

Research Paper

## The Impact of Dysfunctional Attitudes and Emotion Regulation on Prosocial Behaviour in Adults

Vaidehi Singh<sup>1\*</sup>

### ABSTRACT

Dysfunctional attitudes are characterized by an individual's faulty beliefs and feelings about themselves as well as the world. These attitudes can also lead to people acting against their best interests. We are able to feel different forms of emotions such as happiness, sadness, anger etc. as long as we live. In order to control and cope with these emotions, we tend to use both healthy and unhealthy techniques of emotion regulation. Displaying a type of behaviour that is intended to help and support others can be described as prosocial behaviour. The present study aimed at exploring the impact of dysfunctional attitudes and emotion regulation on prosocial behaviour among adults. The independent variable of emotion regulation included two commonly used strategies i.e., cognitive reappraisal and expressive suppression. One hundred and ten adults were assessed using self-report measures such as the Dysfunctional Attitude Scale (From A), Emotion Regulation Questionnaire and Prosocialness Scale for Adults. The findings of this paper revealed a significant positive relationship between dysfunctional attitudes and prosocial behaviour as well as between cognitive reappraisal and prosocial behaviour among the total sample. It was also seen that both dysfunctional attitudes and cognitive reappraisal can predict prosocial behaviour in adults. However, no such significant links were found between expressive suppression and prosocial behaviour.

**Keywords:** *Dysfunctional Attitudes, Emotion Regulation, Cognitive Reappraisal, Expressive Suppression, Prosocial Behavior, Adults, Emotion Regulation Strategies*

An attitude can simply be defined as the general assessment and interpretation of everything around us, including everyday events, people, ideas etc. This is a concept that has the power to affect how humans perceive and act towards things they like and do not like. The development of our attitude depends of various factors, such as personal experiences that we must have had with the object, learned behavior, our overall cognitive ability to perceive and assess things, to name a few. For instance, when we have a fairly positive interaction with a specific person or object, we tend to develop a positive opinion towards them. This is because our personal experience helps in the formulation of our attitude towards the environment, we exist in. Additionally, attitude can also have notable social repercussions. Attitude plays a significant role in influencing the way individuals interact with each other leading to the creation of social norms as well as groups. The

<sup>1</sup>Student

\*Corresponding Author

Received: May 25, 2023; Revision Received: June 04, 2023; Accepted: June 7, 2023

## **The Impact of Dysfunctional Attitudes and Emotion Regulation on Prosocial Behaviour in Adults**

development of stereotypes and biases may take place if an individual's attitude towards one member of a social group is applied to all members of that particular group.

Dysfunctional attitudes are those patterns of thought that are pessimistic and self-deprecating in nature. For instance, an individual who claims to be a perfectionist, may set unattainably high standards for them to live by and believe that a person's reflection of success as well as personal growth are measured by the mistakes made in life. Forming such negative core beliefs can lead to the person engaging in excessive criticism of self, developing a fear of failure. These attitudes can be characterized by overgeneralization, exaggeration of negative outcomes as well as dichotomous thinking i.e., perceiving the world as black and white. Researchers have found that dysfunctional attitudes, by strengthening behaviors that are maladaptive (avoidance etc.) and sustaining negative states of mood play a key role in promote mental health conditions such as depression, anxiety etc. A study conducted by Scott et al (2003) found that such attitudes may contribute to the onset of severe episodes of anxiety and depression.

These attitudes are usually treated with the help of cognitive-behavioral therapy (CBT), where the therapist initially tries to explore and identify the client's negative beliefs and thought patterns and challenges them. he/she then encourages the client to engage in activities that are rewarding, positive and mood enhancing activities such as exercising, practicing mindfulness, socializing etc. Lastly, the therapist along with the client recognizes efficient ways to address and confront the specific problem.

An emotion is a complex psychological concept that is vital to every person's experience. It comprises of a wide range of feelings that are subjective in nature, such as anger, fear, love etc. It has been observed that emotions play a significant role in impacting our thoughts, behavior as well as interpersonal relationships. Paul Ekman, an American psychologist, after conducting several studies this concept, suggested the existence of six fundamental and universally acknowledged emotions felt by every individual regardless of his/her culture. These included emotions such as fear, happiness, anger, surprise, disgust and sadness.

Over the years, many theorists have offered different views on the functions and true nature of emotions. The James-Lange theory, developed by Carl Lange and William James in the 1880s, is considered to be one of the most important and influential theories of emotion. This theory elucidates that, it is due to our fluctuating bodily changes that we feel different emotions. Suggesting that humans feel emotions when they experience changes in their bodies such as elevated heart rate, increase in blood pressure, sweating etc. as a reaction to any sort of stimulus they are exposed. On the contrary, a theory proposed by W.B. Cannon and Philip Bard, suggested that our body's physiological response as well as feeling of emotions, all occur simultaneously instead of the former inducing the latter.

