

ORIGINAL ARTICLE

“I have problems and I have fun”: Funniness ratings of memes about psychological problems reflect how people relate them to themselves and correlate with rumination, reflection, self-liking, and self-competence

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BACKGROUND

Some internet memes relate to specific psychological problems, such as pessimism, anxiety, procrastination, depression, masking feelings, social isolation, and coping with problems. We compared participants' funniness ratings and perceived self-relatedness of these memes, moderated by humor styles. Moreover, we investigated the relationships between ratings of the funniness and relatedness of memes and cognitive processes of rumination and reflection and participants' self-liking and self-competence, controlling for humor styles.

PARTICIPANTS AND PROCEDURE

A sample of 225 Polish participants (58 men and 167 women) aged 20 to 35 ($M = 23.33$, $SD = 2.90$) consented to participate in an anonymous online study. Participants watched internet memes about psychological problems and rated their funniness and relevance to their situation. Then, participants provided information about their rumination, reflection, self-liking, self-competence, and humor styles.

RESULTS

Participants found memes about depression the funniest, and they found procrastination memes the most relatable

to their situation. Rumination correlated more with relating memes about psychological problems to one's situation, and reflection correlated more with ratings of the funniness of these memes. Self-liking and self-competence correlated negatively with ratings of the funniness and relatedness of memes about psychological problems. Affiliative humor predicted relatedness of psychological problems memes negatively, and aggressive and self-defeating humor predicted such relatedness positively.

CONCLUSIONS

Our study is the first to examine perceptions of internet memes about a broad range of psychological problems. Our results show the interplay between psychological variables and the reception of humorous messages about serious contemporary issues.

KEY WORDS

humor styles; internet memes; self-liking; self-competence; reflection and rumination processes

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BACKGROUND

Internet memes are cultural units, typically jokes, which gain influence through online transmission (Davison, 2012). As digital, shareable cultural templates, memes often combine text, image, video, audio, or gesture to convey social meaning (Miltner, 2017). People create and distribute memes for entertainment, as well as to comment on and criticize current events and everyday life problems (Milner, 2016); therefore, memes are a highly inclusive form of participation in digital culture.

Humor benefits health (Gelkopf, 2011), and memes may help people deal with their psychological problems by combining serious issues with humor. During the COVID-19 pandemic, people who viewed memes with COVID-19-related captions reported lower COVID-19-related stress than those who viewed memes with non-COVID-19 captions (Myrick et al., 2022). Among the memes on serious topics, a noticeable group consists of memes related to symptoms of specific psychological problems (e.g., anxiety, depression, addiction, borderline personality, and suicidal ideation; Akram & Drabble, 2022). However, research has primarily focused on depression-related memes, with limited investigation into memes addressing other mental health problems.

People rate funniness of memes depending on how much they relate to their situation. Individuals with symptoms of depression and higher ability to deploy adaptive emotion regulation strategies perceive depressive memes as more humorous and likely to improve the mood of the depressed person (Akram et al., 2020). Moreover, perception of memes about psychological problems may also depend on humor styles (e.g., affiliative, self-enhancing, aggressive, and self-defeating; Martin et al., 2003). Memes about depression turned out to be more attractive to people with symptoms of depression who used more adaptive humor (e.g., self-enhancing) and less maladaptive humor (e.g., self-defeating; Gardner et al., 2021).

Internet memes can help people name their psychological problems, feel a sense of community and social support, and cope with the “tyranny of happiness” that exists in popular media (Scherz, 2022). Internet memes about depression offer a humorous perspective on negative emotions and can enhance perceived social support by relating to others facing similar problems (Occa et al., 2025). However, exposure to depression memes may result in greater depressive mood and lowered quality of life among people with emotion dysregulation, difficulties in goal-directed behaviors during emotional distress, and impulse control difficulties (Akil et al., 2022).

Self-esteem may play a crucial role in the relationship between humor and mental health. Research indicates positive associations between a sense of

humor and self-esteem (Choi et al., 2012), well-being, and mental health (Leist & Müller, 2013; Yue et al., 2010). However, self-enhancing humor promotes self-esteem and well-being, in contrast to aggressive and self-defeating humor styles (Leist & Müller, 2013). The adaptive humor styles (e.g., affiliative and self-enhancing) predict self-esteem and subjective happiness and mediate the relationship between self-esteem and subjective happiness (Yue et al., 2014); on the other hand, self-esteem correlates negatively with aggressive and self-defeating humor styles (Özyeşil, 2012). Moreover, the adaptive components of a sense of humor are associated with lower depression and anxiety (Kuiper et al., 2004). However, self-deprecating humor in memes can promote a sense of collective identity and help people cope with misfortunes (Ask & Abidin, 2018).

