

## Defence Mechanisms of Fertile and Infertile Women

Jaan U<sup>1\*</sup> and Sultan A<sup>2</sup>

<sup>1</sup>Department of Psychology, Jammu and Kashmir Higher Education, Srinagar, Jammu and Kashmir, India

<sup>2</sup>Department of Psychology, University of Kashmir, Srinagar, Jammu and Kashmir, India

\*Corresponding author: Jaan U, Department of Psychology, Jammu and Kashmir Higher Education, Srinagar, Jammu and Kashmir, India, E-mail: [amir695489@gmail.com](mailto:amir695489@gmail.com)

Received date: 08 Aug 2017; Accepted date: 26 Sep 2017; Published date: 03 Oct 2017.

Citation: Jaan U, Sultan A (2017) Defence Mechanisms of Fertile and Infertile Women. J Psychiatry Ment Health 3(1): doi <http://dx.doi.org/10.16966/2474-7769.122>

Copyright: © 2017 Jaan U, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

### Abstract

The act of bearing the children is one of the most important factors that make marriages satisfactory and successful. However, some women are unable to ever bear a child either due to the inability to become pregnant or the inability to carry a pregnancy to a live birth. This becomes a turning point, which lead to various psychological consequences which can be social psychological or existential. This study was undertaken to examine these consequences and for that defence mechanisms among fertile and infertile women (primary and secondary infertile). A sample of 177 females was taken for the purpose of this study from various hospitals of district Srinagar of Kashmir Valley. Out of 177 women 55 females were fertile, 55 females had primary infertility and 67 had secondary infertility. The tools used in the study were Defense Style Questionnaire (DSQ) by Thygesen, Drapeau, Trijsburg, Lecours, & de Roten. Data was analysed using Analysis of Variance (ANOVA) and 30 dimensions or defence mechanisms were attained. Our results were three fold in nature: one these establish new findings in the area by explaining precise usage of defence mechanisms by infertile population; second these confirm the factorial design and their majority of loadings as set by Bond et al. in there factor analysis of DSQ; and third these also confirm theoretical perspective given by Thygesen et al. in conceptualization of nature of defence mechanisms. Moreover post hoc tests detailed and pointed the exact difference between the fertile, primary and secondary infertile couples.

**Keywords:** Defence mechanisms; Infertility; Global Defence Functioning (GDF)

### Introduction

Infertility is defined as the inability to achieve live birth after one year of unprotected intercourse [1]. However in case of age more than 35 years, the time period changes to the six months of unprotected intercourse on the basis of primary prevention [2].

Infertility can be primary or secondary in nature. Primary infertility is defined as not being able to give a live birth or bear a child ever and secondary infertility is defined as not being able to give birth after a previous successful birth [3]. Female infertility can be the result of ovulation problems, polycystic ovarian syndrome, Endometriosis, blocked fallopian tubes and other causes [4].

Psychologists devoted to infertility gathered crucial information for the understanding of this problem. Infertile women wishing to reproduce present higher levels of psychological suffering in comparison to normal women [5]. Among infertile couples passive coping and dissatisfaction with social support are associated with increasing health complaints and higher anxiety and depression levels [6]; infertile women present high levels of social stigma [7]; psychological consequences due to infertility persist for decades, with negative marital, sexual and social impacts [8]; however many studies negate dissatisfaction among infertile couples [9]; quality of the relationship and communication with the partner seems to impact on the emotional status of infertile women [10].

Unravelling unconscious of chronic patients, in our case infertile women is a novel endeavour and research in this particular area mostly focuses on surface level problems. However, nature of problems - likes of which are mentioned above- with infertility tells us that it also features itself at deeper levels. However, these are ignored from psychological discussion and research [11]. Defence mechanisms are the variables which explain ones unconscious, particularly ones personal mental unconscious [12]. Thus, defence mechanism should be brought forth in the form of research problems and its nature should be elucidated.

Defence mechanisms are the forms of unconscious processes that form the mental group operations that are responsible for protecting the individual from experiencing excessive anxiety and protecting self and self-esteem [13]. These are involuntary in nature and shield us from various changes in mood, reality, relationship or conscience [14].

There are almost 44 different types of defence mechanisms, categorized under different hierarchies and theoretical perspectives [13,15-18]. Some of them are: compensation, denial, displacement, identification, intellectualization, interjection, minimization, projection, rationalization, reaction formation, regression, repression, sublimation, substitution and undoing etc., among these, sublimation is considered to be the highest level of defence mechanism that runs civilizations [19].

