



Exploring The Triad: Cognitive Distortions, Parental Deprivation, And Sociability Impacts

Surabhi Ranjan^{1*}, Mohammad Amin Wani²

¹Masters Student, Dept of Psychology, Lovely Professional University, Email: surabhiranjan23@gmail.com

²Assistant Professor, School of Humanities, Lovely Professional University, Phagwara Jalandhar Punjab India

Email: wanipsychology@gmail.com Orcid id: 0000-0002-4737-3731

*Corresponding Author: Surabhi Ranjan

*Masters Student, Dept of Psychology, Lovely Professional University, Email: surabhiranjan23@gmail.com

Citation: Surabhi Ranjan, Mohammad Amin Wani (2024), Exploring the Triad: Cognitive Distortions, Parental Deprivation, and Sociability Impacts, *Educational Administration: Theory and Practice*, 30(5),9678-9683

Doi: 10.53555/kuey.v30i5.4641

ARTICLE INFO

ABSTRACT

The study explores the profound relationship between cognitive distortions, parental deprivation, and their collective influence on sociability. Synthesizing psychological theories and empirical research, it unveils the intricate interplay among these factors. By delving into dimensions such as social interaction and relationship dynamics, it sheds light on how early experiences shape later sociability outcomes. This study underscores the necessity of tailored interventions to mitigate the adverse effects of cognitive distortions and parental deprivation on sociability. Through its comprehensive analysis, this research contributes valuable insights to understanding and addressing social challenges, offering a significant advancement in psychology.

Keywords: - Cognitive distortions, parental deprivation, sociability, mental illnesses, and criminal behaviour.

Introduction

Cognitive Distortion is when individuals interpret information in a manner that is rigid and unrealistic, at times exaggerated due to flaws in the logical reasoning of the individual. They are often referred to as similar negative beliefs and negative biases about the self (Beck, 1976). Parental deprivation refers to an unsatisfactory relationship between the child and the parents, and/ or losing a parent through death, divorce or separation (Lu & Saps, 2021). Sociability is the ability to communicate and interact agreeably with others in the existing environment, also being affable, approachable and socially interactive (Gilliland and Burke, 1926).

Cognitive distortion links to mental illnesses (Najavitis et al., 2004; Roberts, 2015; Yurica, 2005; Zaiden et al., 2023), psychopathology and maladjustment in children (Benoit, 2004), sexual offending (Ciardha & Ward, 2013) and delinquent behaviour (Grygier et al,1969), which is also a product of the absence of a parental figure in a child's early life as stated by Bowlby (1978) that deviant behaviour and pathological lying is common in such children. Little (1965) explains in his study how a child's maternal relationship is a major factor in delinquency.

Parental deprivation has been attributed to the lack of social stimulation during infancy and early childhood (Sheridan & McLaughlin, 2014). It is associated with poor executive function, language development and reading ability research by Miller (2020). The antecedent condition of maternal deprivation links to insufficiency of interaction, distortion in the character of the interaction without respect to its quantity and the discontinuity of relations brought about through separation (Ainsworth et al., 1962).

Sociability is defined as verbal participation that is influenced by the subtle micro- kinesic cues people display upon entering a meeting room (Gray, 1976). People who rank high on the trait of extroversion are usually sociable, outgoing and readily connected with others, on the other hand, people who rank high on the trait of introversion tend to be alone, engage in solitary behaviours, and limit their interactions with others.

Theoretical framework

Rachman & Shafran (1999), came up with the idea of thought-action fusion or TAF concerning cognitive distortion and came up with two sub-divisions of thought-action fusion: probability thought-action fusion and

morality thought-action fusion. Probability thought-action fusion is the intrusive thought that increases the likelihood that a specific negative event will occur. Morality thought-action fusion is experiencing intrusive thoughts morally equivalent to carrying out a prohibited action.

The two models of cognitive distortion that stand out are given by Beck (1967), talking about three main schemas, 1) I am defective or inadequate 2) All of my experiences resulted in defeats or failures and 3) The future is hopeless. The idea of 'self-debasing' was also derived from Beck's theory that defines 1) catastrophising 2) Personalizing 3) Selective abstraction and 4) Overgeneralizing. Similarly, Ellis (1962) in his research talks about emotional and behavioural issues that are a product of irrational beliefs and negative thought patterns.

Eysenck's (1967) theory of personality discussed extraversion-introversion concerning underlying neurological states, where he talked about an extravert being sociable at a behavioural level. Sociability types are defined as Individualism and Collectivism by Gifford (1981), where individualism is constituted in the context of power struggle and collectivism in the context of religion and sports, and the understanding is that there exists a sense of belongingness when an individual feels that they are a part of the community.

