Coping among Mothers having Children with Developmental Disabilities

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Abstract

The concept of ego defence mechanism and coping strategies are complex emotional, cognitive and behavioural process to solve conflicts and find an acceptable solution within a given condition. The present study aims at identifying the prevalence of different types of ego defence mechanism and coping strategies, assess levels of depression and also the status of general health among mothers having children with developmental disabilities. It also examines the relationship between types of defence mechanism, coping strategies, depression and general health. Data were collected from 30 samples, those who were bringing their children to attend rehabilitation services for not less than a period of three months. Case record files, defence mechanism, coping strategies, depression and general health status were examined. Findings indicated that mothers having children with disability commonly use adaptive ego defence mechanism and engagement coping strategies, but at the same time has a high level of depression and poor general health and well being. Immature defence mechanism especially acting out, wishful thinking and devaluation are associated with the severity of depression and poor general health and well being. Emotion focus disengagement coping strategies of self-criticism and social withdrawal were also observed to have a positive relationship with an immature ego defence mechanism. Neurotic defence style on the other hand was found to have a significant positive relationship with the problem focus engagement coping strategies of problem solving and cognitive restructuring and at the same time with problem focus disengagement scale of problem avoidance. The present study does not find any correlation between mature ego defence mechanism and engagement coping strategy.

Keywords: Coping strategies, Depression, Developmental disabilities, Ego defence mechanism

Introduction

It was found that parents of children with Developmental Delay as compared to the control group have higher anxiety and depression (Azeem, *et al*., 2013,) and health problem (Miodrag, *et al.,* 2014). Atkins, *et al*., (1982) viewed adjustment to disability as a very complicated process that is based on the combination of "psychological", "social" and "disability" related components. Livneh's (1991) stage phase model adjustment to one's disability may also be relevant as a process of adjustment to having a child with a disability, the final stage of reintegration is characterized by transformation from defence mechanism of bargaining and denial to more refined coping strategies consisting of five stages: initial impact, defence mobilization, initial realization or recognition, retaliation or rebellion and reintegration or reorganization. According to this model people go through a series of emotional reaction. When awareness of disability increases, anxiety may also develop leading to overreaction, irritability and a sense of helplessness in this stage defence mechanism are yet to come into play. Mobilization of defence mechanism is the second stage and has two separate sub-stages: bargaining and denial. Bargaining is when an individual attempt to make a deal with God or anyone else and will do almost anything in return for recovery; this stage is followed by denial. Unsuccessful bargaining leads to denial wherein everything related to disability is forgotten. In both the substage of bargaining and denial, the thoughts and emotions related to disability and its consequences are suppressed. The defence mechanisms used are suppression, rationalization, repression and denial which protect the ego from the painful reality. However, one cannot deny the existence of disability in their life and will eventually

realize that disability is for real and that it will have a long term impact on his/her life. This embodies the third stage, "initial realization" this stage brings on mourning, reactive depression, and internalized anger. When mourning extends to a longer period and gets generalized to everything in life; they show withdrawn behaviour, detachment, distress and hopelessness. The defence mechanism of withdrawal and avoidance is deemed helpful as the person can reflect on the disability and its consequences without distraction from the social and the physical environment. Guilt is prominent and may attribute the cause of disability as punishment for one's sins, this internalized feelings could not protect the person from facing the realities of disability.

"Retaliation or rebellion" is generally seen as externalized anger and often take out the anger on others. The defence mechanism of projection, externalization and regression are used to deal with anything that appears to be threatening.

The final stage is "reintegration" characterized by acknowledgement, acceptance and final adjustment. In this final stage, the person feels more satisfied and content, and the use of a defence mechanism to protect oneself from the reality of disability is replaced by a more refined coping mechanism.

Defence mechanism and coping strategies are processes aimed at achieving adjustment within the given situation, but the process of achieving the state of adjustment is different. The two different approaches; ego psychology and cognitive approach conceptualize the process of achieving adjustment from altogether different dimensions.

