

Research Article

Submissive Behaviour and Depression: A Case-Control Study Done at Tertiary Care Centre in Jaipur

Abhilasha Yadav¹, Arvin Kamra²

¹Professor, Department of Psychiatry, VMMC & Safdarjung Hospital, New Delhi.

²Consultant, Psychiatrist, Brain and Behaviour Clinic.

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Corresponding Author:

Abhilasha Yadav, Department of Psychiatry, VMMC & Safdarjung Hospital, New Delhi.

E-mail Id:

kamra.abhilasha@gmail.com

Orcid Id:

<https://orcid.org/0000-0002-9044-5366>

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A B S T R A C T

Background: The construct of submissive behaviour and its association with psychopathology especially with depression has been explored extensively in western countries but in India literature on this subject is conspicuous by its absence.

Objectives: This article explores the phenomenon of submissive behaviour and its correlation with depression.

Materials and Methods: This study was conducted at Psychiatric Centre Jaipur (SMS Medical College, Jaipur) on OPD basis from July, 1998 to December, 1999. This was a case control study, 50 matched subjects with age range 15-60 years were included in study and control group. Study Group consisted of 50 depressed patients as per ICD-10 criteria (F32 and F33), controls were selected from general population randomly and were free from any psychiatric illness. Beck depression inventory and Submissive behaviour scale were used in the study.

Statistical Analysis: Mean, Standard deviation, Student 't' test, Pearson's correlation co-efficient were used to analyse the data.

Results: Mean submissive behaviour score of study group was 27.76 and control group was 11.46, the difference between these scores in study and control group was found to be statistically significant. There was positive correlation between depression BDI scores and submissive behaviour scores at $r=+0.2875$.

Conclusion: This research shows that submissive behavior is an important construct in relation to depression even in Indian population. However, further research is needed to support the findings of this study in Indian depressives.

Keywords: Depression, India, Submissive Behavior, Social Rank Theory

Introduction

The behaviour of submission, is defined as a set of personality traits arising through behaviours such as being attentive not to offend or hurt others, trying to please everyone, tending to be benevolent, being excessively giving, being unable to say “no”, tending to say “yes” despite being unwilling, having difficulty in expressing the situations she/he does not like, having difficulty in revealing their anger, constantly being in need of being approved, and being unable to defend their own thoughts or rights.¹ The origins of submissive behaviours can be traced back to the reptiles² and all social animals are capable of expressing them, including humans.³ Submissive behaviours evolved as fundamental social behaviours which facilitated control over aggression and social cohesion.² Animals, in pursuing any biosocial goal and gaining access to resources will encounter others who will be pursuing the same goals, so they must deal with competitors. The most basic strategies for conflict negotiation have been labelled Hawk (escalating) or Dove (submissive de-escalation) strategies^{4,5}, in which, one who sees itself as weaker is oriented to avoid initiating fights with more powerful others and de-escalate actual conflict or attack by sending non-aggressive signals; i.e. plays a fear-dove strategy.^{5,6} The interpersonal circumplex approach views social behaviour as a function of two dimensions: dominance-submission and love-hate.^{7,8} In this model high and low assertiveness have been linked with dominance and submission, respectively. Submissive behaviour is labelled as sub assertive and found to be associated with various psychological problems (e.g. depression and social anxiety).⁹ Submissive behaviour is largely associated with perceptions of inferior social rank or status and can be seen as a form of social defence in the context of others who are more powerful or of higher rank in some way.¹⁰ There are a varied number of submissive behaviours, depending on species, and related to social context and degree of threat. Avoidance and escape are among the most common forms of submissive behaviour in which distance from dominant is the primary defensive response.¹¹

A number of non-social theorists have postulated that depression ensues when individuals cannot control aversive events. This model, is called ‘learned helplessness’ by Seligman and colleagues.^{12,13}