In order to gain control over different emotions experienced throughout our lives, we use the process of emotion regulation. It involves learning and using positive and healthy ways or strategies to manage the expression, intensity as well as duration of the experienced emotion. People make use of both negative and positive strategies to manage intense emotions, where the positives would include writing a journal, maintaining a good sleep quality, practicing yoga, mindfulness or meditation regularly, seeing a therapist etc. and the negatives would comprise of engaging in self-destructive behaviors such as emotional eating, substance abuse, social isolation etc. Many studies conducted over the past decades, have associated emotion regulation with better physical and mental health.

## **The Impact of Dysfunctional Attitudes and Emotion Regulation on Prosocial Behaviour in Adults**

Emotion regulation can be categorized into Antecedent and Response focused strategies. The former includes cognitive reappraisal, in which one attempts to modify one's emotional response by reinterpreting the actual meaning of the circumstance. While the latter incorporates suppression, where one limits the expression of emotions by inhibiting and reducing how one feels about a particular situation. Cognitive reappraisal as a strategy helps an individual change the way he/she thinks about an event or a situation. It suggests that people might be able to deal with intense emotions effectively, if they attempt to change their outlook and perceive the circumstance in a less threatening way. On the other hand, the strategy of expressive suppression involves restraining or hiding one's emotional expressions including body language, eye contact, tone of voice etc. People usually use this strategy to avoid confrontation, rejection or any situation that might cause them stress.

Prosocial behavior is when we display actions that aims at assisting and supporting the people around us. Demonstrating such behaviors may help enhance our interpersonal relationships and the functioning of our society. It may include behaviors ranging from simple acts of cooperation, sharing and kindness to helping people on a greater scale i.e., donating large amounts of money, volunteering etc.

Theories such as the social exchange theory and social learning theory may help one understand the origin of prosocial behavior. According to social learning theory, a child may learn prosocial behavior by observing and imitating the people around him/her including parents, family members, caregivers, friends etc. Social learning theory, on the other hand states that one engages in prosocial behavior solely to be able to increase ones rewards as well as decrease the costs. However, one of the most widely known and studies theories, when it comes to gaining insight about the development of prosocial behavior, is the empathy-altruism hypothesis. It puts forward the idea that people are more likely to exhibit prosocial behavior when feel empathy i.e., the capability of understanding someone's feelings by putting oneself in his/her shoes, for the ones around them. Experts have found that a person's prosocial tendencies may be influenced by different factors such as perception, moral reasoning, personality traits as well as the ability to empathize and sympathize with the ones in need of help. Certain situational factors such as the potential cost and benefits helping someone and presence of people, might also have a significant impact on such behavior.

### ***Rationale***

The purpose of conducting this study was to investigate the influence of dysfunctional attitudes and emotion regulation on prosocial behavior among adults.

Although, there have been sufficient amount of studies on all the three variables separately, they have not been studied together, especially on a sample of Indian adults, as observed by reviewing previous researches. Only limited studies have explored the impact and relationship between emotion regulation and prosocial behaviour, however little to no studies have been conducted with dysfunctional attitudes as an independent and prosocial behaviour as a dependent variable. Thus, this paper aims to acknowledge & study both the potential effects and relationships between them on an Indian population.

## **REVIEW OF LITERATURE**

*Marčinko et al (2013)*. determined the potential relationship between depressive symptoms in psychiatric patients, pathological narcissism as well as dysfunctional attitudes. A total of

## **The Impact of Dysfunctional Attitudes and Emotion Regulation on Prosocial Behaviour in Adults**

234 psychiatric outpatients were evaluated using psychometric tests. The results showed that narcissistic vulnerability was significantly linked to symptoms of depression.

*Vanderhassalt et al (2014)*. investigated whether the link between dysfunctional attitude and symptoms of depression can be moderated by various strategies of emotion regulation. For this study, a total of 92 students were assessed. It was concluded that adaptive strategies to regulate emotions had a significant role in moderating the association between the two.

*Renner et al (2014)*. aimed at assessing the relationship between mental imagery exercise, dysfunctional attitudes and mood. A total of 40 participants were evaluated, in an experimental as well a controlled setting. The finding showed the existence of lower level of dysfunctional attitudes in a controlled setting, whereas greater positive mood levels in an experimental one.

*Conway et al(2014)*. aimed at examining the link between stressful events and dysfunctional attitudes on daily variations in negative as well as positive affect. The sample size of the study was 104 participants. It was concluded that multivariate models, affecting symptoms & genotype independently forecasted increased negative affect on stressful days, however dysfunctional attitudes did not.