Ego Defense Mechanism

Ego psychology conceptualize coping as realistic and flexible thoughts and aims at solving problems and thereby reduce stress. It treats behaviour as less important than cognition and differentiates among several processes that people use to handle person-environment relationships. Meninger (1963), Haan (1969, 1977) and Vaillant (1977) offer a hierarchical model in which coping refers to the highest and most advanced (mature) ego processes followed by defences, which is referred to as neurotic modes of adaptation. It is hierarchically arranged and at the bottom is the process of what Haans calls fragmentation or ego failure and Menninger refers to it, as regressive or psychotic levels of ego functioning. The ego- psychoanalytic model has a dispositional approach to conceptualizing coping. The ego process is an unconscious cognitive mechanism though; its manifestation may have a behavioural component. Psychoanalytical theorist assumes that people have a relatively stable preference for particular defence and coping styles for dealing with conflict and that these styles vary in their maturity (Bond et al, 1983, Vailant, 1977).

Coping Strategies

Ben-Porath and Tellegen (1990) have critically commented that the pioneering work of Richard Lazarus in stress research has reintroduced the concept of complex mental processes to the behavioural psychologist interested in stress and coping and that psychoanalytic theory has a tremendous influence on the way Lazarus conceptualize coping. Coping as defined by Folkman & Lazarus (1980) states that it is a "constantly changing cognitive and behavioural efforts to manage specific external or internal demands that are appraised as taxing or exceeding the resources of a person". Coping is a stabilizing factor which helps individual in maintaining psychosocial adaptation during a stressful period. It encompasses both cognitive and behavioural efforts to reduce or eliminate stressful conditions and associated distress (Lazarus & Folkman 1984, Moos & Schaefer 1993). Lazarus viewed coping as a stable feature of personality. The cognitive appraisal of stressful situation acts as a mediating factor, linking the life stressors and the individuals coping responses. In this context coping is a dynamic process that changes from time to time as per changing demands and changing appraisals of the situation. Tobin et al (1989) categorized coping strategies into two broad categories: engagement coping, which refers to coping by actively negotiating with stressful situations and disengagement coping which focuses on behaviour, thoughts, and feelings that avoid stressful situations.

Defence Mechanism and Coping Strategies – Differences

Cramer (1998) outlined the differences between coping and defence mechanism and gave five characteristics a) conscious and unconscious process, b) intentional or non-intentional operations, c) situational or dispositional, d) hierarchical or non-hierarchical, e) relation to psychological health or pathology. The first two characteristics are of significant difference and the other characteristic does not have many differences but a matter of emphasis. The

relationship between defence mechanism and coping strategies were examined, some authors posited theoretical but non–empirical relationships. The recent views postulate defence mechanism as the first line of defensive operation which precedes coping.

The present study aimed to identify the prevalence of different types of defence mechanism and coping strategies employed by mothers having a child with developmental disabilities and also to assess the level of depression and general health and well being. It may be of significant relevance to assessed types of defence mechanism and coping strategies employed by the present population who were established to have a greater level of stress. The obtained result will help us in examining the relationship between defence mechanism and coping strategies and their influence on psychological wellbeing amongst mothers having children with intellectual developmental disabilities.

Method

Sample

Data were collected from a sample of 30 mothers of children diagnosed with developmental disabilities namely Intellectual Disabilities (ID's) and Autism. All levels of Intelligence Quotient (IQ) can occur in autism, but there is significant mental retardation in some three-quarters of the cases (ICD 10). Participants were regularly coming for follow up of various rehabilitation services for not less than 3 months. Participants mean age was 32.5 years and SD 4.3, mean education in years was of 14.6 years and SD of ± 2.47 years. 53 % belonged to urban and 47% were from rural background. The level of children's functioning was found to have a mean SQ of 52.63 with an SD of ± 21.98; DQ with Mean =52.87 and SD =± 22.44. Mothers with serious medical conditions were not included in the study.