Social theories have focused on the regulators of mood in the context of social conflict, and the way dominant and subordinate animals regulate conflict.^{14,15} This has been referred to as the social rank theory of depression where involuntary subordination is highly linked to depression.¹¹ This model was developed by Price JS who noted early ethological observations that depressed-like states occur in animals and humans who have been defeated and lose rank, and subordinates who are regularly harassed or threatened

by more dominant animals and cannot escape.^{2,14} As per social rank model, human depression is significantly associated with subjective experiences of low self-esteem¹⁶, ‘self-as-inferior to-others’, elevated submissive behaviour, beliefs that others are ‘looking down’ and being critical/rejecting of the self.¹⁷

In a group of female students, Gilbert P, Allan S, Goss K¹⁸ found that submissive behaviour was associated with a number of interpersonal problems especially depression proneness.

Literature about relationship between submissive behaviour and depression from India is conspicuous by its absence. Therefore, the present study was undertaken to explore role of phenomenon of submissive behaviour in depressives.

Aims & Objectives

- To study the role of phenomenon of submissive behaviour in depression.
- To study the correlation of this phenomenon with depression.

Materials and Methods

This study was conducted at Psychiatric Centre Jaipur (SMS Medical College, Jaipur) on OPD basis from July 1998 to December 1999. This was a case control study, 50 subjects each were included in study and control group.

Study Group

It consisted of 50 depressed patients attending the Psychiatric centre OPD and Psychiatry OPD of SMS Medical College, Jaipur. Patient of both the sex with age range 15-60, having diagnosis of depression as per ICD-10 criteria (F 32 and F 33) were recruited in the study. Patients with other major mental illness, organic or medical conditions were excluded.

Control Group

Controls were selected from general population randomly or relatives of the patients attending the Psychiatric Centre, Jaipur and were free from any psychiatric illness. Controls were matched on age, sex, and other socio-demographic profile.

Tools Used for the study

Beck’s Depression Inventory (BDI)

BDI created by Beck AT, is a 21 item self-report inventory, one of the most widely used psychometric test for measuring the severity of depression. BDI’s internal consistency estimates yielded a mean coefficient alpha of 0.86 for psychiatric patients and 0.81 for nonpsychiatric subjects. In the present study, Hindi adaptation by Lal et al. (1974) was used.¹⁹

Submissive behaviour scale (SBS)

SBS which measures submissive social behaviours was

developed by Gilbert P and Allan S.²⁰ The scale is 16 items, five-point (never=0, always=4) and self-report scale. This scale has satisfactory internal and test-retest reliability. The Cronbach alpha value of the original form of the scale was found to be 0.92 for the general population and 0.85 for the student population.²⁰ For the present study SBS was translated into Hindi by three bilingual psychiatrists at Psychiatric Centre Jaipur and verified with other senior consultants to maximize conceptual clarity. Acceptable translation-retranslation reliability was established.

Data generated from the application of aforesaid scales was placed in tabular forms and the following statistical methods were used to analyse the findings.

Statistical Analysis

Mean, Standard deviation, Student 't' test, Pearson's correlation co-efficient were used to analyse the data.

Ethical Issues

Informed consent was obtained from each patient and control person prior to inclusion into the study.

Result

The present study was undertaken to explore the role of phenomenon of submissive behaviour in depression. The study was hospital-based case-control study, done on Out-Patient Depressives. Both the groups were matched on age, sex, and other sociodemographic variables, this eliminated the chance of these variables confounding the score of submissive behaviour scores. The mean age of the patients in the study group was 33.2 (S.D.=10.98) years and in the control group it was 33.1 (S.D.=11.2) years with age range 15-60 years. Most of the subjects (90%) were in age group 15-30 and 31-45 years. Majority of the patients were Hindu, married, from urban setting in and around Jaipur (Table 1).

Only 12% study cases had mild depression, 28% had moderate depression and 60% had severe depression (Table 2).

