

When I Hate to Follow You: Hate-Following, Envy, and Schadenfreude on Instagram

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Abstract. Popular media has documented an increasing interest in the inadvertent acts of tracking the disliked target on social media (hate-following). The current study explored the utility of a hate-following motive, independent of hate, within the framework of a dual approach of envy and the joy in seeing others' misfortune (schadenfreude). Undergraduate Instagram users ($n = 560$, 73.39% females; $M_{age} = 21.14$, $SD = 2.04$) were asked to recall an envy episode and filled in measures of state envy, hate-following motive, and hate. These participants then read a schadenfreude scenario and completed a measure of schadenfreude. We found that when controlling for hate, the link between pain of envy and schadenfreude was mediated by malicious envy, but not by benign envy. However, the indirect effect of pain on schadenfreude varied as a function of hate-following, such that hate-following moderated the path from both malicious and benign envy to schadenfreude, albeit in the opposite directions. Although hate-following one's target of envy may be functional, understanding its root of inferiority may help reduce the tendency to engage in unethical behaviours on social media.

Keywords: benign envy; hate; hate-following; malicious envy; schadenfreude

The growth of technological advancement has, for all practical purposes, changed the social structure and processes at a massive scale. What used to be a private social interaction can now be made public, with densely packed interconnectedness as the main form of relationship dynamics (Yusainy et al., 2017). Virtual friendships, however, are not necessarily driven by social desires, but can also be based on antisocial emotions such as hate (Walther, 2022), envy (Hornik et al., 2023), and even pleasure at others' misfortune or schadenfreude (Phillips et al., 2022). Despite the antisocial nature of disliking the target of these emotions, social media users may display non-intuitive behaviour to befriend (friending) or to keep tabs on (following) the disliked target e.g. (Bond, 2021; Natividad, 2022).

The current study explores the utility of the hate-following motive as put forth by Ouwerkerk

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and Johnson (2016). Ouwerkerk and Johnson (2016) considered hate-following as one of the antisocial motives to connect with disliked others in order to establish one's own superiority. Their original study demonstrates that hate-following, together with other antisocial motives, could increase *schadenfreude*, decrease sympathy reactions, increase gossip intention, and increase the inclination to accept a friendship request on Facebook from a former schoolmate who was successful in high school but subsequently suffered a misfortune. In the current study, we specifically portray this motive in the context of followership on Instagram, with a particular focus on the controversial relation of envy and *schadenfreude* cf. Lange et al. (2018). Although speculative, the term *julid* (Idn.), which refers to when an envier cynically comments about someone else on social media (Badan Pengembangan dan Pembinaan Bahasa, n.d.), may be an expression of *schadenfreude*. As of the end of the year 2023, more than 29,000 posts on Instagram are tagged with #julid.

Schadenfreude is the joy of seeing misfortune, bad luck, or adversity befall another person (Smith, 2013). Responses involving *schadenfreude* have been observed to occur even in toddlers 24 months of age (Shamay-Tsoory et al., 2014). *Schadenfreude* is typically shameful, secretive, and passive (Smith & van Dijk, 2018). However, it may be spontaneously expressed in public (e.g., laughing at the sight of someone slipping on a banana peel). Individuals seem to be more willing to share *schadenfreude* if the misfortune is deemed to be deserved (Dasborough & Harvey, 2017). In competitive contexts, *schadenfreude* may escalate to interpersonal and even intergroup conflicts (Lange & Boecker, 2019).

Instagram is frequently perceived as the least appropriate platform to express negativity (Waterloo et al., 2018), yet even brief exposure to other user's emotions could be contagious (Yusainy et al., 2024). Instagram allows users to apply digital filters and share refined results to multiple social media platforms, thereby creating a competitive atmosphere to show off the perfect sides of the users lives (Lup et al., 2015; Sheldon & Bryant, 2016). Festinger (1954) classical social comparison theory stated that when there is no objective standard to compare against, people would instead compare themselves with the social status of others. An emotional prototype arising from social comparison with another party who is considered to be better (i.e., upward social comparison) is known as envy (Crusius et al., 2020).