Defence mechanisms are related to ones physical and psychological problems. It seems that the understanding of psychological mechanisms used by persons treated for infertility may be helpful in the diagnosis of various problems [20]. Previous literature [12] has stated role of defence mechanisms in predicting the level of individual adaptation to significant psychological problems. Similarly, increased use of defence mechanisms by infertile couples with respect to fertile couples have been also reported by researchers [21]. Research also suggests stiffness in utility of defence mechanisms in infertile male and female couples with respect to normal couples [11].

### Purpose of the Study

It is an endeavour, which is fundamental in nature and quantitative in method. Its purpose is to provide research based data about nature of defence mechanisms deployment of infertile women and provide theoretical data for the generation of various intervention strategies for mental health practitioners. Beside the study will contribute data available on the issue.

## Methodology

The population forms three groups: fertile, primary infertile and secondary infertile. The total respondents were 177 married women out of which 55 were or fertile that at least had a live birth of child, 55 were primary infertile and 67 were secondary infertile. The average age of the fertile group was 31.05 years, of the primary group 31.58 years and of the secondary group was 34.36. Further details about the sample are in Table 1.

Defence Style Questionnaire (DSQ) - 60 developed by Thygesen et al. [22], represents an abridged variant of the original one, devised by Bond in 1986. The DSQ 60 scale address each of the 30 individual defence mechanisms of the DSM IV (APA, 2003/2000) [23]. This questionnaire also measures a single score called global defence functioning (GDF), 30 defence mechanisms, three defence styles and 7 level hierarchy of the estimating scale for the defence mechanisms [24].

Evaluation of obtained scores can be done by several ways, in our case it was done by adding 30 individual defence mechanisms or dimensions, which is acceptable [15]. Psychometric properties explicit that Cronbach's alpha for the three dimensions *image distorting nature affect regulating nature* and *healthy defences* was .64, .72, and .61, respectively. The reliability (Cronbach's alpha) of the scale on our sample was 0.88.

The data collected from the respondents was analysed by using Statistical Package for Social Sciences 20 (SPSS). ANOVA and Post Hoc test were used for the analysis.

## Results

The tables below show the results found in the research. Table 2 gives us the ANOVA summary across the three groups namely: fertile, females with primary infertility and females with secondary infertility. Table 3 gives the post hoc revelations explicating significant groups.

Among the 30 defence mechanisms measured by DSQ-60 only 12 are found significantly differing across fertile females, females with primary infertility and females with secondary infertility. These are splitting other, humor, projection, reaction formation, self-observation, projective identification, self-assertion, devaluation/self, fantasy, splitting self, help rejecting complaining and affiliation (Table 3).

Post Hoc test reveals significant differences between fertile females and females with secondary infertility, and likewise females with primary infertility in comparison to secondary infertility in using the *splitting other* defence mechanism.

Also significant difference was found between fertile females and females with primary infertility, and fertile females and females with secondary infertility in using *humor, projection, devaluation/ self, fantasy and help rejecting complaining* defence mechanisms.

Significant difference was found between the fertile females and females with secondary infertility in using *projective identification, self-assertion and splitting/self* defence mechanisms.

In the group fertile females and females with primary infertility, and the group females with primary infertility and secondary infertility *self-observation* was found significant. *Reaction formation* was found significantly differing just between females with primary infertility and females with secondary infertility. Similarly, *affiliation* was also found differing just between fertile and females with primary infertility group.

Defence mechanisms like altruism, passive aggression, suppression, sublimation, rationalization, denial, devaluation of other, dissociation, omnipotence, acting out, withdrawal, intellectualization, displacement, repression, idealization, isolation, undoing and anticipation which form other dimension of DSQ 60 were found insignificant across the three groups.

Table 1: Sample Details.

Demographic Variables	Range	Frequency	Percentage
Fertility Status	Fertile	55	31.07
	Primary Infertile	55	31.07
	Secondary Infertile	67	37.85
Age	20-30	55	31.07
	30-40	101	57.06
	40-50	25	14.12
Domicile	Rural	110	62.14
	Urban	67	37.85
Family Status	Nuclear	127	71.75
	Joint	47	28.24

Table 2: showing ANOVA summary of defence mechanisms.