*Chambers et al (2015)*. explored the gains of different emotional regulation strategies as compared to mindfulness on young adults suffering from depression. After the interpretation of the results, it was concluded that using mindfulness as strategy to regulate one's emotions can be related to better mental health outcomes.

*Turkoglu et al (2015)*. aimed to assess the link between dysfunctional attitudes and childhood traumas in females. The total size of the sample was 120, out of which 50 were healthy individuals and 70 were patients with depressive disorder. The findings highlighted a negative correlation between the two variables.

*Noh & Kim (2016)*. studied impact of dysfunctional attitudes on relationship between internet addiction and psychopathology, specifically depression and social anxiety. A hundred and fifty-nine Korean college going students participated in this study. It was concluded that dysfunctional attitude played a significant role in mediating the link between the two variables.

*Hejazi et al (2016)*. aimed to compare cognitive distortions, emotion regulation difficulties and dysfunctional attitudes between the individuals with and without substance abuse. One hundred and eighty participants were assessed, out of which 90 were people diagnosed with substance abuse and the other 90 without any substance use disorders. The findings showed a significant difference between the two groups of participants.

*Benita et al (2017)*. aimed at exploring whether an adolescent's prosocial tendencies can be predicted through the assessment of their emotion regulation styles. For this study, self-report measures were used to asses a sample of 240 participants, consisting of Israeli students of class sixth and seventh along with their teachers. It was concluded that a student's prosocial behaviour can be predicted by integrative emotion regulation.

*Yuchang et al (2017)*. conducted a study to examine whether dysfunctional attitudes and self-esteem help in moderating the association between addiction to smartphones and attachment styles. A sample of 297 university students from China were assessed. It was

## **The Impact of Dysfunctional Attitudes and Emotion Regulation on Prosocial Behaviour in Adults**

highlighted that self-esteem and dysfunctional attitude played a significant role in mediating the link between smartphone addiction and anxious attachment styles.

*Wang et al (2017)*. investigated the link between an individual's style of coping, dysfunctional attitude as well as learned helplessness. A sample of 623 males suffering from substance use disorders were assessed using psychometric tests. The findings suggested high levels of learned helplessness and dysfunctional attitude in these men.

*Liu et al (2017)*. conducted a study that sought to assess the possible combined effects of dysfunctional attitude as well as rumination on the association between concerns of body image and emotional distress. The total population of this study consisted of 221 patients diagnosed with cancer. The results suggested that there was a significant positive role of rumination and dysfunctional attitudes in mediating the relationship between the two variables.

*Bailey et al (2018)*. conducted a study to explore the extent to which adults show prosocial behaviour, experience emotional empathy as well as personal distress in response to others' hardships. A sample of 79 participants, with 40 young and 39 older adults, were assessed by recording the pain mimicry after they were made to watch videos of people either experiencing pain or no pain. The findings suggested that older adults reported more emotional empathy and personal distress as compared to the younger ones.

*Xiao et al (2018)*. conducted a research to examine the role of inductive discipline and warmth expressed by parents on the relationship between a child's prosocial behaviour and emotion regulation of the parent. Questionnaires assessing the regulating strategies of emotion, were completed by 64 parents of kindergarteners. The results highlighted that parental warmth does play a significant role in mediating the relationship between the two variables.

*Davis et al (2018)*. aimed to determine whether emotion reappraisal and familism played a role in mediating the association between prosocial behaviour and acculturative stress. The data analysis of this study included 1527 Latino/a university students. The findings highlighted that the link between stress and prosocial behaviour can be moderated via emotion reappraisal as well as familism.

*Laghi et al (2018)*. aimed at studying how different emotion regulation strategies influence empathy social conduct as well as empathy in children. A sample of 219 adolescents were assessed using self-report measures. The results suggested a significant positive affect of cognitive reappraisal on empathy and prosocial behaviour.

*Rajabizadeh et al (2019)*. aimed at investigating the link between communication skills and dysfunctional attitude among women married addicted men and on a verge of divorce. This study included 190 participants who were examined using various self-report measures. The findings suggested the presence of a significant negative relationship between the variables.

*Haurwitz et al (2020)*. studied the potential role of empathic emotion regulation in fostering altruism and prosocial behaviour. The participants of this study, consisting of community samples as well kidney donors, were asked to view images of other individual in distress and engage in distancing and hopeful reappraisals. The findings suggested that hope ensured higher donations as compared to distancing.