In the contemporary theory of Pain-driven Dual Envy (PaDE) by Lange et al. (2018), envy is conceptualised as a painful emotion triggered by the lack of quality, achievements, or ownership by an envier. Pain is a central component involving the arousal of envy, which induces two distinct forms of envy: benign and malicious. Benign envy is a desire for the envied object, improvement motivation, and emulation of the envied target, whereas malicious envy is communication about the envied target, directed aggression, and non-directed aggression.

Studies taking different forms of envy into account typically demonstrate that malicious envy predicts *schadenfreude*, while benign envy does not (Lange et al., 2018; van de Ven et al., 2015). Nevertheless, benign envy could predict higher *schadenfreude* when the target belongs to a relevant social comparison (van Dijk et al., 2006). It was also shown that the link between malicious envy and *schadenfreude* occurred only when the outcome of social comparisons are precise, but not when social

comparisons are ambiguous (Lin & Liang, 2021). The present study specifically assesses whether the prediction of schadenfreude from the temporal unfolding of distinct envy components (pain, followed by benign/malicious envy) differs when an envier is at the same time hate-following the target on Instagram.

To summarise, we predict two hypotheses. The first is that the link between pain of envy and schadenfreude will be mediated by malicious envy, but not by benign envy. The second hypothesis is that the indirect effect of pain on schadenfreude will vary as a function of hate-following, such that hate-following will moderate the paths from malicious envy and from benign envy to schadenfreude. Importantly, a recent concluding commentary (Roseman & Steele, 2018) suggests that along with malicious envy, dislike of others is also a primary antecedent of schadenfreude. Therefore to demonstrate some validity for the hate-following motive, the moderating role of this motive should be distinguishable from the role of hate in general. Although research on hate is systematically lacking (Fischer et al., 2018), measures of hate and hate-following motive (described later) appear to have distinct content. Through this study, we will be able to suggest evidence of the unique contribution of hate-following motive to link between different envy components and schadenfreude in social media interaction.

Methods

Participants and procedure

Our research protocol was approved by the Universitas B Ethics Committee (Number: 375/UN10/F11/2019). Participants were undergraduate Instagram users recruited using convenient sampling through the researchers' social media. According to an estimation made using G*Power v. 3.1 (Faul et al., 2007), the minimum required sample size was 92 to detect a medium effect $f^2 = .15$ in a linear multiple regression with a fixed model and R^2 increase analysis, using five predictors (i.e., the three envy components, hate-following motive, and hate), at a 5% significance level and 80% statistical power. A total of 1124 students accessed the online survey link through SurveyMonkey, which remained open from May 27th until June 9th, 2019. After eliminating the incomplete entered data, we found a final participant count of 560 consisting of 411 females (73.39%) and 149 males (26.61%), with a mean age of 21.14 ($SD = 2.04$) years old. Most participants followed more than 151 accounts (92.14%), were followed by more than 151 accounts (92.32%), and spent more than an hour per day on Instagram (80.22%).

To test the research hypotheses, we used a quasi-experimental design, a one-group posttest-only design. After filling in general demographic information, participants were asked to write down a situational scenario that aroused their envy towards another Instagram user's profile that they followed and filled in the scales for state envy (Lange et al., 2018), hate-following motive (Ouwkerk & Johnson, 2016), and hate (Zeki & Romaya, 2008). Next, the participants were asked to read a schadenfreude scenario containing the instruction to imagine that the Instagram user that caused them envy was befallen with misfortune, and then filled in the schadenfreude scale (van de Ven et al., 2015).

At the closing of the survey, participants were asked to fill in their email addresses (optional) to enter the prize draw.

Instruments and Measures

The envy instruction was translated from Lange et al. (2018). Participants were required to recall and then write down a short description of the most recent event that made them feel envious of another Instagram user that they follow (i.e., The User). They were also told to identify the object of envy (i.e., X). X might be a characteristic of said user, the contents of said user's posts, feedback (i.e., likes and comments) that the user received on their account, or anything else. Participants could choose whether that other user was a public figure or if it was someone they were personally acquainted with.

