50	15.64	3.55		
Difficulty Describing Feelings	High Betrayal Trauma	50	12.86	3.42	.00	NS
	Low Betrayal Trauma	50	12.86	3.36		
Externally-Oriented Thinking	High Betrayal Trauma	50	19.04	3.00	.70	NS
	Low Betrayal Trauma	50	19.50	3.79		
Alexithymia	High Betrayal Trauma	50	52.08	6.39	2.70**	0.54
	Low Betrayal Trauma	50	48.00	8.55		

*** Significant at 0.001 significance level, **Significant at 0.01 significance level, NS not significant.
Cohen's d value, ≤ 0.20 is a small effect size, 0.50 is a moderate effect size and ≥ 0.80 is a large effect size.

Table 1 show that there significant is a difference between high betrayal trauma and low betrayal trauma on difficulty identification feelings at the 0.001 significance level with Chone's d value 1.32, which indicates larger effect size, and on overall alexithymiaat the 0.01 level of significance with Cohen's d value 0.54,which indicates moderate effect size.These results indicate that the high betrayal trauma individuals have more difficulty identifying feelings (M=20.18, SD=3.34) than low betrayal trauma (M=15.64, SD=3.55) and the overall alexithymia was higher in higher betrayal (M=52.08, SD=6.39) than low betrayal individuals(M=48, SD=8.55).

Table 2: Mean and SD of high betrayal trauma and low betrayal trauma on physical health problems (N=100).

Variables	Groups	N	Mean	Std. Deviation	t-value	Cohen's d
Physical Health Problems	High Betrayal Trauma	50	54.36	21.10	5.02***	1.00
	Low Betrayal Trauma	50	33.66	20.08		

*** Significant at 0.001 significance level
Cohen's d value, ≤ 0.20 is a small effect size, 0.50 is a moderate effect size and ≥ 0.80 is a large effect size.

Table 2 shows that there is a significant difference between high betrayal trauma and low betrayal trauma individuals on physical health problems (t=5.02, p<.001) with cohen's d value 1,which indicates large effect size. The results indicate that physical health problems were found more in high betrayal trauma individuals (M=54.36, SD=20.10) than low betrayal trauma (M=33.66, SD=20.08).

Table 3: Mean and SD of male and female high betrayal trauma on alexithymia and its dimensions (N=50).

Variables	Gender	N	Mean	Std. Deviation	t-value	Cohen's d
Difficulty Identifying Feelings	Male	25	20.28	3.30	.21	NS
	Female	25	20.08	3.44		
Difficulty Describing Feelings	Male	25	10.72	1.99	5.66***	1.60
	Female	25	15.00	3.22		
Externally-Oriented Thinking	Male	25	17.40	2.26	5.39***	1.52
	Female	25	20.68	2.07		
Alexithymia	Male	25	48.40	3.00	4.96***	1.41
	Female	25	55.76	6.79		

*** Significant at 0.001 significance level, NS not significant.

Cohen's d value, ≤ 0.20 is a small effect size, 0.50 is a moderate effect size and ≥ 0.80 is a large effect size.

The table 3shows that there is a significant difference between male high betrayal trauma and female high betrayal trauma on difficulty describing feelings, externally-oriented thinking andoverall score of alexithymiaat 0.001 level of significance with cohen's value (d=1.60,d=1.52 & d=1.41) respectively which indicates large effect size. The results indicate that difficulty describing feelings was reported more in female (M=15, SD=3.22)than males (M=10.72, SD=1.99). Similarly, externally oriented thinking are more in females with high betrayal trauma (M=20.68, SD=2.07) than male (M=17.40, SD=2.26) and female with high betrayal trauma were reported more on overall alexithymia (M=55.76, SD=6.79) than male (M=48.40, SD=3.00).

Table 4: Mean and SD of male and female high betrayal trauma on physical health problems (N=50).

Variables	Gender	N	Mean	Std. Deviation	t-value	Cohen's d
Physical Health Problems	Male	25	37.04	11.81	10.27***	2.91
	Female	25	71.68	12.02		

*** Significant at 0.001 significance level

Cohen's d value, ≤ 0.20 is a small effect size, 0.50 is a moderate effect size and ≥ 0.80 is a large effect size.