There were three approaches to sociability defined by Forgas (2022) namely, the nativist approach, the environmental approach and the interactionist approach. The nativist approach refers to the ancestral environment of the individual, the environment approach refers to the acquired learned aspects and the idea of learning and reinforcement takes place at a young age and the interactionist approach refers to the social contract existing in the community (Forgas, 2022).

Among the most significant advancements in the psychological field, the concepts of Cognitive Distortion, Parental Deprivation and Sociability have been studied individually. However, the gap among these variables is still unexplored. The exploration of the concept of Cognitive distortion has been adopted in clinical and non-clinical settings (Ozdel et al, 2014).

Rationale of the study

The rationale for the current study originated from a substantial review of the literature, which highlighted a significant research gap, the relationships among cognitive distortion, parental deprivation, and sociability had yet to be explored before. With this gap in mind, we hypothesized a positive correlation among these three variables, suggesting that experiences of parental deprivation could be associated with higher levels of cognitive distortion and potentially affect sociability as well. Some studies have linked the increase in anxiety with decreased sociability that is caused by parental deprivation in the neonatal stage (Zhixiong et al, 2019). Other studies have linked parental deprivation with mental illnesses and criminal behaviour, whereas some studies have shown higher cognitive distortion in the population in psychiatric facilities and reform institutions (Najavitis et al., 2004; Roberts, 2015; Yurica, 2005; Zaiden et al., 2023).

Method

Objectives

1. To assess the differences in cognitive distortion, parental deprivation and sociability concerning the sex of the respondents.
2. To analyse the relationship of cognitive distortion with parental deprivation and sociability

Hypothesis

H₀: There will be no significant differences in Cognitive distortion, Parental Deprivation and Sociability concerning the sex of the respondents

H₁: Cognitive Distortion is significantly correlated with Parental Deprivation and Sociability

Research Design

The present study is descriptive, inferential and correctional statistics were used for data analysis for the variable's cognitive distortion, parental deprivation and sociability.

Participants

The primary data was collected from 227 participants between the age group 18 to 40 years through convenient sampling techniques via online as well as offline platforms. However, only 173 out of 227 participants were considered due to missing information. The study includes participants from diverse geographical regions across India, encompassing both urban and rural areas, university and workplace settings ensuring a mix of educational backgrounds, religions, and sex. The recruitment process spanned eight weeks in March and April 2024 with equal efforts made in both online and offline strategies to ensure a balanced representation of each mode.

Measures

1. Cognitive Distortion: For measuring cognitive distortions, the current study used a standardized tool Cognitive Distortion Scale by Briere, J. (2000). The Cognitive Distortion Scale consists of 40 items that are divided into 5 subscales, namely self-criticism, self-blame, helplessness, hopelessness and preoccupation with danger with 8 items each. Each given item is rated on a 5-point Likert scale (never, once or twice, sometimes,

often, and very often) and is scored as 1, 2, 3, 4, and 5 respectively. Higher scores on this scale indicate greater degrees of symptomatology. The reliability coefficient for the CDS scales ranged from .89 (for preoccupation with danger) to .97 (for hopelessness). The reliability coefficient for the other subscales was .93 for self-criticism, .92 for self-blame and .94 for helplessness.

2. Parental Deprivation: Given the absence of a standardized questionnaire for parental deprivation, a specialized self-report tool was crafted specifically for this study. The development process was extensive, involving three iterative phases of quantitative testing. Initially, a broad range of items was generated through a literature review and expert consultations. These items were then refined through expert panel reviews, which included five panellists. The final scale comprised 21 selected items, on a 3-point Likert scale (yes, sometimes and no) and is scored as 1, 2 and 3 respectively. The self-report tool consists of three dimensions, physical deprivation, emotional deprivation and financial deprivation. The internal consistency was checked after a pilot study, that not only confirmed the scale's structural integrity but also its high reliability, achieving a Cronbach's alpha of 0.88.

3. Sociability: The sociability of participants was assessed using a standardized scale the Social-ability Questionnaire developed by Berent (1989) that was used for data collection. It consists of 35 items divided into 5 sub-categories namely, concept and self, social anxiety, feelings toward parents and degree of independence, knowledge of social etiquette and empathy. Each item has two responses True or False, each correct answer has to be assigned the value of 1. This scale provides a comprehensive assessment of an individual's sociability through self-report items, allowing for detailed analyses of how sociability relates to cognitive distortions and parental deprivation. As the scale was developed three decades ago, therefore we checked the reliability using the Guttman split-half coefficient in a pilot study which was found to be .615.

