

Research Paper

The Dark Side of Satisfaction: Exploring the Socio- Demographic Correlates of Schadenfreude

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ABSTRACT

Schadenfreude is a complex emotion produced by another person's struggle or adversity. This study examines the difference in Schadenfreude in terms of gender, birth order, and family structure. The study has been conducted among a sample of 323 young adults with 57.3% males, in various districts of West Bengal, using cross-sectional design. Data is analysed using t-tests and ANOVA. The results show a significant difference in gender in the overall theoretical construct of schadenfreude and its subdivisions of justice and rivalry, with males scoring higher than females except in aggression-based schadenfreude. The results also depict that there is no role of birth order and family structure in terms of schadenfreude.

Keywords: *schadenfreude, aggression, justice, rivalry, family structure, birth order*

Schadenfreude is seen as a forbidden emotion in social settings; the day-to-day webs of interaction often occupy a position of Schadenfreude in human social life, widely experienced but rarely admitted. Defined by the American Psychological Association as the pleasure or enjoyment derived from another person's misfortune. The term originated from two German words: Schaden, meaning 'harm,' and Freude, meaning 'joy'. Despite Schadenfreude's repeated occurrence and universality, it is still recognized as a restricted emotion typically felt privately without external display. This emotion mainly arises when another individual's bad luck is considered as deserved, and the individual is perceived as liable for his misfortune (Dijk et al. 2006). As it is a covert emotion, it is distinguished from gloating. Which is externally displayed, active, and direct towards a competitor's loss (Leach et al., 2003). Schadenfreude does not require any intentional harm, action, or someone's engagement to feel; it arises spontaneously from coincidence or another's misfortune without deliberate wrong doing (Leach & Spears, 2008).

According to empirical evidence, the feeling of joy at others' misfortune is always accompanied by other related factors such as low empathy, jealousy, low self-esteem,

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deservingness, etcetera. Schadenfreude is represented through three distinct domains: aggression, rivalry, and justice. This composite of three domains is called the tripartite model of Schadenfreude (Wang et al., 2019; Feather & Sherman, 2002). In this model, the aggression-based Schadenfreude is linked with intergroup conflict and hostility, where a group feels joyful seeing the outgroup suffer (Leach et al., 2003). Rivalry-based Schadenfreude emerges by comparing others with oneself in competitive environments and status hierarchies, deriving pleasure from the misfortunes of higher-status or competing individuals. (Smith et al., 2009). The justice dimension of Schadenfreude arises from perceptions of deservingness, whereby individuals experience pleasure when witnessing the misfortune of a person who is perceived as unfair, immoral, or deserving of negative consequences. It is moreover a perception of moral justice (Feather & Sherman, 2002).

By birth, can our position among our siblings predict our later life, future traits and characteristics? According to Alfred Adler, the answer is yes. He was the second-born among six children, which contributed to the psychology of birth order and personality traits. According to him, it is possible that within a family each child gets a different environment (Adler, 1964). The theory of Adler proposes that first-born are authoritative, traditionalist, with leadership abilities; middle-born have competitive tendencies, while the last-born are always loved and taken care by family members and face difficulties in becoming independent (Adler, 1922; Smith, 2011). Adler's (1922) research provides an innovative way to study the relationships between birth order and personality. Sulloway was another contributor in this field of psychology, in his view point adult personality is shaped by different crisis situations overcome in childhood for family attention. Ernst and Angst (2012) noted that birth order is linked with parenting style, family income and intelligence quotient which can act as sociodemographic variables.

REVIEW OF LITERATURE

Researchers have broadly emphasized various socio-demographic factors associated with Schadenfreude. This particular study selected gender, birth order, and family size as predictors of Schadenfreude, but very minimal research focused on Schadenfreude and its three sub domains namely; Aggression, rivalry, justice.

Schadenfreude and gender

Emotions and the way of their expression are influenced by gender, along with perception and interpretation of situations. Therefore, it can be assumed that gender also influences the experience and expression of Schadenfreude. In a study of social exclusion and competition, findings suggest that males were unlikely to exclude others from social groups as a competitive strategy, whereas females were more prone to engage in social exclusion when they perceived a threat to their social standing or relationships, using exclusion as a means of competition (Benenson et al., 2009). As social exclusion can create feelings of loneliness that work as an antecedent of Schadenfreude, it is more common in females than in males. Thus, we can assume that men experience less Schadenfreude than female, although some research opposes this idea, indicating male are more independent than women. (Cross & Madson, 1997). Another contradictory finding suggests women as highly dependent, empathetic, and more tender with close relations; here empathy performs as a protective factor to decrease Schadenfreude (Greitemeyer et al., 2010). Considering this contradiction, this study will focus on gender as a sociodemographic variable and will attempt to find out the effect of gender differences on Schadenfreude.