The state envy scale (i.e., the Pain-driven Dual Envy: PaDE scale) was an operationalisation by Lange et al. (2018) based on the recent dual approach of envy. Participants filled in 11 questionnaire items on a 7-point Likert scale (1 for *does not apply at all* and 7 for *applies very much*) to measure the pain of envy (3 items; e.g. I feel inadequate.), malicious envy (4 items; e.g. I wanted to complain to someone else about The User.), and benign envy (4 items; e.g. I felt deep longing for X.) triggered by the situation they described earlier. In the current study, we used the Indonesian PaDE scale translation from Yusainy et al. (2018), in which the average score for each envy component was computed separately.

Participants' hate-following motive was measured using the Following Motives Scale from Ouwerkerk and Johnson (2016). Participants filled in a 7-point Likert scale (1 for *strongly disagree* and 7 for *strongly agree*) to 3 questionnaire items about the motives to follow the Instagram account of the person that triggered envy, which were, Because there is something addictive about being annoyed by him/her., Because, although I don't like the person, I find him/her intriguing., and Because I want to know what the person is doing, despite the fact that I actually don't like him/her.. Higher average scores on the 3 items reflected higher hate-following motives.

The hate scale (i.e., the Passionate Hate Scale) from Zeki and Romaya (2008) was derived from the triangular theory of hate as formulated by Sternberg and Sternberg (2008). Participants responded to a 7-point Likert scale (0 for *strongly agree* and 6 for *strongly disagree*) to a 12-item questionnaire reflecting the negation of intimacy (i.e., to keep distance from the hated person followed by rejection and feeling of disgust; 4 items, e.g. The world would be a better place if the person never existed.), passion in hate (i.e., intense anger or fear as a response to a perceived threat; 4 items, e.g. I cannot control my hate for the person.), and decision-commitment in hate (i.e., thoughts that seek to denigrate the target through insults; 4 items, e.g. The person is a low class [sic] type of person.). Following Zeki and Romaya (2008), we computed the hate score by averaging the scores of these three components.

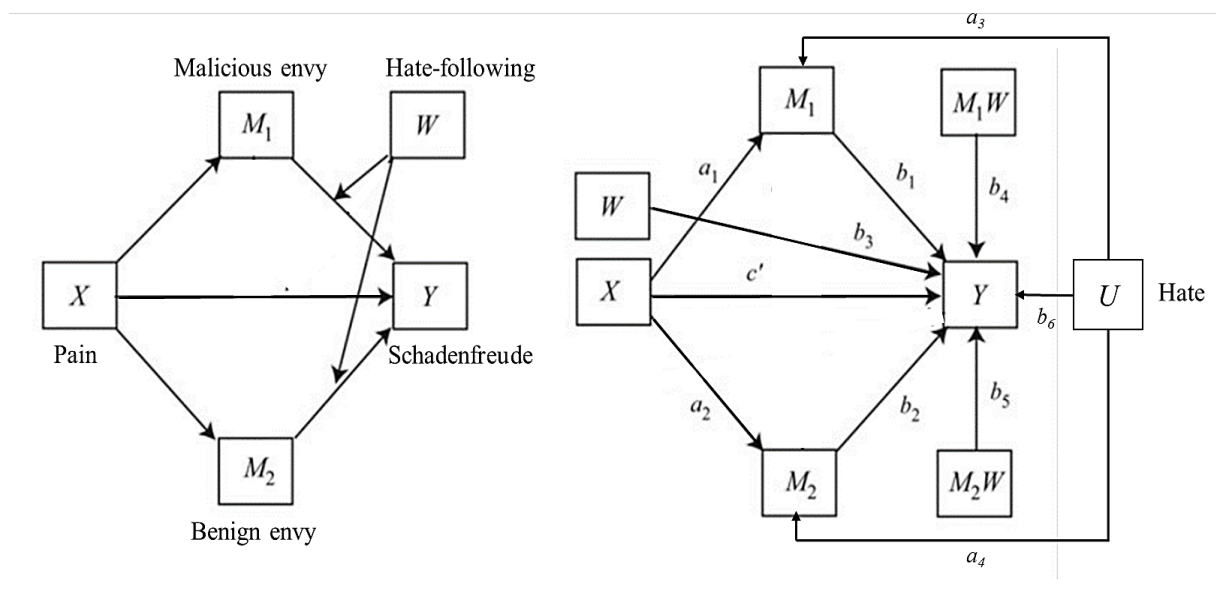
The schadenfreude scenario was translated from van de Ven et al. (2015), see also van Dijk et al. (2005). The instruction given was in the form of a scenario as follows: Imagine the person that you have just described would suffer a minor misfortune, e.g. slipped when walking in front of many people, spilling drinks so that his/her clothes were soaked in the middle of the party, etc.. Schadenfreude was assessed by averaging scores on 3 items regarding the participants feelings on a 7-point Likert scale (0 for *not at all* and 6 for *very much so*) i.e., I would have been a little amused by what happened to

