

Psychological wellbeing of students with trait narcissism

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ABSTRACT

Previous studies suggested that perceived social support (PSS) significantly contributes to psychological wellbeing (PWB), partially explained by the sense of mattering. Nevertheless, individuals with different personality might perceive social support in different ways from the other. The interaction of PSS with trait narcissism, one of the dark triad personality traits was investigated by collecting data from 141 college students who were recruited purposively and instructed to respond to the scales of PWB, PSS, mattering, and narcissism. Bootstrap analysis with 5,000 samples in 95% confidence interval was utilized to test the moderated mediation hypothesis. The results suggested that individuals with moderate-to-high narcissism levels tend to perceive social support as decreasing their sense of mattering to other people, and as they do not feel they matter, their PWB was negatively affected. Limitations, implications, and suggestions are discussed.

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1. INTRODUCTION

Psychological wellbeing of college students has been an important issue since the realization that academic achievement is not the only significant thing in life [1]. In line with that, studies in various setting have reported that psychological wellbeing or mental health is an important factor to have a meaningful life [2] and a balanced life [3]. In the context of this current study, students' psychological wellbeing (PWB) holds a significant role in keeping students from further effect of psychological problems, such as anxiety [4], or depression [5]. Paradoxically, studies also reported that universities and colleges exposed the youth to more mental health problems. A systematic review by Zhang *et al.* [6] suggested that the highest reported cause of mental health problems among young adults is academic stress. While the prevalence of academic stress and mental health issues was reported to be high among university students, it is important to highlight that the reports vary according to many factors; academic factors, for instance, nursing and medical students tend to be reported as experiencing higher levels of academic stress, anxiety, and depression [7]. Another instance is based on social interaction factors; during the lockdown amidst the pandemic, where the social interaction was observed to be lower among every individual, the stress levels among college students was reported to be higher among college students [8].

Another study during the lockdown also reported that the perception of being socially included held important significance on individuals' mental wellbeing, mediated by the lower levels of fear of missing out or FOMO among individuals who felt socially included [9]. While the social interaction factors such as FOMO, loneliness, and perceived social inclusion are considered an important building block for PWB, it is imperative to note that different individuals might react differently towards the same or similar social feedback; in other words, personality factors might play some roles in the equation. A study in Malaysian

context during the outbreak of COVID-19 pandemic highlighted that perceived social support, perceived social inclusion, and the sense of mattering worked differently in developing happiness among individuals with different extraversion levels. The study suggested that personal factors, such as personality traits, interact with social factors, such as perceived social support and sense of mattering, in predicting one's mental health.

The significant role of social attribute towards psychological wellbeing can be explained by several theories, one of them is the sociometer theory [10], which posits that human have an internal psychological mechanism called a sociometer that monitors our social acceptance and belongingness. It suggests that our self-esteem and sense of self-worth are influenced by our perception of how we are socially valued by others [11]. Sociometer theory was supported by many previous studies, such as the study by Nga *et al.* [12] that reported higher sense of empowerment among individuals who believe that their social environment was supportive and inclusive. Contextually, it was also reported that sociometer, the sense that we are included in social circles and socially supported, played significant role in protecting college students from anxiety and depression. The role of sociometer in the form of perceived social support (PSS), perceived social inclusion, and the sense of mattering was reported to be significant and positive towards mental health among college students, and their prevalence was reported to be similar between before, during, and after the pandemic outbreak [8], [13]–[15]. As posited by the theory, our sociometer acts as an internal gauge that assesses the level of acceptance and inclusion we experience in our social interactions. When we feel accepted and valued enough by others, our sociometer signals positive self-evaluation, which contributes to positive emotions and wellbeing [9]. Conversely, when we perceive rejection or social exclusion, our sociometer triggers low self-esteem, leading to negative emotions and a diminished sense of well-being [16].

