

Humor, Self-Esteem, and Spite: Unraveling the Dynamics in Romantic Relationships

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Abstract

The tendency to display transgression for individuals we consider close is higher than those we consider distant. And not always there is a "forgive and forget" in such interpersonal dynamics. This revenge-seeking may emerge as spitefulness in romantic relationships, in subtle forms of humor, and is linked with self-esteem. The present research aims to study whether humor and self-esteem increases or decreases spitefulness among couples. A total of 100 participants (73 female, 27 male) from Mumbai and Bengaluru were asked to fill out a Google form consisting of the Humor Styles Questionnaire, Collective Self-Esteem Scale, and Spitefulness Scale respectively. The statistical tools used were – Pearson's product-moment correlation, two-way analysis of variance, and one-way analysis of variance. Highlights of the results section revealed there is a significant correlation between aggressive humor and spitefulness, and humor and self-esteem. Spitefulness was unrelated to other humor styles as well as self-esteem. Additional one-way analysis of variance revealed difference in humor due to gender and relationship status, while self-esteem and spitefulness have little impact due to gender and relationship status. The study also highlights the need for a new scale for measuring spitefulness and suggests future studies for a deeper understanding of the underplaying factors associated with spitefulness among couples. The study concludes by suggesting current romantic partners to develop higher self-esteem and benign humor styles to enhance romantic relationship.

Keywords: Humor, Self-Esteem, Spitefulness, Romantic Relationships, Relationship Life Satisfaction, Humor Styles

1. Introduction

A key-way of communication of thoughts and feelings, influencing the nature of relationship is humor⁷⁹. Particularly, shared laughter has a positive impact on the relationship quality, and the use of humor is linked with their self-esteem⁵². In romantic relationships, personality traits significantly affect relationship quality. Often times the manifestation of this happens in a passive-aggressive manner. Conflicts in romantic relationships when handled well can help partners to learn about each other, and foster cohesion and commitment¹⁹. Spite is an understudied construct and virtually ignored within the personality, social, and clinical psychology literature (Marcus et al., 2014); defined as an act where the actor bares some form of harm or cost to inflict harm to another, which may or may not result in any benefits to the actor⁶⁹. Due to its complex nature, it often arises in interpersonal relationships as a means of coping linked to low self-worth²⁸. Humor and self-esteem are pivotal elements in the dynamics of romantic relationships¹⁸, particularly in navigating the complexities of spitefulness among couples. The strategic use of humor can

curb the negative effects of spite, fostering resilience and improving relational satisfaction by reframing the conflicts positively⁶⁴. High self-esteem along with humor has shown to help maintain a positive self-perception, enhance social connectedness, reduce aggression and hostility⁴⁵. Therefore, understanding the interplay between humor, self-esteem, and spitefulness is essential for fostering resilient and fulfilling romantic relationships.

2. Review of Related Literature

2.1 Humor

Humor the capacity of coping with difficult and awkward situations and stressful events by expressing or perceiving what is funny (Martin., 2007). And the response depends on how amusing we may find it, it may cause us to smile, to chuckle, or to burst out in peals of convulsive laughter. Humor, besides being a form of fun and entertainment has also taken on a wide range of social functions that are contradictory and paradoxical (Martin, 2003 and 2007). Such as, it can be a way of enhancing social cohesion within an in-group, but it can also be a way of excluding individuals from an out-group; expression of agreement as well as disagreement and aggression; facilitating corporation as well as resistance; strengthening solidarity and connectedness or undermining power and status. Personality psychology research has focused on how humor is used to form interpersonal bonds, attract partners, and reduce stress (Jain, 2022). There are two main types of humor: adaptive (facilitative and self-enhancing) and maladaptive (self-defeating and aggressive).

Affiliative humor is used to amuse others to facilitate relationships in a positive and inclusive in nature. It is also associated with increased levels of self-esteem, psychological well-being, better romantic relationships, emotional stability, and social intimacy. Self-enhancing humor involves having a good-natured attitude toward life, laughing at oneself, life situations, and the eccentricity of life in a constructive way. It is a way of coping or emotion-regulating humor used to look on the bright side of a bad situation. This type of humor is related to increased levels of self-esteem, optimism, psychological well-being, and better coping in the downs of a romantic life. In contrast, aggressive humor is used to disparage others, seen as a way of manipulating them, to insult someone, or disrespect someone. This type of humor is commonly used as a form of sarcastic comments, mocking others, giving people mean-spirited nicknames, etc. Individuals who score high in this category are higher on aggression, narcissism, hostility, and general aggression. Self-defeating humor style is characterized by the use of potentially detrimental humor toward the self in others to gain approval from others and is used as defense mechanism for hiding negative feelings about the self. Individuals who use this style more often have elevated levels of neuroticism, lower self-esteem, and higher vulnerable narcissism.

2.2 Self-esteem:

A more central construct in clinical, developmental, personality, and social psychology is that of self-esteem, it has been studied for nearly a century (Greenier et al., 1995). Rosenberg (1965), defines self-esteem as an individual's overall positive evaluation of the self, characterized by respecting himself and considering himself worthy. William James (1890) postulated that people can have high self-esteem so long as they empathize with their strengths and devalue domains of weakness. Cooley (1902) on the other hand, emphasized on the interpersonal processes that generate and sustain people's beliefs about themselves and rely on the reactions of others, especially significant others.

Based on the Freud's theory of excessive love or narcissism due to troubles interpersonal relationships (Bosson and Swann, 2009), it can be assumed that a flawed self-esteem can lead to poor interpersonal

relationships. Lack of positive feedback and receiving negative feedback can threaten the ego, motivating a person to use personal resources to cope with the negative situation (Baumeister et al., 1996). Self-esteem is an important determinant of emotional well-being (Baumeister et al., 2003), high self-esteem is correlated with mental health, life satisfaction, hope, ability to handle unpleasant moments, cope effectively with challenges, engage in close relationships to improve their strengths (Abdel-Khalek, 2016; Stavropoulos et al., 2015; and Baumeister et al., 2003). Schmidt and Padilla (2003) believe that self-esteem raises when a person gets praised and experiences a partner's love, making self-esteem dependent on one's partner's perceptions.

Feelings of worthlessness, inferiority, emotional instability and dissatisfaction with life are linked with low self-esteem (Mackinnon, 2015), adding on having a negative outlook towards others and personal circumstances. It has been associated with depression, aggression, and reduced ability to overcome setbacks (Stavropoulos et al., 2015).

One's self-esteem significantly impacts overall well-being, personality, and interpersonal relationships. Individuals with low self-esteem often fail to reach their potential, tolerate abusive relationships, and face challenges in various aspects of life (Jain, 2022). Self-esteem, shaped by childhood and parenting, evolves throughout life, influencing how individuals handle life's ups and downs and impacting their decision-making, emotional health, and resilience (Jain, 2022).

2.3 Spitefulness

The degree to which a person is willing to incur a cost in order to inflict harm on another individual is called Spitefulness (Hamilton, 1970). The tendency to display transgression for individuals we consider close is higher than for whom we consider as distant (Brewer et al., 2015). And not always there is a "forgive and forget" in relationships, it is worthy of considerable investigative attention due to its possible implications for couples' health and well-being. Additionally, people in relationships have the capacity to inflict harm on their partners and those partners in turn may respond by inflicting harm. (Rasmussen and Boon, 2014).

One of the darkest of human emotions emerge of spitefulness, it is a rarely studied concept, due to its high correlation with narcissism and Machiavellianism (Brewer et al., 2015). But there are plenty of examples that we can find in our everyday life, such as, a person getting together with ex's best friend to hurt them or gossiping about a co-worker they don't like while risking one's reputation.

It may seem impossible how spite can be seen in a human bond like relationship or marriage that is built out of love and respect, for each other. However, there are subtle forms of spitefulness that manifest in the form of humor in close relationships. This connection lies in the shared ability to navigate social interactions. While spiteful behaviour can be a negative expression of power and control, humor often serves as a more positive means of achieving similar ends through wit and cleverness. Combining the influence of two variables i.e., humor and self-esteem this research aims to study whether or not it increases or decreases spite in couples.