## **The Impact of Dysfunctional Attitudes and Emotion Regulation on Prosocial Behaviour in Adults**

*Li et al (2021)*. explored whether an adolescent's emotion regulation strategies and prosocial tendency can help subjective well-being relate to social support. A sample of five hundred and twelve Chinese adolescents, between the ages of 10 to 17 were assessed. The results showed that both prosocial behaviour as well as emotion regulation played an important role in mediating the between social support and subjective-wellbeing.

*Batool & Lewis (2022)*. assessed the influence of positive parenting on an adolescent's quality of friendship and his/her prosocial behaviour via emotional intelligence (EI). A sample of 350 adolescents along with their parents were examined for this study. After the interpretation of the results, it was concluded that positive parenting and EI training of adolescents can have a significant impact on both the friendship quality as well as prosocial behaviour.

### **METHODOLOGY**

**Aim-** To study the impact of dysfunctional attitudes and emotion regulation on prosocial behaviour in adults.

#### **Objectives -**

- To assess the relationship between dysfunctional attitudes and prosocial behaviour in adults.
- To assess the relationship between relationship between strategies of emotion regulation and prosocial in adults.
- To assess the impact of dysfunctional attitudes on prosocial behaviour in adults.
- To assess the impact of strategies of emotion regulation on prosocial behaviour in adults.

#### **Hypothesis-**

- There is a significant relationship between dysfunctional attitudes and prosocial behaviour in adults.
- There is a significant relationship between cognitive reappraisal (strategy 1 of emotion regulation) and prosocial behaviour in adults
- There is a significant relationship between expressive suppression (strategy 2 of emotion regulation) and prosocial behaviour in adults
- Dysfunctional attitudes are a significant predictor of prosocial behaviour in adults
- Cognitive reappraisal (strategy 1 of emotion regulation) is a significant predictor of prosocial behaviour in adults.
- Expressive suppression (strategy 2 of emotion regulation) is a significant predictor of prosocial behaviour in adults.

#### **Description of Sample**

The sample for the study consisted of 110 adults (18 years and older). The age range taken into consideration was 18 to 59 years. Out of the overall population, 68 were males and 42 were females. The samples were drawn from several organizations, indicating the diversity of the data. All the participants were requested to fill a set of questionnaires provided to them, to the best of their knowledge and were ensured that their details will be kept confidential.

### *Research Design*

The study aims to examine the effect of dysfunctional attitude and emotion regulation on prosocial behaviour in adults. In order to assess this, the method of regression analysis was used. The Pearson's Product Moment Correlation Coefficient was also used to explore the relationship between each independent and dependent variable.

### *Variables*

- Independent variables: Dysfunctional Attitudes & Emotion Regulation
- Dependent variable: Prosocial Behaviour

### *Description of tools*

The assessment of dysfunctional attitudes, emotion regulation and prosocial behaviour in the participants was done with the help of three scales in total. They are as follows:

- 1. Dysfunctional Attitude Scale from A** – This is a self-report measure that was developed by Arlene N. Weissman and Aaron T. Beck in the year 1978. This scale was designed to measure the presence and intensity of negative/maladaptive attitudes. It consists of 40 statements/items with a 7-point Likert scale. The options range from 1, which refers to 'Fully Disagree' to 7, which refers to 'Fully Agree'. Items 2, 6, 12, 17, 24, 29, 30, 35, 37 and 40 are reversely scored.
- 2. Emotion Regulation Questionnaire** – This scale was developed by James J. Gross and Oliver Peter M. John in the year 2003. It is a 10-item questionnaire that aims to measure an individual's tendency to regulate his/her emotions in two ways: cognitive reappraisal and expressive suppression. The participants answer each item on a seven-point Likert scale ranging from strongly disagree (numbered as 1) to strongly agree (numbered as 7). The statements 1, 3,5,7,8 and 10 make up the facet of cognitive reappraisal whereas items 2, 4, 6 and 9 come under the expressive suppression facet. The scoring for this questionnaire is continuous.
- 3. Prosocialness Scale for Adults** –This scale developed by Gian V. Caprara, Arnaldo Zelli, Patrizia Steca and Cristina Capanna in the year 2005, aims to assess the tendency of an adults to act in favor of others. It comprises of 16 items in total. The participants using a five-point Likert scale, indicate if the statement is almost never true, occasionally true, sometimes true, often true or almost always true, all scored as 1, 2, 3, 4 and 5 respectively. The total score is obtained by summing up the responses of all sixteen items.

