Received: 3 May 2023 | Revised: 26 March 2024 | Accepted: 11 April 2024

DOI: 10.1002/acp.4198

RESEARCH ARTICLE

WILEY

Believing in conspiracy theories: The role of emotional granularity and maladaptive emotion regulation strategies

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Abstract

The COVID-19 pandemic has accelerated the spread of conspiracy theories. Previous research has found that individuals who struggle with emotion regulation are more prone to believing in conspiracy theories. Emotional granularity, or the ability to differentiate between nuanced emotional states, is a key component of effective emotion regulation, yet its relationship with conspiracy beliefs has not been explored thoroughly. Thus, we conducted an experience-sampling study (165 participants, mean age = 26.32 years) including measures of emotion regulation and differentiation. The findings revealed that individuals who endorse conspiracy theories engage in repetitive thinking about the causes and consequences of events and exhibit a reduced ability to distinguish between negative emotions. This effect, however, was observed only in the performance-based measure of emotion differentiation, not in the self-report measures. This suggests that enhancing emotional granularity may help individuals in regulating their emotions more effectively, thereby reducing their vulnerability to adopt conspiracy beliefs.

KEYWORDS
conspiracy theories, emotional granularity, emotion regulation

1 | INTRODUCTION

The COVID-19 pandemic has accelerated the spread of *conspiracy theories* on social media, particularly regarding the virus's origin, spread, and treatment (Dow et al., 2021). Conspiracy theories are not a new phenomenon; they have been present throughout history. According to Uscinski et al. (2014), the first wave of conspiracy theories emerged shortly before the year 1900. A conspiracy theory is defined as the belief that two or more actors have coordinated in secret to achieve a particular outcome of public interest but not public knowledge (Douglas & Sutton, 2023). While some conspiracy theories, like the notion that Elvis is still alive, may be harmless, others can be dangerous, leading to prejudice, violence and poor health decisions (Douglas & Sutton, 2023).

According to Douglas et al. (2017), there are three motives that underlie individuals' belief in conspiracy theories: epistemic, social, and existential motives. Epistemic motives are driven by a desire for knowledge and certainty, while social motives seek to maintain a positive image of the in-group by deprecating the out-group. Finally, existential motives are associated with a need for safety and control (Douglas & Sutton, 2023). In line, previous studies have identified that individuals with a high conspiracist ideation tend to have a greater need for control (van Prooijen & Acker, 2015) and moreover show heightened state and trait anxiety (Grzesiak-Feldman, 2013), as well as feelings of powerlessness (i.e., the stable perception of being unable to influence an outcome through one's action; Stern, 2000; Jolley & Douglas, 2014). Taken together, these associations suggest

that conspiracy beliefs are intertwined with certain, mostly negative emotional experiences and distrustful representation of other people and groups.

When experiencing an existential threat which raises feelings such as anxiety or uncertainty, individuals who are less proficient in *emotion regulation*, tend to exhibit attentional dyscontrol, and are even more likely to endorse conspiracy theories in such situations (Bardeen et al., 2017; van Prooijen, 2020). Building upon this understanding, recent longitudinal studies conducted by Liekefett et al. (2023) have underscored the non-beneficial outcomes associated with conspiracy beliefs, noting their potential to exacerbate negative emotional experiences. Notably, these studies also identified a self-reinforcing cycle, wherein initial conspiracy beliefs predicted subsequent increases in such beliefs. In line with these findings, two recent studies have established a correlation between conspiracist ideation and difficulties in emotion regulation, suggesting that the belief in conspiracies may be a maladaptive strategy for managing negative emotions. In contrast, rather than offering a genuine solution, they provide individuals with a false sense of structure and predictability (Molenda et al., 2023; Scandurra et al., 2022). As a result, it is unsurprising that conspiracy theories emerge mainly following significant events van Prooijen & Douglas, 2017) like the COVID-19 pandemic or the assassination of John F. Kennedy. However, a fundamental component of emotion regulation is to recognize emotions accurately.

Emotional granularity, or emotion differentiation, refers to an individual's ability to make nuanced and fine-grained distinctions between similar emotional states (Barrett et al., 2001). Emotional granularity, has been shown to play a crucial role in the regulation process (Kalokerinos et al., 2019). It serves a fundamental role as individuals need to accurately identify the specific emotion, they are experiencing in order to effectively select an appropriate regulation strategy. Consequently, a lower level of differentiation impedes the successful regulation of emotions (Kalokerinos et al., 2019). Individuals with higher emotional granularity tend to use more differentiated and specific words to describe their emotional experience, such as "excited," "jealous," or "miserable," whereas those with low emotional granularity tend to use more general terms, such as "good" or "bad." Identifying emotions accurately is an essential first step in regulating emotions effectively (Gross, 2015). Using precise and distinct words to describe emotions, delivers important information about an emotion-eliciting event. Consequently, individuals who use more fine-grained words to express their emotional experience can manage intense (negative) emotions more effectively (Kashdan et al., 2015). This highlights the importance of accurately recognizing emotions, a skill that may be associated to an individual's susceptibility to cognitive patterns.