CURRENT STUDY

This study investigated social attitudes toward humorously presented serious psychological problems. We sought to examine the extent to which the reception of memes about psychological problems is associated with a sense of their relevance to one’s own situation, information-processing styles (e.g., rumination and reflection), and self-concepts (e.g., self-liking and self-competence). This knowledge may help us understand the function of internet users’ use of humor about psychological problems, for example, in the context of their own struggles with such problems. In practice, this knowledge can help identify psychological crises based on behavioral indicators on the internet.

Despite the wide range of topics of memes about psychological problems (Akram & Drabble, 2022), research to date has focused on memes related to depression (Akil et al., 2022; Gardner et al., 2021). Therefore, the present study aimed to examine people’s opinions about memes related to a broader scope of psychological problems. We focused on ratings of memes’ funniness and perceptions of memes’ relevance to one’s life situation. Moreover, we aimed to examine the relationships between ratings of memes and cognitive processes of rumination and reflection, and aspects related to self-esteem: self-liking and self-competence in the context of humor styles.

Our first goal was to compare funniness ratings and relatedness ratings of memes about such psychological problems as pessimism, anxiety, procrastination, depression, masking feelings, social isolation, and coping with problems. This goal was exploratory; therefore, we did not hypothesize about its results. On the other hand, we decided to examine whether humor styles moderate the funniness and relatedness ratings of these memes. Our second

goal was to assess the correlation between people’s ratings of funniness of memes related to psychological problems and perceived relatedness of these memes to their situations. Research conducted so far has shown that people with symptoms of depression rate memes about depression as funnier (Arkam et al., 2020; Gardner et al., 2021). Therefore, we expected positive correlations between funniness and relatedness of memes regarding pessimism, anxiety, procrastination, depression, masking feelings, social isolation, and coping with problems (Hypothesis 1; H1).

The pervasive presence of internet memes and the possibility of encountering them unintentionally can initiate cognitive processing of their content. However, people differ in cognitive mechanisms underlying the processing of information in the context of the self. Rumination involves excessively returning to negative past events, losses, and injustices, focusing on negative aspects of oneself and one’s life, and is associated with depression, anxiety, and anger (Trapnell & Campbell, 1999). On the other hand, reflection involves curiosity and self-examination to gain self-discovery and knowledge about oneself. Therefore, our third goal was to examine the relationship between rumination and reflection and ratings of internet memes about psychological problems. Rumination involves persistent processing of negative information; therefore, we hypothesized positive correlations between rumination and relatedness ratings. On the other hand, reflection involves a curious and engaged analysis of incoming information; therefore, we hypothesized positive correlations between reflection and funniness ratings (H2).

Our next hypotheses concerned the relationships between ratings of memes and self-esteem. Based on previous research indicating the relationships of self-esteem and humor styles (Choi et al., 2012; Gardner et al., 2021; Yue et al., 2014), we hypothesized that self-liking would be associated with higher ratings of funniness of memes (H3). High self-esteem and self-competence may also correlate with the perceived funniness of memes because of their protective effect against health anxiety (Bajcar & Babiak, 2021). Thus, we hypothesized positive correlations between self-competence and ratings of meme funniness (H4).

Research has shown gender differences in self-esteem (Bleidorn et al., 2016), the frequency of various mental health problems (Seedat et al., 2009), stereotypes regarding mental health, willingness to seek help (Wendt & Shafer, 2016), and sense of humor (Salavera et al., 2020). Therefore, we hypothesized that relationships between funniness and relatedness ratings and rumination, reflection, self-liking, and self-competence would differ among men and women (H5).