him/her., I would have been pleased by the little misfortune that happened to him/her., and I'd find it difficult to resist a little smile.

Data Analysis

We first performed preliminary analysis to examine the zero-order correlations between variables. Hypothesis 1 and 2 were then tested using a second-stage bootstrapped parallel multiple moderated mediation model (Model 14 PROCESS v4.2. from Hayes (2022), based on 5,000 resamples with 95% bias-corrected confidence interval. A quantification of the association between an indirect effect and a moderator was calculated as an index of moderated mediation (Hayes, 2015). We placed the pain of envy as a predictor, malicious and benign envy as parallel mediators, hate-following motive as moderator, schadenfreude as the outcome, and hate as a covariate (see Figure 1). A significant association would be inferred if the Confidence Interval did not include zero.

Figure 1
Conceptual (left) and Statistical (right) Diagrams of a Second Stage Bootstrapped Parallel Multiple Moderated Mediation Model



Results

As shown in Table 1, the internal reliability of the scales was relatively high (Cronbach Alpha >.74). Preliminary analyses showed that the three components of envy were positively associated with each other. Schadenfreude was positively associated with pain, malicious envy, hate-following motive, and hate, but not with benign envy. Hate-following motive also related positively to the three components of envy, but hate was related negatively to benign envy.

Table 1
Intercorrelation and Psychometric Properties of State Envy, Hate-Following Motive, Schadenfreude, and Hate (n = 560)

Scale	PaDE-P	PaDE-M	PaDE-B	Hate-following	Schadenfreude	Hate
PaDE-P	1					
PaDE-M	.57***	1				
PaDE-B	.26***	.15***	1			
Hate-following	.50***	.59***	.24**	1		
Schadenfreude	.35***	.68***	0.03	.50**	1	
Hate	***	.62***	-.14***	.45***	.70***	1
Mean	2.52	2.91	3.95	2.75	1.64	1.60
(SD)	(1.63)	(1.44)	(1.48)	(1.52)	(1.60)	(1.08)
Cronbach Alpha	.85	.83	.77	.74	.87	.88

Note. PaDe-P = State pain of envy, PaDe-M = State malicious envy, PaDe-B = State benign envy from Pain-driven Dual Envy scale. Hate-following = Hate-following motive on the Following Motives Scale. Schadenfreude = Schadenfreude score from schadenfreude scenario. Hate = Hate score from the Passionate Hate Scale.

*** $p < .001$.

Table 2 presents the estimated regression coefficients. Altogether, 60% of the variability in schadenfreude was predicted by all of the variables, $R^2 = 0.60$, $F(7,552) = 118.22$, $p < .001$. Additionally, 54% of the variability in malicious envy was predicted by pain of envy and hate, $F(2,557) = 320.76$, $p < .001$, whereas 36% of the variability in benign envy was predicted by pain of envy and hate, $F(2,557) = 41.67$, $p < .001$. For Hypothesis 1 (top half), the mediation part of analyses found significant indirect effect of pain of envy on schadenfreude through malicious envy (Coef. = 0.14 (0.02), 95% CI [0.10, 0.19]). As expected, pain of envy predicted higher malicious envy (a_1), while malicious envy predicted higher schadenfreude (b_1). The indirect effect of pain of envy on schadenfreude through benign envy was not significant (Coef. = 0.01 (0.01), 95% CI [-0.01, 0.02]), such that pain of envy predicted lower benign envy (a_2), but benign envy did not predict schadenfreude (b_1). After accounting for malicious and benign envy, the direct effect of pain on schadenfreude was still significant (a_1). The effect of hate was also significant, in that hate predicted higher malicious envy (a_3), but lower benign envy (a_1).