Measures

1. **Defense Style Questionnaire** (DSQ - 40) by Andrews et al (1993) was used to assess defence mechanism 55 which comprises 40 items. It derives scores for 20 defence mechanism, each has 2 items; responses were given in a 9 point Likert method. Further defence mechanisms were grouped as i) mature factor comprised of suppression, sublimation, humor and anticipation. ii). Neurotic which has four defence mechanism of undoing, pseudo altruism, idealization and reaction formation. iii) Immature factor has twelve which includes - rationalization, projection, dissociation, displacement, splitting, passive aggression, denial, acting out, autistic fantasy, somatization, isolation and devaluation.

2. **Coping Strategy Inventory Short Form** (CSI-SF) – The Coping Strategy Inventory short form consisting of 32 items, scored on a 5 point Likert scale ranging from 1 (not at all) to 5 (very much) by Tobin (1995) . Higher score reflects higher use of those particular strategies. CSI has 14 subscales including eight primary scales, four secondary scales and two tertiary scales. The primary scale consists of Problem-solving: this subscale assesses both behavioural and cognitive strategies designed to eliminate the source of stress by changing the stressful situation. Cognitive restructuring is cognitive strategies that alter the meaning of the stressful transaction as it is less threatening, Social support refers to seeking emotional support from people, one's family and one's friends. Express emotion refers to releasing and expressing emotions; Problem avoidance refers to the denial of problems and the avoidance of thoughts or action about the stressful event. Wishful thinking refers to cognitive strategies that reflect an inability or reluctance to reframe or symbolically alter the situation. The items involve hoping and wishing that things could be better. Social withdrawal reflects blaming oneself for the situation and criticizing oneself.

The secondary subscale consists of Problem-focused engagement (Problem-solving and cognitive restructuring). It involves cognitive and behavioural strategies to change the meaning of the situation for the individual. These coping efforts are focused on a stressful situation. Emotion-focused engagement comprises social support and expresses emotions. It reflects open communication of feelings to others and increased social involvement, especially with family and friends. These coping efforts are focused on the individual's emotional reaction to a stressful situation.

Problem-focused disengagement includes both problem avoidance and wishful thinking. It reflects denial, avoidance, and an inability or reluctance to look at the situation differently. They reflect cognitive and behavioural strategies to avoid the situation. Emotion-focused disengagement is a combination of social withdrawal and self-criticism or blaming oneself for what happened. Tertiary subscales are of two parts: engagement and disengagement. Engagement reflects attempts by the individual to engage oneself in efforts to manage the stressful

person/environment transaction. It comprises problem-solving, cognitive restructuring, social support and express emotion. Disengagement includes problem avoidance, wishful thinking, social withdrawal and self-criticism.

3. **Beck Depression Inventory (BDI):** Developed by Aaron T. Beck in 1976, is a 21 question multiple choice self-report inventory, used for measuring the severity of depression. Total score of 0-13 is considered as minimal range, 14 - 19 as mild, 20 - 28 as moderate and 29 - 63 is severe.

4. **General Health Questionnaire 12** (GHQ), (Goldberg & Williams 1988):The GHQ-12 comprises 12 items describing mood states; each item of the GHQ-12 has four possible response options. Item scores were coded by using the Likert method (all items coded 0-1-2-3). The twelve-item General Health Questionnaire (GHQ-12) is intended to screen for general (non-psychotic) psychiatric morbidity. A high score indicates worse health.

