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Investigating the mediating effects of insight between decentring and cognitive coping process

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Abstract

The study aimed to test whether insight mediates decentering and cognitive coping processes in adaptive and maladaptive types. One hundred and fifty-five Chinese adult participants were recruited to complete an online survey, to report their level of decentering, insight, and cognitive coping strategies. The results of the simple regression analyses showed decentering positively predicted adaptive cognitive coping, and negatively predicted maladaptive cognitive coping process to a moderate degree. Mediation analyses revealed the mediating effect of insight only occurred in the relationship between decentering and maladaptive cognitive coping strategies, suggesting less decentering predicted greater maladaptive cognitive coping processes via a lower level of insight. The study contributed to the new understanding of the decentering mechanism of the cognitive coping process. Insight had a stronger effect on maladaptive cognitive coping than on adaptive cognitive coping strategies. The study provided recommendations to improve outcome effectiveness in mental health intervention.

Keywords: Cognitive coping process, cognition, decentering, insight, metacognitive;

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1. Introduction

Decentering refers to the capability to shift the perspective from being immersed in one's inner experiences to taking an observer's point of view on their physical sensations, emotions, and thoughts (Bernstein et al., 2015). There are expanding studies investigating the functions and effects of decentering involved in the mindfulness process due to its salutary properties for mental health. Decentering is a common concept and is regarded as a key element that underpins psychological intervention including mindfulness-based stress reduction, mindfulness-based cognitive therapy, acceptance, and commitment therapy, and other mental health interventions, which may bring about positive psychological change (Hanley et al., 2020).

Extensive research supports the benefits of interventions with decentering, in reducing depression in different populations (Garland et al., 2015; Hanley et al., 2020; Mori et al., 2015). Mindfulness theory postulated that decentering-related interventions strengthen one's awareness and capability to look at their inner experiences such as feelings and thoughts in an objective way (Teasdale et al., 2002), changing their relationship to those mental experiences (Fresco et al., 2007; Wells, 2005). Decentering was supported to be beneficial to psychological health and stress coping, and the study aims to explore the process underlying decentering and how it works, which could have implications for mental health interventions**.**

1.1. Literature review

1.1.1. Decentering

The concept of decentering has been studied in various related constructs, such as cognitive defusion, self-distancing, and metacognitive awareness. However, whether they reflect the same metacognitive process is still unsure (Bernstein et al., 2019; Hadash et al., 2017). Bernstein et al. (2015) furtherly characterised the three interrelated metacognitive processes involved in decentering, including 'meta-awareness', 'disidentification from internal experience' and 'reduced reactivity to thought content'. It was proposed that individuals' meta-awareness of their thinking process allows the person to consciously process the thought content more objectively and be less likely to construe the subjective experience as a factual situation, thus, the individual can be less likely to react to the thought content. Therefore, the metacognitive processes in decentering benefit one's regulation of cognitive processing and emotional response to unpleasant events.

Studies suggested decentering facilitates adaptive self-reflection. In an experimental study, participants were asked to recollect unfavourable experiences from a self-immersed or a decentred viewpoint, and those who were more decentred reported reduced emotional and physiological reactivity over time (Ayduk & Kross, 2010; Kross et al., 2011). In self-distanced reflection, individuals are enabled to focus more on rethinking their thoughts and the meaning derived from experience in ways that foster new understandings and insights, which allow them to think and feel alternatively about their experience rather than recalling the details of the negative events (Duncan et al., 2021). Consequently, the decentering process facilitates adaptive reflection, which influences how people construe experiences and changes the mental representation of the negative memory, lowering aversiveness when the memory is reactivated in the future (Ayduk & Kross, 2010; Kross & Ayduk, 2017).

Moreover, previous findings consistently indicated decentering was negatively associated with rumination, suggesting decentering process can protect individuals from maladaptive forms of self-focus (Duncan et al., 2011; Mori et al., 2015). Decentering has been evidenced as a key factor in adaptive reflection that guides people to step back from egocentric thoughts and helps them to see the big picture, so they are more able to observe and analyse themselves objectively even in stressful situations.

Decentering as a metacognitive capacity allows people to reflect on, evaluate and refine their judgment which can be applied to general stress coping (Keser et al., 2020; Zimmer-Gembeck, 2021). Numerous studies indicated the positive association between decentering and positive thinking, a reappraisal of stress, and constructive coping when facing stressful events (Bernstein et al., 2015; Duncan et al., 2021; Kross & Ayduk, 2011). Duncan et al. (2021) also discovered that those people who were better at taking a decentred perspective and regulating thought content were less likely to use maladaptive strategies including avoidance, denial, and distraction to deal with interpersonal stress, in addition, they showed greater coping self-efficacy and flexibility.