### *Procedure*

For the conduction of this study, a set of three questionnaires was administered on a sample of 110 adults. All the participants were ensured confidentiality of their responses. The Dysfunctional Attitude Scale from A was used to assess the negative attitudes present in an individual, the Emotion Regulation Questionnaire was used to investigate the strategies used by individuals to regulate their emotions and the Prosocialness Scale for Adults was used to measure the participants inclination to help others. After the responses were collected, the data was arranged using a spreadsheet and statistically analysed using Mean and Standard Deviation. The correlation between the independent variables and dependent variable was determined with the help of the Pearson's Product Moment Correlation Coefficient. The impact of the same was evaluated using Regression Analysis. The findings were further examined and interpreted using Microsoft – Excel and IBM – SPSS.

**Statistical Analysis**

The mean & standard deviation was calculated to determine the average score of the collected data and measures how far the scores deviate from the mean respectively. To explore the link between the variables, the Pearson Product Moment Correlation Coefficient was used. The impact was explained using regression analysis.

**ANALYSIS OF THE DATA**

**Table 1. Descriptive statistics for Dysfunctional Attitude Scale, Emotion Regulation Questionnaire (with subscales of cognitive reappraisal and expressive suppression) and Prosocialness Scale for Adults among total no. of adults.**

	<b>M</b>	<b>SD</b>	<b>N</b>
Dysfunctional Attitude	198.31	32.065	110
Cognitive Reappraisal	29.76	6.837	110
Expressive Suppression	16.15	5.542	110
Prosocial Behaviour	62.21	8.056	110

This table indicates the descriptive statistics of all the 3 variables used in this study, namely dysfunctional attitude, emotion regulation and prosocial behaviour. It suggests that the mean score for dysfunctional attitude among total number of participants i.e., 110, was found to be 198.31 with a standard deviation of 32.065.

Similarly, the mean scores and standard deviations for both the subscales of Emotion Regulation Questionnaire i.e., cognitive reappraisal and expressive suppression was found to be (29.46, 6.837) and (16.15, 5.542) respectively.

Lastly, the mean (average) score as well as the standard deviation for prosocial behaviour among 110 participants was shown to be 62.21 and 8.056 respectively.

**Table 2. Correlation between dysfunctional attitudes and prosocial behaviour in adults.**

	<b>Dysfunctional Attitude</b>	<b>Prosocial Behaviour</b>
Dysfunctional Attitude	<i>1</i>	
Sig. (2-tailed)		
Prosocial Behaviour	.337**	1
Sig. (2-tailed)	<.001	

\*\* Correlation is significant at the 0.01 level (2-tailed).

This table highlights a weak positive correlation between dysfunctional attitude and prosocial behaviour in adults with  $r = 0.337$  &  $p = <.001$

**Table 3. Correlation between cognitive reappraisal and prosocial behaviour in adults.**

	<b>Cognitive Reappraisal</b>	<b>Prosocial Behaviour</b>
Cognitive Reappraisal	<i>1</i>	
Sig. (2-tailed)		
Prosocial Behaviour	.313**	1
Sig. (2-tailed)	<.001	

\*\* Correlation is significant at the 0.01 level (2-tailed).

This table shows a weak positive correlation between cognitive reappraisal (i.e., strategy 1 of emotion regulation) and prosocial behaviour in total number of adults with  $r = 0.313$  &  $p = <.001$



**Table 4. Correlation between expressive suppression and prosocial behaviour in adults.**

	Expressive Suppression	Prosocial Behaviour
Expressive Suppression <i>Sig. (2-tailed)</i>	1	
Prosocial Behaviour <i>Sig. (2-tailed)</i>	-.020 .832	1

This table highlights no significant correlation between expressive suppression (i.e., strategy 2 of emotion regulation) and prosocial behaviour in adults with  $r = -.020$  &  $p = .832$

**Table 5. Impact of dysfunctional attitudes on prosocial behaviour in adults.**

Variable	Beta Coefficient	R <sup>2</sup>	F	p-value
Dysfunctional Attitude	.337	.114	13.834	.000

This regression table indicates the impact of dysfunctional attitude (independent variable) on prosocial behaviour with a beta coefficient value of 0.337, an R squared value of 0.114, an F value of 18.834 and a p-value of 0.0003.

**Table 6. Impact of cognitive reappraisal on prosocial behaviour in adults.**

Variable	Beta Coefficient	R <sup>2</sup>	F	p-value
Cognitive Reappraisal	.313	.098	11.693	.000

This regression table indicates the impact of the independent variable of cognitive reappraisal i.e., strategy of emotion regulation on prosocial behaviour with a beta coefficient value of 0.337, an R squared value of 0.114, a F value of 18.834 and a p-value of 0.0003.

**Table 7. Impact of expressive suppression on prosocial behaviour in adults.**

Variable	Beta Coefficient	R <sup>2</sup>	F	p-value
Expressive Suppression	-.020	.000	.045	.832

This regression table indicates the impact of expressive suppression (independent variable) on prosocial behaviour with a beta coefficient value of -.020, an R squared value of 0.000, a F value of 0.045 and a p-value of 0.832.