Procedure

Before the conduct of this study, the participants were briefed about the study objectives through a written consent form that detailed the study's purpose, the voluntary nature of participation, and the anonymity of the data. They were assured that they could withdraw from the study at any point. We collected the data via two different modes, online (Google Forms) and offline (physical forms). Furthermore, the data was analysed using Jamovi software and the findings were discussed in light of supporting studies.

Data Analysis

The analysis of data involved rigorous data cleaning to ensure the accuracy of the dataset. Following this, Jamovi software was used to perform Pearson's correlation analysis, to find the correlation among the variables that the research study intended to study. This method was utilized given the quantitative nature of the scales used for the data collection process, among cognitive distortion, parental deprivation, and sociability.

Results

In the results and discussion section, the researcher presents a comprehensive analysis of the data and the interrelationship between cognitive distortions, parental deprivation, and sociability impacts.

Table 1: Distribution of the respondents based on Sex

Sex	N	% of Total
Female	107	61.8 %
Male	66	38.2 %

Findings from Table 1, show the frequencies of sex, the table infers that the majority of the data collected was of the female population N= 107 (61.8%) and male population N=66 (38.2%), a cumulative of 100 % of the data collected for the current research study.

Table 2: Mean differences in Cognitive Distortion, Parental Deprivation and Sociability with respect to Sex

Variables	Group	N	Mean	Median	SD	SE	Mean difference	SE difference	p	Cohen's d Effect Size																													
Cognitive Distortion	Female	107	148.2	157	32.02	3.07	-13.42	4.787	0.006	-0.44																													
	Male	66	161.6	169	28.08	3.46					Parental Deprivation	Female	107	34.7	33	8.75	0.85	0.02	1.289	0.990	0.00	Male	66	34.7	33	7.33	0.90	Sociability	Female	107	19.6	19	3.7	0.36	0.98	0.619	0.115	0.25	Male
Parental Deprivation	Female	107	34.7	33	8.75	0.85	0.02	1.289	0.990	0.00																													
	Male	66	34.7	33	7.33	0.90					Sociability	Female	107	19.6	19	3.7	0.36	0.98	0.619	0.115	0.25	Male	66	18.6	18	4.35	0.54												
Sociability	Female	107	19.6	19	3.7	0.36	0.98	0.619	0.115	0.25																													
	Male	66	18.6	18	4.35	0.54																																	

This table presents mean differences in cognitive distortion, parental deprivation, and sociability between males and females:

Cognitive Distortion:

Results revealed that females scored significantly lower (mean difference of -13.42) in cognitive distortion compared to males. The effect size (Cohen's d) indicates a moderate effect (-0.44), suggesting that the difference in cognitive distortion between males and females is meaningful.

Parental Deprivation:

For parental deprivation, findings show no significant difference between males and females (mean difference of 0.02). The p-value (0.990) suggests that the difference observed is not statistically significant. The effect size (Cohen's d) is negligible (0.00), indicating that there is practically no difference in parental deprivation between males and females.

Sociability:

While talking about sociability it is unveiled that females scored slightly higher (mean difference of 0.98) in sociability compared to males, but this difference was not statistically significant. The p-value (0.115) suggests that the observed difference is not statistically significant. The effect size (Cohen's d) is small (0.25), indicating a minor difference in sociability between males and females.

In summary, the analysis suggests that there are significant differences between males and females in cognitive distortion, with females showing lower levels compared to males. However, there are no significant differences in parental deprivation and sociability between the two groups.

Table 3: Relationship of cognitive distortion with parental deprivation and sociability

	Cognitive Distortion	Parental Deprivation	Sociability
Cognitive Distortion	1	.412**	.384**
Parental Deprivation		1	0.131
Sociability			1

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

The data was analysed using a 2-tailed Pearson correlation with 2-tailed significance, where the table infers that there exists a positive correlation among the variable's cognitive distortion, parental deprivation and sociability. Among the population tested N=173, there exists a positive correlation between the variable's cognitive distortion and parental deprivation of $r=.412$ and between cognitive distortion and sociability there was a correlation of $r=.384$. Lastly, between the variable's parental deprivation and sociability, there was a slight positive correlation of $r=.131$.

Discussion

The variables mentioned in the current study have not been researched together before the current study. Research has identified cognitive distortions as mediators between life stress and depression in an adolescent sample (Deal & Williams, 1988) There are known dysfunctional mental health consequences seen among the adolescents of parental deprivation (Ghosh, 2016), it has also been associated with types of parenting styles on children's lying behaviours (Moffett, 1993). Some research studies have shown the association of paternal deprivation with a profound influence on behavioural development, thereby affecting characteristics such as sociability (Zhixiong et al, 2019).