1.1.2. Insight

Insight is regarded as the clarity of an individual's feelings, thinkings, and behaviours (Grant et al., 2002; Yan et al., 2022). Insight can be considered as the novel understanding of oneself gained by reviewing one's past and present experiences, making connections among the experiences, and realising the interrelations among one's thoughts, feelings, and behaviours, which promotes the adaptation of new and more helpful beliefs as well as the associated behaviours (Falon et al., 2021; Hill et al., 2007; Loyd et al., 2023). Research evidenced that insight is a crucial element for positive psychological functioning. Studies indicated insight was linked to enhanced self-control, cognitive flexibility, hardiness, and mental well-being (Bucknell et al., 2022; Cowden & Meyer-Weitz, 2016; Grant et al., 2002; Henry et al., 2023). In addition, literature found insight was negatively correlated with self-rumination, anxiety, and depressive symptoms (Harrington & Loffredo, 2010). When people attain self-understanding and insight, they have more awareness of the formations of psychological problems, and this provides people with more directions on how to confront the problems and enhances their sense of mastery and control (Jennissen et al., 2018; Van den Bergh et al., 2021). It was shown that insight potentially functions as a buffer against stress from unpleasant events.

Crane et al. (2019)'s systematic self-reflection model (SSR) indicates a conscious reflection process on past stressors, one's emotion regulatory approaches, and coping experiences facilitates the development of insight related to the coping process. Falon et al. (2021) highlighted the significance of insight as a mediating variable in the relationship between self-reflection practices and improved coping and resilient capacities. Self-reflective activities involving trigger identification, stressor reappraisal, and coping evaluation can increase our self-understanding of the stress nature, response patterns to stressors across time and contexts, and the inter-relationships between personal reactions and others' behaviours (Falon et al., 2021). Self-insight and self-awareness deriving from reflective practices strengthen our capacities for resilience as this self-knowledge help us to clarify our thoughts, emotions, and personal values and promote value-driven actions, develop more sense of control in response to challenging circumstances, and enhance our coping and problem-solving skills.

Theorists have suggested that self-reflection is the generation process of insight, whereas empirical studies highlighted insight may only appear when the reflective process is adaptive, while maladaptive reflection such as rumination is detrimental to mental health. When one's self-reflective practices feature uncontrollable and recurring thoughts relating to the causes of a negative event and undesirable consequences such as loss, symptoms, and injustice to self, it could increase one's emotional distress, anxiety, guilt, and shame (Watson et al., 1996). Therefore, the characteristics of reflection such as thought content and pattern matter its effects on one's emotional well-being and self-understanding. As SSR theory suggests insight emerges from a reflective process, it is worth studying whether decentering as a kind of adaptive reflection facilitates the development of insight that promotes positive and adaptive coping.

1.1.3. Cognitive coping process

The cognitive coping process is conceptualised as the cognitive method of processing and regulating emotionally stimulating information that can assist us to maintain emotional control and avoid being overwhelmed by challenging life experiences (Garnefski et al., 2001). Cognitive coping strategies can be viewed as functional and dysfunctional. Functional cognitive coping strategies include positive reappraisal, positive refocusing, refocus on planning, putting into perspective, and acceptance, while dysfunctional cognitive coping methods involve rumination, catastrophising, self-blame, and blaming others (Martin & Dahlen, 2005; Sakakibara & Endo, 2016).

Research has studied the linkage between cognitive coping strategies and mental well-being extensively. According to studies, self-blame, catastrophising, and rumination were all been linked to increased anxiety and depressive symptoms (Garnefski et al., 2002; Stikkelbroek et al., 2016). Rey and Extremera (2012) indicated adolescents who used rumination and self-blame more frequently reported higher levels of verbal and physical aggression in daily life. On the other hand, positive reappraisal has been connected to greater optimism and self-esteem, as well as fewer psychopathology symptoms (Garnefski et al., 2002).

Existing research showed decentering allows individuals to adaptively handle unpleasant situations through restructuring appraisal of events through reconstruing experience rather than recounting. It is postulated that shifting one's thought content from retelling to reconstruing enhances one's cognitive process and mental health, which raises the attention to the thought change mechanism, specifically, it needs to further explore what particular kind of thought content emerged as a result of the decentering process and how it relates to better psychological adjustment.

1.2. Purpose of study

The SSR model and empirical findings suggested that adaptive self-reflection develops insight and self-understanding in a stress-coping context, benefitting one's coping flexibility and coping effectiveness. However, there is a limited study specifically looking at their relationships with the cognitive coping process. Therefore, the goal of this research is to examine whether insight mediates the relations between decentering and cognitive coping processes. The hypotheses are: (1) More decentering predicts a more adaptive cognitive coping process; (2) Less decentering predicts a more maladaptive cognitive coping process; (3) More decentering predicts more insight; (4) More decentering predicts more adaptive cognitive coping process via a higher level of insight; (5) Less decentering predicts more maladaptive cognitive coping process via the lower level of insight.