Individuals who endorse conspiracy theories often exhibit a cognitive style characterized by black-and-white thinking, which involves viewing the world in stark, polarized terms. This cognitive pattern tends to oversimplify complex issues, events, and interpersonal dynamics into clear-cut categories of right versus wrong or good versus evil (Iannello et al., 2022). As a result, individuals prone to black-and-white thinking may struggle to appreciate the nuances and complexities inherent in emotional experiences. Given that belief in conspiracies has been shown to be motivated by negative emotions and associated with emotional dysregulation, it is reasonable to assume that there may be a correlation between an individual's ability to differentiate emotions and their belief in conspiracy theories. This suggests that the rigid cognitive style of black-and-white thinking, may extend to their perception and interpretation of emotions, leading to a more dichotomous view of emotional experiences.

Thus, in the current study, we hypothesized that individuals with lower emotional granularity (i.e., considering emotions as either good or bad) would be more likely to endorse conspiracist ideation. Further, we performed an exploratory analysis pertaining to whether conspiracist ideation is differentially related to performance-based and self-reported measures of emotional granularity. Finally, we aimed to extend the existing literature on dysfunctional emotion regulation and conspiracist ideation by incorporating additional functional emotion regulation strategies.

2 | METHOD

2.1 | Sample

The study investigated 165 participants, consisting of 39 males, 122 females, and four participants who identified as diverse. The sample had a mean age of 26.32 (SD = 11.02) and the vast majority (96%) of participants had at least a high-school diploma or higher. Moreover, the majority of the students were psychology students (80%). There was no monetary compensation for participating in the study, Psychology students were awarded course credit, however. Participants were mainly recruited on the campus and on online forums. The study has been approved by the ethics committee of the University of Graz (GZ.39/74/63 ex 2021/22).

2.2 | Procedure

The study followed a previously published experience sampling procedure (Ottenstein & Lischetzke, 2020), and started with an online survey that assessed participants' sociodemographic (age, sex, and education) and trait measures (see "questionnaires"). Following this, participants were asked to install an in-house developed app on their smartphones to obtain the emotional granularity specificity index. The app displayed two notifications each day for over a week (14 max.). Notifications were randomly displayed between 08:00 am and 10:00 pm with a minimum of at least 5 h between two notifications. Participants, on average, answered 57% of the notifications (SD = 36.15; min = 7.14, max = 100). The study was preregistered on the Open Science Framework (https://osf.io/kxrds).

3 | PERFORMANCE-BASED EMOTIONAL GRANULARITY

The study utilized an experience sampling approach to assess participants' emotional states in the app. Participants were instructed to

describe their current emotional state using at least one affective adjective, as per Ottenstein and Lischetzke's (2020) method. Rather than being provided with a predetermined list of adjectives, participants were asked to enter their own description in a text box. Subsequently, they rated the valence and arousal of their response on a 9-point Likert scale with higher scores indicating higher pleasantness/arousal. To assess the specificity of the adjectives used, two raters (AW, JP) classified each adjective as either specific (e.g., "isolated") or unspecific (e.g., "bad"). Adjectives that did not describe an emotional state (e.g., "drunk", "sick") were excluded. Inter-rater reliability was good, with Cohen's kappa of .65, based on 834 words. In total participants reported an average of 14.43 adjectives (SD = 12.25). Adjectives were further categorized as either positive or negative.

To obtain a performance-based index for emotional granularity, we incorporated the level of agreement among raters. For instance, if both raters agreed that two given adjectives were specific, the participant's granularity was two. If raters disagreed on the specificity of one adjective, the participant's granularity was 1.5. Consequently, if both raters agreed that both given adjectives were unspecific, the participant's granularity was zero. Finally, to obtain an individual performance-based granularity measure, the indices were averaged across all answered notifications. The current study focused solely on negative emotional granularity, as deficits in this area have been shown to have more significant effects on emotion regulation (e.g., Barrett et al., 2001).