Defence Mechanisms		Sum of Squares	df	Mean Square	F**	Sig.
Splitting Other	Between Groups	136.232	2	68.116	5.908	.003
	Within Groups	2006.085	174	11.529		
	Total	2142.316	176			
Humor	Between Groups	185.086	2	92.543	4.847	.009
	Within Groups	3321.830	174	19.091		
	Total	3506.915	176			
Projection	Between Groups	728.364	2	364.182	13.722	.000
	Within Groups	4617.941	174	26.540		
	Total	5346.305	176			
Reaction Formation	Between Groups	60.564	2	30.282	3.197	.043
	Within Groups	1648.159	174	9.472		
	Total	1708.723	176			
Self Observation	Between Groups	140.248	2	70.124	6.562	.002
	Within Groups	1859.391	174	10.686		
	Total	1999.638	176			
Projective Identification	Between Groups	88.566	2	44.283	3.156	.045
	Within Groups	2441.367	174	14.031		
	Total	2529.932	176			
Self Assertion	Between Groups	90.465	2	45.232	3.601	.029
	Within Groups	2185.411	174	12.560		
	Total	2275.876	176			
Devaluation/ Self	Between Groups	498.491	2	249.245	13.581	.000
	Within Groups	3193.351	174	18.353		
	Total	3691.842	176			
Fantasy	Between Groups	270.933	2	135.466	4.570	.012
	Within Groups	5157.711	174	29.642		
	Total	5428.644	176			
Splitting Self	Between Groups	203.890	2	101.945	6.471	.002
	Within Groups	2741.172	174	15.754		
	Total	2945.062	176			
Help-Rejecting Complaining	Between Groups	1069.240	2	534.620	30.308	.000
	Within Groups	3069.302	174	17.640		
	Total	4138.542	176			
Affiliation	Between Groups	127.401	2	63.700	3.582	.030
	Within Groups	3094.441	174	17.784		
	Total	3221.842	176			

\*df is the degree of freedom & \*\*F is the ANOVA value.

**Table 3:** Tukey's test showing post hoc revelations of significant groups.

Dependent Variables	Group (I)	Group (J)	Mean Difference	Standard Error	Sig.
Splitting other	Fertile	Primary	-.32727	.64749	.869
		Secondary	-1.95278*	.61782	.005
	Primary	Fertile	.32727	.64749	.869
		Secondary	-1.62551*	.61782	.025
	Secondary	Fertile	1.95278*	.61782	.005
		Primary	-1.62551*	.61782	.025
Humor	Fertile	Primary	-2.14545*	.83320	.029
		Secondary	-2.25807*	.79501	.014
	Primary	Fertile	2.14545*	.83320	.029
		Secondary	-.11262	.79501	.989
	Secondary	Fertile	2.25807*	.79501	.014
		Primary	.11262	.79501	.989
Projection	Fertile	Primary	-4.34545*	.98239	.000
		Secondary	-4.41357*	.93737	.000
	Primary	Fertile	4.34545*	.98239	.000
		Secondary	-.06811	.93737	.997
	Secondary	Fertile	4.41357*	.93737	.000
		Primary	.06811	.93737	.997
Reaction Formation	Fertile	Primary	.78182	.58689	.379
		Secondary	-.63419	.56000	.495
	Primary	Fertile	-.78182	.58689	.379
		Secondary	-1.41601*	.56000	.033
	Secondary	Fertile	.63419	.56000	.495
		Primary	1.41601*	.56000	.033
Self Observation	Fertile	Primary	1.98182*	.62337	.005
		Secondary	.11099	.59480	.981
	Primary	Fertile	-1.98182*	.62337	.005
		Secondary	-1.87083*	.59480	.006
	Secondary	Fertile	-.11099	.59480	.981
		Primary	1.87083*	.59480	.006
Projective Identification	Fertile	Primary	-.78182	.71429	.519
		Secondary	-1.70366*	.68156	.035
	Primary	Fertile	.78182	.71429	.519
		Secondary	-.92185	.68156	.368
	Secondary	Fertile	1.70366*	.68156	.035
		Primary	.92185	.68156	.368
Self Assertion	Fertile	Primary	1.41818	.67581	.093
		Secondary	1.62795*	.64484	.033
	Primary	Fertile	-1.41818	.67581	.093
		Secondary	.20977	.64484	.943
	Secondary	Fertile	-1.62795*	.64484	.033
		Primary	-.20977	.64484	.943
Devaluation/ Self	Fertile	Primary	-2.92727*	.81693	.001
		Secondary	-3.97612*	.77949	.000
	Primary	Fertile	2.92727*	.81693	.001
		Secondary	-1.04885	.77949	.372
	Secondary	Fertile	3.97612*	.77949	.000
		Primary	1.04885	.77949	.372
Fantasy	Fertile	Primary	-2.72727*	1.03822	.025
		Secondary	-2.62632*	.99064	.024
	Primary	Fertile	2.72727*	1.03822	.025
		Secondary	.10095	.99064	.994
	Secondary	Fertile	2.62632*	.99064	.024
		Primary	-.10095	.99064	.994