Studying spitefulness in romantic relationships within the context of humor and self-esteem is crucial. Humor plays a significant role in determining romantic satisfaction and can both reflect and influence spiteful behaviour. Understanding different humor styles—affiliative, self-enhancing, aggressive, and self-defeating—alongside self-esteem levels showcases how they interact with spitefulness, impacting relationship dynamics and conflict resolution. This research aims to uncover how fluctuations in self-esteem and humor styles contribute to spitefulness among couples, with the goal of improving relationship quality and enhancing romantic satisfaction.

A reason for recent interest in spitefulness studies is due to understanding of motivations for spitefulness that appears to be more complicated rather than simply acquiring benefits and avoiding costs because spiteful individuals are willing to incur costs in order to inflict harm on others (Marcus & Norris, 2016). Before delving more into the past related literature, a differentiation of aggression from spitefulness is that spite must involve harm to the actor (and not just to the other) can distinguish spite from other selfish, sadistic, hostile, or aggressive behaviours. Thus, measures of spitefulness and aggression although positively correlated are distinct (Vrabel et al., 2017; Smead & Forber, 2019). Authors found that spitefulness that includes an element of self-harm which can be a powerful motive with potentially serious and often negative psychological, interpersonal, and societal consequences.

Researchers have also become interested in the associations that "dark" personality features have with moral values (Djeriouat & Trémolière., 2014; Noser et al., 2015). The dark features of personality are tendency to manipulate, deceive, or exploit others. Overall, these features are positively associated with psychopathy, Machiavellianism, and narcissism; and negatively associated with agreeableness, along with high spite in males, younger population and ethnic minority (Marcus et al., 2014). Zeigler-Hill et al., (2015) showed that spiteful individuals lacked moral values when making judgements for others; little to no remorse for their actions (Vonk et a., 2015); low levels of guilt (Marcus et al., 2014) mainly due to lesser ability to understand mental states others, and lack of concern for other's well-being. These studies indicate that spitefulness characteristic like lack of concern for others can be associated with humor styles that they adopt. Such that, the ability to harm others spitefully may reflect in the type of humor style they employ.

Freud suggested humor as an unconscious outlet for aggression, used for self-comfort and social interaction. While humor has positive effects like enhancing relationships and reducing negative emotions, there's also a darker side. Some humor styles aim to harm others or oneself by belittling abilities. Individuals high in spitefulness may gravitate towards such harmful humor styles (Martin et al., (2003). Benign humor has also been positively correlated with traits like extraversion and openness (Veselka et al., 2010), and maladaptive humor is positively correlated with darker personality traits like antagonism (Zeigler-Hill et al., 2016). Adding to the research, spitefulness was found to be negatively correlated with benign humor, and positively correlated with maladaptive humor styles (Vrabel et al., 2017; Gajivand, 2019). Suggesting that spiteful individuals would be likely to avoid using benign styles of humor and utilize injurious humor styles as they are more likely than others to be aggressive, callous, exploitive, and lack empathy (Marcus & Norris, 2016). It hence becomes important to examine both the negative relationships that spitefulness is likely to have with the benign humor styles as well as the positive relationships that it is likely to have with the injurious humor styles.

Humor is highly valued by single adults seeking romantic relationships (Wilbur & Campbell, 2011) and by committed romantic partners reacting on what contributes to relationship success (Ziv & Gadish, 1989); indicator of attraction (Hall, 2015), and is associated with relational quality, closeness, and support in established relationships (Kurtz & Algoe, 2016). Not only is humor a common form of daily talk among romantic partners (Alberts et al., 2005) romantic partners are probably one of, if not the single most common audience to partners in expressing humor. This multi-layered nature of humor complicates its role in romantic relationships (Martin, 1998).

Among humor's functions, its use in bringing about good cheer is most consistently associated with relationship satisfaction (Hall, 2013). Laughter is associated with social bonding; romantic interest (Zeigler-Hill et al, 2015), and relationship satisfaction (Kurtz & Algoe, 2016). In addition, private jokes

and playfulness create a shared space—a home where risks can be taken, and departures from the mundane are welcomed (Betcher, 1981). Lastly, shared humor affirms each partner's values and perspective (Hall, 2013).

Romantic relationships are a core feature of people's lives, as they inevitably involve the ebb and flow of negative and positive events that influence both partners' well-being (Alberts et al., 2005). With expectations not being met in the relationship, it increases negative affect and worsen mental and physical and mental health with longer duration linked with more satisfaction decline in relationship and the breakdown of the relationship (Bravo et al., 2017; McNulty et al., 2021). In contrast, even conflicts then are met with effective communication and emotional support when the expectations are met in the relationship leading to increased positive affect, well-being, self-esteem, life satisfaction, and relationship satisfaction (Alberts et al., 2005; Bressler et al., 2006; Hone et al., 2015).

A study by Jain (2022) that examined how humor styles and self-esteem are correlated, 75 samples were collected, results indicated that that affiliative humor style significantly predicted higher self-esteem, with a positive correlation, also found by Hone et al., (2015); Martin, et al., (2003); and Yue et al., (2014). On the other hand, aggressive humor style was negatively correlated with self-esteem. The study supported that humor contributes to higher subjective well-being. It suggested that humor has relation with a positive effect on an individual's psychological and physiological well-being.

Butzer and Kuiper (2008) in a study to find the humor use in typical conflict and pleasant scenarios, and their overall relationship satisfaction revealed that individuals more satisfied with their relationships used more positive humor and less negative humor. Negative humor was linked to conflicts. Additionally, those high in relationship satisfaction used significantly less negative humor in conflicts than in pleasant situations, while those with lower satisfaction used negative humor equally in both scenarios. Marital satisfaction was related to perception of the partner's humor more than the spouse's own humor (Ziv & Gadish, 1989).

Research has very well established the link between better self-esteem and relationship satisfaction, such that self-esteem is found to not only affect the way we think of ourselves but also how much love we are able to receive and how we treat others, especially in intimate relationships. Lancer (2016) proposes that a person's initial level of self-esteem prior to the relationship predicts a partner's common relationship satisfaction. Wood et al., (2023) asserts that one partner's self-esteem triggers a chain of mechanisms (which may include trust and reciprocated behaviours between partners) that ultimately affects each partner's satisfaction with the relationship. Overall, the findings indicate that the factors of one's self-esteem in a relationship affect relationship satisfaction with lower self-esteem indicating lower relationship satisfaction (Muhammad & Jaffar, 2022). Dysfunctional behaviour during conflicts also affects the self-esteem and relationship satisfaction in a negative way (Richter and Finn, 2021) and vice versa (Ven, 2020). Additionally, self-esteem also depends on the partner's mood to predict perceived responsibility and level of rejection (Schriber, 2017).

Research argues that the self can both influence and be influenced by one's close relationships (Aron & Aron, 1991, 2014; Drigotas et al., 1999; Murray et al., 1996). Self-esteem influences romantic relationships, affecting our sense of self-worth and psychological well-being (Erol & Orth, 2016). Conversely, negative relationship experiences can erode self-esteem, leading to feelings of inadequacy, rejection, and emotional distress. Transitions in romantic relationships and self-esteem have also established link such that beginning a relationship increased self-esteem and that the increase persisted when the relationship held at least for 1 year; breaking up decreased the self-esteem but was recovered

after a year even if the participant stayed single; marrying had no influence on self-esteem (Luciano & Orth, 2017). This shows a dyadic nature of self-esteem in a romantic relationship.

Research also indicates that when relationship satisfaction is low, partners show lower relationship commitment, care more about the cost of the relationship investment, and seek more alternative relationships (Robles et al., 2014). Hence, it can be reasoned that relationship satisfaction is associated with many negative behaviours. Furthermore, insecurity and relationship dissatisfaction partially mediate the relationship between low self-esteem and intention to break up, and due to low self-esteem, individuals may begin to doubt the level of trust, love and care accorded them by their partners (Arikewuyo et al., 2021).

Majority of the attention on negative behaviours is focused on those with high intensity and great harm like domestic violence and abuse, however there are few underrated and easily ignored negative behaviours like spitefulness. Since there is no study that explores spitefulness in romantic relationships, we, in this paper aim to bridge that gap. However, in the past there have been studies that highlight the revenge in romantic relationships, a few of them are mentioned below.