PARTICIPANTS AND PROCEDURE

PROCEDURE

We invited participants to take our survey via social media. We informed them about the nature of the study and asked for their consent to participate. The information provided to participants indicated that the study contained content related to suicidal ideation and a request to carefully consider their decision to participate. We also indicated that participants would be provided with information on what to do if they experienced any unpleasant experiences during the study. If participants consented via a tick-box, they watched internet memes about psychological problems and rated their funniness and relevance to their situation. Then, participants provided information about their rumination, reflection, self-liking, self-competence, and humor styles. Upon completion, participants were thanked and debriefed.

PARTICIPANTS

A sample of 225 Polish participants (58 men and 167 women) aged 20 to 35 ($M = 23.33$, $SD = 2.90$) consented to participate in an anonymous online study via the Lime Survey platform. Sensitivity analysis indicated that the sample size was large enough to detect small correlations ($|r| = .13$) and small effect sizes in 2×7 mixed model ANOVA (f_s between 0.07 and 0.09) with appropriate power ($1 - \beta = .80$) given α equal to .05 (Faul et al., 2007). The study was approved by the Ethics Committee of the University of Silesia. Among the participants, 39 (17.33%) reported being under the care of a psychologist, psychiatrist, or psychotherapist at the time of the study. One hundred thirty-five respondents (60.00%) reported having secondary education, 89 (39.60%) reported having academic education, and one person (0.40%) reported having vocational education. Surveyed men and women did not differ in their frequency of being under the care of a psychologist, psychiatrist, or psychotherapist ($\chi^2(1) = 2.66$; $p = .103$) or in their education level ($\chi^2(1) = 2.66$; $p = .549$).

MEASURES

We measured participants’ ratings of funniness and relatedness of memes about psychological problems with our own questionnaire. We selected memes illustrating seven categories of psychological problems (6 memes for each): pessimism, procrastination, coping with problems, social isolation, masking feelings, anxiety, and depression (for descriptions of the content of these memes and sample memes, see Supplementary materials). The memes were selected by one

of the authors (N. L.) from among those available on social media (i.e., Facebook, Instagram) and popular Polish humor websites (i.e., kwejk.pl, blasty.pl). These memes were then assigned to specific categories by two authors (N. L. and L. J.). Participants viewed each meme separately and responded to the extent to which they found it funny and how much the situation depicted in the meme applied to them (from 1 – *definitely not* to 6 – *definitely yes*). We averaged responses to obtain scores for funniness and relevance of memes related to each psychological problem. Funniness scales had satisfactory reliability [McDonald's ω s from .77 (Pessimism and Depression) to .87 (Procrastination)], as did relatedness scales [McDonald's ω s from .75 (Coping with problems) to .86 (Anxiety)].

Rumination-Reflection Questionnaire. We used items from the Polish translation (Słowińska et al., 2014) of the Rumination-Reflection Questionnaire (Trapnell & Campbell, 1999; for sample items of used scales, see Supplementary materials) to measure rumination and reflection. Both rumination and reflection scales had satisfactory reliability (ω s = .86 and .84, respectively). Participants answered on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). We averaged their answers to obtain general scores.

Self-liking/Self-competence Scale. To measure participants' self-esteem, we used the Polish version (Szpitalak & Polczyk, 2015) of the Self-liking/Self-competence Scale – Revised Version (Tafarodi & Swann, 1995). This questionnaire consists of two scales, each with 8 items: the self-competence scale (ω = .89) and the self-liking scale (ω = .89). Participants answered on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). We averaged their answers to obtain general scores.

Humor Styles Questionnaire. We measured humor styles using the Polish translation (Hornowska & Charytonik, 2011) of the Humor Styles Questionnaire (Martin et al., 2003). Participants were asked how much they agreed (1 – *strongly disagree*; 7 – *strongly agree*) with 32 items corresponding to affiliative humor (ω = .71), self-enhancing humor (ω = .81), aggressive humor (ω = .80), and self-defeating humor (ω = .80). We averaged their answers to obtain general scores.

STATISTICAL ANALYSIS

To compare the funniness and relatedness ratings of memes about psychological problems, we used a mixed model ANOVA analysis with linear moderators (humor styles). To examine the relationships between funniness and relatedness ratings with rumination, reflection, self-liking, and self-competence, we conducted a correlation analysis controlling for humor styles. Most of the calculations were performed using *JASP* (version 0.95.1.0), and Fisher's z

values were calculated using the online *Quantpsy* tool (<https://quantpsy.org/corrttest/corrttest.htm>).