Splitting Self	Fertile	Primary	-1.41818	.75688	.149
		Secondary	-2.59810*	.72220	.001
	Primary	Fertile	1.41818	.75688	.149
		Secondary	-1.17992	.72220	.234
Secondary	Fertile	2.59810*	.72220	.001	
	Primary	1.17992	.72220	.234	
Help-Rejecting Complaining	Fertile	Primary	-4.65455*	.80090	.000
		Secondary	-5.69932*	.76420	.000
	Primary	Fertile	4.65455*	.80090	.000
		Secondary	-1.04478	.76420	.360
Secondary	Fertile	5.69932*	.76420	.000	
	Primary	1.04478	.76420	.360	
Affiliation	Fertile	Primary	2.09091*	.80417	.027
		Secondary	1.46052	.76732	.141
	Primary	Fertile	-2.09091*	.80417	.027
		Secondary	-.63039	.76732	.690
Secondary	Fertile	-1.46052	.76732	.141	
	Primary	.63039	.76732	.690	

## Discussion

Defence mechanisms seems obvious to all population, but research [17] and conventional wisdoms tell us that there might be some provisions that are particular to the infertile population. Results revealed in Tables 1 and 2 clearly explain these provisions across the three groups as far as their fecundity is concerned. Moreover, the results that were found by the researchers are of three fold in nature. One these establish new findings in the area by explaining particular usage of defence mechanisms by infertile population. Second, these confirm the factorial design and their majority of loadings set by Bond et al. [25] in their factor analysis of DSQ. Lastly, these also confirm theoretical perspective given by [22] in conceptualization of nature of defence mechanisms. Following is a brief elucidation of these three points.

First, previous research gives us a small view of defence mechanisms deployment by infertile females. Researchers simply suggest that usage of defence mechanism in infertile females is more than fertile females [16,26,27]. Coleman [28] in his study reported that infertile women use immature defence mechanisms more than fertile women. Justo et al. [14] suggest that there lies defensive inflexibility among infertile couples due to reproductive stress. Neither of these studies gives detailed viewpoint regarding particular usage of defence mechanisms as provided by our study. Our study points out 12 particular defence mechanisms out of 30 and their usage by fertile and infertile population.

Secondly, Out of 12 significantly differing defence mechanisms in our sample, help rejecting complaining, splitting of self, splitting of other, projection, and projective identification are conceptualized under *image distorting nature*; characterized by distortions in the image of the self, body, or others that may be employed to regulate self-esteem [23]. Fantasy was reasoned to be an *affect regulating nature*; can be helpful in resolving inner and outer conflicts. Self observation, humour, affiliation and self assertion are conceptualized under *healthy defenses*; considered under adaptive defences [23] these result in optimal adaptation in handling stressors, maximizing conscious awareness and gratification. These three theoretical concepts, given by [22] Thygesen et al., namely *image distortion*, *affect regulating* and *healthy defence*, and what comprises them are exactly consistent with our results. Thus, providing quantitative validation or justification of the three-stage model provided by Thygesen et al.

Third and lastly, Thygesen et al., [22] in their factor analysis of DSQ 60 loaded all the thirty-defence mechanism and as an outcome came up with

the same defence mechanisms except *reaction formation* and *devaluation*. Again forming a reciprocal relationship with our results and the results attained by Thygesen et al. [22].

Implication of research in Defence mechanisms helps in understanding coping and overcoming the barriers to facilitate the treatment [20]. These also make us capable to understand the psyche of an infertile woman facing resulting consequences like marital dissatisfaction, depression, stress etc. Not only this, to assist in their problems and make them adapt to this trauma, counselling programs made in the light of this research and other related researches would be help them and would be reward to our work. Limitations of this study include the non-homogeneity across the three groups of sample and failure to explain reasons behind the infertility of the affected. Similarly, the significant differences found across the three groups are partial in nature.