Table 1. Socio-demographic profile: study group vs control group

	Study Group (N=50)		Control Group (N=50)	
Age (Years)				
15-30	23	Mean=33.1 SD=10.98	22	Mean=33.1 SD=11.2
31-45	22		21	
46-60	5		7	
Sex				
Male	36		36	
Female	14		14	

Religion		
Hindu	46	45
Muslim	4	5
Occupation		
Business	5	7
Labour	5	5
Service	21	20
Housewife	11	9
Student	5	6
Professional	3	3

	Study Group (N=50)	Control Group (N=50)
Domicile		
Rural	10	11
Urban	40	39
Educational Status		
Primary	6	6
Middle	8	7
Secondary	18	19
Graduation	17	16
Postgraduation	1	2
Type of Family		
Joint	20	22
Nuclear	30	28
Marital Status		
Married	31	32
Single	13	14
Widow/Widower/ Separated/divorced	6	4

Table 2. Depression severity in study group (N=50)

Depression (BDI Score)	N	Percentage
Mild (10-15)	6	12
Moderate (16-23)	14	28
Severe (>24)	30	60

Table 3. Mean BDI scores in study group

Mean	S.D.
27.08	9.46

Mean BDI scores in study group was 27.08 with standard deviation of 9.46 (Table 3).

Table 4. Mean submissive behaviour score (SBS)

	Study group (50)	Control group (50)	t-value	p-value
Mean	27.76	11.46	10.945	<0.05 Significant
S.D.	8.839	5.722		

Table 5. Correlation between BDI scores and SB Scores for study group (50)

BDI scores	SB scores	
Mean=27.08 SD= 9.46	Mean=27.76 SD=8.839	r=0.2875

Table 6. Submissive behaviour-age sub group

Age (Years)	Study group		Control group		t-value	p-value
	Mean	S.D.	Mean	S.D.		
15-30	28.833	9.06	11.636	6.00	7.64	<0.05(S)
31-45	28.38	8.84	10.61	5.782	7.538	<0.05(S)
46-60	20	3.08	13.428	4.755	2.900	>0.01

Table 7. Submissive behaviour-sex sub group

Sex	Study group		Control group		t-value	p-value
	Mean	S.D.	Mean	S.D.		
Male	27.83	9.76	12.33	5.76	8.11	<0.05(S)
Female	27.57	6.148	9.21	5.131	8.287	<0.05(S)

Table 8. Submissive behaviour-religion sub group

Religion	Study group		Control group		t-value	p-value
	Mean	S.D.	Mean	S.D.		
Hindu	27.608	8.878	11.822	5.733	9.92	<0.05 (S)
Muslim	29.5	9.46	10.2	6.61	3.172	>0.01(NS)

Table 9. Submissive behaviour-domicile sub group

Domicile	Study group		Control group		t-value	p-value
	Mean	S.D.	Mean	S.D.		
Rural	29.9	9.90	11.454	5.85	5.130	<0.05 (S)
Urban	27.225	8.606	11.461	5.762	9.587	<0.05 (S)

Table 10. Submissive behaviour-occupational sub group

Occupation	Study group		Control group		t-value	p-value
	Mean	S.D.	Mean	S.D.		
Business	30.4	13.5	15.714	3.86	2.364	>0.01 (NS)
Labour	31.2	8.497	8.4	3.646	5.51	<0.05 (S)
Service	26.33	9.05	12.25	6.306	5.8027	<0.05 (S)
Housewife	26.818	5.095	8.666	4.5	8.45	<0.05 (S)
Student	27.4	11.37	10	6.87	2.996	>0.01 (NS)
Professional	31.666	10.06	12.666	4.163	3.020	>0.01 (NS)

Table 11. Submissive behaviour-educational sub group

Education	Study group		Control group		t-value	p-value
	Mean	S.D.	Mean	S.D.		
High secondary or below	26.857	6.87	11.07	5.22	6.84	<0.05 (S)
Graduation	27.055	9.415	14.222	5.440	5.0	
P.G.	29.166	9.859	9	5.412	7.607	

Mean submissive behaviour score of study group was 27.76 and control group 11.46, and the difference between these scores in study and control group was found to be statistically significant (Table 4).

There was positive correlation between depression BDI scores and submissive behaviour scores at $r=+0.2875$ (Table 5).