Schadenfreude and birth order

The most influential research on the topic of birth order was mainly done by Alfred Adler (1927) and Kevin Lemen (1985). They stated that children under the same umbrella of a particular family can acquire different types of personality traits according to their positions among siblings, the distinct experience felt by each child associated with their birth position shapes their later life. In the first phase of life, first-borns remain the center of attention for the family, all parents with two or more children share a phase in their lives when their first-born was an only child. When later siblings disrupt this exclusive attention phase it becomes a period of pivotal moment and transition phase of a firstborn child when they have to compete with siblings (Sulloway, 1996). Darwin's theory also stated that these social roles gradually influence and shape an individual's personality traits over time, either make adaptable to new situations, capable of developing new ideas, beliefs, broader social changes, or creating adjustment difficulties leading to psychological or behavioural problems. Roach (2006) suggested that later-born individuals mainly use social intelligence and indirect strategies in interpersonal relations and first-born tend to rely more on dominance. However, the relation between birth order and personality does not produce large, consistent research along with limited availability (Rohrer, 2015). Research on personality traits in relation with birth order has been done previously but the relationship of Adlerian birth order with the Schadenfreude domain is still understudied. Schadenfreude can be observed from a very early age, as early as 24 months, particularly in situations involving unfairness and emotional inequality (Shamay-Tsoory, 2014). Since this emotion appears early in development, it is possible that it becomes more stable and develops further as individuals grow older and high agreeableness (Nashori F, 2025) also creates these emotions in first-borns (Sulloway, 2001).

Schadenfreude and family structure

Family structure is considered as a socio-demographic factor that helps in developing personalities experiencing new emotions, and seeing the world through one's own experience and how others affect our lives; in nuclear families, all attention stays within a small circle, whereas in joint families individuals have to face sibling interaction and competition for attention and resources, which makes them learn rivalry and a competitive attitude (Downey, 2001).

METHODOLOGY

Rationale of the study

Schadenfreude has been studied widely in the Western context; in a collectivist setting, societal role expectations and family dynamics can differ due to cultural influence. This study aimed to assess whether sociodemographic variables align with the Western context or works differently in Indian population, contributing empirical insight to Indian Schadenfreude research.

Hypothesis of the Present Study:

- **H1:** There will be a significant gender difference in Schadenfreude and its dimensions.
- **H2:** There will be no significant difference between the construct of schadenfreude and its subdivisions with birth order.
- **H3:** There will be no significant difference between the whole construct of schadenfreude and its subdivisions with family structure.

Method

This research consisted of a total of 323 participants. Data collection was done in Kolkata, Purulia, and North 24 Parganas. Informed consent was taken from all participants. This was a cross-sectional study aimed to find out the effect of socio-demographic variables and birth order on Schadenfreude, followed by a quantitative research method through convenience sampling (Etikan et al., 2016; Cresswell, 2009). The inclusion criteria in this study are: every participant should be 18-25 years old, with a basic understanding of English. Table 1 shows the demographic distribution of the data.

Instruments

- **Tripartite Schadenfreude Scale:** The Schadenfreude traits were measured with the Tripartite Schadenfreude Scale (Safia et al., 2024). This 30-items scale is a self-report instrument that measures Aggression Schadenfreude (for example “It is gratifying that my opponents are socially inferior to me”; $\alpha = 0.86$), Rivalry Schadenfreude (for example, “ There is a unique pleasure in gaining benefits by harming others”; $\alpha = 0.87$) and Justice Schadenfreude (for example, “ I feel inner peace seeing a person being humiliated, who does not respect others; I feel a sense of calm when I see someone being punished for his mistakes” $\alpha = 0.73$) with 12 items each in aggression Schadenfreude and rivalry Schadenfreude, and 6 items in justice Schadenfreude, on a 5 point Likert scale (strongly disagree = 1 to strongly agree = 5).
- **Birth Order:** To know the birth order of participants, Adler's four types of birth order were used, only child, first-born, middle-born/second-born, and youngest child, respectively. All participants were asked to mark on their respective birth positions where they belong.
- **Socio-demographic Variables:** Here, gender, age, and family structure were taken as socio-demographic variables, which were mentioned in the questionnaire as self-report measures.