RESULTS

A table containing descriptive statistics of measured variables in the overall sample and in men and women is presented in Supplementary materials (Table S1). We begin here with funniness ratings, taking into account possible effects of humor styles. A 2 (sex) \times 7 (psychological problem) mixed model ANOVA with Greenhouse-Geisser correction (the assumption of sphericity was violated: Mauchly's $W = 0.496$; approximate $\chi^2(20) = 151.90$; $p < .001$) revealed a main effect of sex ($F(1, 223) = 22.11$, $p < .001$, $\eta_p^2 = .09$), a main effect of psychological problem ($F(4.65, 1017.62) = 2.52$, $p = .032$, $\eta_p^2 = .01$) and an interaction of sex and psychological problem ($F(4.65, 1017.62) = 4.30$, $p < .001$, $\eta_p^2 = .02$). Post-hoc tests with Bonferroni-Holm correction revealed that women rated funniness of memes higher than men did ($t(219) = 4.60$, $p < .001$, Cohen's $d = 0.61$). Participants rated memes about depression as funnier than memes about other psychological problems except pessimism ($|ts|(219) \geq 3.00$; $ps \leq .034$; $|ds| \geq 0.23$), and memes about pessimism, anxiety, procrastination, social isolation, and coping with problems were rated as funnier than memes about masking feelings ($|ts|(219) \geq 7.33$; $ps \leq .001$; $|ds| \geq 0.58$). Women rated funniness of memes about anxiety, procrastination, masking feelings, social isolation, and coping with problems higher than men did ($|ts|(219) \geq 3.61$; $ps \leq .016$; $|ds| \geq 0.56$). Men rated memes about depression as funnier than memes about other psychological problems ($|ts|(219) \geq 3.62$; $ps \leq .016$; $|ds| \geq 0.49$). Moreover, men rated memes about pessimism, anxiety, social isolation, and coping with problems as funnier than memes about masking feelings ($|ts|(219) \geq 3.29$; $ps = .045$; $|ds| \geq 0.46$). Women rated memes about procrastination, depression, and coping with problems as funnier than memes about pessimism, anxiety, and masking feelings ($|ts|(219) \geq 3.75$; $ps \leq .010$; $|ds| \geq 0.30$). Moreover, women rated memes about social isolation as funnier than memes about pessimism and masking feelings ($|ts|(219) \geq 3.02$; $ps \leq .008$; $|ds| \geq 0.26$) and they rated memes about pessimism and anxiety as funnier than memes about masking feelings ($|ts|(219) \geq 5.23$; $ps \leq .001$; $|ds| \geq 0.35$). We also found interactions of psychological problems and affiliative humor ($F(4.65, 1017.62) = 2.79$, $p = .029$, $\eta_p^2 = .01$), self-enhancing humor ($F(4.65, 1017.62) = 3.29$, $p = .007$, $\eta_p^2 = .02$), and self-defeating humor ($F(4.65, 1017.62) = 2.97$, $p = .014$, $\eta_p^2 = .01$). However, the regression analyses showed that self-enhancing humor was a predictor of ratings of jokes about procrastination ($\beta = .14$; $p = .035$), and self-defeating humor was a predictor of ratings of jokes about anxiety ($\beta = .14$; $p = .042$) and masking feelings ($\beta = .24$; $p < .001$).

Table 1

Correlations between participants' funniness and relatedness ratings and their rumination, reflection, self-liking, and self-esteem levels, controlling for humor styles