2. Materials and Methods

2.1. Participant

A total of 155 Chinese adults living in Hong Kong were recruited through the snowballing method. Around 250 invitation emails together with the online questionnaire link and the online informed consent form were sent to friends and colleagues for their participation and they were invited to pass the questionnaire along to further potential participants.

2.2. Data collection Instrument

The three following measurement scales, Experiences Questionnaire – Decentering subscale (ED-D; Fresco et al., 2007), Self-Reflection and Insight Scale – Insight subscale (SRSI-IN; Grant et al., 2002) and Cognitive Emotional Regulation Questionnaire (CERQ; Garnefski et al., 2001) were translated into Chinese with the back-translation method and used in the study. Experiences Questionnaire - Decentering subscale (Fresco et al., 2007) was to measure the level of decentering. ED-D contains 13

items rated on a 5-point Likert scale from '*1 = never*' to '*5 = all the time*'. A higher score means a higher tendency to take a decentred perspective in recent experience. The Cronbach's alpha coefficient for the decentering measurement in the current study was 0.83, showing good internal reliability.

SRSI-IN was adopted to measure the construct of insight (Grant et al., 2002) which generally reflects one's clarity of internal states including thoughts, feelings, and motivation. SRSI-IN contains 8 items rated on a 6-point Likert scale from '*1= strongly disagree*' to '*6 = strongly agree*'. A higher score indicates more clarity of thoughts, feelings, and behaviours. In this study, the insight measurement had adequate internal reliability, evidenced by Cronbach's alpha value of 0.832.

The CERQ was employed to evaluate the specific cognitive coping process that a person would use to cope with stressful life events (Garnefski et al., 2001). The CERQ has 36 items and contains 9 theoretically separate subscales with 4 items in each subscale. All items are rated on a 5-point Likert scale ('*1 = rarely*' to '*5 = almost always*'). The nine cognitive coping strategies are categorised as maladaptive (e.g., 'self-blame', 'blaming others', 'rumination', 'catastrophising') and adaptive (e.g., 'acceptance', 'refocus on planning', 'positive refocusing', 'positive reappraisal' and 'putting into perspective'). Each subscale score was obtained by adding up the item scores of the subscale. The original study demonstrated adequate internal reliability among all subscales where the alpha value ranged from 0.68 to 0.86 (Garnefski et al., 2001). In the present sample, the internal reliability of the subscales was acceptable to adequate, with Cronbach's alpha values ranging from 0.648 to 0.833, except for the subscales of acceptance and putting into perspectives. The alpha coefficients for the acceptance and putting into perspective subscales were 0.295 and 0.431 respectively, suggesting these two subscales had rather low internal consistency in this sample.

2.3. Data analysis

After the data collection, the data were analysed with SPSS 25 Statistics. The descriptive statistics for the sample's demographic characteristics were computed to give an overall picture of the sample. Simple linear regression analyses were employed to investigate the relationships between decentering and cognitive coping processes. The correlation between decentering and insight was also evaluated by Pearson correlation analysis. PROCESS macro mediation analyses were carried out to test the mediating effects of insight on the relations between decentering and cognitive coping processes.

2.4. Ethics

This research handed out written participation consent as part of the data collection procedure. The participants only continued with the survey, when they agreed to the consent form. The identities of the participants were not revealed.

3. Results

3.1. Demographic characteristics of participants

One hundred fifty-five subjects participated in the online survey. Among the participants, males and females accounted for 21.9% (*n* = 34) and 78.1% (*n* = 121) of the respondents respectively. Half of the participants (50.3%) belong to the age group of 23–27 and 23.9% of the participants were aged 28–32. Other age groups shared a smaller portion of the sample (1.9%–7.1%). Regarding the education level, the majority of the respondents (73.5%) attained an Associate degree or High diploma or Bachelor's degree. Around one-fifth of respondents (21.9%) obtained a Master's degree or above and only 4.5% of the subjects completed the education up to the secondary school level.