Preliminary analysis

The data collection for this study was conducted through self-reported questionnaires. At first, MS Excel was used to code the entire response, then IBM SPSS version 26 was used to check normality. In this data set, skewness and kurtosis values were within the range of 2, indicating normally distributed data and supporting the use of parametric statistics. The internal reliability of the Schadenfreude scale along with its dimensions (aggression, rivalry, and justice), was measured through Cronbach's alpha coefficient. The first dimension, aggression Schadenfreude, showed acceptable reliability ($\alpha = .71$); secondly, rivalry Schadenfreude showed acceptable reliability ($\alpha = .75$); however, justice showed slightly deviated reliability ($\alpha = .68$). The overall Schadenfreude scale showed excellent reliability ($\alpha = .85$). So, the tripartite Schadenfreude scale is regarded as verified for this study.

RESULTS

Table 1: Sociodemographic Characteristics of Participants

Baseline Characteristics	Male		Female		Full Sample	
	n	%	n	%	n	%
Gender						
Male	185	57.3	—	—	185	57.3
Female	—	—	138	42.7	138	42.7
Birth Order						
Only Child	40	21.6	35	25.4	75	23.2
First Born	70	37.8	48	34.8	118	36.5
Second Born	52	28.1	39	28.3	91	28.2
Youngest Child	23	12.4	16	11.6	39	12.1
Family Structure						
Nuclear	96	51.9	70	50.7	166	51.4
Joint	61	33.0	49	35.5	110	34.1
Extended	28	15.1	20	14.6	47	14.6

Note = 323 Participants. Percentages are based on their response; no missing data were found for sociodemographic variables. Participants were categorized based on Gender, Birth Order, and Family Structure.

Table 2: Result of Independent t test comparing gender among aggression, rivalry, justice and total Schadenfreude

Variables	Male (n= 185)		Female (n= 138)		t (321)	p	Cohen's d
	M	SD	M	SD			
Aggression	28.70	6.865	28.01	7.769	0.836	.404	0.094
Rivalry	28.32	6.987	25.70	7.499	3.241**	.001	0.365
Justice	17.99	4.481	16.79	4.949	2.285*	.023	0.257
Schadenfreude	75.02	14.081	70.50	15.338	2.744**	.006	0.309

***is significant at the 0.01 level*

**is significant at 0.05 level*

Table 2 shows that an independent-sample t-test was conducted to compare mean scores between males and females. Result shows no significant statistical differences in males ($M = 28.70$, $SD = 6.865$) and female ($M = 28.01$, $SD = 7.769$); $t(321) = 0.836$, $p = .404$, in aggression scores. The difference between rivalry $t(321) = 3.241$, $p = .001$; justice, $t(321) = 2.285$, $p = .023$; and Schadenfreude, $t(321) = 2.744$, $p = .006$; were statistically significant. However, a higher score found in male participants on rivalry ($M = 28.32$, $SD = 6.987$), justice ($M = 17.99$, $SD = 4.481$), and Schadenfreude ($M = 75.02$, $SD = 14.081$), compared to female participants on rivalry ($M = 25.70$, $SD = 7.499$), justice ($M = 16.79$, $SD = 4.949$) and Schadenfreude ($M = 70.50$, $SD = 15.338$). According to this result, gender significantly influences all the measured variables except aggression. Cohen's d value also reveals a small effect size for aggression (0.094), rivalry (0.365), justice (0.257), and Schadenfreude (0.309).

Table 3: Mean, Standard Deviations, and One-Way Analyses of Variance in Schadenfreude dimensions and Birth order

Measure	Only child (n=75)		First born (n=118)		Second born (n=91)		Youngest child (n=39)		F (3, 319)	p	n ²
	M	SD	M	SD	M	SD	M	SD			
Aggression	28.00	7.571	27.51	6.726	29.53	7.656	29.28	7.101	1.601	.189	.015
Rivalry	26.84	7.168	27.51	7.516	27.11	7.136	27.18	7.636	0.134	.940	.001
Justice	17.65	4.806	17.68	4.697	17.08	4.757	17.49	4.633	0.323	.809	.003
Schadenfreude	72.49	16.35	72.69	14.23	73.71	14.40	73.95	14.53	0.166	.920	.002

Table 3 shows one way analysis of variance which suggests birth orders has no significant statistical differences between only child, first born, second born, and youngest child on aggression, $F(3,319) = 1.601$, $p = .189$; rivalry $F(3,319) = 0.134$, $p = .940$; justice $F(3,319) = 0.323$, $p = .809$; and Schadenfreude, $F(3,319) = 0.166$, $p = .920$. The effect size was insignificant because birth order had no influence on the measured variables.