	Relatedness	Rumination	Reflection	Self-liking	Self-competence
Funniness of memes about					
Pessimism					
Overall	.65***	.16*	.18**	-.24***	-.14*
Men	.43**	.11	.23	-.11	-.04
Women	.68***	.19*	.19*	-.25**	-.17*
Fisher's z	-2.37*	-0.53	0.27	0.93	0.85
Anxiety					
Overall	.59***	.10	.22**	-.13*	-.13
Men	.51***	.05	.00	.03	.22
Women	.58***	.12	.30***	-.16*	-.21**
Fisher's z	-0.64	-0.45	-1.97*	1.16	2.80**
Procrastination					
Overall	.54***	.10	.00	-.03	-.03
Men	.50***	.08	.06	-.07	-.07
Women	.52***	.10	.01	.01	.02
Fisher's z	-0.17	-0.13	0.39	-0.51	-0.58
Depression					
Overall	.61***	.18**	.23***	-.22**	-.13
Men	.63***	.19	.28*	-.06	-.06
Women	.60***	.19*	.23**	-.25**	-.14
Fisher's z	0.31	0.00	0.34	1.25	0.52
Masking					
Overall	.68***	.13*	.17*	-.22**	-.13
Men	.59***	.05	.01	-.06	.03
Women	.69***	.17*	.23**	-.25**	-.15
Fisher's z	-1.09	-0.78	-1.44	1.25	1.16
Social isolation					
Overall	.53***	.17*	.12	-.12	-.02
Men	.47***	.14	.15	-.06	-.08
Women	.52***	.17*	.14	-.11	.02
Fisher's z	-0.43	-.20	0.07	0.32	-0.64
Coping					
Overall	.70***	.12	.08	-.11	-.03
Men	.71***	.25	.19	-.17	-.08
Women	.66***	.09	.08	-.07	.01
Fisher's z	0.61	1.06	0.72	-0.65	-0.71

Table 1 continues

Table 1

Table 1 continued

	Relatedness	Rumination	Reflection	Self-liking	Self-competence
Relatedness of memes about					
Pessimism					
Overall		.31***	.24***	-.46***	-.36***
Men		.34*	.42**	-.42**	-.40**
Women		.32***	.21**	-.45***	-.36**
Fisher's z		.014	1.51	0.24	-0.30
Anxiety					
Overall		.26***	.23***	-.26***	-.21**
Men		.15	.02	-.07	-.01
Women		.31***	.32***	-.31***	-.27
Fisher's z		-1.09	-2.00*	1.61	1.71
Procrastination					
Overall		.20**	.03	-.15*	-.25***
Men		.28*	.06	-.32*	-.48***
Women		.18*	.04	-.09	-.17*
Fisher's z		0.68	0.13	-1.55	-2.26*
Depression					
Overall		.32***	.31***	-.43***	-.31***
Men		.38**	.43**	-.37**	-.31*
Women		.32***	.29***	-.44***	-.31***
Fisher's z		0.44	1.04	0.54	0.00
Masking					
Overall		.27***	.19**	-.36***	-.29***
Men		.28*	.22	-.33*	-.22
Women		.29***	.21**	-.37***	-.30***
Fisher's z		-0.07	0.07	0.29	0.55
Social isolation					
Overall		.21**	.12	-.23***	-.16*
Men		.22	.25	-.11	-.25
Women		.22**	.10	-.25**	-.13
Fisher's z		0.00	1.00	0.93	-0.80
Coping					
Overall		.20**	.05	-.23***	-.20**
Men		.19	.10	-.25	-.28*
Women		.22**	.06	-.21**	-.16*
Fisher's z		-0.20	0.26	-0.27	-0.88

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Fisher's zs were calculated using the Quantpsy internet statistical calculator available on the website <https://quantpsy.org/calc.htm> (access: October 8, 2025). The 95% confidence intervals of all correlation coefficients at $p < .05$ do not intersect 0. Due to multiple comparisons, correlations with p -value $< .01$ were considered significant.

Then, we used the same analytical plan to examine relatedness of memes. A 2 (sex) × 7 (psychological problem) mixed model ANOVA with Greenhouse-Geisser correction (the assumption of sphericity was violated: Mauchly's $W = 0.378$; approximate $\chi^2(20) = 210.90$; $p < .001$) revealed a main effect of sex ($F(1, 219) = 18.34$, $p < .001$, $\eta_p^2 = .08$) and a main effect of psychological problem ($F(4.45, 974.86) = 4.35$, $p < .001$, $\eta_p^2 = .02$). Post-hoc tests with Bonferroni-Holm correction revealed that women, compared to men, perceived memes about psychological problems as more related to them ($t(219) = 4.28$, $p < .001$, $d = 0.52$). Participants rated memes about procrastination as more related to them than memes about other psychological problems ($|ts|(219) \geq 3.61$; $ps \leq .004$; $|ds| \geq 0.32$), and they rated memes about social isolation more related to them than memes about pessimism, anxiety, depression, masking feelings, and coping with problems ($|ts|(219) \geq 2.85$; $ps \leq .039$; $|ds| \geq 0.22$). Moreover, participants rated memes about depression, masking feelings, and coping with problems as more related to them than memes about anxiety ($|ts|(219) \geq 3.20$; $ps \leq .014$; $|ds| \geq 0.26$).