3.2. Regression between decentering and cognitive coping process

Hypotheses 1 and 2 assessed the effect of decentering on the adaptive cognitive coping process and maladaptive cognitive coping process respectively. Adaptive cognitive coping processes referred to the total item scores of positive refocusing, refocusing on planning, and positive reappraisal, while items of acceptance and putting into perspective were removed due to the low reliability of the subscales. Maladaptive cognitive coping processes referred to the aggregate of items scores of self-blame, blaming others, rumination, and catastrophising. Hypothesis 1 assumed a higher level of decentering predicts more adaptive cognitive coping processes. The results indicated the regression was statistically significant and that decentering explained 23.1% variance in adaptive cognitive coping processes, R^2 = 0.231, F (1, 153) = 46.078, p < 0.001. It was shown that decentering positively predicted adaptive cognitive coping processes (β = 0.481, p < 0.001). Hypothesis 2 proposed lower level of decentering predicts more maladaptive cognitive coping processes. It was found that decentering explained 13.1% of the variance in maladaptive cognitive coping processes, R^2 = 0.131, F (1, 153) = 23.130, p < 0.001, which supported hypothesis 2. Decentering was significantly negatively regressed with maladaptive cognitive coping (β =.−0.362, p < 0.001).

To further investigate the regression between decentering and each specific type of cognitive coping process, the study conducted simple linear regression analyses to analyse which types of the cognitive coping process had a significant association with decentering. Among seven specific cognitive coping processes, decentering significantly negatively predicted self-blame (β = −0.456, p < 0.001) and catastrophising (β = −0.395, p < 0.001), and positively predicted positive refocusing (β = 0.446, p < 0.001), refocus on planning (β = 0.286, p < 0.001) and positive reappraisal (β = 0.384, p < 0.001). Whereas, it was found that rumination and blaming others from the maladaptive cognitive coping types were not significantly predicted by decentering.

3.3. Correlation between decentering and insight

Hypothesis 3 proposed that decentering is positively related to insight. The results illustrated that decentering was positively correlated with insight to a moderate degree, r (153) = 0.350, p < 0.001. This suggested hypothesis 3 was significant.

3.4. Mediating effects of insight on associations between decentering and cognitive coping process

Hypotheses 4 and 5 pertain to the mediating function of insight on the association between decentering and cognitive coping processes. The direct effects of decentering and indirect effects of insight in the mediation model were investigated and the results are indicated in Table 1. Hypothesis 4 postulated that more decentering predicts a more adaptive cognitive coping process via a higher level of insight. The results demonstrated the direct effect of decentering on adaptive cognitive coping was positive and significant (b = 0.3822, SE = 0.0658, p < 0.001). However, insight did not predict adaptive cognitive coping processes in the model (b = 0.1263, SE = 0.0748, p = 0.0934). Furthermore, the indirect effect of insight on the relationship between decentering and adaptive cognitive coping was not significant since zero fell between the lower and upper bound of 95% confidence interval, b = 0.0389, 95% CI [−0.0117, 0.0945]. Therefore, hypothesis 4 was not supported, in other words, insight did not mediate the relationship between decentering and adaptive cognitive coping process.

Table 1

Mediation Analysis of Insight as a Mediator in the Association Between Decentering and Cognitive Coping Process

Types of effect	*b*	SE	95% *CI*	*p*-value
Direct effects				

Decentering → Adaptive***	0.3822	0.0658	[0.2521, 0.5122]	0.0000
Decentering → Maladaptive**	−0.2494	0.0813	[−0.4100, −0.0888]	0.0026
Insights → Adaptive	0.1263	0.0748	[−0.0215, 0.2740]	0.0934
Insights → Maladaptive***	−0.4747	0.0924	[−0.6573, −0.2922]	0.0000
Indirect effects				
Decentering→ Insight→ Adaptive	0.0389	0.0268	[−0.0117, 0.0945]	/
Decentering→ Insight→ Maladaptive	−0.1461	0.0457	[−0.2453, −0.0671]	/

SE = standard error. CI = confidence interval.
***p < 0.001; **p < 0.01.

For hypothesis 5, it was presumed that less decentering predicts a more maladaptive cognitive coping process via a lower level of insight. The results denoted the direct effect of decentering on maladaptive cognitive coping was negative and significant (b = −0.2494, SE = 0.0813, p = 0.0026). Insight was found to negatively predict maladaptive cognitive coping in the model (b = −0.4747, SE = 0.0924, p < 0.001). The indirect effect of insight was significant since the 95% confidence interval did not cover zero, b = −0.1461, 95% CI [−0.2453, −0.0671], which suggested insight significantly mediated the association between decentering and maladaptive cognitive coping process. The negative indirect effect index of insight (b = −0.1461) in the mediation analysis suggested lower level of decentering was linked to more maladaptive cognitive coping via a lower level of insight, which supported hypothesis 5. Given the significant direct effect of decentering on maladaptive cognitive coping process, it was implied that insight existed as a partial mediator in the model. Figure 1 further visualises the mediation model with insight as a mediator in the association between decentering and adaptive and maladaptive cognitive coping processes.