Table 4: Mean, Standard Deviations, and One-Way Analyses of Variance in Schadenfreude dimensions and Family structure

Measure	Nuclear (n=166)		Joint (n=110)		Extended (n=47)		F (2, 320)	p	n ²
	M	SD	M	SD	M	SD			
Aggression	28.42	7.421	28.11	7.391	29.04	6.440	0.272	.762	.002
Rivalry	27.07	7.688	26.93	7.209	28.32	6.158	0.653	.521	.004
Justice	17.66	4.894	17.18	4.753	17.55	3.999	0.340	.712	.002
Schadenfreude	73.14	14.924	72.22	15.207	74.91	3.292	0.549	.578	.003

In table 4 ANOVA suggests there is no statistically significant differences found within nuclear, joint, and extended family structures on aggression, $F(2, 320) = 0.272$, $p = .762$; rivalry $F(2, 320) = 0.653$, $p = .521$; justice $F(2, 320) = 0.340$, $p = .712$; and Schadenfreude, $F(2, 320) = 0.549$, $p = .578$. The effect size was insignificant because family structure had no influence on the measured variables.

DISCUSSION

The tripartite Schadenfreude scale used here was derived from the tripartite motivational model of Schadenfreude; all three domains come under one umbrella term despite different origins. Aggression generally comes from group dynamics (in-group vs out-group). Findings of this research suggest that gender does not differ between males and females in the aggression domain, which generally goes against existing literature; females will feel more Schadenfreude (Dijk et al., 2006). But in the other two dimensions, males have significantly higher scores in Schadenfreude than females. Rivalry somehow makes Schadenfreude feel personal, not just a feeling of joy, an emotion shaped by an underlying mindset to compete with societal role pressure. Justice here makes it balanced; no action or opponent needed, just based on pure fairness. In our society men suffers from role expectations, which may explain their rivalry, justice and total Schadenfreude tendency. This finding also aligns with study of (Nashori, 2025), where male participants show higher Schadenfreude than females.

The study also depicts that neither the holistic state of Schadenfreude nor the subdivision has a significant relation with birth order, as it is more prominently based on situational factors rather than the birth position of a person. As schadenfreude means deriving pleasure from the misfortune of others as an emotional state of an individual's situational factors that

has no relation to birth order. There is no prominent research that shows a direct relation between birth order and schadenfreude. Rohrer et al. (2015) conducted a study among participants in Great Britain, the United States, and Germany to evaluate the Big Five personality traits with birth order and among siblings, where he found that there is no relation between the Big Five personality factors and birth order, which includes the emotional stability domain.

This present study was the first empirical evidence of a relation between family structure and Schadenfreude domains, so it cannot be directly compared with existing findings. Nuclear families always serve more attention, create heightened emotional empathy (Sharafat, A. 2013), and low aggression (Dandona, 2026) that works as a protective factor for Schadenfreude (Greitemeyer et al., 2010). In joint or extended families, all members need to stay with each other and utilize common resources, which creates adjustment maturity and impulse control (Kondiba et al., 2018) and helps to outgrow more positive attitude beyond the narrow range of rivalry, aggression and justice. This evidence supported findings of this paper that family structure does not always lead to Schadenfreude and its expression. However, other variables like favouritism and cohesion between family could be predictors of Schadenfreude, which need to be studied further.

Limitations and Suggestions

Further research must investigate schadenfreude as a unified emotional domain and its relation with other aspects. This study was specifically limited to the young aspiring adult population of West Bengal. This study was done in cross-sectional design, which has limited ability to establish generalisability, and it cannot identify causal relationships or the influence of other variables, so future research can implement longitudinal or experimental designs to measure time gaps and cohort effects. A convenience sampling method was used in this paper, which may indirectly influence selection bias, and other geographical locations can influence perception of Schadenfreude as casteism, socio-economic background, and diverse culture shape our view of empathetic understanding. Thus, generalisability may not be possible without doing broader sample analysis. Lastly, this research used a self-reported questionnaire, which can lead to method bias because no one wants to be accountable for schadenfreude attitudes outwardly therefore, to earn social desirability responses can be changed overtly.