Included as sociometer, PSS has been reported as a significant predictor of psychological and subjective wellbeing, as well as other psychological features, such as unconditional self-acceptance [17], a cognitive feature of accepting and valuing oneself, including imperfections, without requiring external validation or meeting certain criteria. It fosters emotional and psychological well-being, resilience, as well as a healthier relationship with oneself [18], [19]. In the context of our study, sociometer is represented by both PSS and mattering. Mattering is another cognitive feature that is significantly predicted by PSS and significantly predicts PWB [20]. Nevertheless, PSS and mattering cannot be defined as one single factor or two factors that interact with one another to predict PWB as they PSS is a robust predictor of mattering; when one feel supported by others, they would likely to believe that they matter to those who support them [21].

Furthermore, mattering was reported as a significant and robust predictor of happiness in its various forms, such as subjective wellbeing [9], wellness [22] and satisfaction with life. With that in mind, it is logical to hypothesize that mattering can explain (mediate) the association between PSS and PWB among the college students in our current study. In other words, we hypothesize that individuals who perceive that other people are supportive tend to believe that they matter to others, and that belief will eventually lead them to a better mental health. Nonetheless, some studies suggested that the sense that we matter to other might vary among individuals, based on how they develop their sociometer. This individual difference might be associated with personal references that are formed by different personality factors [23]. Therefore, sociometer and personality factors might interact with one another in contributing to one's perceived wellbeing, either psychologically or subjectively. Supporting the notion that sociometer might interact with personality traits, another study by Prihadi *et al.* [24] suggested that PSS and mattering interact with trait extraversion in predicting satisfaction with life among adults in the locked down period in Malaysia.

For the context of our current study, we refer to narcissism as a personality trait, instead of narcissistic personality disorder (NPD). NPD is a psychological disorder characterized by a pervasive pattern of grandiosity, a deep need for admiration, and a lack of empathy. It involves rigid and maladaptive narcissistic traits that significantly impair a person's functioning and relationships [25], [26]. Trait narcissism, on the other hand, refers to narcissistic tendencies or characteristics that exist on a spectrum. It encompasses a range of self-centered traits, from mild to extreme, but falls short of meeting the diagnostic criteria for NPD. Thus, in the context of this current study, trait narcissism refers to a dark personality trait characterized by an excessive sense of self-importance, a deep need for admiration, and a lack of empathy towards others [27], [28].

Known as one of the dark triad personality traits together with Machiavellianism and sociopathy [29], narcissism involves a preoccupation with one's own achievements, appearance, and success, often at the expense of others. Individuals with narcissism often exhibit manipulative and exploitative behaviors to fulfill their own desires and maintain a grandiose self-image [30]. Although this trait would not be diagnosed as a disorder, it is often associated with negative outcomes, such as interpersonal conflicts, shallow relationships, and difficulties in maintaining healthy connections with others [31]. During the lockdown amidst the pandemic, it was reported that trait narcissism interacted with PSS in predicting loneliness among the quarantined individuals [32]; narcissistic individuals tend to sense the social support deprivation and manage

their behavior to gain more desired social feedback. As during the lockdown most of the social interaction could only be done online, narcissistic individuals tend to manipulate the contents of their social media or profile pictures to attract desired comments or social feedback from others that feed their elevated need to matter [33], [34].

In turn, when their other social network users provided them with the desired social feedback, narcissists would likely to believe they matter more to others, and they would likely to be more satisfied with their life now and subjectively perceive themselves as being well [27], [33]. Nevertheless, students with narcissism might also perceive social support as an unintentional reminder of their own vulnerabilities and limitations, which contradict their grandiose self-image, that eventually led them to reject or devalue the support, as it challenges their belief in their own superiority [35]. It was reported by Fang *et al.* [36] that such situation might lead individuals with trait narcissism to depression.