Spiteful behaviour is associated with feelings of insecurity, inadequacy, or low self-esteem. Individuals with low self-esteem may harbor resentment or bitterness towards others, leading them to engage in spiteful actions as a way to bolster their own sense of superiority or regain a sense of control. Studies indicate that people forego the temptation to take revenge when they, one, do not question the morality of responding vengefully; two, do not consider the costs of retaliating (or perceive its benefits to outweigh its costs), and three, weigh the harm that vengeance might cause their relationship less heavily than its benefits (Boon et al., 2017). Furthermore, the perceptions of getting revenge are also judged on the basis on its effectiveness and the cost involved (Rasmussen, 2013; Boon et al., 2011), making acting spitefully a well thought act.

Other studies, in contradiction, highlight that revenge is primarily related to psychopathy and less to Machiavellianism; showcasing a disagrees for support to spite in romantic relationships, which is more planned and handled with accountability, unlike psychopathy (BasClemente & Espinosa, 2021). They propose that transgression in romantic relationships are emotional in nature and usually do not anticipate their consequences or success. And moreover, revenge majorly involved rule violation, and the decision of revenge was based on the desire to bring about a desired change in their partner, in order to redress their own unpleasant feelings, or to rectify injustice (Boon et al., 2009).

In an attempt to explore revenge within romantic relationships, Dustagheer (2020) found that personality traits influence perceptions of motivations for or likelihood of engaging in romantic revenge. Crocker et al., (2014) found that much of what is considered evil stems from the pursuit self-esteem, i.e., the desire to prove to others that one is wonderful and worthy. They proposed that both low and high self-esteem when threatened, can lead towards harming others around them. Indicating that vulnerable self-esteem reflects a sense of superiority and therefore any failure, setback, or criticism has the potential to puncture or deflate one's self-worth. Additionally, people with high narcissism have fragile and unstable self-esteem, and when threatened may easily be triggered into protecting, maintaining, and enhancing their self-esteem, often at the expense of others (Marcus et al., 2014).

This ties all the variables together, and in conclusion to the review of literature above, there are few facets of humor that are linked with spitefulness. Likewise, the same is true for self-esteem with spitefulness. Romantic relationships in this study play an important role, for two reasons, one, there is no study that explores these three variables under one research, and second, the deep level understanding this will

provide us about a lot of relationship issues, conflicts and break-up/divorce parameters. In addition to that, this study aims to get a close Indian viewpoint of the positive or negative effects of fluctuations in humor and self-esteem in spitefulness in romantic couples. This, hence, highlights the need to conduct this research.

3. Objectives

- To explore the relationship between humor, self-esteem and spitefulness among romantic partners.
- To see if there will be any effect of humor and self-esteem on spitefulness among romantic partners.
- To see if there are any gender differences of humor, self-esteem and spitefulness among romantic partners.
- To see if there are any differences in humor, self-esteem and spitefulness based on relationship status among romantic partners.

4. Hypotheses

- There is significant correlation between humor, self-esteem and spitefulness among romantic partners.
- There is significant independent and interaction effect of humor and self-esteem on spitefulness among romantic partners.
- There is significant difference in humor, self-esteem and spitefulness among romantic partners based on gender.
- There is significant difference in humor, self-esteem and spitefulness among romantic partners based on relationship status.

5. Methodology

5.1 Participants

The current study consists of a total of 100 participants from the states of Mumbai and Bengaluru who are either married/in romantic relationship/have been in romantic relationship before, or have been divorced, or are a widow/widower. The participants were randomly selected. The age of the participants ranges from 18 years to 65 years. The table 1 showcases the demographic details of the participants.

Table 1: Characteristics of Participants in the Current Study

Demographic Details	Group	Frequency	Percentage
Gender	Female	73	73
	Male	27	27
Age	18-25	79	79
	26-33	7	7
	34-41	7	7
	42-49	4	4
	50-57	3	3
	58-65	0	0
Relationship status	Married	18	18
	Divorced	0	0
	Widow/widower	0	0

	In relationship	35	35
	Was in relationship	47	47
Educational qualification	Postgraduate and above	50	50
	Graduate	41	41
	12 th standard	7	7
	10 th standard	0	0
	Other	2	2
Occupation	Employed	38	38
	Unemployed	62	62

In this study, among the total participants, 73 (73%) were female and 27 (27%) were male. The age-specific details of the participants depict 79 (79%) among 18-25 years, 7 (7%) among 26-33 years, 7 (7%) among 34-41 years, 4 (4%) among 42-49 years, 3 (3%) among 50-57 years and lastly 0 among 58-65 years. The relationship status of 18 (18%) participants was married, 0 were divorced, 0 were widow/widower, 35 (35%) were in a relationship, and 47 (47%) were previously in a relationship. The education qualification of 50 (50%) participants was postgraduate, 41 (41%) participants were graduates, 7 (7%) of them were 12th standard pass, none of them were 10th standard, and 2 (2%) participants selected others in this category. Within the occupation status 38 (38%) were employed and 62 (62%) were unemployed.

5.2 Instruments used

- **Humor Styles Questionnaire (HSQ):**

The HSQ developed by Martin et al., (2003) was used to measure humor style of the participant. The HSQ consists of 32 items measuring four humor styles. Sample items are "I enjoy making people laugh" (affiliative), "Even when I'm by myself, I'm often amused by the absurdities of life" (self-enhancing), "If I don't like someone, I often use humor or teasing to put them down" (aggressive), and "I let people laugh at me or make fun at my expense more than I should" (self-defeating).

Scoring - The instrument employs a seven-point Likert scale from "totally disagree" (1) to "totally agree" (7). All the items are added separately for each style of humor. This instrument also contains a few reversed scored items which need to be scored accordingly. For the last part, the style totals are divided by 4 to see where they fall on the range – score of 1 – 2 indicates low humor; score of 3 – 4 indicates moderate humor and a score of 5 – 7 indicates high humor of the type.

Reliability and validity - Cronbach's alphas across the four humor scales ranged from .58 to .81 indicating acceptable internal consistency: Affiliative= .81, Self-enhancing = .75, Aggressive = .58, and Self-defeating =.72 (Penzo et al., 2011).

- **Collective Self-esteem Scale (CSES):**

The CSES was developed by Luhtanen and Crocker (1992) was used to measure the overall self-esteem of an individual: this scale assesses an individual's differences in collective, rather than personal self-esteem with four subscales – membership, public collective self-esteem, private self-esteem, and importance to identity. However, for this paper a composite score for self-esteem is used.

Scoring - The instrument employs a seven-point Likert scale from "Strongly Disagree" (1) to "Strongly Agree" (7). All the items are added to obtain a total score. Items - 2, 4, 5, 7, 10, 12, 13, and 15 are reverse scored. Then the final score for each subscale is totalled and divided by 4, the total of the four scores obtained is the final score. Then, using the guideline, a high score (total > 20) which indicates high

collective self-esteem, moderate score (total 14 – 20) which indicates moderate collective self-esteem, and low score (total < 14) which indicates low collective self-esteem.

Reliability and validity - The lowest variance was .58 and the highest was .88. The reliability analysis indicated that Cronbach's alpha coefficients and item-total correlation were substantial for this tool. The alpha coefficients ranged from .83 to .88. item. Item-total correlation ranged from .51 to .80 for the subscales and from .40 to .71 for the total scale. The validity was moderate with the Rosenberg self-esteem scale.

- **Spitefulness scale:**

The 17-item scale developed by Marcus et al., (2014) was used to measure an individual's propensity for spiteful behaviour.

Scoring - the instrument employs a five-point Likert rating scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). The totals for the scale are calculated, keeping in mind items 3 and 14 are reverse scored. The totals can then be divided by 17. The values obtained can be interpreted based on the guideline such as the value of 1.0 to 1.5 indicates very low spitefulness, 1.6 to 2.5 indicates low spitefulness, the value of 2.6 to 3.5 indicates moderate spitefulness, the value of 3.6 to 4.5 indicates high spitefulness and lastly value of 4.6 to 5.0 indicates very high spitefulness.

Reliability and validity: The Spitefulness Scale demonstrated good internal consistency with a Cronbach's alpha of 0.87, indicating that the items on the scale are highly correlated and measure the same underlying construct. The test-retest reliability over a four-week period was found to be 0.82, showing that the scale produces stable and consistent results over time.