Procedure of Data collection

The detailed assessment of the child was done by a group of professionals including a special educationist, psychiatrist and psychologist during the first contact with the institute. File review was done to retrieve assessment data. The data collection was done between the period of January 2014 to August 2014. Developmental Quotient (DQ) was derived from the Developmental Screening Test developed by J. Bharatraj in 1983 and Social Quotient by administering Vineland Social Maturity Scale originally developed by E.A. Doll in 1935 which was then adapted by A.J. Malin in the year 1965. The Childhood Autism Rating Scale (CARS) developed by Eric Schopler et al (1980) was designed to help differentiate children with autism from those with other developmental delays, such as intellectual disability. The diagnosis was done based on the International Classification of Disease 10th revision (ICD - 10). After a detailed assessment, children diagnosed with Intellectual Disability and Autism was recommended for required rehabilitation services. Mothers of children attending group activity (special education) regularly in this government-run institute for not less than three months were taken for the study. Informed consent was taken from each participant. Test administration of the study sample was done in two sessions over a period of one week. The participants were given the standardized tools of Defense Style Questionnaire (DSQ - 40) by Andrews et al (1993), Coping Strategy Inventory Short Form (Tobin, 1995), Beck Depression Inventory (BDI) developed by Aaron T. Beck in 1976 and General Health Questionnaire – 12 (Goldberg & Williams 1988).

Data Scoring and Analysis

The scoring for the standardized tools in this study was done according to the scoring guidelines given in the manual. For statistical analysis of the obtained scores, the demographic profiles were coded on a nominal scale. The collected data was analyzed using SPSS (version 16.9). Descriptive statistics including means, standard deviations, and percentages were computed to examine the demographic characteristics of the participants, scores on coping strategy inventory and defence mechanism inventory. Pearson product-moment correlations were computed to see the relationship between various analytical variables of defence mechanism, different coping strategies, depression and general health scores.

Results

Data were collected from mothers having children with intellectual and developmental disabilities. All the participants were regularly coming for follow up in various rehabilitation services for not less than three months in a government-run institute.

Table 1: Socio-demographic and clinical details

Variables	**Mean**	**Standard Deviation**
Age (in years)	32.47	4.02
Educational (in years) level of the participants	14.64	2.47
Residence	**No. of cases (*n*)**	**Percentage**
Urban	16	53.3
Rural	14	46.7
Level of functioning/Disability of	**Mean**	**Standard Deviation**

the child		
DQ	52.63	21.98
SQ	52.87	22.44

Table 1 shows the details of the participants. Participants mean age was 32.5 years and SD of ± 4.3, mean education in years was 14.6 and SD of ± 2.47 years. 53 % belongs to urban and 47% were from rural background. The mean age of the children was found to be 12 years and a standard deviation of ± 3.24. The level of children's functioning was obtained by assessing Social Quotient (Mean = 52.63, SD = ±21.98) and Developmental Quotient (M =52.87, SD =± 22.44). It was found that 80% (n = 24) were diagnosed with ID and 20% (n = 6) were diagnosed as having Autism with ID.

Prevalence of Defense Mechanism

Table 2: Mean and Standard Deviation of defense mechanism scores

Defenses	**Domains**	**Mean (SD)**
Mature	Humor	4.5 (1.56)
	Suppression	5.99 (1.68)
	Sublimation	5.66 (1.86)
	Anticipation	5.90 (1.65)
Neurotic	Undoing	4.50 (1.35)
	Idealization	4.68 (2.13)
	Reaction Formation	4.02 (1.33)
	Pseudo altruism	5.35 (1.57)
Immature	Denial	4.30 (1.78)
	Dissociative	4.88 (1.86)
	Devaluation	2.71 (1.53)
	Acting out	4.28 (1.99)
	Somatization	5.24 (2.27)
	Autistic Fantasy	3.64 (2.20)
	Splitting	3.74 (1.48)
	Passive aggression	4.42 (1.89)
	Displacement	4.5 (1.5)
	Rationalization	5.79 (1.59)
	Isolation	4.70 (1.59)
	Projection	4.37 (1.32)
Defense style	Mature style	5.55 (0.9)
	Neurotic Style	4.46 (1.34)
	Immature style	4.42 (1.1)

Table 2 indicates the prevalence of defense mechanism. The mean score of mature defense style (M = 5.55, SD =± 0.95) was found to be higher than neurotic and immature style. The individual defense mechanism of suppression (M = 5.99, SD = ±1.68), anticipation (M= 5.90, SD= ±1.65) sublimation (M = 5.66, SD = ±1.86), rationalization (M =5.79, SD = ±1.59), followed by pseudo altruism (M= 5.35, SD = ±1.75) and somatization (M = 5.24, SD = ±1.75) were commonly used by the mothers and the least reported were the defense mechanism of devaluation (M = 2.71, SD =± 1.53) and autistic fantasy (M = 3.64, SD = ±2.20).