Based on the literature, we hypothesized that trait narcissism among the students will interact with their PSS in predicting both mattering and PWB; it will also interact with mattering in predicting PWB. In other words, we hypothesized that narcissism will alter the coefficient of path a, path b, path c, and path c' in the mediation model, and therefore moderates the mediation indirect effect of PSS on PWB through mattering. Figure 1 illustrate the hypothesized model of moderated mediation based on the literature to be tested. As can be seen in Figure 1, we hypothesized that the higher the level of trait narcissism, the lower the coefficient of the indirect link between PSS and PWB through mattering.

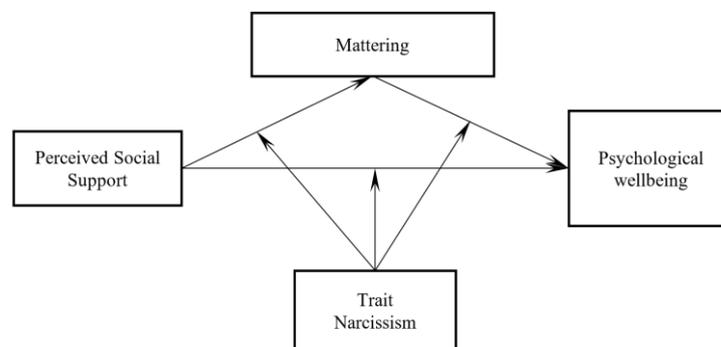


Figure 1. Hypothetical model of moderated mediation hypothesis

2. RESEARCH METHOD

2.1. Participants

A targeted sample of 141 college and university students hailing from the Selangor State of Malaysia was purposively selected. The inclusion criteria for this study mandated that participants be adults aged 18 years or older and officially enrolled in a college or university in Malaysia during the data collection period. This careful selection process ensured that the study's sample was representative of the specific demographic under investigation.

2.2. Measurements

2.2.1. Multidimensional scale of perceived social support

Perceived social support was measured using the multidimensional scale of perceived social support [37]. The scale consists of 12 items asking participants to rate if they have received support from those around them. It was measured on a 7-point Likert scale 1 (very strongly disagree) to 7 (very strongly agree). The scale demonstrated high internal reliability, $\alpha=.907$.

2.2.2. General mattering scale

The mediating variable, mattering was measured using the general mattering scale [38]. The scale consists of five items and was rated on a 4-point Likert scale 1 (not at all) to 4 (very much). The scale has high internal reliability, $\alpha=.769$.

2.2.3. Psychological wellbeing scale

To measure the outcome variable, psychological wellbeing, the psychological wellbeing scale [39] was used. The scale consisted of 18 items measured on a 7-point Likert scale ranging from 1 (strongly agree) to 7 (strongly disagree). The scale has an internal reliability of $\alpha=.815$.

2.2.4. Narcissistic personality inventory

The moderator variable, trait narcissism was measured using the narcissistic personality inventory. This inventory asked the participants to rate which of the statements they identified closest with that best describe their feelings and beliefs about themselves. As this is a dichotomous inventory, reliability could not be generated.

2.3. Data collection procedure

Data collection was done by inviting the participants to participate via online social media. Participants were required to agree and give their informed consent before proceeding. Once agreed, the participants completed the survey by starting to fill up their demographic details followed by the general mattering scale, multidimensional scale of perceived social support, psychological well-being, and finally the narcissistic personality inventory. The participants took an average of 15 minutes to complete the survey. At the end, participants were thanked for their participations.

2.4. Data analysis

To test the moderated mediation hypothesis, we employ the bootstrap method with 5,000 samples with 95% confidence interval. The bootstrap method was chosen due to its robustness in analyzing the complex interrelationship between the outcome variable and more than one predictor variable without having to assume the normality of the data [40]. To execute the test, we employ the PROCESS Macro model 59 for SPSS.