We also found main effects of affiliative humor ($F(1, 219) = 10.77$, $p < .001$, $\eta_p^2 = .05$), aggressive humor ($F(1, 219) = 4.60$, $p = .033$, $\eta_p^2 = .02$), and self-defeating humor ($F(1, 219) = 35.34$, $p < .001$, $\eta_p^2 = .14$). However, regression analyses revealed that higher relatedness of jokes was predicted by lower affiliative humor ($\beta = -.21$; $p = .002$) and higher self-defeating humor ($\beta = .36$; $p < .001$). There were also interactions of psychological problem and affiliative humor ($F(4.45, 974.86) = 7.71$, $p < .001$, $\eta_p^2 = .03$), aggressive humor ($F(4.45, 974.86) = 2.62$, $p = .028$, $\eta_p^2 = .01$), and self-defeating humor ($F(4.45, 974.86) = 3.14$, $p < .011$, $\eta_p^2 = .01$). Affiliative humor negatively predicted relatedness of jokes about pessimism ($\beta = -.24$, $p < .001$), anxiety ($\beta = -.18$, $p = .006$), masking feelings ($\beta = -.20$, $p = .003$), and social isolation ($\beta = -.34$, $p < .001$). Aggressive humor positively predicted relatedness of jokes about pessimism ($\beta = .19$, $p = .005$), depression ($\beta = .15$, $p = .028$), and masking feelings ($\beta = .16$, $p = .018$). Self-defeating humor positively predicted relatedness of jokes about pessimism ($\beta = .31$, $p < .001$), anxiety ($\beta = .21$, $p = .002$), procrastination ($\beta = .19$, $p = .005$), depression ($\beta = .35$, $p < .001$), masking feelings ($\beta = .41$, $p < .001$), social isolation ($\beta = .26$, $p < .001$), and coping with problems ($\beta = .28$, $p < .001$).

Subsequently, we correlated funniness ratings with relatedness ratings, rumination, reflection, self-liking, and self-competence, controlling for humor styles (Table 1). Our analysis was exploratory; however, because of multiple comparisons, we raised the threshold for statistical significance to $p < .01$ when interpreting correlation coefficients. In each psychological problem, we observed correlations

between funniness ratings and relatedness ratings. Moreover, participants higher on rumination rated memes about depression as funnier. Participants higher on reflection rated funnier memes about pessimism, anxiety, and depression. On the other hand, participants higher on self-liking gave lower funniness ratings to memes about pessimism, anxiety, depression, and masking feelings. Men and women differed in correlations between ratings of memes about self-competence.

We also correlated participants' ratings of relatedness of memes with their rumination, reflection, self-liking, and self-competence. Participants higher on rumination perceived all types of memes as more related to them, and participants higher on reflection perceived memes about pessimism, anxiety, depression, and masking feelings as more related to them. Moreover, participants with lower self-liking and lower self-competence perceived almost all types of memes as more related to them.

DISCUSSION

Our exploratory goal was to examine ratings of funniness and relatedness for memes about various psychological problems. The results showed that people rated memes about depression as the funniest and memes about masking feelings as the least funny. This result may be due to the high prevalence of depression memes in popular culture (Akil et al., 2022; Akram et al., 2020; Gardner et al., 2021), which may translate into greater comprehension of their content. Compared to men, women perceived memes about psychological problems as funnier and more related to their situation. Higher funniness ratings given by women may result from less suppression and greater social permission and acceptance of mental problems among women than men. These results may be due to gender stereotypes and social lack of acceptance for men who have nervous breakdowns and other psychological problems (Oliffe et al., 2016). However, participants rated procrastination memes as most relevant to their own situation. These results align with studies showing that procrastination is perceived as a rather common behavioral tendency (Yan & Zhang, 2022). Procrastination may occur in many areas of life (e.g., health, education, work, and social relationships); therefore, people may have many opportunities to recognize their problems with procrastination more often than other types of psychological problems.