Prevalence of Coping Strategies

Table -3: Mean and Standard deviation of scores on coping strategies

	Coping strategies	Mean (SD)
Primary subscale	Problem solving	3.55 (1.07)
	Cognitive restructuring	2.9 (1.01)
	Express Emotion	2.7 (0.85)

	Social Support	3.11 (0.94)
	Problem Avoidance	2.17 (0.89)
	Wishful thinking	2.53 (0.76)
	Self criticism	1.88 (0.98)
	Social withdrawal	2.4 (0.13)
Secondary Subscale	Problem focus engagement	3.28 (0.83)
	Emotion focus engagement	2.9 (0.76)
	Problem focus disengagement	2.35 (0.64)
	Emotion focus disengagement	2.18 (0.78)
Tertiary subscale	Engagement	3.09 (0.70)
	Disengagement	2.21 (0.60)

The coping strategies as indicated in table 3, problem solving (M = 3.55, SD = ±1.07), social support (M = 3.11, SD = ±.94) and cognitive restructuring (M = 2.9, SD = ±1.01) were more commonly employed and the least were obtained for coping strategies of problem avoidance (M = 2.17, SD = ±.89) and self-criticism (M = 1.88, SD = ±.98).The Secondary subscale of problem focus engagement (M = 3.28, SD = ±.83) and emotion focus engagement (M = 2.9, SD = ±.76) were found to be more common than problem focus disengagement and (M = 2.35, SD =± .64) emotion focus disengagement (M = 2.18, SD =± .78). Engagement (M = 3.09, SD = ±.70) was found to be more common than disengagement (M =35.43, SD =± 9.87).

Depression and General Health

Table 4: Level of depression and status of general well being

	Mean (SD)	**Scores/Severity**
BDI	20.97 (8.70)	No depression (n = 5) =16.66%
		Mild (n = 8) = 26.66%
		Moderate (n= 10) = 33.33%
		Severe (n = 7) = 23.33%
GHQ	13.60 (6.10)	<15(n=12) = 40 %
		>15 (n=12) = 50%
		>20 (n=3) = 10%

Table 4 shows the scores on BDI and GHQ. The obtained scores on BDI indicated 23 % of participants were identified as having a severe level of depression, 33% had moderate depression, and 27% had mild depression whereas 17% did not report depression. On GHQ, 50% of the sample scores higher than 15 which indicated the presence of psychological distress and 10% of the sample had obtained scores of more than 20 suggesting severe problems and psychological distress.

Correlation between Defense style, Coping Strategies, Depression and GHQ

Table 5: correlation between Defense style and Primary Coping Strategies

(1).Defense Mechanism	Primary Coping strategies							
	Problem solving	Cognitive restructuring	Express emotion	Social support	Problem avoidance	Wishful Thinking	Self criticism	Social withdrawal
(a).Neurotic	.424*	.419*	.345	.044	.502**	.218	.261	.006
(b).Mature	.313	.128	.205	.154	.212	.193	.295	.068
(c).Immature	.226	.240	.071	-.081	.148	.236	.379*	.459*
(2).GHQ	-.166	-.031	-.233	-.181	.017	.481**	.123	.519**
(3).BDI	-.267	-.049	-.332	-.167	-.080	.238	.183	.466**

Table 6: Correlation between Depression and GHQ scores with defense mechanism

Defenses	Domains	BDI	GHQ
Mature	Humor	-.127	.023
	Suppression	.089	.066
	Sublimation	.223	-.267
	Anticipation	-.138	.028
Neurotic	Undoing	.273	.084
	Idealization	-.010	-.042
	Reaction Formation	.120	.249
	Pseudo altruism	-.149	-.327
Immature	Denial	.106	.335
	Dissociation	.004	.164
	Devaluation	.375*	.496**
	Acting out	.398*	.407**
	Somatization	1.06	.336
	Autistic Fantasy	.453*	.466**
	Passive aggression	.200	.248
	Displacement	.017	-.078
	Rationalization	-.038	-.127
	Isolation	.271	.109
	Projection	-.229	-.167
	Splitting	.046	.099