The table 4 shows that there is a significant difference between male high betrayal trauma and female low betrayal trauma on physical health problems at the 0.001 significance level with cohen's d value 2.91,which indicates large effect size. The results indicatethat femaleswith high betrayal trauma had more physical health problems (M=71.68, SD=12.02) than male high betrayal trauma (M=37.04, SD=11.81).

Table 5: Mean and SD of male and female low betrayal trauma on alexithymia and its dimensions (N=50).

Variables	Gender	N	Mean	Std. Deviation	t-value	Cohen's d
Difficulty Identifying Feelings	Male	25	16.76	3.18	2.33*	0.66
	Female	25	14.52	3.59		
Difficulty Describing Feelings	Male	25	13.80	3.28	2.04*	0.58
	Female	25	11.92	3.28		
Externally-Oriented Thinking	Male	25	18.76	4.53	1.39	NS
	Female	25	20.24	2.79		
Alexithymia	Male	25	49.32	9.79	1.10	NS
	Female	25	46.68	7.05		

* Significant at 0.05 significance level, NS not significant.

Cohen's d value, ≤ 0.20 is a small effect size, 0.50 is a moderate effect size and ≥ 0.80 is a large effect size.

The table 5 shows that there is a significant difference between male low betrayal trauma and female low betrayal trauma on difficulty identifying feelings and difficulty describing feelings at 0.05 level of significance, with cohen's d value 0.66 and 0.58 respectively. Which indicate moderate effect size?The

results indicatethat males with low betrayal trauma scores higher (M=16.76, SD=3.18)on difficulty identifying feelings than females (M=14.52, SD=3.59) and similarly, males were reported higher on difficulty describing feelings (M=13.80, SD=3.28) than females(M=11.92, SD=3.28).

Table 6: Mean and SD of male and female low betrayal trauma on physical health problems (N=50).

Variables	Gender	N	Mean	Std. Deviation	t-value	Cohen's d
Physical Health problem	Male	25	21.64	12.05	5.25***	1.49
	Female	25	45.68	19.41		

*** Significant at 0.001 significance level

Cohen's d value, ≤ 0.20 is a small effect size, 0.50 is a moderate effect size and ≥ 0.80 is a large effect size.

The table 6 shows that there is a significant difference between male low betrayal trauma and female low betrayal trauma on physical health problems at the 0.001 significance level with cohen's d value 1.49, which indicates large effect size. The results indicate that females of low betrayal trauma have more physical health problems (M=45.68, SD=19.41) than male low betrayal trauma (M=21.64, SD=12.05).

Table 7: Result of multiple regression analysis for overall alexithymia as a criterion variable and group, gender and age as predictors

R	R square	Adjusted R square	Std. error of the estimate	F	Significance
.35[a]	.123	.10	7.402	4.49	005[b]

Variables	beta value	Std. Error	t-value	significance
(Constant)	49.67	1.44	34.35	.000
Groups	-4.24	1.48	2.86	.005
Gender	2.42	1.48	1.63	.106
Age	2.71	1.48	1.82	.071

Dependent Variable: overall Alexithymia

Predictors: (Constant), Groups, Gender, Age

Multiple regressionswere conducted to examine, whether group, gender and age have impact on alexithymia. From the table 7, the value of R is .35, indicates positive coefficient correlation among all the variables. Adjusted R^2 is .10.Which indicates that the overall model explained 10 percentage of variation can be explained by the three predictors variables, which was revealed to be statistically significant, F(3,96)=4.49, p<.01. An inspection of individual predictors revealed that satisfaction with group (ß= -4.24, p<.01) is significant predictors of overall alexithymia. However the gender (ß= 2.42, p=.10) and age (ß=2.71, p=.07) does not emerged as a significant predictor. The result indicates that the score are significantly different depending on the group (HB, LB), High betrayal (HB) have scored that are 4.24 points higher than of low betrayal (LB).

