

A Study of Gender Differences in the Relationship between Forgiveness and Irrationality

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Abstract: *The current research study is an attempt made to assess rationality and forgiveness among male & female adults at varying educational levels. The total randomly selected respondent data of 437 has been taken in consideration. The educational level of respondents has been taken at two different levels, i.e., below graduation and graduation and above. The age range of respondents has been between 21-40 years. The psychological tools in the form of Irrational Belief Inventory (IBI) and Heartland Forgiveness Scale (HFS) have been used to collect the required data from the respondent. Person's correlation and regression analysis have been used to assess the result. It has also been observed that rationality is positively correlated with forgiveness. The respondents who have high rationality also have a high level of forgiveness. The study has also revealed that males are more rational than females. The study has also revealed that educational level does not affect forgiveness.*

Keywords: Forgiveness, Irrationality, Gender, Educational level

I. INTRODUCTION

In today's world of material happiness, mostly people are aspiring for the getting the things may be tangible or intangible by any mean. Most of the times people are not able to see the relationship with reality and behave just for getting the pleasure of having the things. All after that, even we get the things they are not happy because somewhere they remain in the state of grudges and competitiveness. Because sense of forgiveness also not within us. If we look very closely, we can see it is due to irrational behaviour and leads to unhappiness in almost every situation and that pain due to irrational thoughts leads to non-forgiving thoughts all the time. This problem has tried to address in many ways in philosophical context but empirically evidences are very less. There is an urgent need to understand the both concepts and influence of each other.

During the eighteenth century where modernization or stated developing in all over the Europe and then it was spread all over the globe about socio-political, socio-cultural, socio-economic as well demographic transition including technological use. The initial part of such development is rationality and scientific advancement. Rationality means the ability to think logically, make decisions based on evidence, and act in ways that are consistent with goals and values of oneself. It is a key concept in understanding how people process information and make choices. It is observed that, human thought is generally not rational because much of it is unconscious, automatic, emotional, and heuristic in nature, so, we understand that rationality is a process. Most of the times it can see that the rationality is a product of unconscious, automatic, emotional and heuristic thoughts. It is also can considered as outcome of aroused thoughts and defensive reaction. Our regular selection and decision are something like anticipated result. Eventually in effect simulated and processed outcome also said to be the rationality. Psychological Rationality, acknowledges that people do not always follow logic perfectly, due to emotional, cognitive, and social factors. It is more about how people think and decide in real world, imperfect conditions. Psychological rationality also involves the ability to make long-term decisions rather than focusing on immediate rewards. The capacity to delay gratification, or resist short-term temptations for long-term gain, is an important aspect of rational thinking from a psychological standpoint.

In 2000 with the invention of positive psychology, new constructs related to it as if forgiveness was also started getting into more interest by many researchers. The study of forgiveness finds its usefulness in understanding the negative



consequences that attribute self, other person and situations responsible. Criminal events, interpersonal, interpersonal and social conflicts are the realities that most people have to face in their life. Forgiveness has connected to all those bad and painful negative events in everyone life. The researchers have suggested forgiveness to be a key component of renouncing resentment and may involve reconciliation (Thompson, and Snyder, 2003). Forgiveness has the capacity to make anyone free from negative cognitions and thoughts and feelings towards a transgression, transgressor, or situations linked with a transgression. The after effects of any wrong behaviour carry negative thoughts, feelings, or behaviour leading to negative attachment. However, the forgiving nature takes us to positivity and neutral reframing that eventually culminate in a weakening of the attachment (Thompson et al., 2005). Essentially, forgiveness has a restoring capacity that involves a set of processes help to regain love and trust in interpersonal, social and organizational relationships for both transgressor and victim. Rationality is the approach to take behavioral decision based on the logic, not on the basis of just blind belief or following anyone's actions without verification.

II. LITERATURE REVIEW

Following are past research studies referred for review purpose related to the current study are enlisted below...

Singh AK, Tiwari GK (2025) worked to find the gender differences for reasons for unforgiveness and respective interventions for wellbeing of the offender. It was found the men found unforgiveness is toll for reform of offender and women find it is as a protection tool.

Kaleta, K. & Mróz, J. (2022) had compared male and females for forgiveness and its correlates. The outcome of this study found the males are scoring more in dispositional forgiveness than that of with females.

Porada, K., Sammut, S. & Milburn, M. (2018) investigated the relation between the rationality, forgiveness and self-acceptance with respect to gender and it was found in their study, that moderate but strong negative associations among the irrationality and dispositional forgiveness. The significant difference was not found among the type of genders in this study.