3. RESULTS AND DISCUSSION

3.1. Results

The outcomes demonstrate the absence of a significant association between the PSS model and PWB (total effect) at any level of narcissism. In other words, one's perception of support does not offer protection against mental health issues, as indicated by the results in Table 1. While this finding seems to against the past studies (that individuals who feel supported tend to have better psychological health), it is important to see the finding depicted in Tables 2 and 3, where we controlled for (took away the effect of) mattering.

While Table 2 depicts the significance of PSS in predicting PWB without mediated by mattering, the Table 3 depicts the significance of the indirect effect of PSS in predicting PWB through PSS at different levels of narcissism. As seen in Tables 2 and 3 suggested that when individuals feel they are supported by others, they will feel they matter more, and therefore they will be mentally healthier, or psychologically better. However, our finding also suggested that this premise does not work for individuals with moderate to high narcissism. It can be explained that the trait narcissism might push one to be our results suggested that the perception that one is socially supported significantly improves one's mental health, or in this case, represented by psychological wellbeing. This significant positive contribution of perceived social support had been hypothesized in the early stage of our study and have been reported by many studies before [9], [13], [18], [21].

Table 1. Conditional effects of the focal predictor at values of the moderator

Narc	Effect	se	t	p	LLCI	ULCI
25.00	.1288	.4769	.2701	.7875	-.8144	1.0720
29.00	-.9618	.4644	-2.0711	.0403	-1.88-3	-.0434
31.00	-1.5072	.6350	-2.3733	.0190	-2.7631	-.2512

Note: Lower limit confidence interval (LLCI), upper limit confidence interval (ULCI)

Table 2. Conditional direct effect(s) of X on Y

Narc	Effect	Se	t	p	LLCI	ULCI
25.00	-.3187	.1355	-2.3510	.0202	-.5867	-.0506
29.00	-.1653	-.851	-1.9428	.0541	-.3335	.0030
31.00	-.0886	.1239	-.7150	.4758	-.3335	.1564

Table 3. Conditional indirect effects of X on Y

Narc	Effect	BootSE	BootLLCI	BootULCI
25.00	.0125	.0619	-.0899	.1614
29.00	-.0806	.0465	-.1786	.0053
31.00	-.1163	.0655	-.2611	-.0040

3.2. Discussion

Our findings offered an unusual outcome where the total effect of the predictor on the outcome was negative and only significant at the moderate level of moderator, the direct effect was also negative and only significant at the low level of moderator, while the indirect effect of the predictor through the mediator is also negative and only significant at the high level of moderator; the moderator variable, trait narcissism plays a pivotal role in the interrelationship among the other three variables. These findings are not supported by the sociometer theory, which implied that higher PSS predicts higher mattering that eventually predicts higher PWB [11], neither did our findings confirm the findings of the previous studies which reported that mattering and PSS contributed positively to PWB. This different outcome might be due to the involvement of trait narcissism. The presence of narcissism, and its interactions with the two sociometer variables in our study had altered their dynamics with the outcome variable of PWB. Nevertheless, in all levels of narcissism, the contribution of PSS is significantly negative as can be seen in Tables 2 and 3.

There are several possible explanations from a scientific perspective as to why individuals with moderate to high narcissism trait might perceive that social support made them feel matter less. It is notable that individual experiences and perceptions may vary, and not all individuals with narcissistic traits will exhibit the same patterns of behavior or beliefs. Second, individuals with narcissistic traits often have fragile self-esteem [32], which is highly dependent on external validation and praise. When they believe that they are receiving social support, they may interpret it as an indication that they are incapable of handling their problems on their own or that others perceive them as weak [31]. This perceived threat to their self-esteem can lead to feelings of inadequacy or a diminished sense of self-importance. Third, narcissistic individuals tend to have an inflated sense of self-importance and a belief in their exceptional abilities [27]. Hence, our finding is supported by Fang *et al* [36], who stated that individuals with higher narcissism might prone to depression as they fail to perceive social support well.