3.1 | Questionnaires

Conspiracist ideation was assessed via the generic conspiracist beliefs scale (GCB; Brotherton et al., 2013). The scale consists of 15 items (e.g., "A small, secret group of people is responsible for making all major world decisions, such as going to war"), which are rated on a five-point scale (1 = *definitely not true*, 5 = *definitely true*). McDonald's omega (ω) for the total scale was .91.

To investigate current event conspiracies at the time of the survey rather than generic ones, we developed a 12-item scale focusing on common conspiracies related to Covid and the war in Ukraine. The scale comprised seven items related to Covid (e.g., The coronavirus was developed as a bioweapon) and five items related to the war in Ukraine (e.g., The Russian invasion was preceded by several attacks from Ukraine, which were not reported in the media). Using a slider, participants indicated the likelihood of the statements (0 = *not at all probable*, 100 = *extremely probable*), and we included an attention-check item ('If you are not a robot, move the slider between 70 and 80') to exclude participants who failed to follow instructions. Participants with a significant deviation outside this range were excluded from further analyses. McDonald's ω was .77 for the coronavirus related subscale and .71 for the war of Ukraine related items.

To obtain self-report emotion granularity ratings we used the subscale Differentiation of the Range and Differentiation of Emotional Experience Scale (RDEES; Kang & Shaver, 2004), which consists of seven items (e.g., "Each emotion has a very distinct and unique meaning to me") rated on a 4-point response scale (1 = *strongly disagree*, 4 = *strongly agree*). McDonald's ω was .86.

Heidelberg Form for Emotion Regulation Strategies (HFERST; Izadpanah et al., 2019): The HFERST consists of a total of 28 items and measures functional and dysfunctional emotion regulation strategies on eight different subscales: Rumination, Reappraisal, Acceptance, Problem solving, Expressive suppression, Experience suppression, Avoidance, Social support. An example item for the subscale rumination is "When I have negative feelings, I often brood over the question, why I am feeling this way." Items are rated on a 5-point response scale (1 = *never*, 5 = *always*). McDonald's ω ranged between .77 (Problem solving) and .83 (social support) for the subscales.

Brief Symptom Inventory (BSI-18; Spitzer et al., 2011). In this study, we utilized the Anxiety and Depression subscales of the Brief Symptom Inventory, as previous research highlighted the association between emotional well-being and emotion regulation (Kraiss et al., 2020). Participants were asked to rate the intensity of symptoms they experienced in the past 7 days on a five-point scale ranging from 0 (*not at all*) to 4 (*very strong*). The symptoms included, for example, feeling lonely and restlessness. The internal consistency of the subscales was measured using McDonald's ω: Anxiety: .82; Depression: .83.

The perception of own feelings was assessed via two subscales: emotional self-awareness (ESA) and clarity about own feelings (COF) taken from the German version of the "The perception of one's own and other's feelings" (Lischetzke et al., 2001). Both subscales consist of 6 items (e.g., I think about my feelings(ESA); "I know how I feel" (COF)) which are rated on a 4-point scale (1 = *almost never*, 4 = *almost always*). McDonald's ω was .93 (ESA) and .88 (COF).

Verbal ability was assessed with the German Multiple Choice Vocabulary Test (MWT; Lehrl et al., 1995) to ascertain that the sample possessed at least an average proficiency in vocabulary. This is crucial for accurately assessing emotional granularity, as it necessitates the ability to articulate specific emotional states with words. The test consists of 37 items with increasing difficulty. Participants have to identify the only correct German word from a set of five words. Kuder Richardson 20 was .66.

Building upon prior research highlighting a significant correlation between conspiracist ideation and the endorsement of alternative medicine (Soveri et al., 2021), and given the shared element of profound distrust in official information within both constructs, we utilized the Holistic Complementary and Alternative Medicine Questionnaire (HCAMQ, Hyland et al., 2003). This instrument asks about participants' beliefs regarding the scientific validity of complementary and alternative medicine (CAM; "It is worthwhile trying complementary medicine before going to the doctor") as well as their beliefs pertaining to holistic health (HH; "Positive thinking can help you fight off a minor illness."). The inventory consists of 11 items which are rated on a six-point scale (1 = *strongly disagree*, 6 = *strongly agree*). McDonald's ω for the total scale was .70. Due to the relative low reliability this scale was excluded from further analyses.

3.2 | Data analysis plan

To ensure data quality, we used the 'careless' package in R to identify careless responding, such as straight lining, in the questionnaire data. One participant was excluded due to this issue. Additionally, four participants were excluded as they showed excessive deviations from the attention catching item. After these exclusions, 160 participants remained for further analyses.