5.3 Procedure

The data was collected using Google forms, a user-friendly online survey platform. Section 1 consisted of the information regarding the researcher's details the topic of the research, and the inclusion criteria. Section 2 included the consent form, including – Purpose, Participant's role; Confidentiality, Risks, Voluntary participation; and permission for their participation. Section 3 contained the demographic details that were collected such as initials, age, gender, relationship status, educational qualification, and occupation. Section 4 consisted of the first questionnaire – Humor Styles Questionnaire, a 32-item scale to assess the humor level and predominance of humor types. Section 5 consisted of the second questionnaire – Collective Self-Esteem Scale, a 16-item scale to assess the overall self-esteem of an individual. Section 6 consisted of the last questionnaire –Spitefulness Scale, a 17-item scale to assess an individual's propensity for spiteful behaviour. The instructions for all the questionnaires were mentioned clearly for participants to respond. The last section was a sincere appreciation for the participant for taking out time to fill the form and acknowledgement that the form has been submitted.

Once the form was complete and submitted through Google Forms, the coding and scoring of all 100 participants were done using the appropriate scoring guidelines for each form prescribed in the methodology. Upon scoring the scores were first checked for normality and analysed using Microsoft excel and SPSS, the results were then used to make thorough interpretations for the same. This research was then completed adding the discussion and limitations/future directions for this research.

5.4 Data analysis

Using Microsoft Excel, the data gathered was coded numerically and scored. This data was then used to compute the normality (mean, median, mode, standard deviation, skewness, and kurtosis); correlation; two-way ANOVA (Analysis of Variance), and one way ANOVA in the SPSS (Statistical Package for Social Sciences, version 29 for IBM with the significance level of <0.05). The current study employed

parametric statistical tests like correlation and two-way ANOVA to test the hypotheses. For further analysis of variables with demographic factors, one-way ANOVA was performed.

6. Results

The normality distribution of variables to get a general idea about the variable was checked with descriptive statistics like arithmetic mean, median, mode, standard deviation, skewness and kurtosis of the study variables were calculated and presented below in table 2.

Table 2: Descriptive Statistics for the Study Variables

Statistic	Affilia- tive hu- mor	Self-en- hancing humor	Aggres- sive hu- mor	Self-de- feating humor	Humor	Self-es- teem	Spiteful- ness
Mean	10.35	8.96	6.57	7.24	33.13	17.09	2.11
Median	10.75	9.00	6.75	7.62	34.12	16.75	2.08
Mode	11	9.25	8	8	34.75	16.00	2.17
SD	2.12	1.85	2.12	2.43	5.66	2.08	0.62
Skew- ness	-0.549	-0.205	-0.040	0.163	-0.345	1.989	0.411
Kurtosis	-0.288	-0.404	-0.420	0.008	-0.068	8.513	-0.258

As can be seen from table 2, the values of the arithmetic mean, median, and mode for Affiliative humor, a sub-dimension of humor styles, obtained were 10.35, 10.75, and 11 respectively. The standard deviation obtained was 2.12. The skewness and kurtosis were -0.549 and -0.288 respectively. This indicated that this value is normally distributed.

Self-enhancing humor, a sub-dimension of humor styles, has obtained 8.96, 9, and 9.25 as the arithmetic mean, median, and mode respectively. The standard deviation obtained was 1.85. the skewness and kurtosis was -0.205 and -0.404 respectively, indicating a more or less normal distribution of the variable. Aggressive humor, which is the third sub dimension of the humor styles has obtained the value of 6.57, 6.75 and 8 as the arithmetic mean, median and mode respectively. The standard deviation obtained was 2.12. The skewness and kurtosis were 0.040 and -0.420 respectively. The values obtained indicate that more or less this variable is normally distributed.

For Self-defeating humor, the last sub-dimension of humor, the values for the arithmetic mean, median, and mode obtained are 7.24, 7.62 and 8 respectively. The standard deviation for the same was 2.43. the skewness and kurtosis obtained were 0.163 and 0.008. These values indicate that the variable was normally distributed among the sample.

Overall, for this variable, the total score was also considered, the Humor Styles Questionnaire total, for which the arithmetic mean, median, and mode were 33.13, 34.12, and 34.75, respectively. The standard deviation obtained was 5.66. The skewness and kurtosis values are -0.345 and -0.68 respectively. These values suggest that the variable overall was normally distributed among the sample.

The second variable, Self-esteem had values of 17.09, 16.75 and 16.00 for the arithmetic mean, median and mode respectively. The closeness of these variables indicate normal distribution. The standard deviation obtained was 2.89. The skewness value was 1.989, which is within the normal range; and the

kurtosis values was 8.513 indicating a leptokurtic peakedness, this indicates the variable has a larger than normal distribution for this variable among the sample.

The third study variable, Spitefulness had the values of 2.11, 2.08 and 2.17 for arithmetic mean, median, and mode respectively. The standard deviation was 0.62 for the same. The skewness for spitefulness was 0.411 and that of kurtosis was -0.258 respectively. This indicated a more or less even distribution of data among the sample.

From the above descriptions it can be inferred that the variables of the study were in accordance with the theoretical perspective and were valid for further statistical analysis. The current study employed parametric statistical tests like correlation, one-way ANOVA, and two-way ANOVA.

6.1 Pearson’s correlation product moment of the study variables

In this study it was hypothesized that there would be a significant correlation between humor, self-esteem and spitefulness. To find if the above were true, Pearson's correlation coefficient was calculated between the four dimensions of humor, the total humor styles scores, self-esteem, and spitefulness which are present in table 3

Table 3: Correlation of Study Variables

Variables	Affilia-tive hu-mor	Self-en-hancing humor	Aggres-sive hu-mor	Self-de-feating humor	HSQ total	Self-es-teem	Spiteful-ness
Affiliative humor	-						
Self-enhancing hu-mor	0.274**	-					
Aggressive humor	0.300**	0.076	-				
Self-defeating humor	0.233*	0.132	0.436**	-			
Humor styles ques-tionnaire total (HSQ)	0.679**	0.517**	0.701**	0.725**	-		
Self-esteem	0.048	0.046	0.168	0.322**	0.235*	-	
Spitefulness	-0.040	0.080	0.479**	0.196	0.275**	0.071	-

** . Correlation is significant at $p < 0.01$; * . Correlation is significant at $p < 0.05$

The above table 3 suggest that there exists a statistically significant positive correlation between spitefulness and aggressive humor style ($r = 0.497$, $p < 0.01$), indicating an almost moderate positive correlation. Self-defeating humor was also positively correlated with spitefulness but was low and not significant. The results also indicate that there exists an insignificant and weak negative correlation between affiliative humor and spitefulness. Likewise, is true for spitefulness and self-enhancing humor indicating an insignificant weak positive correlation. This means that spitefulness was related with only the aggressive humor subdimension of the four humor styles.

Interestingly, spitefulness was statistically significantly positively correlated with the overall total score on the humor styles questionnaire ($r = 0.275$, $p < 0.01$). Additionally, spitefulness was not significantly correlated with self-esteem ($r = 0.071$, $p > 0.482$). Apart from these the other statistically significant positive correlation are between affiliative and aggressive humor styles ($r = 0.300$, $p < 0.01$), as well as between affiliative and self-defeating humor styles ($r = 0.233$, $p > 0.05$).

Self-esteem has been found to have statistically significant low positive correlation with total humor style scores ($r = 0.235, p < 0.05$). Self-esteem has also been found to have no correlation with affiliative and self-enhancing humor styles; and a statistically significantly low positive correlation with self-defeating humor ($r = 0.322, p < 0.01$).

This leads to the conclusion that aggressive humor style is correlated with spitefulness, meaning when the aggressive humor increases, the tendency to be spiteful increases. This supports our literature review (Marcus et al., 2014; Vonk et al., 2015; Veselka et al., 2010; Zeigler-Hill et al., 2016). And self-defeating humor was also positively correlated with spitefulness, although the results were not significant. The weak and insignificant correlation between affiliative and self-enhancing humor styles with spitefulness indicates that these humor styles and spite have no relationship. Although overall humor is positively correlated with spitefulness, meaning as one's humor increases, the tendency to be spitefulness increases too. Contrary to the literature from past, there is no significant relationship between self-esteem and spitefulness.