## References

1. Zegers-Hochschild F, Adamson GD, de Mouzon J, Ishihara O, Mansour R, et al. (2009) International Committee for Monitoring Assisted Reproductive Technology (ICMART) and the World Health Organization (WHO) revised glossary of ART terminology, 2009. *Fertil Steril* 92: 1520-1524.
2. ASRM (2008) Definitions of infertility and recurrent pregnancy loss. *Fertil Steril* 90: S60.
3. WHO (2012) Premier of Infertility. World Health Organization, Geneva.
4. Chohan A (2010) Fundamentals of Psychology. MAR, Pakistan.
5. Jacob MC, McQuillan J, Greil AL (2007) Psychological distress by type of fertility barrier. *Hum Reprod* 22: 885-894.
6. Lechner L, Bolman C, van Dalen A (2007) Definite involuntary childlessness: associations between coping, social support and psychological distress. *Hum Reprod* 22: 288-294.
7. Slade P, O'Neill C, Simpson AJ, Lashen H (2007) The relationship between perceived stigma, disclosure patterns, support and distress in new attendees at an infertility clinic. The relationship between perceived stigma, disclosure patterns, support and distress in new attendees at an infertility clinic 22: 2309-2317.
8. Wirtberg I, Möller A, Hogström L, Tronstad SE, Lalos A (2007) Life 20 years after unsuccessful infertility treatment. *Hum Reprod* 22: 598-604.
9. Bahrain SA, Nazemi F, Dadkhah A (2009) The comparison of marital satisfaction between fertile and infertile women. *Iranian Rehabilitation Journal* 7: 11-16.
10. Kleanthi G, Katerina L, Grigorios V (2012) Increased anxiety and depression in Greek infertile women results from feelings of marital stress and poor marital communication. *Health Science Journal* 6: 70-81.
11. de Miranda JDMR, MeloVanessa ALC, Sousa FDA (2010) Defense mechanisms of infertile couples vs. fertile couples. *International Journal of Developmental and Educational Psychology* 2: 433-442.
12. Lotfi KF, Shahram V, Kazemi ZN, Aghdam SS (2014) Defense Styles, Defense Mechanisms and Post-Traumatic Growth in Patients Suffering from Cancer. *Procedia - Social and Behavioral Sciences* 159: 228-231.
13. Cramer P (2008) Seven Pillars of Defence Mechanism Theory. *Journal of Social and Personality Compass* 2: 1963-1981
14. Vaillant GE (2000) Adaptive mental mechanisms. *Am Psychol* 55: 89-98.
15. Trijsburg RW, van t' Spijker A, Van HL, Hesselink AJ, Duivenvoorden HJ (2000) Measuring overall defensive functioning with the Defense Style Questionnaire. *J Nerv Ment Dis* 188: 432-439.
16. Vaillant GE (1977) *Adaptation to life*. Boston: Little, Brown.
17. Vaillant G (1994) Ego mechanisms of defence and personality psychopathology. *Journal of Abnormal Psychology* 103: 44-50.
18. Wastell C (1999) Defensive focus and the defense style questionnaire. *The Journal of Nervous and Mental Disease* 187: 217-223.
19. Morgan C, Schopler J, Weisz J, King R (1993) *Introduction of Psychology*. Tata Mc Graw Hill, New York.
20. Podolska MZ, Bidzan M (2011) Infertility as a psychological problem. *Ginekol Pol* 82: 44-49.
21. Shahrzad K, Mahtab H, Naeime B, Fatemeh R (2010) The Study of Irrational Beliefs, Defense Mechanisms and Marital Satisfaction in Fertile and Infertile women. *Journal of Family and Reproductive Health* 4: 129-133.
22. Thygesen KL, Drapeau M, Trijsburg RW, Lecours S, de Roten Y (2008) Assessing Defense Styles: Factor Structure and Psychometric Properties of the New Defense Style Questionnaire 60 (DSQ-60). *International Journal of Psychology and Psychological Therapy* 8: 171-181.
23. APA (2003) *Diagonostic and Statistical Manual IV*. American Psychological Association.
24. Craşovan DI, Maricuţoiu LP (2012) Adaptation of the defensive style questionnaire 60 (dsq-60) within a Romanian sample. *Cognition, Brain, Behavior. An Interdisciplinary Journal* XVI: 509 -528.
25. Vaillant GE, Bond M, Vaillant CO (1986) An empirically validated hierarchy of defense mechanisms. *Arch Gen Psychiatry* 43: 786-794.
26. Greil AL (1997) Infertility and psychological distress: A Critical Review of the Literature. *Soc sci med*. 45: 1679-1704.
27. Callaway JR (2006) *Infertility& depression*. Bella online.
28. Coleman JV, Patrick DL (1976) Integrating mental health Services into Primary Medical care. *Med Care* 14: 654-661.