Table 2

Unstandardized OLS regression coefficients with Confidence Intervals (Standard Errors in parentheses) estimating malicious envy, benign envy, and schadenfreude

Antecedent	PaDe-M(M1)			PaDe-B(M2)			Schadenfreude(Y)		
		Coef.	95% CI		Coef.	95% CI		Coef.	95% CI
PaDe-P (X)	a_1	0.36** (0.27)	0.31, 0.41	a_2	0.32** (0.04)	0.25, 0.40	c'	-0.08** (0.03)	-0.15, -0.01
PaDe-M (M1)							b_1	0.40*** (0.05)	0.31, 0.49
PaDe-B (M2)							b_2	0.02 (0.03)	-0.05, 0.08
Hate-following (W)							b_3	0.12** (0.04)	0.04, 0.19
M1 ⊗ W							b_4	0.05** (0.04)	0.01, 0.09
M2 ⊗ W							b_5	-0.04* (0.02)	-0.08, -0.02
Hate (U)	a_3	0.65** (0.04)	0.56, 0.73	a_4	-0.36*** (0.06)	-0.48, -0.25	b_6	0.65*** (0.05)	0.54, 0.76
Constant	i_{M1}	-1.94*** (0.09)	-2.11, -1.77	i_{M2}	-0.23*** (0.12)	-0.47, 0.01	i_{My}	0.76*** (0.13)	0.50, 1.01
		$R^2 = 0.54$			$R^2 = 0.13$			$R^2 = 0.60$	
		$F(2,557) = 320.76, p < .001$			$F(2,557) = 41.67, p < .001$			$F(7,552) = 118.22, p < .001$	

Note. PaDe-P = State pain of envy, PaDe-M = State malicious envy, PaDe-B = State benign envy from Pain-driven Dual Envy scale. Hate-following = Hate-following motive on the Following Motives Scale. Schadenfreude = Schadenfreude score from schadenfreude scenario. Hate = Hate score from the Passionate Hate Scale.

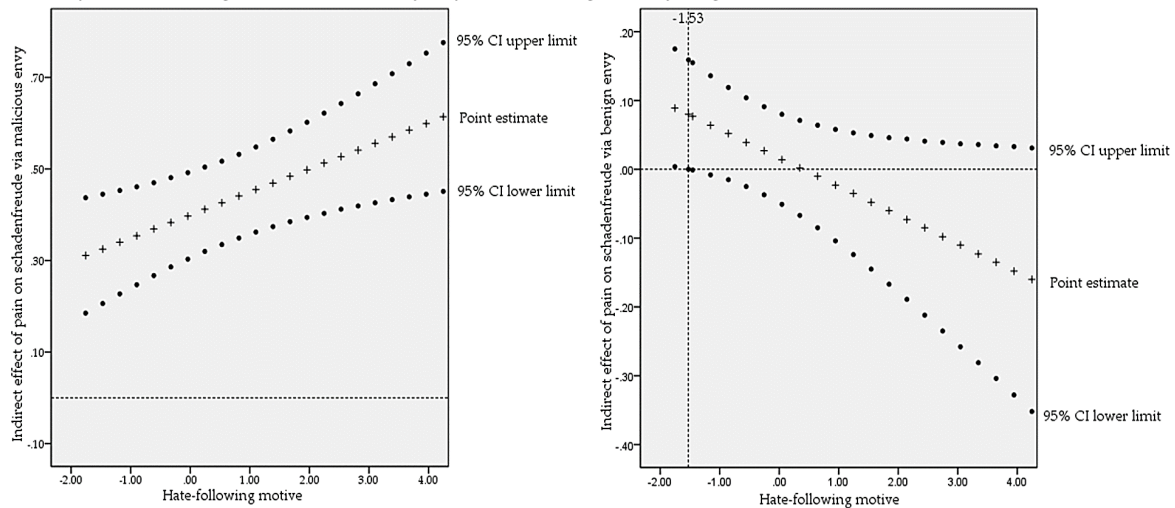
* $p < .05$, ** $p < .01$, *** $p < .001$.