Our results indicate that ratings of the funniness and relatedness of jokes about psychological problems are related to humor styles. Self-enhancing humor style was associated with perceiving jokes about procrastination as funnier. This result suggests that joking about procrastination may help in coping

with problematic time management and its consequences. Affiliative humor was associated with less self-relevance of jokes about psychological problems; however, using aggressive and self-defeating humor was associated with a greater tendency to relate such jokes to one's own situation. These results indicate that prosocial humor may facilitate access to resources that reduce the risk of psychological problems, while antisocial and disincentive humor may hinder access to such resources.

In line with H1, the more participants found the memes about each psychological problem relevant to their own situation, the higher they rated the memes' funniness. Higher funniness ratings in the self-referential joke situation may stem from the coping function of humor, which allows the seriousness of a problem to be reduced through its humorous presentation (Gelkopf, 2011; Marziali et al., 2008). On the other hand, higher ratings of jokes about problems related to oneself may result from a better comprehension of these jokes. Personal experiences with psychological problems may give people a sense of proficiency in understanding the contexts that appear in jokes about these problems (Yus, 2013). Moreover, the self-reference effect is stronger in collectivist cultures (Ng & Lai, 2009), and Poland scores slightly above the midpoint on the individualism scale (Hofstede Insights, 2024). In more individualistic cultures, the observed self-reference may be weaker. On the other hand, in individualistic cultures, mental health difficulties are more frequent (Bhullar et al., 2012); therefore, recipients may perceive such memes as more self-relevant. Thus, cross-cultural replications are necessary to better understand how cultural orientation modulates the perceived self-relevance of mental health content.

Rumination correlated with all relatedness ratings and reflection correlated with the majority of funniness ratings, in line with H2. People who ruminate often reflect on negative past events and focus on negative aspects of themselves (Trapnell & Campbell, 1999). Memes about psychological problems may act as triggers for negative thoughts about their psychological functioning. Reflection is associated with curiosity and the ability to view things from multiple perspectives (Trapnell & Campbell, 1999). People high on reflection may find memes about psychological issues more amusing because they can interpret information in a multidimensional way, finding humor even in generally serious matters. We also observed correlations of rumination with depression memes' funniness ratings and correlations of reflection with some relatedness ratings. The former suggest that more ruminative people may react to certain jokes more intensely, while the latter may indicate a broader self-perception among more reflective people, also taking into account aspects related to psychological problems.

Contrary to H3 and H4, self-liking correlated with lower ratings of funniness of some memes, whereas self-competence was not associated with funniness ratings. Moreover, people higher on self-liking and self-competence rated memes about psychological problems as less related to their own situation. Previous studies indicate positive associations between a sense of humor and self-esteem (Choi et al., 2012). On the other hand, people high in self-liking and self-competence perceived memes about psychological problems as less relevant to their situation. This might reduce their comprehension of these memes (Flamson & Barrett, 2008; Yus, 2013) and might translate into their lower perceived funniness. Higher self-esteem is associated with greater knowledge and willingness to engage in health-promoting behaviors (Liu et al., 2022). Therefore, the lower relevance of memes about psychological problems among people high on self-liking and self-competence may be a result of their higher engagement in behaviors that enhance mental health.

Contrary to H5, we detected very few differences between men and women in correlations of funniness and relatedness ratings and rumination, reflection, self-liking, and self-competence. The lack of such differences suggests that the functions of rumination, reflection, self-liking, and self-competence in ratings of memes about psychological problems in men and women are similar. On the other hand, our sample included fewer men than women, which could have affected the results of some gender comparisons.

CONCLUSIONS

Our study has several limitations, described in Supplementary materials. However, to our knowledge, our study is the first to examine perceptions of internet memes about a broad range of psychological problems. We found that people consider memes about depression the funniest; on the other hand, people find procrastination memes the most related to their situation. We also found that rumination correlates more with relating memes about psychological problems to one's situation, and reflection correlates more with ratings of funniness of memes. Moreover, we found negative associations between self-liking and self-competence and ratings of funniness and relatedness of memes about psychological problems. Our results also showed that affiliative humor style is associated with lower self-reference of memes about psychological problems, while aggressive and more self-defeating humor styles are associated with higher self-reference of such memes.

Supplementary materials are available on the journal's website.

DISCLOSURES

This research received no external funding. The study was approved by the Ethics Committee of the University of Silesia (Approval No. KEUS 148/07.2021). The authors declare no conflict of interest.

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