6.2 Two-way Analysis of Variance

The study also hypothesized that there would be significant independent and interaction effects of humor on self-esteem in spitefulness among couples. The two-way ANOVA of the same is presented below as table 4.

Table 4: Results of Two-way ANOVA

Source	Type III sum of squares	df	Mean square	F	Significance
Corrected model	36.221a	94	0.385	1.009	0.573
Intercept	316.530	1	316.530	828.597	<0.001
Humor	19.328	55	0.351	0.920	0.622
Self-esteem	12.032	24	0.501	1.312	0.414
Hu-mor*Self-esteem	4.374	11	0.398	1.041	0.518
Error	1.910	5	0.382		
Total	487.073	100			
Corrected total	38.131	99			

a. R Squared = 0.950 (adjusted R Square = 0.008)

The two-way ANOVA revealed that there was no statistically significant independent or interaction effect of humor styles and self-esteem on spitefulness. This leads the conclusion that humor, and self-esteem have no impact on whether a person is spiteful or not. Humor, despite having positive correlation with spitefulness does not have any effect on spitefulness, and self-esteem also does not have any effect on whether of not a person becomes spiteful. This hints at the genetic predisposition of spite based on Hamilton's theory (Hamilton, 1970; Gardner & West, 2004).

6.3 One-way Analysis of Variance

The insignificant findings in the two-way ANOVA suggests looking for other factors associated with the variables of the study. So one-way ANOVA was performed to see how gender has a role in the manifestation of humor, self-esteem, and spitefulness. Table 5 represents the same below.

Table 5: Results of One-way ANOVA Based on Gender

		Sum of squares	df	Mean square	F	Significance
Humor total	Between groups	313.483	1	313.483	10.741	0.001**
	Within groups	2860.070	98	29.184		
	Total	3173.553	99			
Self-esteem	Between groups	3.768	1	3.768	0.862	0.355
	Within groups	428.344	98	4.371		
	Total	432.112	99			
Spitefulness	Between groups	1.194	1	1.194	3.167	0.078
	Within groups	36.938	98	0.377		
	Total	38.131	99			

** . Correlation is significant at $p < 0.01$

As can be seen from the table 5 that there is a statistically significant difference in the humor styles between males and females ($F=10.741$, $p < 0.01$). This can be inferred as, there is gender difference in expression of humor styles between males and females. Additionally, the means were comparing as presented in table 6

Table 6: Mean Differences of One-way ANOVA Based on Gender

Variable	Gender	N	Mean
Humor total	Male	27	36.04*
	Female	73	32.05
Self-esteem	Male	27	17.41
	Female	73	16.97
Spitefulness	Male	27	2.29
	Female	73	2.05

*. Correlation is significant at $p < 0.05$

It can be inferred from table 6, that males have scored higher on the humor style questionnaire than females (males were $N=27$, $M=36.04$; females were $N=73$, $M=32.05$), suggesting that males have more humor usage than females.

However, there was no statistically significant difference in self-esteem and spitefulness between the two genders. The self-esteem has been found to have no statistical difference in the one-way ANOVA on the basis of gender. Meaning that, there was no major difference in self-esteem between males and females. And spitefulness too is found to have no statistical significance based on gender. Meaning that, there was no difference in spitefulness between the two genders.

The second demographic factor that was analysed was the relationship status. One-way ANOVA was performed to see if humor, self-esteem and spitefulness have any differences based on the relationship status. The for the same is presented in the table 7.

Table 7: Results of One-way ANOVA Based on Relationship Status

		Sum of squares	df	Mean square	F	Significance
Humor total	Between groups	299.834	2	149.917	5.060	0.008**
	Within groups	2873.719	97	29.626		
	Total	3173.553	99			
Self-esteem	Between groups	0.628	2	0.314	0.071	0.932
	Within groups	431.484	97	4.448		
	Total	432.112	99			
Spitefulness	Between groups	0.091	2	0.046	0.116	0.890
	Within groups	38.040	97	0.392		
	Total	38.131	99			

** . Correlation is significant at $p < 0.01$

It can be inferred from table 7 that there is statistically significant difference in the means of relationship status for only humor ($F=5.06$, $p < 0.01$). To see which relationship status has the highest mean difference the means table can be referred, as presented below table 8.

Table 8: Mean Differences of One-way ANOVA Based on Relationship Status

	Relationship status	N	Mean
Humor	Married	18	30.55
	In a relationship	35	32.11
	Was in relationship	47	34.88*
Self-esteem	Married	18	17.26
	In a relationship	35	17.04
	Was in relationship	47	17.07
Spitefulness	Married	18	2.18

	In a relationship	35	2.10
	Was in relationship	47	2.10

*. Correlation is significant at $p < 0.05$

By looking at the means from table no. 8, it becomes clear that individuals who were in a romantic relationship before were more humorous ($N=47, M=34.88$), than individuals in a romantic relationship currently ($N=35, M=32.11$) and people who are married ($N=18, M=30.55$). These differences were observed only for humor styles, self-esteem, and spitefulness had no difference in the means between the relationship status.

7. Discussion

From the above results the main findings suggests that there is a significant positive correlation between spitefulness and aggressive humor style ($r = 0.497, p < 0.01$), and an insignificant but positive correlation with self-defeating humor style as well as humor in general ($r = 0.275, p < 0.01$). This supports the previous research findings that individuals with injurious humor styles are more likely to engage in spiteful behaviours (Vrabel et al., 2017). Aggressive humor is a reflection of ridicule and insults others. Previous findings have shown that aggressive humor can damage interpersonal relationships and is usually considered socially undesirable (Duarte, 2020). Humor both overall and aggressive humor specifically is related to spitefulness (Zeigler-Hill et al., 2016).

In contradiction to the hypothesis proposed, there was no significant correlation between spitefulness and both benign humor styles i.e., affiliating and self-enhancing humor styles, previous findings do not support these outcomes. Research fails to explain this outcome, as most of the studies on these variables have not found these outcomes. This is a new finding in the body of research conducted so far, suggesting having more investigation on benign humor and spitefulness, and more about how benign humor manifests into spitefulness.

The argument at the beginning of this research was that people who have lower self-esteem, feel threatened in times of conflict in interpersonal relationships, the low sense of self leads the fragile ego to burst out into taking revenge from the partner. This means that individuals having low self-esteem should be having high spitefulness scores, and vice-versa. However, the findings of the current paper suggest that spitefulness and self-esteem are not correlated. In other words, a person with both high and low self-esteem can become spiteful in life with loved ones and others (Crocker et al., 2014).

In addition, self-esteem and humor were found to have a low but statistically significant correlation. This suggests that individuals can increase their self-esteem by increasing their humor expression and increasing shared laughter, which in positively correlated with romantic life satisfaction (Tan et al., 2023). The opposite can also be true, as individuals with higher self-esteem tend to take challenges resiliently and do not worry about failing or rejections. This leads them to have a lighter and a more positive outlook on life, and in relationships. Such individuals may be more likely to resolve conflicts, communicate transparently and stay put in difficult times with their partner (Yue et al., 2014; Jiang et al., 2020; Jain, 2022).

The additional analysis conducted revealed that there is a gender difference such that more males than females engage in humor in relationships, is in line with the past research (Hofmann et al., 2020; Tosun et al., 2018). Hooper and colleagues (2016) in a study found that both male and female participants believed that males are the funny gender. An interesting finding also revealed that the extent to which

women find men funny is directly proportional to their love interest for them (Wilbur & Campbell, 2011). The current study also showed that there is no difference in gender in terms of self-esteem, this although contrary to the assumptions made earlier, does have some evidence backing up why it may have happened. Erol and Orth, (2011) point out that self-esteem increases during adolescence and slows down as one enters adulthood, such that there is no significant difference in male's and female's self-esteem during that phase. This can be an explanation for the current study's no gender difference as 79% of the population belonged to the early adulthood age range.

Spite also has been found to have close to significant gender difference, with males having slightly higher tendency to be spiteful. There are mixed findings for this, while some studies have found that males are more spiteful (Marcus et al., 2014; Wilkowski et al., 2012) and more likely to engage in vengeful behaviours, other studies have found that there is no difference in gender for vengeful behaviours, and rather factors like agreeableness may determine if a person takes revenge (Hoppers, 2023).