As can be seen in Table 2 (bottom half), holding constant hate and pain of envy, the effect of malicious envy on schadenfreude was dependent on the hate-following motive (b_4). Supporting Hypothesis 2, the index of moderated mediation (a_1b_4) was different from zero (Coef. = 0.02 (0.01), 95% CI [0.01, 0.03]), indicating that hate-following motive moderated the indirect effect of pain on schadenfreude through malicious envy. Plotting this interaction using the Johnson–Neyman approach showed that there were no points in the distribution of hate-following motive where the indirect effect of pain on schadenfreude through malicious envy transitioned between statistically significant and not significant (see Figure 2, left panel). The effects of malicious envy on schadenfreude were significantly positive for any value of hate-following motive.

Holding constant hate and pain of envy, the effect of benign envy on schadenfreude was also dependent on the hate-following motive (b_5); see again Table 2, bottom half). The index of moderated mediation of hate-following (a_2b_5) was different from zero (Coef. = -0.01 (0.01), 95% CI [-0.03, -0.01]). Probing the interaction showed that the indirect effect of pain on schadenfreude through benign envy was significant and positive at values below -1.53 of hate-following motive (Figure 2, right panel). As

the hate-following motive increased, the association between benign envy and schadenfreude was no longer significant. Overall, the effect of hate was still significant in predicting higher schadenfreude (b_6).

Figure 2
Johnson–Neyman Plots for The Moderation of The Hate-Following Motive on The Indirect Effects of Pain on Schadenfreude Through Malicious Envy (left) and Benign Envy (right)



Discussion

The current study investigated the utility of the motive of keeping oneself up to date with the statuses and situations revolving around the disliked target (i.e., hate-following) on Instagram using the framework of the dual approach of envy and schadenfreude. We found that holding constant hate and hate-following motive, malicious envy mediated the link between pain of envy and schadenfreude. The mediation role of benign envy on the link between pain and schadenfreude was not significant. These results replicated the majority of findings in nonsocial-media contexts using the dual approach of envy (Lange et al., 2018). These results also replicated the findings from a laboratory-based experiment with Indonesian undergraduates in the setting of deception in negotiation (Yusainy et al., 2018), thus underlining similarities in the processes involved in social comparison across different contexts of antisocial and unethical behaviour.

Importantly, the present study identified the unique social interaction dynamics that occur when someone follows their target of dislike, which could be intertwined with feelings of envy and schadenfreude. As concluded in a recent meta-analysis, social media posts provide opportunities for viewers to make more frequent and more extreme upward comparisons (McComb et al., 2023). Following the disliked target is carried out to assert one’s superiority Ouwerkerk and Johnson (2016).

Therefore, it can be regarded as a tactic for engaging in downward social comparison. Given the relatively low probability of downward comparisons, adopting this unfavourable approach may be perceived as beneficial for the hate-followers in helping to alleviate their feelings of envy when the disliked person experiences a setback.

It is inconceivable to imagine a world where individuals do not engage in social comparisons based on attributes that are relevant to themselves. Envy has been identified as one of the key mechanisms for users' well-being across social media platforms (Meier & Johnson, 2022). As argued by Djikic and Langer (2007), social comparisons frequently entail a biased selection of information that relies too heavily on previous categorisations. In contrast, when one is mindful, they acknowledge the importance of categories based on previous experiences but perceive these categories as adaptable and open to change when confronted with new information. Social media users who hate-follow need to realise the chances of downward comparisons are relatively scarce. Even when there is joy in seeing the relevant social comparison target befallen with misfortune, it is crucial for social media users to mindfully realise that the root of envy and hate-following motive is still inferiority.

Specifically, our main analyses showed that the indirect effect of pain on *schadenfreude* increased as a function of a hate-following motive on the path from malicious envy and *schadenfreude*, independent of the role of hate. According to the PaDE theory, malicious envy includes hostility and intentions to hurt the envy target (Lange et al., 2018). For the purpose of group harmony in collectivist cultures (Baldwin & Mussweiler, 2018), any behaviour that is based on a hate-following motive would require a convincing justification so that it does not threaten the status quo social stability. When a malicious envy target suffers from a misfortune that is deemed to be deserved, a hate-follower can satisfy their egoistic need to reduce their feelings of inferiority and achieve justice (Roseman & Steele, 2018) without the need for them to actively participate to those ends, which may potentially cause social conflict.