## DISCUSSION & CONCLUSION

This study aimed at assessing the impact of dysfunctional attitudes and emotion regulation on prosocial behaviour in adults. A total of six hypotheses were postulated for this study. The first hypothesis states there is a significant relationship between dysfunctional attitudes and prosocial behaviour in adults; second, there is a significant relationship between cognitive reappraisal (strategy one of emotion regulation) and prosocial behaviour in adults; third, there is a significant relationship between expressive suppression (strategy two of emotion regulation) and prosocial behaviour in adults. The fourth hypothesis states that dysfunctional attitudes are a significant predictor of prosocial behaviour in adults; fifth, states that cognitive reappraisal (strategy 1 of emotion regulation) is a significant predictor of prosocial behaviour in adults and lastly, sixth states that expressive suppression (strategy 2 of emotion regulation) is a significant predictor of prosocial behaviour in adults.

## The Impact of Dysfunctional Attitudes and Emotion Regulation on Prosocial Behaviour in Adults

The total population of this study comprised of 110 adults (18 and above), out of which 42 were females and 68 were males. The tools used to examine the variables were the Emotion Regulation Questionnaire (ERQ), Dysfunctional Attitude Scale Form A (DAS-A) and Prosocialness Scale for Adults (PSA).

In reference to table 1, the findings highlighted the mean (M) standard deviation (SD) of all the variables explored in the study where  $N = 110$ . The M and SD for dysfunctional attitudes were 198.31 and 32.065 respectively. The mean and standard deviation values for both the subscales of ERQ, i.e., expressive suppression as well as cognitive reappraisal, was calculated to be (16.15, 5.542) and (29.46, 6.837) respectively. Lastly, M and SD for prosocial behaviour was found to be 62.21 and 8.056 respectively.

According to the 1st hypothesis, there is a significant relationship between dysfunctional attitudes and prosocial behaviour among the total number of adults. Table 2 indicated the relationship between the two variables, where a significant but weak positive correlation was found with an 'r' value of 0.337 and a 'p' value that is  $<.001$ . This further suggests that with an increase in dysfunctional attitude, there tends to be a slight increase in prosocial behaviour as well. Therefore, based on these findings, the first hypothesis is accepted, highlighting the existence of a significant relationship between the variables (dysfunctional attitudes and prosocial behaviour). It is also important to note that these variables have not been studied together before and that the observed association may be influenced by other variables that were not measured in our study.

The 2<sup>nd</sup> hypothesis stated that there is a significant relationship between cognitive reappraisal and prosocial behaviour among adults. In reference to Table 3, the findings suggested a significant but weak positive correlation with  $r = 0.313$  and  $p = <.001$ . Further indicating that with an increase in cognitive reappraisal, there occurs a slight increase in prosocial behaviour. Therefore, the second hypothesis is accepted, highlighting an existence of a significant relationship between the two. These results are in line with another study conducted by Kanske et al. (2016), in which after examining the link between cognitive reappraisal and prosocial behaviour in situations where a person experiences social dilemmas, the authors found a significant relationship between the two.

According to the 3<sup>rd</sup> hypothesis, there is a significant relationship between expressive suppression and prosocial behaviour. In reference to Table 4, the results showed a negative weak correlation with  $r = -.020$  and no significant relationship with a p-value of 0.832. Therefore, this hypothesis is rejected, due to lack of a significant relationship found between the independent and dependent variable. These findings are in line with a study conducted by Xiao and others in 2018, in which, after exploring the potential roles of a parent's expression of warmth and discipline on the link between their emotion regulation strategies and prosocial tendencies of the child, it was found that expressive suppression was negatively linked to the two variables.

According to the 4<sup>th</sup> hypothesis, dysfunctional attitudes are a significant predictor of prosocial behaviour among adults. Table 5, indicated the impact of the former on the latter. The findings highlighted a  $R^2$  value of 0.114, suggesting that dysfunctional attitude accounts for approximately 11.4 % of variability in prosocial behaviour scores. The beta coefficient value of 0.337 suggested that for each 1 unit increase in dysfunctional attitudes, prosocial behaviour was predicted to increase by 0.337 units, indicating the existence of a positive relationship between them. With a p and F value of 13.834 and .000 respectively, it can be

## The Impact of Dysfunctional Attitudes and Emotion Regulation on Prosocial Behaviour in Adults

suggested that dysfunctional attitudes are a significant predictor of prosocial behaviour among adults. Therefore, this hypothesis is accepted. However, the variables mentioned above have not been explored collectively in a study together before and the observed results may have been influenced by other variables that were not taken into consideration in this particular study.