Additional one-way ANOVA of the study suggest that humor and relationship status were statistically significant, and married people and people who are in romantic relationships have lower humor than people who were in romantic relationships. This indicated that individuals in marriage or relationship need to increase their humor with their partner. The higher the positive or benign humor among couples higher the level of marital/romantic life satisfaction (Tsai et al., 2023). Self-esteem, on the other hand, was found to have no significant difference due to the relationship status of a person, this aligns with a study done as an analysis of the effect of relationship status on self-esteem and academic performance, where they found that relationship status and self-esteem are not associated (McLaughlin, 2015).

The romantic bond between partners and what it is influenced by is an important aspect to investigate as these variables shed light on the interplay between them and provide valuable insights into the relationship dynamics and emotional well-being. Humor in romantic relationships often serves as a coping mechanism, acting as an effective tool in times of conflict and resolve them in a light manner, hence reducing the spiteful behaviours by enabling a positive communication between partners (Cann et al., 2008). The study highlights the need to improve self-esteem and use more benign humor as it may contribute to lower levels of spite. Individuals with a secure sense of self are least likely use vindictive approaches to protect their ego or assert dominance (Baumeister et al., 1996). Understanding these relationships can be useful in building a stronger bond with the partner in personal settings, can be used to enhance the therapeutic practices to improve the relational satisfaction; help in curbing destructive behaviours and ultimately contribute to more resilient and healthier relationships.

8. Future directions

The current study did show significant correlation between almost all the variables; however, the independent and interaction effect was insignificant, this may be due to the low number of participants and uneven distribution of the male-to-female ratio in the study. Future studies should aim to have a more and an equal number of male and female participants. Another suggestion here could be selecting only the married population as it would give more in-depth information about the dynamics of interpersonal relationships.

Another limitation is the use of the spitefulness scale by Marcus et al., (2014), this is the only scale available for measuring spitefulness. We want to highlight here, that the items mentioned on the scale are too aggressive and overtly suggest the participants choose the socially desirable bias options. The spitefulness that is commonly seen in daily life among couples is much more subtle than what the scale

measures. This hints at more measurements to be made for assessing spitefulness. This may have also caused many participants to give biased responses. Another suggestion would be to interview the participants as that would be more insightful for the study variables.

9. Conclusion

In summary, this study underscores the significant link between spitefulness and aggressive humor, highlighting that, individuals who use humor to ridicule others are more likely to engage in spiteful behaviours. Contrary to expectations, no negative correlation was found between spitefulness and benign humor styles, suggesting a need for further research in this area. Surprisingly, spitefulness appears unrelated to self-esteem, indicating that individuals of varying self-esteem levels can exhibit spiteful behaviour. Additionally, a positive correlation between humor and self-esteem suggests that humor can enhance self-esteem and relationship satisfaction. Gender differences emerged with men more likely to engage in humor and exhibit slightly higher spitefulness, while self-esteem showed no gender disparity. Interestingly, humor in relationships varied by relationship status, with married or romantically involved individuals displaying less humor, pointing to the need of increased positive humor in enhancing relationship satisfaction. These findings open new avenues for understanding the complex interplay between humor, self-esteem and spitefulness in interpersonal dynamics.

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References

1. Abdel-Khalek A. M. (2016). Introduction to the Psychology of self-esteem. ResearchGate. https://www.researchgate.net/publication/311440256_Introduction_to_the_Psychology_of_self-esteem
2. Alberts J. K., Yoshimura, C. G., Rabby M., & Loschiavo R. (2005). Mapping the topography of couples' daily conversation. *Journal of Social and Personal Relationships*, 22(3), 299–322. <https://doi.org/10.1177/0265407505050941>
3. Arikewuyo A. O., Eluwole K. K., Dambo T. H., & Abdulbaqi S. S. (2021). Do low self-esteem, relationship dissatisfaction and relationship insecurity exacerbate the intention to break up in romantic relationships? *Current Psychology*, 41(11), 7695–7706. <https://doi.org/10.1007/s12144-020-01221-1>
4. Aron A., Aron E. N., Tudor M., & Nelson G. (1991). Close relationships as including other in the self. *Journal of Personality and Social Psychology*, 241–253.
5. Aron A., & Aron E, N. (2014). Self and self-expansion in relationships. In *Knowledge structures in close relationships* (pp. 325-344). Psychology Press. Psychology Press. <https://www.taylorfrancis.com/chapters/edit/10.4324/9781315806631-16/self-self-expansion-relationships-arthur-aron-elaine-aron>
6. Bailey J. A. (2002). The foundation of self-esteem. *The Journal of the National Medical Association*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2594522/>
7. Baumeister R. F., Campbell J. D., Krueger J. I., & Vohs K. D. (2003). Does high Self-Esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest*, 4(1), 1–44. <https://doi.org/10.1111/1529-1006.01431>

8. Baumeister R. F., Smart L., & Boden J. M. (1996). Relation of threatened egotism to violence and aggression: The dark side of high self-esteem. *Psychological Review*, 103(1), 5–33. <https://doi.org/10.1037/0033-295x.103.1.5>
9. Boon S. D., Alibhai A. M., & Deveau V. L. (2011). Reflections on the costs and benefits of exacting revenge in romantic relationships. *Canadian Journal of Behavioural Science*, 43(2), 128–137. <https://doi.org/10.1037/a0022367>
10. Boon S. D., Deveau V. L., & Alibhai A. M. (2009). Payback: The parameters of revenge in romantic relationships. *Journal of Social and Personal Relationships*, 26(6–7), 747–768. <https://doi.org/10.1177/0265407509347926>
11. Boon S. D., Rasmussen K. R., Deveau V. L., & Alibhai A. M. (2017). Resisting revenge: An investigation of reasons for foregoing revenge in romantic relationships. *Personal Relationships*, 24(3), 474–490. <https://doi.org/10.1111/pere.12193>
12. Bosson J. and Swann, W.B. (2009). Self-Esteem Nature, Origins, and Consequences. In Leary, R.H.M., Ed., *Handbook of Individual Differences in Social Behavior*, Guilford, New York, 527-546. - References - Scientific Research Publishing. (n.d.). <https://www.scirp.org/reference/referencespapers?referenceid=2459891>
13. Bravo V., Connolly J., & McIsaac C. (2017). Why did it end? Breakup reasons of youth of different gender, dating stages, and ages. *Emerging Adulthood*, 5(4), 230–240. <https://doi.org/10.1177/2167696817700261>
14. Bressler E. R., & Balshine S. (2006). The influence of humor on desirability. *Evolution and Human Behavior*, 27(1), 29–39. <https://doi.org/10.1016/j.evolhumbehav.2005.06.002>
15. Bügelmayer E., & Spiess C. K. (2011, October 1). Spite and cognitive skills in preschoolers. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1946783#
16. Burtäverde V., Jonason P. K., Ene C., & Istrate M. (2021). On being “dark” and promiscuous: The Dark Triad traits, mate value, disgust, and sociosexuality. *Personality and Individual Differences*, 168, 110255. <https://doi.org/10.1016/j.paid.2020.110255>
17. Butzer B., & Kuiper N. A. (2008). Humor use in romantic relationships: The effects of relationship satisfaction and pleasant versus conflict situations. *Journal of Psychology (Washington, D.C. Online)/the. Journal of Psychology*, 142(3), 245–260. <https://doi.org/10.3200/jrlp.142.3.245-260>
18. Campbell L., Martin R. A., & Ward J. R. (2008). An observational study of humor use while resolving conflict in dating couples. *Personal Relationships*, 15(1), 41–55. <https://doi.org/10.1111/j.1475-6811.2007.00183.x>
19. Cann A., Zapata C. L., & Davis H. B. (2008). Humor style and relationship satisfaction in dating couples: Perceived versus self-reported humor styles as predictors of satisfaction. *Humor*, 21(2), 157–178.
20. Caughlin J. P., Vangelisti A. L., & Mikucki-Enyart S. L. (2013). Conflict in dating and marital relationships. *ResearchGate*. https://www.researchgate.net/publication/317333192_Conflict_in_Dating_and_Marital_Relationships
21. Clemente M., & Espinosa P. (2021). Revenge in couple relationships and their relation to the dark triad. *International Journal of Environmental Research and Public Health/International Journal of Environmental Research and Public Health*, 18(14), 7653. <https://doi.org/10.3390/ijerph18147653>