In age sub group, difference in mean submissive scores between study and control group was found statistically significant only in 15-30 and 31-45 age group not in age group of 46-60 year (Table 6).

The difference between mean submissive scores in study and control group both in male and female was also found to be statistically significant (Table 7).

In religion subgroup the difference between mean submissive scores in study and control group was found statistically significant only in Hindu subjects, not in Muslims (Table 8).

Subjects residing in both rural and urban area, the difference between mean submissive scores in study and control group was found to be statistically significant (Table 9).

In occupational subgroup the difference between mean submissive scores in study and control group was found to be statistically significant in-service class, housewives and labour class, it was not significant in students, professionals and business class (Table 10).

In educational subgroup the difference between mean submissive scores in study and control group was found statistically significant in all sub categories (Table 11).

Discussion

In humans, major depression is thought to occur when involuntary subordination becomes prolonged. A submissive behaviour starts when one puts oneself into a process of social ranking in one's community. It is emphasized that the ones who compare themselves with the others in the community and account themselves inferior have more submissive behaviours.²¹

Birtchnell J, Horowitz LM and Vitkus J, Price JS, Gardner R, Gilbert P regard involuntary subordinate and submissive behaviour as central to depression.^{7,8,14,22,23}

An individual who accounts himself to be weak in his community prefers either to go away or to succumb under difficulties. That one starts to account oneself weak causes internal frustration, social anxiety, blocking to make new attempts, loss of self-confidence, and depression.^{1,24-26}

In current study it has been established that phenomenon of submissive behaviour is present in depressives in comparison to control group as there was statistically significant difference in mean submissive scores between both the groups, also positive correlation was found between depression BDI scores and submissive behaviour scores ($r=+0.2875$). This was in accordance with study of Allan S and Gilbert P.²⁷ In their study BDI scores were positively and significantly correlated with SBS at $r=0.27$.

In a latest study done on 350 university students, a significant relationship between submissive behaviors and their psychological symptoms was found.²⁸

In another study which explored the associations and interactions between social rank (submissive behavior and social comparison), shame, rumination and depression in 125 undergraduate students, relations at a meaningful level between submissive behavior and depression was found.²⁹

In age subgroup, except for the age group of 46-60 years depressives in both other age group showed significant submissive behavior in comparison to the subjects in control group. Subjects in 15-30-year age group behaved more submissively than in 31-45-year age group, this group also included adolescent subjects and their submissive behavior can be explained with Alfred Adler's theory of Inferiority Complex. Feelings of inferiority develop as a child comes to the realization that they are smaller and weaker, with less knowledge, and virtually no privileges compared to those around them. As individuals grow, and continue to make such comparisons, such subjective comparisons influence one's perception of self-worth and lowers self-esteem by way of inferiority complex. Adler believed that everyone is susceptible to inferiority, since no one escapes the deficiencies of childhood.³⁰

In sex subgroup both gender in study group had statistically significant higher SB Scores as compared to control group but females behaved more submissively. This fact can relate to depression proneness, number of interpersonal

problems, recall of unfavorable parenting especially in Indian context.

In occupational subgroup, the submissive behavior scores across all type of occupation were high in depressives as compared to control group but this difference reached statistically significant level only in-service class, labour and housewives. Housewives scored highest in depressed group.

The difference between submissive behavior scores in study and control group was found to be statistically significant for various educational subclass.

Conclusion

The concept of submission that is evaluated within the scope of Social Ranking Theory and its relationship with psychopathology has been studied extensively in western countries, but literature from India on this subject is conspicuous by its absence. To the best of our knowledge current study is first Indian study which has tried to explore role of phenomenon of submissive behavior and its relationship with depression. In current study phenomenon of submissive behavior was positively and significantly correlated with depression across all age group (except in elderly patients), in both the gender, across all the educational sub-category, in Hindus, and in urban and rural population.

This research shows that submissive behavior is an important construct in relation to depression even in Indian population. However, further research investigating the relationship between submissive behavior and depression is needed, to support the findings of this study in Indian depressives.

Conflict of Interest: None

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