The 5<sup>th</sup> hypothesis stated that cognitive reappraisal is a significant predictor of prosocial behaviour in adults. Table 6 indicated the impact of the independent variable (former) on the dependent variable (latter). The findings with a R squared value of 0.313 highlighted that cognitive reappraisal accounts for about 13.3% of variability in scores of prosocial behaviour. The beta coefficient value of 0.313 shows that for each one unit increase in cognitive reappraisal, prosocial behaviour is predicted to increase by 0.313 units, indicating the existence of a positive relationship between them. With a p and F value of 13.834 and .000 respectively, it can be suggested that dysfunctional attitude is a significant predictor of prosocial behaviour among adults. Therefore, the third hypothesis is accepted. These findings are similar to a study conducted by Laghi et al. (2018), where after investigating the potential influence of emotion regulation strategies on empathy and prosocial behaviour in adolescents, the authors found a positive impact of cognitive reappraisal on empathy as well as prosocial tendencies.

Lastly, according to the 6<sup>th</sup> hypothesis, expression suppression is a significant predictor of prosocial behaviour among adults. In reference to Table 7, the findings highlighted no significant relationship between the independent variable (expression suppression) and the dependent variable (prosocial behaviour) as indicated by a R-squared value of .000. With a F value of 0.045 and p value of 0.832, it can be stated that the former is not significant predictor of the latter. The beta coefficient value of -0.20 suggested that for every one unit increase in expression suppression, there is only a 0.20 unit decrease in prosocial behaviour. Hence, based on the results above, this hypothesis is rejected. Kang & Guo (2021) explored the influence of authoritative style of parenting on prosocial behaviour among young adults through strategies of emotion regulation. Similar to the results above, they found that expressive suppression did not play a key role in mediating the association between the two variables.

Hence, it was concluded that there exists a significant impact and relationship between dysfunctional attitude and prosocial behaviour as well as between cognitive reappraisal (strategy one of emotion regulation) and prosocial behaviour. The current study also found no significant impact or relationship between expressive suppression (strategy two of emotion regulation) and prosocial among the total population. This paper may have had some limitations due to the small sample size and use of self-report measures. It was conducted on an overall population which may have contributed to the weak correlation established in this paper. Assessing the variables using different tools of emotion regulation and prosocial behaviour, combined with a bigger and more diverse sample size, may better elucidate the impact and links between them.

### *Limitations*

- The size of the study was concise, which may have limited adequate representation of the complexity of this concept.
- Participants may have experienced a lack of interest due to the length of the questionnaires provided.

## The Impact of Dysfunctional Attitudes and Emotion Regulation on Prosocial Behaviour in Adults

- The correlations and impact between the variables may have been influenced by factors that were not assessed in the study, such as mood, stress, gender, social economic strata etc.