Associations between conspiracist ideation and the performance-based emotional granularity were assessed by using a linear mixed model. Due to the relatively high multicollinearity with generic beliefs in conspiracy (GCB) theories and the relatively low reliability of current event conspiracy theories, only GCB was considered. First, a null model was built, with a random intercept for subjects. Next, we added the predictor of interest (GCB) and following control variables (sex, age, anxiety, depression, emotional self-awareness, and clarity of feelings) to the model and fitted random slopes until the optimal model fit was achieved based on Akaikes information criterion and explained variance for random components. The best model resulted in a random intercept for subjects with random slopes for anxiety and emotional self-awareness (i.e., performance-based granularity ~1 + sex + age + anxiety + depression + ESA + COF + GCB +(1 + anxiety + ESA|subject).

For associations between conspiracist ideation and self-reported emotion granularity (i.e., subscale RDEES differentiation) we used a simple linear regression incorporating the same control variables as for the LMM described above.

Finally, associations between different emotion regulation strategies and generic beliefs in conspiracy ideation were investigated with a hierarchical linear model. In model 1, age and gender were entered. In model 2, we entered functional emotion regulation strategies (reappraisal, social support, acceptance, problem solving). In model 3, we entered dysfunctional emotion regulation strategies (rumination, avoidance, expressive and experience suppression).

All analyses were carried out with JAMOVI (v 2.3.21) and the GAMLj package (v 2.6.6).

4 | RESULTS

4.1 | Questionnaires

Results of the questionnaires can be found in Table 1. Information about the intercorrelations between questionnaires can be found in the supplementary material (S1-Table 1).

TABLE 1 Means, standard deviations and confidence intervals (95%) for the obtained questionnaires.

	M (SD)	95% CI [lower–Upper]
Generic conspiracy beliefs	1.96 (0.67)	1.86–2.07
Current event conspiracy beliefs		
COVID	14.26 (12.93)	12.24–16.28
Ukraine	17.44 (15.27)	15.05–19.82
Performance-based EG	1.54 (0.76)	1.41–1.67
Self-reported EG	3.71 (0.78)	3.59–3.83
Emotion regulation		
Rumination	3.87 (0.83)	3.74–4.00
Reappraisal	3.39 (0.80)	3.26–3.51
Acceptance	3.51 (0.90)	3.37–3.65
Problem solving	4.06 (0.61)	3.96–4.15
Emotion suppression	3.19 (0.85)	3.06–3.33
Expressive suppression	2.23 (0.80)	2.11–2.36
Avoidance	3.12 (0.93)	2.98–3.27
Social support	3.58 (1.23)	3.39–3.77
Brief symptom inventory		
Anxiety	0.83 (0.69)	0.72–0.93
Depression	0.77 (0.69)	0.66–0.87
Perception of own feelings		
Emotional self-awareness	3.03 (0.68)	2.93–3.14
Clarity of feelings	3.14 (0.60)	3.05–3.24
Verbal ability	29.27 (3.02)	28.80–29.74

Abbreviations: CI = 95% confidence interval; EG, emotional granularity; M, mean, SD, standard deviation.

4.2 | Performance-based emotional granularity

As a manipulation control, we compared valence and arousal ratings for positive and negative labeled adjectives. Positive emotional adjectives received higher valence ratings ($M = 6.40$, SD = 1.16) than negative adjectives ($M = 4.18$, SD = 1.15; $t_{(107)} = 17.12$, $p < .001$). There was no significant difference ($t_{(107)} = -1.61$, $p = .110$) in arousal ratings between positive ($M = 3.06$, SD = 1.67) and negative ($M = 3.36$, SD = 1.63) adjectives.

The performance-based emotional granularity for negative adjectives was negatively associated with conspiracist ideation. Indicating that for an increase of one in generic conspiracy beliefs the ability to differentiate between negative emotional experiences decreases by 0.19. Furthermore, there was a positive association between depression and negative emotional granularity. All other predictors were not statistically significant (Table 2).

4.3 | Self-reported emotional granularity

The overall model was significant and explained 38% of the variance ($F_{(8,151)} = 12.35$, $p < .001$). Self-reported emotional granularity was positively associated with age ($B = 0.01$, $SE = 0.01$, $CI(95\%) = 0.00–0.02$, $p = .025$), emotional self-awareness ($B = 0.36$, $SE = 0.09$, $CI(95\%) = 0.19–0.53$, $p = < .001$), and clarity of own feelings ($B = 0.60$, $SE = 0.10$, $CI(95\%) = 0.40–0.80$, $p = <.001$) but not with conspiracist ideation ($B = 0.11$, $SE = 0.08$, $CI(95\%) = -0.04$ to 0.26, $p = .152$).