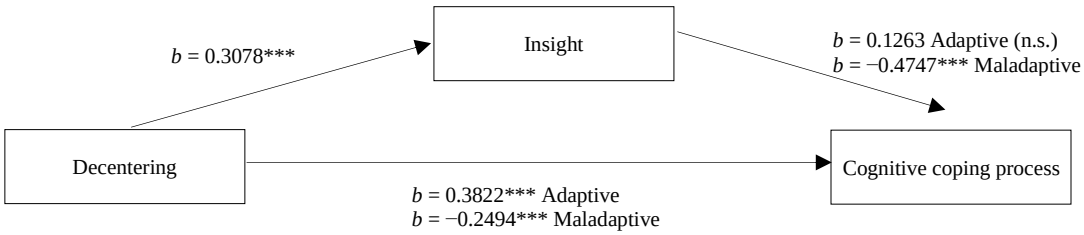

Figure 1
*Mediation Model (***p < 0.001; ns = Not Significant)*

4. Discussion

The study's goal was to examine the proposed psychological mechanism involving decentering, insight, and cognitive coping processes in contributing to positive mental adjustment in face of life stressors. The study analysed the total effect of decentering on specific cognitive coping processes which

could be grouped into adaptive and maladaptive types. The meditating effect of insight in the relationship between decentering and cognitive coping processes was also examined. First, for the total effect of decentering, the study found decentering significantly predicted both adaptive and maladaptive cognitive coping processes in different directions. The findings demonstrated that decentering significantly positively predicted adaptive cognitive coping processes and negatively regressed with maladaptive cognitive coping processes to a moderate degree. Moreover, decentering was found to explain 23.1% and 13.1% of the variance in adaptive cognitive coping and maladaptive cognitive coping respectively, indicating the proportion of change explained by decentering was slightly higher in the adaptive cognitive coping process than in maladaptive types. The results suggested that people with more decentred capability employ less maladaptive cognitive coping strategies but more adaptive cognitive coping methods. Specifically, decentering was linked to reduced self-blame and catastrophising, as well as increased refocus on planning, positive refocusing, and positive reappraisal.

The findings echoed Garland et al. (2015)'s mindfulness-to-meaning theory that decentering process is the key cognitive process that enables individuals to distance themselves from their thoughts and feelings in stressful situations and develop more awareness to observe and recognise the thought features such as the content, frequency, and pattern. Hence, people are facilitated to become more conscious when they process the situational cues and make reactions accordingly. It also helps broaden their attention to novel information which fosters reappraisal of experience and generates a range of coping options that enhance coping flexibility. Therefore, it helps us to reduce automatic and unconscious behaviours under stressful situations and promotes coping responses that are in line with personal goals and values.

Regarding the effects of decentering on specific cognitive coping processes, the study found all three adaptive cognitive coping processes increased with decentering. Among the maladaptive cognitive coping processes, decentering predicted less self-blame but it did not affect blaming others. The ability to take decentred perspective may allow individuals to observe themselves in the stressful context objectively where they may pay more attention to how and why they react to the event, instead of thinking about other people involved in the situation, therefore, the decentering capability may impact the cognitive processes that are self-relevant rather than other-relevant. Rumination was not predicted by decentering in the present study. Bernstein et al. (2019) elucidated that decentering process requires meta-awareness of the thinking process occurring in subjective experience including thinking, feeling, and sensing, hence, this kind of meta-awareness may overlap with self-focused thinking to some point. It may explain the insignificant relationship between decentering and self-focused thinking in a stressful situation.

The second objective of the present study was to test the mediation model with insight as a mediator between decentering and cognitive coping processes. The study found insight only mediated the relationship between decentering and maladaptive cognitive coping process, but not for adaptive cognitive coping process. The findings indicate that less decentering predicted more maladaptive cognitive coping processes via a lower level of insight. Previous research illustrated the strong inverse linkage between self-knowledge and unhelpful and passive coping behaviours, such as mental disengagement, behavioural engagement, and denial (Smith et al., 1996). Insight can be regarded as self-knowledge that serves to integrate and organise our experiences, assist in self-relevant information processing, and navigate our choices and behaviours in various circumstances (Baumeister, 1986). People with less self-knowledge tended to feel more unpredictable towards external stimuli (Hamill, 2003), which implied their heightened vulnerability and lower locus of control amid stressors. Lacking self-knowledge may also impair one's ability to appraise situations and his or her coping capacity

adequately. They may fail to claim credit for pleasant events and may incline to take the blame for unpleasant incidents (Smith et al., 1996), which may result in unhelpful or passive or coping reactions.