Wei, H. & Ran, Y. (2017) worked to find the role of gender of apologizer on the forgiveness of consumer. It was releveled that company's careful and important role while deciding the forgiving person in the case of transgressions.

Rationale of the study

In current the age, everyone is running behind accumulation of material and concentrate to enjoy the accumulated physical facility. The person is in great fear that someone will take everything from him, so he feels; there is a great need of taking effort to make pool of supporters. The easiest way to make this thing possible is to divide and rule in the all humankind. India is very famous country for its unity in diversity due its diversified traditions, cultures, spiritual background as well as various religions, castes. Without realization of intensions of surroundings, everyone following ideas blindly, making society more unstable and turbulent and more fearful. Even with strong history of great philosophers in India, absence of rational approach is being observed most of cases. Hence, its need of today to explore the ways which will take the whole society towards rational approach. Currently mental health is big problem. Even we have developed new technologies, huge infrastructures but somewhere we are unable to make peaceful and healthy society. This is due to lack of rationality. So, it can be seen the need to observe the urgency and gravity to focus on secularity and rationality of educational content. The person could see relationship with every other if he has rational thought process. Nevertheless, looking at the increasing crime, we can see the importance of such study through the positive psychology variable such as forgiveness is very important in mental health of individuals. This would lead to development of social health also. We need research in this issue to understand, how and which factors help us to think and behave rationally while dealing with such scenario, and having supportive, friendly society with forgiving attitude towards everything.



III. METHOD

Aim of the study

‘To study rationality and forgiveness among the male and female adults from region nearby of Pune city, those who have undergone formal education.

Objectives

1. To measure the rationality and forgiveness among adult males and females
2. To find the education level wise differences related to the rationality and forgiveness.
3. To assess the gender difference for rationality and forgiveness among males and females.

Hypotheses of the study

1. There will be significant gender wise difference related to the rationality and forgiveness.
2. Males will be more rational and hence of forgiving attitude than females.
3. There will not be significant difference of rationality and forgiveness in context of educational level.

Sample

Total sample of study was with educational level having 213-up to graduation and 224 graduation and above. The sample was selected by random sampling from Pune city and the nearby suburban area like Pimpri-Chinchwad and from the areas like Haveli, Bhor, and Purandar tehsils of Pune district of Maharashtra state. The Purposive sampling method was used for the selection of the sample. The range of the age group of the subjects was from 21 to 40 years both inclusive. The sample consists of a varied domain of professions of the society. The sample includes students, teachers, and private serving people, and the sample also includes household women who solved the tests. The attempt was made to keep the Male-Female ratio to be 1:1.

Psychological Tools

In this research study, the data was collected from respondents with the use of following standardized psychological tools.

1. Irrational Belief Inventory (IBI)

The Irrational Belief Inventory (IBI), developed by Petra Koopmans, Robbert Sanderman, and Irma Timmerman (1994), was used in the present study to evaluate the existence and degree of irrational beliefs among the participants. The IBI is a standardized self-report psychometric scale based on the principles of Rational Emotive Behavior Therapy (REBT), originally proposed by Albert Ellis. This theoretical approach suggests that many negative emotional and behavioral reactions arise from irrational, inflexible, and unrealistic patterns of thinking. The overall score of the 50 statements in the IBI is calculated by adding the responses to all items, where a higher score indicates a greater level of irrationality. The inventory contains 50 items, each rated on a 5-point Likert scale ranging from Strongly Agree (5), Agree (4), Uncertain (3), Disagree (2), to Strongly Disagree (1). The instrument is designed to measure five major dimensions of irrational beliefs: Worrying, Rigidity, Need for Approval, Problem Avoidance, and Emotional Irresponsibility. The IBI demonstrates good internal consistency for both the individual subscales and the total score. Overall, the IBI offers a comprehensive assessment of individuals' irrational cognitive tendencies, which helps in examining their relationship with psychological outcomes such as resilience and emotional well-being.