### REFERENCES

- Batool, S. (2020). Does positive parenting predict pro-social behavior and friendship quality among adolescents? Emotional intelligence as a mediator. <https://www.semanticscholar.org/paper/Does-positive-parenting-predict-pro-social-behavior-Batool-Lewis/f911da2d20ffbed150bf18616e14255285932fe4>
- Benita, M., Levkovitz, T., & Roth, G. (2017). Integrative emotion regulation predicts adolescents' prosocial behavior through the mediation of empathy. *Learning and Instruction, 50*, 14–20. <https://doi.org/10.1016/j.learninstruc.2016.11.004>
- Brethel-Haurwitz, K. M., Stoianova, M., & Marsh, A. A. (2020). Empathic emotion regulation in prosocial behaviour and altruism. *Cognition & Emotion, 34*(8), 1532–1548. <https://doi.org/10.1080/02699931.2020.1783517>
- Chambers, R. D., Gullone, E., Hased, C., Knight, W. E. J., Garvin, T. M., & Allen, N. B. (2015). Mindful Emotion Regulation Predicts Recovery in Depressed Youth. *Mindfulness, 6*(3), 523–534. <https://doi.org/10.1007/s12671-014-0284-4>
- Conway, C. M., Slavich, G. M., & Hammen, C. (2015). Dysfunctional Attitudes and Affective Responses to Daily Stressors: Separating Cognitive, Genetic, and Clinical Influences on Stress Reactivity. *Cognitive Therapy and Research. https://doi.org/10.1007/s10608-014-9657-1*
- Davis, A. N., Carlo, G., Schwartz, S. J., Zamboanga, B. L., Armenta, B. E., Kim, S. W., Opal, D., & Streit, C. (2017). The roles of familism and emotion reappraisal in the relations between acculturative stress and prosocial behaviors in Latino/a college students. *Journal of Latina/O Psychology, 6*(3), 175–189. <https://doi.org/10.1037/lat000092>
- Hejazi, M. (2016). On the Comparison of Dysfunctional Attitudes, Cognitive Distortions, and Difficulty in Emotion Regulation between People with Substance Abuse and Normal Individuals. <https://www.semanticscholar.org/paper/On-the-Comparison-of-Dysfunctional-Attitudes%2C-and-Hejazi-Aghayari/9c5a9d3b121fdff1572e61a57b01f38a878cf89d>
- Laghi, F., Lonigro, A., Pallini, S., & Baiocco, R. (2018). Emotion Regulation and Empathy: Which Relation with Social Conduct? *Journal of Genetic Psychology, 179*(2), 62–70. <https://doi.org/10.1080/00221325.2018.1424705>
- Li, J., Yao, M., & Liu, H. (2021). From Social Support to Adolescents' Subjective Well-Being: the Mediating Role of Emotion Regulation and Prosocial Behavior and Gender Difference. *Child Indicators Research, 14*(1), 77–93. <https://doi.org/10.1007/s12187-020-09755-3>
- Liu, J., Peh, C. X., & Mahendran, R. (2017). Body image and emotional distress in newly diagnosed cancer patients: The mediating role of dysfunctional attitudes and rumination. *Body Image, 20*, 58–64. <https://doi.org/10.1016/j.bodyim.2016.11.001>
- Marčinko, D., Jakšić, N., Ivezić, E., Skočić, M., Surányi, Z., Loncar, M., Franić, T., & Jakovljević, M. (2014). Pathological Narcissism and Depressive Symptoms in Psychiatric Outpatients: Mediating Role of Dysfunctional Attitudes. *Journal of Clinical Psychology, 70*(4), 341–352. <https://doi.org/10.1002/jclp.22033>
- Noh, D., & Kim, S. (2016). Dysfunctional attitude mediates the relationship between psychopathology and Internet addiction among Korean college students: A cross-sectional observational study. *International Journal of Mental Health Nursing, 25*(6), 588–597. <https://doi.org/10.1111/inm.12220>

## The Impact of Dysfunctional Attitudes and Emotion Regulation on Prosocial Behaviour in Adults

- Rajabizadeh, G., Rajabizadeh, Z., Moghadam, S. O., & Vafadoost, Z. (2019). The Relationship between Dysfunctional Attitudes and Communication Skills of Women with an Addicted Husband on the Verge of Divorce. *PubMed*, 11(1), 51–57. <https://doi.org/10.22122/ahj.v11i1.221>
- Renner, F., Schwarz, P., Peters, M. L., & Huibers, M. J. (2014). Effects of a best-possible-self mental imagery exercise on mood and dysfunctional attitudes. *Psychiatry Research-neuroimaging*, 215(1), 105–110. <https://doi.org/10.1016/j.psychres.2013.10.033>
- Turkoglu, S. A., Eşizoğlu, A., Köşger, F., & Aksaray, G. (2015). Relationship between dysfunctional attitudes and childhood traumas in women with depression. *International Journal of Social Psychiatry*, 61(8), 796–801. <https://doi.org/10.1177/020764015585328>
- Vanderhasselt, M., Koster, E. H. W., Onraedt, T., Bruyneel, L., Goubert, L., & De Raedt, R. (2014). Adaptive cognitive emotion regulation moderates the relationship between dysfunctional attitudes and depressive symptoms during a stressful life period: A prospective study. *Journal of Behavior Therapy and Experimental Psychiatry*, 45(2), 291–296. <https://doi.org/10.1016/j.jbtep.2014.01.003>
- Xiao, S. X. (2018b). Parental emotion regulation and preschoolers' prosocial behavior: The mediating roles of parental warmth and inductive discipline. <https://www.semanticscholar.org/paper/Parental-emotion-regulation-and-preschoolers%E2%80%99-The-Xiao-Spinrad/7f6bf3cd9bd28c31dcf4e66c56f385b06ef69275>
- Yuchang, J., Cuicui, S., Junxiu, A., & Junyi, L. (2017). Attachment Styles and Smartphone Addiction in Chinese College Students: The Mediating Roles of Dysfunctional Attitudes and Self-Esteem. *International Journal of Mental Health and Addiction*, 15(5), 1122–1134. <https://doi.org/10.1007/s11469-017-9772-9>

### **Acknowledgement**

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

### **Conflict of Interest**

The author(s) declared no conflict of interest.

**How to cite this article:** Singh, V. (2023). The Impact of Dysfunctional Attitudes and Emotion Regulation on Prosocial Behaviour in Adults. *International Journal of Indian Psychology*, 11(2), 1834-1846. DIP:18.01.188.20231102, DOI:10.25215/1102.188