5. Conclusion

In the study, it was found that the relation between decentering and adaptive cognitive coping process was not mediated by insight. This finding is away from the expectation and suggests that adaptive cognitive coping processes require more factors or mental qualities other than insight. The adoption of adaptive cognitive coping strategies could be possibly influenced more by other relevant factors such as context-specific features. Moreover, the mediation analysis of the present study measured the general aspect of the adaptive cognitive coping process and maladaptive cognitive coping process by summing the total response of the related specific cognitive coping strategies, which may not reflect the mediation effect of insight in the association between decentering and each of the specific cognitive coping process.

The study has several limitations. First, the study employed snowballing sampling instead of random sampling which may not be representative of the population being investigated. Second, the study excluded the subscales of acceptance and putting into perspectives from the adaptive cognitive coping category in the analysis due to their low reliability which may be related to the translational and cultural factors. Future research can further evaluate the current translated inventory by inter-rater reliability test and make the necessary adjustment to the instrument to improve the reliability of these two subscales. Third, the sample size was rather small, it would be better to increase the sample size to enhance the external validity of the study.

The current study supported the utility of decentering-related intervention in helping individuals to cognitively process stressful events more functionally. The results suggest strengthening the mental skills and capacities for decentering in intervention, such as guiding clients to step back and observe their thoughts, emotions, and behaviours oneself could potentially help reduce their maladaptive cognitive coping processes and promote adaptive cognitive coping strategies, which in turn, benefit their mental well-being. Furthermore, the study illustrated that insight only mediated the relation between decentering and the general maladaptive cognitive coping process, but it had no mediating effect on the general adaptive cognitive coping response. It provides more understanding of the decentering mechanism that insight plays a stronger role in the use of maladaptive cognitive coping methods than in adaptive cognitive coping strategies. The decentering-related intervention featured with insight element that is particularly useful to lower one's tendency to engage in unhelpful cognitive coping processes. The study revealed the differentiated trajectories for the maladaptive cognitive coping process and adaptive cognitive coping process in the decentering context, which implies the capacity for maladaptive and adaptive cognitive coping processes requires different resources that need further research to clarify.

References

Ayduk, Ö., & Kross, E. (2010). From a distance: Implications of spontaneous self-distancing for adaptive self-reflection. *Journal of Personality and Social Psychology, 98*(5), 809–829. https://psycnet.apa.org/doiLanding?doi=10.1037/a0019205

Baumeister, R. F. (1986). *Identity.* Oxford University Press.

Bernstein, A., Hadash, Y., & Fresco, D. M. (2019). Metacognitive processes model of decentering: Emerging methods and insights. *Current Opinion in Psychology, 28*, 245–251. https://www.sciencedirect.com/science/article/pii/S2352250X18302409

Bernstein, A., Hadash, Y., Lichtash, Y., Tanay, G., Shepherd, K., & Fresco, D. M. (2015). Decentering and related constructs: A critical review and metacognitive processes model. *Perspectives on Psychological Science, 10*(5), 599–617. https://journals.sagepub.com/doi/pdf/10.1177/1745691615594577

Bucknell, K. J., Kangas, M., & Crane, M. F. (2022). Adaptive self-reflection and resilience: The moderating effects of rumination on insight as a mediator. *Personality and Individual Differences, 185*, 1–7. https://www.sciencedirect.com/science/article/pii/S0191886921006139

Cowden, R. G., & Meyer-Weitz, A. (2016). Self-reflection and self-insight predict resilience and stress in competitive tennis. *Social Behavior and Personality: An International Journal, 44*(7), 1133–1149. https://www.ingentaconnect.com/content/sbp/sbp/2016/00000044/00000007/art00008

Crane, M. F., Searle, B. J., Kangas, M., & Nwiran, Y. (2019). How resilience is strengthened by exposure to stressors: The systematic self-reflection model of resilience strengthening. *Anxiety, Stress, & Coping, 32*(1), 1–17. https://www.tandfonline.com/doi/abs/10.1080/10615806.2018.1506640

Duncan, N. S., Zimmer-Gembeck, M. J., Gardner, A. A., & Modecki, K. (2021). The measurement and benefit of decentering for coping self-efficacy, flexibility, and ways of coping with interpersonal stress. *Personality and Individual Differences, 179*, 1–10. https://www.sciencedirect.com/science/article/pii/S019188692100307X

Falon, S. L., Kangas, M., & Crane, M. F. (2021). The coping insights involved in strengthening resilience: The self-reflection and coping insight framework. *Anxiety, Stress, & Coping, 34*(6), 734–750. https://www.tandfonline.com/doi/abs/10.1080/10615806.2021.1910676

Fresco, D. M., Moore, M. T., van Dulmen, M. H., Segal, Z. V., Ma, S. H., Teasdale, J. D., & Williams, J. M. (2007). Initial psychometric properties of the experience's questionnaire: Validation of a self-report measure of decentering. *Behavior Therapy, 38*(3), 234–246. https://www.sciencedirect.com/science/article/pii/S0005789407000147