TABLE 2 Results of the linear mixed model for variables predicting performance-based emotional granularity.

			95% confidence interval			
Predictor	**B**	**SE**	**Lower**	**Upper**	***t***	***p***
Intercept	1.72	0.13	1.47	1.98	13.09	<.001
Females–Males	0.05	0.14	−0.21	0.32	0.40	.688
Diverse–Males	0.67	0.40	−0.11	1.45	1.69	.096
Age	−0.01	0.01	−0.02	0.00	−1.79	.079
Anxiety	−0.03	0.09	−0.22	0.15	−0.33	.753
Depression	0.20	0.10	0.01	0.39	2.05	.049
ESA	−0.09	0.11	−0.30	0.13	−0.78	.441
COF	0.15	0.11	−0.07	0.37	1.35	.197
GCB	−0.19	0.09	−0.38	−0.01	−2.04	.044

Note: $R^2 = .07$. reference category = males; *B* = unstandardized regression coefficient.
Abbreviations: COF, clarity of own feelings; ESA, emotional self-awareness; GCB, generic conspiracy beliefs; SE, standard error.

Detailed information about the other (non-significant) variables can be found in the Supplementary Material (S1-Table 2).

4.4 | Emotion regulation

The overall model for the hierarchical regression analysis including all predictors accounted for 16% of the variance ($F_{(11,148)} = 2.62$, $p = .004$). The control variables entered in block 1 accounted for 5% of the variance. While entering functional emotion regulation strategies increased the accounted variance by additional 4%, which was however not statistically significant ($p = .116$). Entering dysfunctional emotion regulation strategies accounted for additional 6% of the variance and was a statistically significant better model than model 2 ($F_{(4,148)} = 2.79$; $p = .028$).

In the final model, only rumination for the emotion regulation subscales ($B = 0.23$, $SE = 0.07$, CI (95%) = 0.09–0.38, $p = .002$) was a statistically significant predictor. More specific, it was revealed that an increase of one in rumination leads to an increase of .23 in the belief in generic conspiracies.

Additionally, participant's sex was a statistically significant for predicting conspiracist ideation. Individuals who described themselves as diverse held lower beliefs in conspiracy theories compared to males ($B = -0.82$, $SE = 0.39$, CI (95%) = −1.59 to −0.05, $p = .036$). However, it must be stressed that the sample size for the diverse group was small ($n = 4$). All other predictors were not statistically significant (all *p*s > .059). More detailed information about the results of the hierarchical regression can be found in the Supplementary Material (S1-Table 3).

5 | DISCUSSION

To the best of our knowledge, this is the first study to investigate the link between emotional granularity and conspiracist ideation. The main finding of the study indicated a negative correlation between belief in conspiracy theories and performance-based emotional granularity. In the current study, no significant correlation was observed between belief in conspiracy theories and the subjective self-reports of emotion differentiation. This finding indicates that individuals who endorse conspiracy theories may possess a reduced ability to distinguish between negative emotions, which only becomes apparent when assessed using a performance measure of emotional granularity. Further, the self-reported ability of these individuals to differentiate emotions may not accurately reflect actual skill in this area. Additionally, our study revealed that the maladaptive emotion regulation strategy of rumination is positively associated with conspiracist ideation.

Our findings suggest that individuals with a reduced ability to differentiate between negative emotions and experience adverse events, may engage in rumination about the causes and outcomes of these events, without finding a clear resolution. Consequently, such individuals may become more susceptible to adopting conspiracy beliefs. In line, conspiracy beliefs can be seen as a less effective way of coping with negative emotional experiences, according to a recent study (Molenda et al., 2023). It has been proposed that endorsing conspiracy beliefs might offer individuals a sense of coherence and meaning, simplifying complex world processes (Wabnegger et al., 2021). This perspective further aligns with the notion that conspiracy theories often emerge as a response to psychological threats, particularly during significant world events (Douglas et al., 2017; Marchlewska et al., 2022; van Prooijen & Douglas, 2017). However, this is interpretation is still somewhat speculative and should be investigated in future studies.

Interestingly, as mentioned above, conspiracist ideation was only negatively associated with performance-based emotional granularity in the current study, but not with the subjective self-report measure. Emotional granularity is considered a skill that varies between individuals, as it reflects the ability to differentiate between complex emotional experiences (Kashdan et al., 2015). Self-report measures, on the other hand, are more likely to reflect a person's beliefs about themselves rather than an accurate representation of their current emotional experiences (Robinson & Clore, 2002). This suggests a discrepancy between self-estimated and actual emotional granularity, which may

also be observed in individuals who endorse conspiracy theories. Moreover, our finding can be interpreted in the context of a previous study which reported on overconfidence as a predictor of conspiracist ideation (Vranic et al., 2022). This suggests that individuals with conspiracist ideation may also overestimate their ability to differentiate emotions, indicating an overly optimistic bias towards their emotional competence.