Furthermore, as narcissistic students often have a strong desire for control and independence. Accepting social support from peers, educators, or parents may be viewed as a loss of control or a reliance on others, which can be perceived as threatening [35]. Lack of empathy: narcissistic individuals typically have limited empathy for others and struggle to understand or connect with their emotions. As a result, they may be less attuned to the supportive efforts of others and may interpret them as insincere or manipulative. This lack of empathy can hinder their ability to recognize and appreciate the positive impact of social support, leading them to discount or dismiss its significance. Our study has several limitations, first, the cross-sectional design that we employed limits us from knowing the effect of narcissism over time and across different developmental stages of the participants. Second, our participants were all university students, and therefore most of them refer to academic stress when it comes to the question of their PWB. This situation might not be generalized to different population such as working adults or married couples, which might have various sources of PWB. Third, we realize that our results indicated low-to-moderate prevalence and prevalence changes (R^2 and R^2_{chg}), which means that other variables might play significant roles when they are included in the equation, such as attachment styles, other personality traits, and even their demographic variables. Therefore, it is highly suggested for the future research to include different variables as predictors of PWB. Other research designs and data management methods are, such as qualitative and longitudinal design are also suggested.

4. CONCLUSION

In conclusion, our study examined the role of trait narcissism in the perception of social support and its impact on PWB among university students. We found that individuals with moderate to high levels of narcissism did not perceive social support as a validation of their mattering to others. For instance, when university students with high narcissistic traits received supportive messages from friends during challenging times, they might interpret the support as a sign of weakness or insincerity, diminishing its positive impact on their PWB. These findings emphasize the significance of mattering in the context of social support, as individuals' beliefs about their significance influence how they perceive and benefit from support, particularly among university students with trait narcissistic.