2. Heartland Forgiveness Scale (HFS)

The scale developed by Thompson et al. (2005) was used to measure dispositional forgiveness. It consists of eighteen items designed to evaluate an individual's general tendency to forgive. The scale includes three subscales, each containing six items: forgiveness of self (six items), forgiveness of others (six items), and



forgiveness of situations (six items). The first subscale, HFS Self, assesses the degree to which individuals forgive themselves. The second subscale, HFS Other, measures interpersonal forgiveness toward other people. The third subscale, HFS Situation, evaluates forgiveness toward difficult or uncontrollable situations. The response options range from 1 (Almost Always False of Me) to 7 (Almost Always True of Me). Scores for each subscale range from six to forty-two, while the total Heartland Forgiveness Scale (HFS) score ranges from eighteen to one hundred twenty-six. The overall score on the Heartland Forgiveness Scale reflects the general tendency of a person to forgive oneself, others, and negative situations beyond one's control. Higher scores represent greater levels of forgiveness, whereas lower scores indicate a lower tendency to forgive.

Operational definitions of the variables

- **Irrationality:** Rationality is a total score obtained by the subjects on the Irrational Belief inventory (Koopmans et al.). The total score ranges from 50 to 250. Low score indicates rationality and high score indicates irrationality.
- **Forgiveness:** Forgiveness is a total score obtained by the subjects on the Heartland Forgiveness Scale (Thompson et al.). For each of the three subscales, scores of 31 are average, and on the Total Forgiveness scale, a score of 93 is average. The total score ranges from 18 to 90. Higher scores indicate higher levels of forgiveness, and lower scores indicate lower levels of forgiveness.
- **Educational level:** It is the class up to which person has taken formal education. As if SSC, HSC, Diploma, Graduation, Post-graduation, Ph.D. etc. are the various levels oneself may have successfully completed education. Any formal education completed less than any graduation is called as grouped at one level (Below Graduation) and equal or above graduation level is considered at other one level (Graduation and above).

Statistical Tools

Descriptive statistics (Mean, SD and t-value has been used for normality analysis of collected data. In addition, correlation and regression study has been used. Results are calculated using appropriate psychological tools and after that, based on results found, discussions made.

Table-1: Descriptive Statistics of variables: Irrational Beliefs and Forgiveness (n = 437)

Variables	Educational Level	Gender	Mean	Std. Deviation	df	t-value	Sign
Irrational Beliefs	Below Graduation	Male	126.99	19.34	210	-3.21	0.01*
		Female	134.61	17.56			
	Graduation and above	Male	119.54	12.81	223	-2.94	0.04*
		Female	127.25	15.42			
Forgiveness	Below Graduation	Male	72.60	11.62	210	1.12	NS
		Female	71.10	12.17			
	Graduation and above	Male	73.40	10.44	223	1.05	NS
		Female	72.00	16.52			

**p<.01 *p<.05

Table-1 explains the variable wise descriptive statistics of the study. For variables of Rationality, Forgiveness, the average scores of the total sample shown in the mean column and their deviation from the mean shown in standard deviation (SD) column was calculated. The mean, mode and median values are very closer for all variables indicating that the collected data is normal. After observation, descriptive statistics also indicates the data is normal.

Mean of irrational belief is 126.99 (SD=19.34) and 134.61 (SD=17.56) and that of forgiveness is 72.60 (SD=11.62) and 71.10(SD=12.17) for male & female respondents repetitively having education below graduation.



Mean of irrational belief is 119.54 (SD=12.81) and 127.25 (SD=15.42) and that of forgiveness is 73.40 (SD=10.44) and 72.00 (SD=16.52) for female respondents having education graduate and above.

The t-values of irrational beliefs are -3.21 & -2.94 for educational background below graduation and graduate and above respectively. Whereas the t-value of forgiveness are 1.12 & 1.05 for educational background below graduation and graduate and above respectively.

The irrationality level is more in females in comparison with male counterpart at both educational level. It is also seen that education play important role because the education has increasing influence on rationality.

Differences in Gender for forgiveness is does not represent statistical significance. Considering the minimum and statistical non-significant mean differences between the groups indicates that level of education not influencing the level of forgiveness significantly.

Table-2: pearson correlation among three aspects of forgiveness

Variable	Self-Forgiveness	Others-Forgiveness	Situation-Forgiveness
Self- Forgiveness	1	0.133	-0.094
Others- Forgiveness	0.133	1	0.345**
Situation- Forgiveness	-0.094	0.345**	1

**p<.01 *p<.05

The forgiveness is measured at three levels and the associations between those three factors are in Table-2. This table represents that positive correlation for other forgiveness and situation forgiveness significant at 0.01 level.

Table-3: Pearson correlation matrix for Rationality and Forgiveness

Variable	Irrational Beliefs	Forgiveness
Irrational Beliefs	1.00	-0.55*
Forgiveness	-0.55*	1.00

**p<.01 *p<.05

Table-3 represents that negative but moderate level of association between irrational beliefs and forgiveness significant at 0.05 level.