Additionally, results of the current study revealed a positive association between depression scores and performance-based emotional granularity, which is in contrast to previous research that has pointed to negative associations between these variables (e.g., Erbas et al., 2019; Starr et al., 2017). This reversed pattern observed in our study may be due to the highly positive skewed depression scores in our sample, consisting mostly of healthy students. It is possible that only a higher level of depression would have a negative impact on emotional differentiation.

Furthermore, self-reported emotional granularity was found to be positively associated with emotional self-awareness and clarity relating to one's own feelings. This is consistent with previous research indicating that self-awareness is crucial for effective emotion regulation (e.g., Carver & Scheier, 1981; Silvia, 2002); individuals who are more attentive to their own emotions tend to report a better ability to differentiate between emotions. Additionally, there was a positive correlation found in the current study between age and self-reported emotion differentiation, although this association may be a statistical artifact given the small beta estimate of .01 with a confidence interval including zero.

There are several limitations to this study that should be mentioned. First, the sample size was relatively small and consisted mainly of individuals who scored, on average, low in conspiracist ideation, which may be due to the sample being highly educated (van Prooijen, 2017). Moreover, this was a relatively homogeneous sample consisting mainly of university students, which limits the generalization to a broader population. It is possible that the observed effects would be more pronounced in a sample that is more susceptible to conspiracy theories. Second, the study primarily included females, which limits the generalizability of the findings to other genders.

To reduce belief in conspiracy theories, future studies could consider implementing training to enhance emotion regulation and differentiation. A combination of cognitive control training on emotion regulation, which has been shown to reduce overthinking (Hoorelbeke et al., 2016), as well as reflecting on and diversifying emotional experiences (Cameron et al., 2013), could provide simple tools for assessing and regulating emotional experiences. This, in turn, may lead to decreased endorsement of conspiracy theories in the long run.

In conclusion, our findings demonstrated that conspiracist ideation is associated with a reduced ability to differentiate between negative emotions, as well as a maladaptive emotion regulation strategy (rumination).

ACKNOWLEDGEMENTS

The authors acknowledge the financial support by the University of Graz.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are openly available in OSF at https://osf.io/wsnuf/.

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REFERENCES

Bardeen, J. R., Daniel, T. A., Hinnant, J. B., & Orcutt, H. K. (2017). Emotion dysregulation and threat-related attention bias variability. *Motivation and Emotion*, *41*(3), 402–409. https://doi.org/10.1007/s11031-017-9604-z

Barrett, L. F., Gross, J., Christensen, T. C., & Benvenuto, M. (2001). Knowing what you're feeling and knowing what to do about it: Mapping the relation between emotion differentiation and emotion regulation. *Cognition & Emotion*, *15*(6), 713–724. https://doi.org/10.1080/02699930143000239

Brotherton, R., French, C., & Pickering, A. (2013). Measuring belief in conspiracy theories: The generic conspiracist beliefs scale. *In Frontiers in Psychology*, *4*, 279. https://doi.org/10.3389/fpsyg.2013.00279

Cameron, C. D., Payne, B. K., & Doris, J. M. (2013). Morality in high definition: Emotion differentiation calibrates the influence of incidental disgust on moral judgments. *Journal of Experimental Social Psychology*, *49*, 719–725. https://doi.org/10.1016/j.jesp.2013.02.014

Carver, C. S., & Scheier, M. F. (1981). *Attention and self-regulation*. Springer New York. https://doi.org/10.1007/978-1-4612-5887-2

Douglas, K. M., & Sutton, R. M. (2023). What are conspiracy theories? A definitional approach to their correlates, consequences, and communication (SSRN Scholarly Paper Nr. 4337257). https://doi.org/10.1146/annurev-psych-032420-031329

Douglas, K. M., Sutton, R. M., & Cichocka, A. (2017). The psychology of conspiracy theories. *Current Directions in Psychological Science*, *26*(6), 538–542. https://doi.org/10.1177/0963721417718261

Dow, B. J., Johnson, A. L., Wang, C. S., Whitson, J., & Menon, T. (2021). The COVID-19 pandemic and the search for structure: Social media and conspiracy theories. *Social and Personality Psychology Compass*, *15*(9), e12636. https://doi.org/10.1111/spc3.12636