The null hypothesis states that there will be no significant differences in cognitive distortion, parental deprivation and sociability concerning the sex of the respondents. The results of the analysis support the said hypothesis as the difference between the sex of the respondents with respect to the variables is negligible and is not significant. Therefore, the null hypothesis stands true. The alternate hypothesis states that Cognitive Distortion is significantly correlated with Parental Deprivation and Sociability. As the results show there exists a positive correlation among the variables, therefore Cognitive Distortion is significantly related to Parental Deprivation and Sociability, which supports the alternate hypothesis.

Conclusion

The current study establishes that cognitive distortions are significantly correlated with parental deprivation and sociability, highlighting the importance of addressing these psychological factors together. There exists a relationship among the variables which can potentially enable the early detection of cognitive distortion and lack of sociability skills in the population who were deprived of parental figures in early childhood.

Ethical considerations

Ethical considerations are essential while dealing with participants in a research study. In this study exploring the relationships among cognitive distortion, parental deprivation, and sociability, several ethical principles were upheld to ensure the confidentiality and anonymity of the participants.

First and foremost, informed consent was taken from every participant in the current research study. Participants were fully informed about the purpose of the study, which included ensuring that participants understood the voluntary nature of their involvement and their right to withdraw from the study at any time. Confidentiality and anonymity are essential to protect participant's privacy. All data collected was kept confidential. Researchers maintained integrity and transparency throughout the research process. This included accurately representing the study's purpose, procedures, and findings.

Acknowledgement

We wish to express our sincere gratitude to all individuals and entities whose contributions have made this research possible. We extend our heartfelt thanks to our families for their unwavering support and understanding. Their encouragement has been instrumental in the completion of this endeavour.

References

1. Ainsworth, M. D., Andry, R. G., Harlow, R. G., Lebovici, S., Mead, M., Prugh, D. G., & Wootten, B. (1962). DEPRIVATION OF MATERNAL CARE A Reassessment of its Effects. In https://iris.who.int/bitstream/handle/10665/37819/WHO_PHP_14.pdf. World Health Organization. https://iris.who.int/bitstream/handle/10665/37819/WHO_PHP_14.pdf
2. Barriga, A. Q., Hawkins, M. A., & Camelia, C. R. T. (2008). Specificity of cognitive distortions to antisocial behaviours. *Criminal Behaviour and Mental Health*, 18(2), 104–116. Wiley. <https://doi.org/10.1002/cbm.683>
3. Bowlby, J. (1952). *Maternal Care and Mental Health*. University of Oregon; World Health Organization. <https://darkwing.uoregon.edu>
4. Campbell, J. B., & Hawley, C. W. (1982). Study habits and Eysenck's theory of extraversion-introversion. *Journal of Research in Personality*, 16(2), 139–146. Science Direct. [https://doi.org/10.1016/0092-6566\(82\)90070-8](https://doi.org/10.1016/0092-6566(82)90070-8)
5. Fauziah Zaiden, Mastura Mahfar, Aslan Amat Senin, & Faizah Mohd Fakhruddin. (2023). Global Research Pattern of Cognitive Distortion: A Bibliometric Analysis. *SAGE Open*, 13(4). Sage Journals. <https://doi.org/10.1177/21582440231219658>
6. Forgas, J. P., Crano, W., & Fiedler, K. (2022). *THE PSYCHOLOGY OF SOCIABILITY*. In Routledge. Routledge, Cambridge University. <https://www.routledge.com/The-Psychology-of-Sociability-Understanding-Human-Attachment/Forgas-Crano-Fiedler/p/book/9781032193052>. Sydney Symposium of Social Psychology.
7. Ghosh, Smritikana. M. (2016). Parental Deprivation and Adolescents Mental Health. *The International Journal of Indian Psychology*, 3(7), 2349–3429. *The International Journal of Indian Psychology*. <https://doi.org/18.01.122/20160303>
8. Gifford, R. (n.d.). APA PsycNet. Psycnet.apa.org; APA Psycnet. Retrieved March 12, 2024, from <https://psycnet.apa.org/doiLanding?doi=10.1037%2FO022-3514.41.2.340>
9. Gilliland, A. R., & Burke, R. S. (1926). A measurement of sociability. *Journal of Applied Psychology*, 10(3), 315–326. <https://doi.org/10.1037/h0071953>
10. Grinspoon, P. (2022, May 4). How to recognise and tame your cognitive distortions. Harvard Health; Harvard Health Publishing. <https://www.health.harvard.edu/blog/how-to-recognize-and-tame-your-cognitive-distortions-202205042738#:~:text=Cognitive%20distortions%20are%20internal%20mental>
11. Grygier, T., Chesley, J., & Tutters, E. W. (1969). Parental Deprivation: A Study of Delinquent Children. *British Journal of Criminology*, 9(3), 209. <https://heinonline.org/HOL/LandingPage?handle=hein.journals/bjcrim9&div=28&id=&page=>
12. Hasan, S., Crocker, R., Rousseliere, D., Dumont, G., Hale, S., Srinivas, H., Hamilton, M., Kumar, S., Maclean, C., Bauer, H., Opstal, W., Mueller, C. von, Waters Robichau, R., von Schnurbein, G., Archambault, E., Anheier, H. K., Mukerji, M., Borkman, T., Jung, R. H., & Das, A. (2010). Sociability. *International Encyclopedia of Civil Society*, 1376–1379. Springer. https://doi.org/10.1007/978-0-387-93996-4_598
13. He, Z., Young, L., Ma, X.-M., Guo, Q., Wang, L., Yang, Y., Luo, L., Yuan, W., Li, L., Zhang, J., Hou, W., Qiao, H., Jia, R., & Tai, F. (2019). Increased anxiety and decreased sociability induced by paternal deprivation involve the PVN-PrL OTerpic pathway. *ELife*, 8, e44026. <https://doi.org/10.7554/eLife.44026>
14. Howitt, D., & Sheldon, K. (2007). The role of cognitive distortions in paedophilic offending: Internet and contact offenders compared. *Psychology, Crime & Law*, 13(5), 469–486. Taylor and Francis Online. <https://doi.org/10.1080/10683160601060564>
15. Koller, K. M., & Castanos, J. N. (1970). Family Background in Prison Groups: A Comparative Study of Parental Deprivation. *British Journal of Psychiatry*, 117(539), 371–380. Cambridge University Press. <https://doi.org/10.1192/bjp.117.539.371>
16. Little, A. (1965). "Parental Deprivation, Separation and Crime": A Test on Adolescent Recidivists. *The British Journal of Criminology*, 5(4), 419–430. JSTOR.