Garland, E. L., Farb, N. A., Goldin, P. R., & Fredrickson, B. L. (2015). The mindfulness-to-meaning theory: Extensions, applications, and challenges at the attention–appraisal–emotion interface. *Psychological Inquiry, 26*(4), 377–387. https://www.tandfonline.com/doi/full/10.1080/1047840X.2015.1092493

Garnefski, N., Kraaij, V., & Spinhoven, P. (2001). Negative life events, cognitive emotion regulation, and emotional problems. *Personality and Individual Differences, 30*(8), 1311–1327. https://www.sciencedirect.com/science/article/pii/S0191886900001136

Garnefski, N., Legerstee, J., Kraaij, V., van Den Kommer, T., & Teerds, J. A. N. (2002). Cognitive coping strategies and symptoms of depression and anxiety: A comparison between adolescents and adults. *Journal of Adolescence, 25*(6), 603–611. https://www.sciencedirect.com/science/article/pii/S0140197102905075

Grant, A. M., Franklin, J., & Langford, P. (2002). The self-reflection and insight scale: A new measure of private self-consciousness. *Social Behavior and Personality: An International Journal, 30*(8), 821–835. https://www.ingentaconnect.com/content/sbp/sbp/2002/00000030/00000008/art00011

Hadash, Y., Lichtash, Y., & Bernstein, A. (2017). Measuring decentering and related constructs: Capacity and limitations of extant assessment scales. *Mindfulness, 8*(6), 1674–1688. https://link.springer.com/article/10.1007/s12671-017-0743-9

Hamill, S. K. (2003). Resilience and self-efficacy: The importance of efficacy beliefs and coping mechanisms in resilient adolescents. *Colgate University Journal of the Sciences, 35*(1), 115–146. https://www.researchgate.net/profile/Sarah-Hamill-Skoch/publication/252643464_Resilience_and_Self-Efficacy_The_importance_of_efficacy_beliefs_and_coping_mechanisms_in_resilient_adolescents/links/0046353bc19a8ad608000000/Resilience-and-Self-Efficacy-The-importance-of-efficacy-beliefs-and-coping-mechanisms-in-resilient-adolescents.pdf

Hanley, A. W., Bernstein, A., Nakamura, Y., Hadash, Y., Rojas, J., Tennant, K. E., Jensen, R. L., & Garland, E. L. (2020). The metacognitive processes of decentering scale: Development and initial validation of trait and state versions. *Psychological Assessment, 32*(10), 956–971. https://psycnet.apa.org/record/2020-51897-001

Harrington, R., & Loffredo, D. A. (2010). Insight, rumination, and self-reflection as predictors of well-being. *The Journal of Psychology, 145*(1), 39–57. https://www.tandfonline.com/doi/abs/10.1080/00223980.2010.528072

Henry, J. D., Grainger, S. A., & von Hippel, W. (2023). Determinants of social cognitive aging: Predicting resilience and risk. *Annual Review of Psychology, 74*, 167–192. https://www.annualreviews.org/doi/abs/10.1146/annurev-psych-033020-121832

Hill, C. E., Castonguay, L. G., Angus, L., Arnkoff, D. B., Barber, J. P., Bohart, A. C., Borkovec, T. D., Bowman, E. A., Caspar, F., Gibbons, M. B. C., Crits-Christoph, P., Cruz, J. M., Elliott, R., Friedlander, M. L., Gelso, C. J., Glass, C. R., Goldfried, M. R., Greenberg, L. S., Holtforth, M. G., ... Wampold, B. E. (2007). Insight in psychotherapy: Definitions, processes, consequences, and research directions. In L. G. Castonguay & C. E. Hill (Eds.), *Insight in psychotherapy*. American Psychological Association. https://psycnet.apa.org/record/2006-12840-021

Jennissen, S., Huber, J., Ehrenthal, J. C., Schauenburg, H., & Dinger, U. (2018). Association between insight and outcome of psychotherapy: Systematic review and meta-analysis. *American Journal of Psychiatry, 175*(10), 961–969. https://ajp.psychiatryonline.org/doi/abs/10.1176/appi.ajp.2018.17080847

Keser, E., Kahya, Y., & Akın, B. (2020). Stress generation hypothesis of depressive symptoms in interpersonal stressful life events: The roles of cognitive triad and coping styles via structural equation modeling. *Current Psychology, 39*, 174–182. https://link.springer.com/article/10.1007/s12144-017-9744-z

Kross, E., & Ayduk, O. (2011). Making meaning out of negative experiences by self-distancing. *Current Directions in Psychological Science, 20*(3), 187–191. https://journals.sagepub.com/doi/pdf/10.1177/0963721411408883