Table 8: Result of multiple regression analysis for physical health problems as a criterion variable and group, gender and age as predictors

R	R square	Adjusted R square	Std. error of the estimate	F	Significance
.79[a]	.63	.62	.62	54.65	.000[b]

Variables	beta value	Std. Error	t-value	significance
(Constant)	37.22	2.77	13.43	.000
Groups	-21.03	2.84	7.40	.000
Gender	29.45	2.83	10.38	.000
Age	5.50	2.84	1.93	.057

Dependent Variable: Physical Health Problems

Predictors: (Constant), Groups, Gender, Age

Multiple regressionswere conducted to examine, whether group, gender and age impact on physical health problems. From the table 8,the value of R is .79, indicates positive and significant coefficient correlation among all the variables. Adjusted R^2 is .62 which indicates that the overall model explained 62

percentage of variation can be explained by the three predictors variables, which was revealed to be statistically significant, F(3,96)=54.65, p<.001. An inspection of individual predictors revealed that satisfaction with group (ß= -21.03, p<.001) and gender (ß= 24.05, p<.001) are significant predictors of physical health problem. However the age does not emerged as a significant predictor (ß= 5.50, p=.05). The result indicates that the score are significantly different depending on the group (HB, LB), High betrayal (HB) have scored that are 21.03 points higher than of low betrayal (LB). Similarly, in gender (male, female), females have scored that are 29.45 points higher than male.

DISCUSSION

The primary purpose of the study was to measure the group and gender on alexithymia and physical health problems and to see the effect of socio demographic factors (gender and age) as predictors of alexithymia and physical health problems in the individuals suffered from betrayal trauma among young adults.

It was found that female victims were significantly moreprone for alexithymia than for male victims. However, in normal populations there isoutcomes of gender differences in which men are more alexithymic and less emotional than women. Our results indicate the contrary, e.g. high betrayal trauma women found to be significantly more alexithymic than men, on the cognitive component (reduced Verbalizing and Identifying). Levant and his coworkers[30] noted the same findings on clinical samples. It is associated with the feminine stereotype (hysterical, emotional, fantasy prone, liar, etc.) might be responsible for the highly impaired cognitive component in women, as not being taken seriously by expressing doubts on the credibility of their accounts, hampers the formation between the emotional experience and its cognitive labels. However, on the affective component (difficulty identifying feelings) however, the gender did not differ significantly from each other, which is remarkable as well because women usually are more emotional than men [31].Moreover, The results suggested that the mean for alexithymia and physical health problems are more in high betrayal trauma than low betrayal trauma, which means high betrayal trauma people are more suffering from alexithymia and physical health problems and the same results were highlighted by Linehan [21], Polusny et al. [32]. This may be because of incorporate emotional awareness and psychosomatic problems.The results showed that the mean of physical health problems for high betray trauma was found more than low betrayal trauma, moreover the physical health problems in female with high betray trauma had high score than male trauma individuals. The authors Fillingim, Wilkinson, and Powell [33] find the same findings while examined histories of sexual and physical abuse in adulthood, health care utilization pain, somatization, and perceptions of health status. The results showed high betrayal trauma were more predicting the psychical health problems and alexithymia, the same results were reported by Sachs-Ericsson, Blazer, Plant and Arnow [34], Springer et al. [2],because individuals exposed to high betrayal traumas are at increased risk for a range of physical health difficulties. Researchers have suggested that high betrayal trauma may exert an impact on physical health through a number of potential psychological pathways [1, 34, 35]. Researchers like Kiecolt-Glaser, McGuire, Robles and Glaser [36]. Reiche, Morimoto, and Nunes [37], suggest that high betrayal trauma may influence immune function via psychological symptoms to have physical health problems and alexithymia. Moreover the results showed that age have not predicted the alexithymia and physical health problems anymore and the same results were reported by Parker et al., [38] Franz et al. [39].

CONCLUSION

The findings of the current study inform health professionals about the different range of symptoms associated with betrayal trauma. The young adults, the females exposed to betrayal trauma may have difficulty noticing, reporting, and understanding their own emotional states as compared to male, which needs a health assessment. These results highlight the need for health professionals to ask about the number of traumas to which patients have been exposed. Health professionals should be aware of connections among betrayal trauma, psychological difficulties, and physical health complaints to make appropriate assessments and referrals. The result that alexithymia is associated with HB trauma and with physical health problems suggests that interventions that incorporate emotional awareness and regulation techniques, trauma processing, and attention to physical health status may be helpful for individuals with HB trauma exposure.

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