Table 7: Correlation - Defense Mechanism with Secondary and Tertiary Coping Strategies

(1).Defense Mechanism	Secondary Coping strategies				Tertiary coping strategies	
	Problem focus engagement	Problem focus disengagement	Emotion focus Engagement	Emotion focus disengagement	Engagement	Disengagement
(a).Neurotic	.535**	.479**	.220	.107	.393*	.164
(b).Mature	. 317	. 263	.210	.247	.353	.094
(c).Immature	.298	.244	-.011	.410*	.151	.347
(2).GHQ	-.191	-.242	.300	.437*	-.225	.413*
(3).BDI	.649	.139	.122	.033	-.343	.301

*correlation is significant at the 0.05 level (2 tailed).

**correlation is significant at the 0.01 level (2tailed).

Table 8 Correlation - defense mechanism with General Health Questionnaire and BDI

Defense mechanism	General Health Questionnaire	BDI
(a).Neurotic	-.039	.064
(b).Mature	-.054	-.123
(c).Immature	.253	.293

Pearson Correlation was done to assess the interrelationship between defence style and primary coping strategies showed a significant positive correlation between neurotic style with the three primary coping strategies of problem-solving (r= .424, p<.05), cognitive restructuring (r=.419, p<05) and problem avoidance (r =.502, p<.01) (Table 5). As indicated in table 7 the secondary subscale of problem focus engagement (r=.535, p<01) and problem focus disengagement (r=.479, p<.01) indicated significant positive relation with neurotic defence style, and tertiary coping strategies of engagement (r=.393, p<.05) was also found to have a positive correlation with neurotic style, whereas immature defence style was found to have a positive correlation with emotion focus disengagement (r=.410, p<.05).

It is also found that immature defence style indicated a positive correlation with coping strategies of self-criticism(r=.379, p<.05) and social withdrawal (r=.459, p<.05) which are emotion focus disengagement. No correlation was found between mature defences with any of the coping strategies (Table 5). It was observed that scores on GHQ show a positive correlation with the primary coping strategies of wishful thinking (r=.481, p<.05) and social withdrawal (r=.519, p<.05) (Table 5) and secondary subscale of emotion focus disengagement (r= .437, p<.05) (Table 6). Poor general health was observed to be correlated with the immature defence mechanism of devaluation r=.496, p<.01, acting out (r=.407, p<.01) and autistic fantasy (r=.466, p<.01). The severity of depression was found to be associated with the primary coping strategy of social withdrawal (r=466, p<.01) (Table 5) and also with the immature defence mechanism of devaluation r=.375, p<.05), acting out (r=.407, p<.01) and autistic fantasy (r=.453, p<.05) (Table 6). Table 8 shows correlation between the defense mechanism of neurotic, mature and immature with GHQ and BDI, where no significant correlation was obtained.

Discussion

This study aimed to identify the prevalence of different types of defence mechanism and coping strategies used by mothers having a child with developmental disabilities and also to assess the level of depression and general health and well-being. Data were collected from a sample of 30 mothers of children diagnosed with Intellectual disabilities and developmental disabilities.

In the present study, the findings have shown that participants mainly used mature defences like sublimation, rationalization, anticipation and suppression rather than neurotic and immature style; neurotic defence mechanism of pseudo altruism and immature defence of somatization were also some of the more commonly used defence mechanism in our sample. The immature defence mechanism of devaluation and autistic fantasy were the least employed defence mechanism. The coping strategies of engagement - problem-solving, cognitive restructuring and social support were commonly reported rather than coping strategies of disengagement. Assessment of both defence mechanism and primary coping strategies reveals that most participants generally use adaptive mechanism. This indicates their willingness to engage effectively with the needs of the child with a disability. The study also shows that only 17% of mothers do not qualify as having depression, whereas the rest of the 83% had varying degrees of depression and more than 50% has poor general health and wellbeing.