22. Crocker J., Lee S. J., & Park L. E. (2014). The pursuit of self-esteem: Implications for good and evil. ResearchGate. https://www.researchgate.net/publication/224012626_The_pursuit_of_self-esteem_Implications_for_good_and_evil
23. Darlene Lancer. (2016, February 28). Self-Esteem makes successful relationships. Psych Central. <https://psychcentral.com/lib/self-esteem-makes-successful-relationships>
24. Djeriouat H., & Trémolière B. (2014). The Dark Triad of personality and utilitarian moral judgment: The mediating role of Honesty/Humility and Harm/Care. *Personality and Individual Differences*, 67, 11–16. <https://doi.org/10.1016/j.paid.2013.12.026>
25. Drigotas S. M., Rusbult C. E., Wieselquist J., & Whitton S. W. (1999). Close partner as sculptor of the ideal self: Behavioral affirmation and the Michelangelo phenomenon. *Journal of Personality and Social Psychology*, 77(2), 293–323. <https://doi.org/10.1037/0022-3514.77.2.293>
26. Duarte B. (2020). Man, That’s Funny: The Evolved Functions of Aggressive Humor. In R. K. Aune & E. Taniguchi (Eds.), Thesis proposal to the graduate divisions of the university of Hawaii at Manoa.
27. Erol R. Y., & Orth U. (2016). Self-Esteem and the quality of romantic relationships. *European Psychologist*, 21(4), 274–283. <https://doi.org/10.1027/1016-9040/a000259>
28. Fehr E., Hoff K., & Kshetramade M. (2008). Spite and development. *the American Economic Review*, 98(2), 494–499. <https://doi.org/10.1257/aer.98.2.494>
29. Florey D. M. (2013). The problem of spite. Student Publications. https://cupola.gettysburg.edu/student_scholarship/79
30. Ford T. E., McCreight K. A., & Richardson K. (2014). Affective style, humor styles and happiness. *Europe’s Journal of Psychology*, 10(3), 451–463. <https://doi.org/10.5964/ejop.v10i3.766>
31. Gajivand R. G. (2019). Investigating the role of mediators of humor styles in the relationship between spitefulness with the major dimensions of personality. https://cpap.shahed.ac.ir/?_action=article&au=14883&_au=Rostam++Ghalebi+Gajivand&lang=en
32. Gardner A., & West S. A. (2004). Spite and the scale of competition. *Journal of Evolutionary Biology*, 17(6), 1195–1203. <https://doi.org/10.1111/j.1420-9101.2004.00775.x>
33. Goldman A. (2023, July 20). How to Deal With a Spiteful Spouse During Divorce. <https://www.linkedin.com/pulse/how-deal-spiteful-spouse-during-divorce-akiva-goldman/>
34. Greenier K. D., Kernis M. H., & Waschull S. B. (1995). Not all high (or low) self-esteem people are the same: Theory and research on stability of self-esteem. Plenum Press.
35. Hall J. A. (2013). Humor in Long-Term Romantic Relationships: The Association of General Humor Styles and Relationship-Specific Functions with Relationship Satisfaction. *Western Journal of Communication*, 77(3), 272–292. <https://doi.org/10.1080/10570314.2012.757796>
36. Hall J. A. (2017). Humor in romantic relationships: A meta-analysis. *Personal Relationships*, 24(2), 306–322. <https://doi.org/10.1111/pere.12183>
37. Hamilton, W. D. (1970). Selfish and spiteful behaviour in an evolutionary model. *Nature*, 228(5277), 1218–1220. <https://doi.org/10.1038/2281218a0>
38. Hofmann J., Platt T., Lau C., & Torres-Marín J. (2020). Gender differences in humor-related traits, humor appreciation, production, comprehension, (neural) responses, use, and correlates: A systematic review. *Current Psychology*, 42(19), 16451–16464. <https://doi.org/10.1007/s12144-020-00724-1>
39. Hone L. S. E., Hurwitz W., & Lieberman D. (2015). Sex Differences in Preferences for Humor: a replication, modification, and extension. *Evolutionary Psychology*, 13(1), 167–181. <https://doi.org/10.1177/147470491501300110>

40. Hooper J., Sharpe D., & Roberts S. G. B. (2016). Are men funnier than women, or do we just think they are? *Translational Issues in Psychological Science*, 2(1), 54–62. <https://doi.org/10.1037/tps0000064>
41. Jain S. (2022). Humor styles and Self-Esteem among young adult. *The International Journal of Indian Psychology*, 10(2). <https://ijip.in/wp-content/uploads/2022/07/18.01.130.20221002.pdf>
42. Jiang F., Lu S., Jiang T., & Jia H. (2020). Does the relation between humor styles and subjective Well-Being vary across culture and age? A Meta-Analysis. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.02213>
43. Jordan C. H., Zeigler-Hill V., & Cameron J. J. (2020). Self-Esteem. In Springer eBooks (pp. 4738–4748). https://doi.org/10.1007/978-3-319-24612-3_1169
44. Klosterman M. (n.d.). Self-Esteem and relationship perception. *Scholarship & Creative Works @ Digital UNC*. https://digscholarship.unco.edu/urj/vol2/iss2/7/?utm_source=digscholarship.unco.edu%2Furj%2Fvol2%2Fiss2%2F7&utm_medium=PDF&utm_campaign=PDFCoverPages
45. Kuiper N. A., & Borowicz-Sibenik M. (2005). A good sense of humor doesn't always help: agency and communion as moderators of psychological well-being. *Personality and Individual Differences*, 38(2), 365–377. <https://doi.org/10.1016/j.paid.2004.04.015>
46. Kuiper N. A., Grimshaw M., Leite C., & Kirsh G. (2004). Humor is not always the best medicine: Specific components of sense of humor and psychological well-being. *Humor*, 17(1–2). <https://doi.org/10.1515/humr.2004.002>
47. Kurtz L. E., & Algoe S. B. (2016). When sharing a laugh means sharing more: testing the role of shared laughter on Short-Term interpersonal consequences. *Journal of Nonverbal Behavior*, 41(1), 45–65. <https://doi.org/10.1007/s10919-016-0245-9>
48. Luciano E. C., & Orth U. (2017). Transitions in romantic relationships and development of self-esteem. *Journal of Personality and Social Psychology*, 112(2), 307–328. <https://doi.org/10.1037/pspp0000109>
49. Marcus D. K., Zeigler-Hill V., Mercer S. H., & Norris A. L. (2014). The psychology of spite and the measurement of spitefulness. *Psychological Assessment*, 26(2), 563–574. <https://doi.org/10.1037/a0036039>
50. Martin R. A. (2000). Introduction to the psychology of humor. In *Psychology of Humor*. https://booksite.elsevier.com/samplechapters/9780123725646/Sample_Chapters/02~Chapter_1.pdf
51. Martin R. A. (2007). Introduction to the psychology of humor. In Elsevier eBooks (pp. 1–30). <https://doi.org/10.1016/b978-012372564-6/50020-4>
52. Martin R. A., Puhlik-Doris P., Larsen G., Gray J., & Weir K. (2003). Individual differences in uses of humor and their relation to psychological well-being: Development of the Humor Styles Questionnaire. *Journal of Research in Personality*, 37(1), 48–75. [https://doi.org/10.1016/s0092-6566\(02\)00534-2](https://doi.org/10.1016/s0092-6566(02)00534-2)
53. McNulty J. K., Meltzer A. L., Neff L. A., & Karney B. R. (2021). How both partners' individual differences, stress, and behavior predict change in relationship satisfaction: Extending the VSA model. *Proceedings of the National Academy of Sciences of the United States of America*, 118(27). <https://doi.org/10.1073/pnas.2101402118>
54. Morf C. C., & Rhodewalt F. (2001). Unraveling the Paradoxes of Narcissism: A Dynamic Self-Regulatory Processing Model. *Psychological Inquiry*, 12(4), 177–196. https://doi.org/10.1207/s15327965pli1204_1