Erbas, Y., Ceulemans, E., Blanke, E. S., Sels, L., Fischer, A., & Kuppens, P. (2019). Emotion differentiation dissected: Between-category, within-category, and integral emotion differentiation, and their relation to well-being. *Cognition & Emotion*, *33*(2), 258–271. https://doi.org/10.1080/02699931.2018.1465894

Gross, J. J. (2015). Emotion regulation: Current status and future prospects. *Psychological Inquiry*, *26*(1), 1–26. https://doi.org/10.1080/1047840X.2014.940781

Grzesiak-Feldman, M. (2013). The effect of high-anxiety situations on conspiracy thinking. *Current Psychology*, *32*(1), 100–118. https://doi.org/10.1007/s12144-013-9165-6

Hoorelbeke, K., Koster, E. H. W., Demeyer, I., Loeys, T., & Vanderhasselt, M.-A. (2016). Effects of cognitive control training on the dynamics of (mal)adaptive emotion regulation in daily life. *Emotion*, *16*, 945–956. https://doi.org/10.1037/emo0000169

Hyland, M. E., Lewith, G. T., & Westoby, C. (2003). Developing a measure of attitudes: The holistic complementary and alternative medicine questionnaire. *Complementary Therapies in Medicine*, *11*(1), 33–38. https://doi.org/10.1016/s0965-2299(02)00113-9

Iannello, P., Colautti, L., Magenes, S., Antonietti, A., & Cancer, A. (2022). Black-and-white thinking and conspiracy beliefs prevent parents from vaccinating their children against COVID-19. *Applied Cognitive Psychology*, *36*(6), 1177–1187. https://doi.org/10.1002/acp.3999

Izadpanah, S., Barnow, S., Neubauer, A. B., & Holl, J. (2019). Development and validation of the Heidelberg form for emotion regulation strategies (HFERST): Factor structure, reliability, and validity. *Assessment*, *26*(5), 880–906. https://doi.org/10.1177/1073191117720283

Jolley, D., & Douglas, K. M. (2014). The effects of anti-vaccine conspiracy theories on vaccination intentions. *PLoS One*, *9*(2), e89177.

Kalokerinos, E. K., Erbas, Y., Ceulemans, E., & Kuppens, P. (2019). Differentiate to regulate: Low negative emotion differentiation is associated with ineffective use but not selection of emotion-regulation strategies. *Psychological Science*, *30*(6), 863–879. https://doi.org/10.1177/0956797619838763

Kang, S.-M., & Shaver, P. R. (2004). Individual differences in emotional complexity: Their psychological implications. *Journal of Personality*, *72*(4), 687–726. https://doi.org/10.1111/j.0022-3506.2004.00277.x

Kashdan, T. B., Barrett, L. F., & McKnight, P. E. (2015). Unpacking emotion differentiation: Transforming unpleasant experience by perceiving distinctions in negativity. *Current Directions in Psychological Science*, *24*(1), 10–16. https://doi.org/10.1177/0963721414550708

Kraiss, J. T., Ten Klooster, P. M., Moskowitz, J. T., & Bohlmeijer, E. T. (2020). The relationship between emotion regulation and well-being in patients with mental disorders: A meta-analysis. *Comprehensive Psychiatry*, *102*, 152189. https://doi.org/10.1016/j.comppsych.2020.152189

Lehrl, S., Triebig, G., & Fischer, B. (1995). Multiple choice vocabulary test MWT as a valid and short test to estimate premorbid intelligence. *Acta Neurologica Scandinavica*, *91*(5), 335–345. https://doi.org/10.1111/j.1600-0404.1995.tb07018.x

Liekefett, L., Christ, O., & Becker, J. C. (2023). Can conspiracy beliefs be beneficial? Longitudinal linkages between conspiracy beliefs, anxiety, uncertainty aversion, and existential threat. *Personality and Social Psychology Bulletin*, *49*(2), 167–179. https://doi.org/10.1177/01461672211060965

Lischetzke, T., Eid, M., Wittig, F., & Trierweiler, L. (2001). Die Wahrnehmung eigener und fremder Gefühle. *Diagnostica*, *47*(4), 167–177. https://doi.org/10.1026//0012-1924.47.4.167

Marchlewska, M., Green, R., Cichocka, A., Molenda, Z., & Douglas, K. M. (2022). From bad to worse: Avoidance coping with stress increases conspiracy beliefs. *The British Journal of Social Psychology*, *61*(2), 532–549. https://doi.org/10.1111/bjso.12494