Further, we found that the indirect effect of pain on *schadenfreude* on the path from benign envy and *schadenfreude* was also dependent on a hate-following motive, independent of the role of hate. This effect was particularly observed when the motive for hate-following was low, such that higher benign envy predicted higher *schadenfreude* towards the target of envy. Benign envy motivates an individual to work harder to achieve the goals or objects possessed by the envy target (Cohen-Charash & Larson, 2017). However, unlike all the other social emotions that can also motivate an individual (e.g., admiration), the default affective state of benign envy is still a negative one, and it is concretely focused on upward social comparison towards the envy target. On the other hand, the hate-following motive contains a combination of conflicting emotions, such as discomfort and addiction, dislike and curiosity, to the desire to know more despite actual dislike (Ouwkerk & Johnson, 2016). When the target of benign envy suffers from misfortune, the position of the target changes to that of a non-dominant one. The target of benign envy who suffers from misfortune could be seen as satisfying the curiosity of Instagram users whose motive to hate-follow is low.

It has been suggested elsewhere that benign envy is more socially acceptable than malicious envy (Cohen-Charash & Larson, 2017). Nevertheless, our findings that moderate and

high hate-following motives did not predict schadenfreude do not necessarily mean that being hate-followers is more constructive in the presence of benign envy. In fact, benign envy typically manifests in efforts to improve the envier status through subtle and indirect social manipulations (Lange et al., 2018). As found in a recent experiment involving Indonesian students, even the subtle experience of being ignored on Instagram threatened the socio-psychological needs of the target (Yusainy et al., 2023). Social pain may cause as much pain as physical ones (Zhang et al., 2019). Moreover, individuals who engaged in more social comparisons, regardless of whether they compared themselves to others who were better off or worse off, were more prone to feelings of guilt, blame, and procrastination (White et al., 2006).

The methodological limitation in the current study was that we only reported the reliability of test scores using the Alpha coefficient as information regarding the psychometric properties of instruments, but did not test the construct validity of each instrument using latent variable modeling (e.g., CFA). However, Cronbach's Alpha has been criticised for relying on unrealistic assumptions e.g. (McNeish, 2018; Sijtsma, 2009). In this study, we assumed that all items were valid for measuring each construct. Future studies need to report testing construct validity to provide evidence of whether the items are valid for measuring what they intended to measure. Reporting reliability alone is not sufficient since the evidence of construct validity needs to be reported i.e. American Educational Research Association (AERA) and American Psychological Association (APA) and National Council on Measurement in Education (NCME) (2014).

Conclusion

The purpose of this study was to investigate the applicability of the hate-following motive among Instagram users, independent of hate, on the temporal unfolding of different envy components and schadenfreude. We found that the link between pain of envy and schadenfreude was mediated by malicious envy, but not by benign envy. Further, the hate-following motive moderated the indirect effect of pain on schadenfreude, specifically from malicious envy to schadenfreude, and from benign envy to schadenfreude. The role of the hate-following motive, however, was not as straightforward as hatred towards the target, particularly with regard to the experience of benign envy.

Recommendation

The current study used a social comparison perspective to account for the association between envy and schadenfreude, thereby capturing rivalry schadenfreude. The findings from this study contribute to providing support for the validity of the contemporary approach of envy, by showing that consideration of the hate-following motive on social media could strengthen the predictive role of diverse envy components on schadenfreude. Future research could investigate the multifaceted nature of schadenfreude (Wang et al., 2019) as well as a model of schadenfreude that distinguishes different types of emotion (Cecconi et al., 2020). Future studies could also examine other socially improper emotions such as *gluckschmerz* or pain at another's good fortune (Smith & van Dijk, 2018). Given the

correlational nature of our study, experimental inquiry is indeed crucial to test the model on a causal level.

Declaration

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Authors' Contributions

CY and KVV designed the studies. IA and AK created the stimulus materials. ZH and KRF collected the data and conducted the substantive statistical analyses. CY wrote the original draft, and all authors read and approved the final version of the manuscript.

Competing Interest

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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