- https://www.jstor.org/stable/pdf/23635761.pdf?refreqid=fastly-default%3Ac408dfa4f382075200ac9cc0fafe61&ab_segments=&origin=&initiator=&acceptTC=1
17. Lu, P. L., & Saps, M. (2021). Chronic Abdominal Pain of Childhood and Adolescence. Elsevier EBooks, 54-60.e4. Science Direct. <https://doi.org/10.1016/b978-0-323-67293-1.00006-2>
 18. Maldonado, M. (2013, July 22). Jihadism, Culture Globalization, and Cognitive Distortions. Reflections; wordpress. <https://psychologyacademia.wordpress.com/2013/07/22/jihadism-culture-globalization-and-cognitive-distortions/>
 19. Miller, A. B., Machlin, L., McLaughlin, K. A., & Sheridan, M. A. (2020). Deprivation and psychopathology in the Fragile Families Study: A 15-year longitudinal investigation. *Journal of Child Psychology and Psychiatry*, 62(4), 382–391. The Association for Child and Adolescent Mental Health. <https://doi.org/10.1111/jcpp.13260>
 20. Ó Ciardha, C., & Ward, T. (2012). Theories of Cognitive Distortions in Sexual Offending. *Trauma, Violence, & Abuse*, 14(1), 5–21. Sage Journals. <https://doi.org/10.1177/1524838012467856>
 21. Özdel, K., Taymur, I., Guriz, S. O., Tulaci, R. G., Kuru, E., & Turkcapar, M. H. (2014). Measuring Cognitive Errors Using the Cognitive Distortions Scale (CDS): Psychometric Properties in Clinical and Non-Clinical Samples. *PLoS ONE*, 9(8), e105956. Research Gate. <https://doi.org/10.1371/journal.pone.0105956>
 22. Pittard, C. M., & Pössel, P. (2020). Cognitive distortions. *Encyclopedia of Personality and Individual Differences*, 706–708. https://doi.org/10.1007/978-3-319-24612-3_965
 23. Rnic, K., Dozois, D. J. A., & Martin, R. A. (2016). Cognitive distortions, humour styles, and depression. *Europe's Journal of Psychology*, 12(3), 348–362. <https://doi.org/10.5964/ejop.v12i3.1118>
 24. Volery, M., Carrard, I., Rouget, P., Archinard, M., & Golay, A. (2006). Cognitive distortions in obese patients with or without eating disorders. *Eating and Weight Disorders - Studies on Anorexia, Bulimia and Obesity*, 11(4), e123–e126. <https://doi.org/10.1007/bf03327577>