55. Muhammad I., & Jaffar R. (2020). Romantic relationship and self esteem: The role of self esteem in prediction of relationship satisfaction, romanticism, and emophilia. https://www.researchgate.net/publication/364651218_Romantic_Relationship_and_Self_Esteem_The_Role_of_Self_Esteem_in_Prediction_of_Relationship_Satisfaction_Romanticism_and_Emophilia
56. Murray S. L., Holmes J. G., & Griffin D. W. (1996). The self-fulfilling nature of positive illusions in romantic relationships: Love is not blind, but prescient. *Journal of Personality and Social Psychology*, 71(6), 1155–1180. <https://doi.org/10.1037/0022-3514.71.6.1155>
57. No Difference in Women’s and Men’s Self-Esteem in Youth and Early adulthood, study finds. (2011, July 14). <https://www.apa.org>. <https://www.apa.org/news/press/releases/2011/07/youth-self-esteem>
58. Noser A. E., Zeigler-Hill V., Vrabel J. K., Besser A., Ewing T. D., & Southard A. C. (2015). Dark and immoral: The links between pathological personality features and moral values. *Personality and Individual Differences*, 75, 30–35. <https://doi.org/10.1016/j.paid.2014.11.010>
59. Rasmussen K. (2013). Vengeful Decisions: the role of perceived effectiveness and costliness of revenge. <https://doi.org/10.11575/prism/28638>
60. Rasmussen K. R., & Boon S. D. (2014). Romantic revenge and the Dark Triad: A model of impellance and inhibition. *Personality and Individual Differences*, 56, 51–56. <https://doi.org/10.1016/j.paid.2013.08.018>
61. Richter J., & Finn C. (2021). Transactions between self-esteem and perceived conflict in romantic relationships: A 5-year longitudinal study. *PloS One*, 16(4), e0248620. <https://doi.org/10.1371/journal.pone.0248620>
62. Robles T. F., Slatcher R. B., Trombello J. M., & McGinn M. M. (2014). Marital quality and health: A meta-analytic review. *Psychological Bulletin*, 140(1), 140–187. <https://doi.org/10.1037/a0031859>
63. Rodgers C., & Dahling, J. J. (2018). Self-regulatory correlates of spitefulness. *Personality and Individual Differences*, 123, 257–259. <https://doi.org/10.1016/j.paid.2017.11.020>
64. Samson, A. C., & Gross J. J. (2012). Humour as emotion regulation: The differential consequences of negative versus positive humour. *Cognition and Emotion*, 26(2), 375–384. <https://doi.org/10.1080/02699931.2011.585069>
65. Schmidt J. A., & Padilla B. (2003). Self-Esteem and Family Challenge: an investigation of their effects on achievement. *Journal of Youth and Adolescence*, 32(1), 37–46. <https://doi.org/10.1023/a:1021080323230>
66. Schriber V. J. (2017). The Relationship Between Self-Esteem, Ambivalence, and Relationship Outcomes within Romantic Partnerships. <https://openworks.wooster.edu/cgi/viewcontent.cgi?article=8539&context=independentstudy>
67. Smead R., & Forber P. (2012). The Evolutionary Dynamics of Spite in Finite Populations. *Evolution*, 67(3), 698–707. <https://doi.org/10.1111/j.1558-5646.2012.01831.x>
68. Smead R., & Forber P. (2019). Signals and spite in fluctuating populations. *Open Philosophy*, 2(1), 137–146. <https://doi.org/10.1515/opphil-2019-0014>
69. Southard A. (2020). Spitefulness. In Springer eBooks (pp. 5166–5173). https://doi.org/10.1007/978-3-319-24612-3_1270
70. Stavropoulos V., Lazaratou H., Marini E., & Dikeos D. (2015). Low Family Satisfaction and Depression in Adolescence: The Role of Self-Esteem. *Journal of Educational and Developmental Psychology*, 5(2). <https://doi.org/10.5539/jedp.v5n2p109>

71. Tosun S., Faghihi N., & Vaid J. (2018). Is an Ideal Sense of Humor Gendered? A Cross-National Study. *Frontiers in Psychology*, 9. <https://doi.org/10.3389/fpsyg.2018.00199>
72. Tsai M., Cheng Y., & Chen H. (2023). Humor Styles and Marital Satisfaction: Cluster analysis of the relationship. *Psychological Reports*, 003329412211491. <https://doi.org/10.1177/00332941221149151>
73. Van De Ven S., & Pronk T. (2020). Gender Differences and the Relation between Self-Esteem and Romantic Relationship Satisfaction. In Tilburg University, Bachelor Thesis [Thesis].
74. Vela L. E., Booth-Butterfield M., Wanzer M. B., & Vallade J. I. (2013). Relationships among humor, coping, relationship stress, and satisfaction in dating relationships: replication and extension. *Communication Research Reports*, 30(1), 68–75. <https://doi.org/10.1080/08824096.2012.746224>
75. Veselka L., Schermer J. A., Martin R. A., Cherkas L. F., Spector T. D., & Vernon P. A. (2010). A behavioral genetic study of relationships between humor styles and the six HEXACO personality factors. *Europe's Journal of Psychology*, 6(3). <https://doi.org/10.5964/ejop.v6i3.206>
76. Vonk J., Zeigler-Hill V., Ewing D., Mercer S., & Noser A. E. (2015). Mindreading in the dark: Dark personality features and theory of mind. *Personality and Individual Differences*, 87, 50–54. <https://doi.org/10.1016/j.paid.2015.07.025>
77. Vrabel J. K., Zeigler-Hill V., & Shango R. G. (2017). Spitefulness and humor styles. *Personality and Individual Differences*, 105, 238–243. <https://doi.org/10.1016/j.paid.2016.10.001>
78. Walker S. A., Pinkus R. T., Olderbak S., & MacCann C. (2023). People with higher relationship satisfaction use more humor, valuing, and receptive listening to regulate their partners' emotions. *Current Psychology*, 43(3), 2348–2356. <https://doi.org/10.1007/s12144-023-04432-4>
79. Walsh J. (2021). Using humor in practice relationships. In Oxford University Press eBooks (pp. 231–251). <https://doi.org/10.1093/oso/9780197517956.003.0013>
80. Wilbur C. J., & Campbell L. (2011). Humor in romantic contexts: do men participate and women evaluate? *Personality & Social Psychology Bulletin*, 37(7), 918–929. <https://doi.org/10.1177/0146167211405343>
81. Wilkowski B. M., Hartung C. M., Crowe S. E., & Chai C. A. (2012). Men don't just get mad; they get even: Revenge but not anger mediates gender differences in physical aggression. *Journal of Research in Personality*, 46(5), 546–555. <https://doi.org/10.1016/j.jrp.2012.06.001>
82. Wood J. V., Forest A. L., Friesen J. P., Murray S. L., Holmes J. G., & McNulty J. K. (2023). Self-esteem and romantic relationship quality. *Nature Reviews Psychology*. <https://doi.org/10.1038/s44159-023-00247-z>
83. Yue X. D., Liu K. W., Jiang F., & Hiranandani N. A. (2014). Humor styles, Self-Esteem, and subjective happiness. *Psychological Reports*, 115(2), 517–525. <https://doi.org/10.2466/07.02.pr0.115c18z6>
84. Zeigler-Hill V., Fulton J. J., & McLemore C. (2011). The role of unstable self-esteem in the appraisal of romantic relationships. *Personality and Individual Differences*, 51(1), 51–56. <https://doi.org/10.1016/j.paid.2011.03.009>
85. Zeigler-Hill V., McCabe G. A., & Vrabel J. K. (2016). The dark side of humor: DSM-5 pathological personality traits and humor styles. *Europe's Journal of Psychology*, 12(3), 363–376. <https://doi.org/10.5964/ejop.v12i3.1109>
86. Zeigler-Hill V., Noser A. E., Roof C., Vonk J., & Marcus D. K. (2015). Spitefulness and moral values. *Personality and Individual Differences*, 77, 86–90. <https://doi.org/10.1016/j.paid.2014.12.050>
87. Ziv A., & Gadish O. (1989). Humor and marital satisfaction. *The Journal of Social Psychology/Journal of Social Psychology*, 129(6), 759–768. <https://doi.org/10.1080/00224545.1989.9712084>