To examine the combined and individual predictive power of the independent variables, gender (Male and Female), and educational level (Less than Graduation and Graduation and above) a multiple regression analysis was conducted. The objective was to assess the extent to which these variables could collectively and independently predict variance in the dependent variable. Results of multiple linear regression of four dependent variables is in the table 3.

Table-4: Multiple Linear Regression Results for Dependent Variables

Dependent Variable	Predictor	B	SE B	β	t	R ²
Irrational Beliefs	Constant	108.3	2.33	—	46.5*	0.17
	EL_BG	7.94	1.87	0.2	4.25**	
	GE_M	-0.83	1.73	-0.02	-0.48	
Forgiveness	Constant	87.24	1.19	—	73.3**	0.03
	EL_BG	1.63	0.95	0.08	1.71	
	GE_M	2.55	0.88	0.14	2.9*	

**p<.01 *p<.05

Table-4 shows the findings highlighting the distinct and joint contributions of demographic factors to psychological outcomes. Among the predictors, educational level had the strongest standardized coefficient, indicating it as the most influential predictor in the model. Prior to conducting the regression analysis, the assumptions of linearity,



independence of errors, normality were tested and found to be satisfactory. The overall regression model was statistically significant, indicating that the combination of gender, and educational level significantly predicted the dependent variable. The model explained approximately R^2 of the variance in the outcome, suggesting a moderate level of predictive power. Results of the multiple linear regression analyses predicting each dependent variable from the categorical predictors shown in Table-4

For irrational belief, the model accounted for 17% of the variance, $R^2 = 0.17$, $F(3, 433) = 29.45$, $p < 0.001$, with education level below graduation predicting higher irrational belief ($B = 7.94$, $\beta = 0.20$, $p < 0.001$).

For forgiveness, the model explained 3% of the variance, $R^2 = 0.03$, $F(3, 433) = 4.42$, $p = 0.004$, with only males predicting higher forgiveness ($B = 2.55$, $\beta = 0.14$, $p = 0.035$).

IV. DISCUSSION

The results of this correlation between rationality and forgiveness are consistent with the Fehr et al. (2014) study, who researched the meta-analysis of big five and forgiveness. This factor is indirectly related to conscientiousness and openness, which is an intellect factor of openness that causes forgiveness. However, it was found that the level of rationality is not a major factor for forgiveness.

Multiple stepwise regression analysis was done to research that the educational level and gender contribute significantly to the prediction of rationality and forgiveness too. It was found that there is a positive correlation between forgiveness and rationality. This means that the subject with high levels of rationality also possesses high levels of forgiveness. The correlation and regression analysis showed that rationality is a major factor for forgiveness. This result is consistent with the fact that rational cognitive processes facilitate forgiveness by reducing emotional responding (Barbaro and Shackelford, 2022; Burnette et al., 2012).

Individuals who use logical appraisal and cognitive flexibility can reframe transgressions in a less personal and more objective manner, which facilitates forgiveness (Davis and Gold, 2011; Thompson et al., 2005). This supports the idea that forgiveness is not only an emotional process but also a cognitive process that is based on rational thinking.

Likewise, Bugay and Demir (2011) found that there was a significant positive correlation between rational decision-making style and forgiveness, indicating that rational people are more likely to tackle conflicts with constructive thoughts rather than rigid emotions. A similar study carried out by Thompson et al. (2005), while developing the Heartland Forgiveness Scale, found that forgiveness is highly linked to cognitive flexibility and rational appraisal traits, which are characteristic of rational people.

Research findings suggest that rational people are more likely to exhibit adaptive cognitive processes and are more capable of comprehending and avoiding negative emotions, as well as objectively evaluating given situations. These cognitive processes are more likely to enable them to forgive others. Thus, it is logical to hypothesize that rationality will be able to positively predict forgiveness, and people with strong rational thinking skills are more likely to possess forgiving attitudes.

Limitations of the study

- Study sample has been limited to Pune city and its very closely connected area
- Sample age range is limited from 21 to 40 years
- Sample without any formal education (uneducated) is not taken into consideration
- Gender other than male and female is not considered in the study

V. CONCLUSION

Based on the statistical analysis and discussions done, following conclusions are made from the above study.

1. There is a significant gender wise difference for the rationality and forgiveness.
2. Males are more rational and hence of forgiving attitude than females.
3. There is a significant difference of rationality but non-significant difference of forgiveness in context of educational level.



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