Kross, E., & Ayduk, O. (2017). Self-distancing: Theory, research, and current directions. *Advances in Experimental Social Psychology, 55*, 81–136. https://www.sciencedirect.com/science/article/pii/S0065260116300338

Kross, E., Duckworth, A., Ayduk, O., Tsukayama, E., & Mischel, W. (2011). The effect of self-distancing on adaptive versus maladaptive self-reflection in children. *Emotion, 11*(5), 1032–1039. https://psycnet.apa.org/doiLanding?doi=10.1037/a0021787

Loyd, A. B., Westberg, D. W., Williams, L., Humphries, M., Meca, A., & Rodil, J. C. (2023). "I just want to be me, authentically": Identity shifting among racially and ethnically diverse young

adults. *Journal of Youth and Adolescence,* 1–18. https://link.springer.com/article/10.1007/s10964-023-01744-3

Martin, R. C., & Dahlen, E. R. (2005). Cognitive emotion regulation in the prediction of depression, anxiety, stress, and anger. *Personality and Individual Differences, 39*(7), 1249–1260. https://www.sciencedirect.com/science/article/pii/S0191886905001765

Mori, M., Takano, K., & Tanno, Y. (2015). Role of self-focus in the relationship between depressed mood and problem-solving. *Motivation and Emotion, 39*(5), 827–838. https://link.springer.com/article/10.1007/s11031-015-9486-x

Rey, L., & Extremera, N. (2012). Physical-verbal aggression and depression in adolescents: The role of cognitive emotion regulation strategies. *Universitas Psychologica, 11*(4), 1245–1254. http://www.scielo.org.co/scielo.php?pid=S1657-92672012000400018&script=sci_abstract&tlng=pt

Sakakibara, R., & Endo, T. (2016). Cognitive appraisal as a predictor of cognitive emotion regulation choice. *Japanese Psychological Research, 58*(2), 175–185. https://onlinelibrary.wiley.com/doi/abs/10.1111/jpr.12098

Smith, M., Wethington, E., & Zhan, G. (1996). Self-concept clarity and preferred coping styles. *Journal of Personality, 64*(2), 407–434. https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-6494.1996.tb00516.x

Stikkelbroek, Y., Bodden, D. H., Kleinjan, M., Reijnders, M., & van Baar, A. L. (2016). Adolescent depression and negative life events, the mediating role of cognitive emotion regulation. *PLoS One, 11*(8), 1–16. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0161062

Teasdale, J. D., Moore, R. G., Hayhurst, H., Pope, M., Williams, S., & Segal, Z. V. (2002). Metacognitive awareness and prevention of relapse in depression: Empirical evidence. *Journal of Consulting and Clinical Psychology, 70*(2), 275–287. https://doi.apa.org/doiLanding?doi=10.1037%2F0022-006X.70.2.275

Van den Bergh, O., Brosschot, J., Critchley, H., Thayer, J. F., & Ottaviani, C. (2021). Better safe than sorry: A common signature of general vulnerability for psychopathology. *Perspectives on Psychological Science, 16*(2), 225–246. https://journals.sagepub.com/doi/pdf/10.1177/1745691620950690

Watson, P. J., Morris, R. J., Ramsey, A., Hickman, S. E., & Waddell, M. G. (1996). Further contrasts between self-reflectiveness and internal state awareness factors of private self-consciousness. *Journal of Psychology: Interdisciplinary and Applied, 130*(2), 183–192. https://www.tandfonline.com/doi/abs/10.1080/00223980.1996.9915000

Wells, A. (2005). Detached mindfulness in cognitive therapy: A metacognitive analysis and ten techniques. *Journal of Rational-Emotive and Cognitive-Behavior Therapy, 23*(4), 337–355. https://link.springer.com/article/10.1007/s10942-005-0018-6

Yan, R., Ringwald, W. R., Vega, J., Kehl, M., Bae, S. W., Dey, A. K., Low, C., Wright, A. G. C., & Doryab, A. (2022). Exploratory machine learning modeling of adaptive and maladaptive personality traits from passively sensed behavior. *Future Generation Computer Systems, 132*, 266–281. https://www.sciencedirect.com/science/article/pii/S0167739X2200053X

Zimmer-Gembeck, M. J. (2021). Coping flexibility: Variability, fit, and associations with efficacy, emotion regulation, decentering, and responses to stress. *Stress and Health, 37*(5), 848–861. https://onlinelibrary.wiley.com/doi/abs/10.1002/smi.3043

Chan, J. P. K., & Chan, R. W. M. (2023). Investigating the mediating effects of insight between decentring and cognitive coping process. *Global Journal of Psychology Research: New Trends and Issues. 13*(1), 01–12. https://doi.org/10.18844/gjpr.v13i1.8441