Molenda, Z., Green, R., Marchlewska, M., Cichocka, A., & Douglas, K. M. (2023). Emotion dysregulation and belief in conspiracy theories. *Personality and Individual Differences*, *204*, 112042. https://doi.org/10.1016/j.paid.2022.112042

Ottenstein, C., & Lischetzke, T. (2020). Development of a novel method of emotion differentiation that uses open-ended descriptions of momentary affective states. *Assessment*, *27*(8), 1928–1945. https://doi.org/10.1177/1073191119839138

Robinson, M. D., & Clore, G. L. (2002). Belief and feeling: Evidence for an accessibility model of emotional self-report. *Psychological Bulletin*, *128*, 934–960. https://doi.org/10.1037/0033-2909.128.6.934

Scandurra, C., Pizzo, R., Pinto, L. E., Cafasso, C., Pellegrini, R., Cafaggi, F., D'Anna, O., Muzii, B., Bochicchio, V., & Maldonato, N. M. (2022). Emotion dysregulation and conspiracy beliefs about COVID-19: The moderating role of critical social media use. *European Journal of Investigation in Health, Psychology and Education*, *12*(10), 1559–1571. https://doi.org/10.3390/ejihpe12100109

Silvia, P. J. (2002). Self-awareness and the regulation of emotional intensity. *Self and Identity*, *1*(1), 3–10. https://doi.org/10.1080/152988602317232768

Soveri, A., Karlsson, L. C., Antfolk, J., Lindfelt, M., & Lewandowsky, S. (2021). Unwillingness to engage in behaviors that protect against COVID-19: The role of conspiracy beliefs, trust, and endorsement of complementary and alternative medicine. *BMC Public Health*, *21*(1), 684. https://doi.org/10.1186/s12889-021-10643-w

Spitzer, C., Hammer, S., Löwe, B., Grabe, H. J., Barnow, S., Rose, M., Wingenfeld, K., Freyberger, H. J., & Franke, G. H. (2011). Die Kurzform des Brief Symptom Inventory (BSI-18): Erste Befunde zu den psychometrischen Kennwerten der deutschen Version. [The short version of the Brief Symptom Inventory (BSI-18): Preliminary psychometric properties of the German translation.]. In *Fortschritte der Neurologie, Psychiatrie* (Bd. 79). Georg Thieme Verlag KG. https://doi.org/10.1055/s-0031-1281602

Starr, L. R., Hershenberg, R., Li, Y. I., & Shaw, Z. A. (2017). When feelings lack precision: Low positive and negative emotion differentiation and depressive symptoms in daily life. *Clinical Psychological Science*, *5*(4), 613–631. https://doi.org/10.1177/2167702617694657

Stern, P. C. (2000). New environmental theories: Toward a coherent theory of environmentally significant behavior. *Journal of Social Issues*, *56*, 407–424. https://doi.org/10.1111/0022-4537.00175

Uscinski, J. E., Parent, J. M., Uscinski, J. E., & Parent, J. M. (2014). *American conspiracy theories*. Oxford University Press.

van Prooijen, J. (2017). Why education predicts decreased belief in conspiracy theories. *Applied Cognitive Psychology*, *31*, 50–58. https://doi.org/10.1002/acp.3301

van Prooijen, J.-W. (2020). An existential threat model of conspiracy theories. *European Psychologist*, *25*(1), 16–25. https://doi.org/10.1027/1016-9040/a000381

van Prooijen, J.-W., & Acker, M. (2015). The influence of control on belief in conspiracy theories: Conceptual and applied extensions. *Applied Cognitive Psychology*, *29*(5), 753–761. https://doi.org/10.1002/acp.3161

van Prooijen, J.-W., & Douglas, K. M. (2017). Conspiracy theories as part of history: The role of societal crisis situations. *Memory Studies*, *10*(3), 323–333. https://doi.org/10.1177/1750698017701615

Vranic, A., Hromatko, I., & Tonković, M. (2022). "I did my own research": Overconfidence, (dis)trust in science, and endorsement of conspiracy theories. *Frontiers in Psychology*, *13*, 931865. https://doi.org/10.3389/fpsyg.2022.931865

Wabnegger, A., Gremsl, A., & Schienle, A. (2021). The association between the belief in coronavirus conspiracy theories, miracles, and the susceptibility to conjunction fallacy. *Applied Cognitive Psychology*, *35*(5), 1344–1348. https://doi.org/10.1002/acp.3860

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How to cite this article: Wabnegger, A., Potthoff, J., & Schienle, A. (2024). Believing in conspiracy theories: The role of emotional granularity and maladaptive emotion regulation strategies. *Applied Cognitive Psychology*, *38*(3), e4198. https://doi.org/10.1002/acp.4198