REFERENCES

- Adler, A. (1922). *The individual psychology of Alfred Adler*. New York: Harper & Row & London: Routledge & Kegan Pau
- Adler, A. (1927). *Understanding human nature*. (W. B. Wolfe, Trans.). New York: The World Publishing Company.
- Adler, A. (1964). *Problems of neurosis*, New York, et al. (Harper Torchbooks) 1964.
- Cresswell J.W. (2009), *Research Design: Qualitative and Quantitative Approaches*, (3rd ed.), SAGE, Thousand Oaks, California
- Cross, S. E., & Madson, L. (1997). Models of the self: self-construals and gender. *Psychological bulletin*, 122(1), 5.
- Dandona, A. (2026). Aggression of Nuclear and Joint Family Adolescents. *Youth Voice Journal*, 16(2), 3.
- Downey, D. B. (2001). Number of siblings and intellectual development: The resource dilution explanation. *American psychologist*, 56(6-7), 497.
- Ernst, C., & Angst, J. (2012). *Birth order: Its influence on personality*. Springer Science & Business Media.

- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4
- Feather, N. T., & Sherman, R. (2002). Envy, resentment, schadenfreude, and sympathy: Reactions to deserved and undeserved achievement and subsequent failure. *Personality and Social Psychology Bulletin*, 28(7), 953-961.
- Greitemeyer, T., Osswald, S., & Brauer, M. (2010). Playing prosocial video games increases empathy and decreases schadenfreude. *Emotion*, 10(6), 796.
- Kondiba, B. V., & Hari, K. S. (2018). Emotional maturity among joint family and nuclear family children. *The International Journal of Indian Psychology*, 6(2), 109-12.
- Leach, C. W., & Spears, R. (2008). "A vengefulness of the impotent": the pain of in-group inferiority and schadenfreude toward successful out-groups. *Journal of personality and social psychology*, 95(6), 1383.
- Leach, C. W., Spears, R., Branscombe, N. R., & Doosje, B. (2003). Malicious pleasure: schadenfreude at the suffering of another group. *Journal of personality and social psychology*, 84(5), 932.
- Leman, K. (1985). *The Birth Order Book*. New York: Dell Publishing
- Nashori, F., Ramdani, Z., Khairunnisa, N. Z., Wijaya, T. D., & Azzizah, S. N. (2025). Schadenfreude among Indonesian University Students: The Role of Agreeableness, Extraversion, and Demographic Factors. *International Journal of Islamic Educational Psychology*, 6(2).
- Roach, P. (2006). Birth order and personality differences.
- Rohrer, J. M., Egloff, B., & Schmukle, S. C. (2015). Examining the effects of birth order on personality. *Proceedings of the National Academy of Sciences*, 112(46), 14224-14229.
- Safia, S., Adil, A., Ghayas, S., & Shujja, S. (2024). Development and validation of Tripartite Schadenfreude Scale. *BPA-Applied Psychology Bulletin (Bollettino di Psicologia Applicata)*, (300)
- Shamay-Tsoory, S. G., Ahronberg-Kirschenbaum, D., & Bauminger-Zviely, N. (2014). There is no joy like malicious joy: Schadenfreude in young children. *PloS one*, 9(7), e100233.
- Sharafat, A., & Zubair, A. (2013). Perceived parental attachment and emotional empathy among adolescents. *FWU Journal of Social Sciences*, 7(1), 6-14.
- Smith, E. J. (2011). Theories of counseling and psychotherapy: an integrative approach. *Sage Social Psychology*, 82 (4), 675-686
- Smith, R. H., Powell, C. A., Combs, D. J., & Schurtz, D. R. (2009). Exploring the when and why of schadenfreude. *Social and Personality Psychology Compass*, 3(4), 530-546.
- Sulloway, F. J. (1996). *Born to rebel: Birth order, family dynamics, and creative lives*. Pantheon Books.
- Sulloway, F. J. (2001). Birth order, sibling competition, and human behavior. In *Conceptual challenges in evolutionary psychology: Innovative research strategies* (pp. 39-83). Dordrecht: Springer Netherlands.
- Van Dijk, W. W., Ouwerkerk, J. W., Goslinga, S., Nieweg, M., & Gallucci, M. (2006). When people fall from grace: reconsidering the role of envy in Schadenfreude. *Emotion*, 6(1), 156.
- Wang, S., Lilienfeld, S. O., & Rochat, P. (2019). Schadenfreude deconstructed and reconstructed: A tripartite motivational model. *New Ideas in Psychology*, 52, 1-11.

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Conflict of Interest

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