Poor general health was found to have a significant positive correlation with the coping strategies of emotion focus disengagement characterized by wishful thinking and social withdrawal and was also found to have a statistically significant positive relationship with immature defence style; which means frequent usage of emotion focus engagement and immature defence mechanism are generally associated with poor general health and wellbeing. The specific immature defence mechanism of devaluation, acting out and autistic fantasy were positively associated with depression and poor general health rather than neurotic defence style. The findings on correlational analyses reported by Flanerry and Perry (1990) indicated similar findings that immature defences were highly associated with higher reported levels of life stress, physical illness, and affective symptoms.

Mothers who resorted to neurotic defence style were also more likely to endorse more items on the disengagement subscale of problem avoidance and also with engagement subscale of problem-solving and cognitive restructuring which appears to be self-contradictory as the neurotic style was found to have a positive relationship with both engagement and disengagement coping strategies at the same time. Since, the concept of neurotic defence mechanism is generally conceptualized as a pathological condition, the neurotic defence style and engagement coping strategy which is adaptive, should ideally be in a different direction. This finding supports Vaillant & Battista's (1982) idea that neurotic defence mechanisms, despite being correlated with high levels of distress and impairment, have been seen to be protective in cognitive and affective awareness of conflicts, when compared to immature defences.

The present research findings do not indicate a significant correlation between mature defence mechanism and coping strategies of engagement. Mature defence style was not found to be correlated with engagement coping strategies despite participants reporting common usage of both mature defence mechanism and engagement coping strategies. This finding partly favours the reported research outcome which suggested the existence of relationships between adaptive coping strategies and mature defences, as well as between maladaptive coping strategies and immature defences (Callahan and Chabrol 2004; Grebot et al., 2006). It may be stated that the mature defence mechanism is entirely different from engagement coping strategies, since coping strategies assesses cognitive and

behavioural component, on the contrary usage of mature defence style are beyond ones cognitive and behavioural aspects, encompassing unconscious, non-intentional and dispositional.

Given the findings that mothers despite reports of being depressed, the high prevalence of mature defence mechanism suggested the possibility of increased personal growth and moving towards conscious awareness about life's reality. The findings that more number of mature defence mechanism and adaptive coping mechanisms are being reported by the mothers who have children with a disability may be explained by the fact that our participants were those mothers who bring their child daily to the institution for special education, and were regularly attending follow up services as and when required. This is in agreement with Vaillant's (1977) proposed hierarchy of defence, which states that mature defence mechanism is associated with better adaptive functioning and health as opposed to the immature defence which is correlated negatively with measures of adaptive adult functioning.

In conclusion, mothers having children with disability commonly use adaptive ego defence mechanism and engagement coping strategies; but at the same time has a high level of depression and poor general wellbeing. Immature defence mechanism especially acting out, wishful thinking and devaluation are associated with a high level of depression and poor general health and wellbeing. Emotion focus disengagement coping strategies of self-criticism and social withdrawal have a significant positive correlation with the immature ego defence mechanism. The neurotic defence style was found to have a positive relationship with both problem focus engagement coping strategies (problem-solving and cognitive restructuring) and at the same time with the problem focus disengagement scale of problem avoidance.

Strength and limitation

Mothers being the primary caregiver, understanding the process of coming to terms with the reality of a child's disability and promoting their wellbeing is of utmost importance. Extending professional help requires an understanding of their use of psychological resources and finding a way to strengthen them. The limitations of the study are; the present research design being a cross-sectional study, it does not indicate the longitudinal process of transformation in the usage of defence mechanism and coping strategies. The other factors like severity and types of child's disability, duration and age of diagnosis, availability of various social, familial and economic supports need to be considered. The study also has less sample size and therefore lacks generalizability.

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