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REFERENCES

- [1] K. Kiakojoury and T. D. Taher, "Relationship between Self-efficacy, Happiness, Life Satisfaction and Perceived Social Support with Academic Achievement Motivation Case study: University students of Bandar Anzali," *Educational Researches*, vol. 16, no. 68, pp. 183–198, 2021, doi: 10.30495/educ.2021.686646.
- [2] K. Iatridis, J.-P. Gond, and E. Kesidou, "How Meaningfulness and Professional Identity Interact in Emerging Professions: The Case of Corporate Social Responsibility Consultants," *Organization Studies*, vol. 43, no. 9, pp. 1401–1423, Sep. 2022, doi: 10.1177/01708406211035506.
- [3] C. Choi, J. Lee, M. S. Yoo, and E. Ko, "South Korean children's academic achievement and subjective well-being: The mediation of academic stress and the moderation of perceived fairness of parents and teachers," *Child Youth Serv Rev*, vol. 100, pp. 22–30, May 2019, doi: 10.1016/j.chilyouth.2019.02.004.
- [4] C. Wang *et al.*, "Anxiety, depression, and stress prevalence among college students during the COVID-19 pandemic: A systematic review and meta-analysis," *Journal of American College Health*, pp. 1–8, Sep. 2021, doi: 10.1080/07448481.2021.1960849.
- [5] K. D. Prihadi, S. Y. Wan, V. Y. Y. Lee, and H. N. Ismail, "Anxiety and depression among university students during the lockdown: their protective and risk factors," *International Journal of Public Health Science (IJPHS)*, vol. 11, no. 1, pp. 327–335, Mar. 2022, doi: 10.11591/ijphs.v11i1.21245.
- [6] Y. Zhang, X. Bao, J. Yan, H. Miao, and C. Guo, "Anxiety and Depression in Chinese Students During the COVID-19 Pandemic: A Meta-Analysis," *Front Public Health*, vol. 9, Aug. 2021, doi: 10.3389/fpubh.2021.697642.
- [7] L. Qiu, Y. Feng, J. Luo, Y. Zhang, and Q. Yang, "Predictors of personal depression stigma in medical students in China: differences in male and female groups," *Med Educ Online*, vol. 27, no. 1, Dec. 2022, doi: 10.1080/10872981.2022.2093427.
- [8] C. Benke, L. K. Autenrieth, E. Asselmann, and C. A. Pané-Farré, "One year after the COVID-19 outbreak in Germany: long-term changes in depression, anxiety, loneliness, distress and life satisfaction," *European Archives of Psychiatry and Clinical Neuroscience*, vol. 273, no. 2, pp. 289–299, Mar. 2023, doi: 10.1007/s00406-022-01400-0.
- [9] H. Wang and K. D. Prihadi, "What makes locked-down students happy: the sense of mattering and subjective well-being," *International Journal of Evaluation and Research in Education (IJERE)*, vol. 11, no. 1, pp. 201–206, Mar. 2022, doi: 10.11591/ijere.v11i1.22578.
- [10] M. R. Leary and R. F. Baumeister, "The nature and function of self-esteem: Sociometer theory," *Adv Exp Soc Psychol*, vol. 32, pp. 1–62, 2000, doi: 10.1016/S0065-2601(00)80003-9.
- [11] K. D. Prihadi, C. Y. S. Wong, E. Y. V. Chong, and K. Y. X. Chong, "Suicidal thoughts among university students: The role of mattering, state self-esteem and depression level," *International Journal of Evaluation and Research in Education (IJERE)*, vol. 9, no. 3, pp. 494–502, Sep. 2020, doi: 10.11591/ijere.v9i3.20587.
- [12] G. J. E. Nga, D. Kurian, K. D. Prihadi, and A. Aziz, "Mattering, social support, resilience and sense of empowerment during the pandemic," *International Journal of Public Health Science (IJPHS)*, vol. 11, no. 2, pp. 615–622, Jun. 2022, doi: 10.11591/ijphs.v11i2.21372.
- [13] D. E. Eagle, C. F. Hybels, and R. J. Proeschold-Bell, "Perceived social support, received social support, and depression among clergy," *J Soc Pers Relat*, vol. 36, no. 7, pp. 2055–2073, Jul. 2019, doi: 10.1177/0265407518776134.
- [14] J. Wu, Y. Wu, and Y. Tian, "Temporal associations among loneliness, anxiety, and depression during the COVID-19 pandemic period," *Stress and Health*, vol. 38, no. 1, pp. 90–101, Feb. 2022, doi: 10.1002/smi.3076.
- [15] Ł. Okruszek, A. Aniszewska-Stańczuk, A. Piejka, M. Wiśniewska, and K. Żurek, "Safe but Lonely? Loneliness, Anxiety, and Depression Symptoms and COVID-19," *Front Psychol*, vol. 11, Dec. 2020, doi: 10.3389/fpsyg.2020.579181.
- [16] P. P. T. Sim and K. D. Prihadi, "Social comparison and life satisfaction in social media: The role of mattering and state self-esteem," *International Journal of Public Health Science (IJPHS)*, vol. 9, no. 3, pp. 245–254, Sep. 2020, doi: 10.11591/ijphs.v9i3.20509.
- [17] S.-Y. Kam and K. D. Prihadi, "Why students tend to compare themselves with each other? The role of mattering and unconditional self-acceptance," *International Journal of Evaluation and Research in Education (IJERE)*, vol. 10, no. 2, pp. 441–447, Jun. 2021, doi: 10.11591/ijere.v10i2.21238.
- [18] S. Popov, "When is Unconditional Self-Acceptance a Better Predictor of Mental Health than Self-Esteem?," *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, vol. 37, no. 3, pp. 251–261, Sep. 2019, doi: 10.1007/s10942-018-0310-x.
- [19] J. Camp, S. Vitoratou, and K. A. Rimes, "LGBQ+ Self-Acceptance and Its Relationship with Minority Stressors and Mental Health: A Systematic Literature Review," *Archives of Sexual Behavior*, vol. 49, no. 7, pp. 2353–2373, Oct. 2020, doi: 10.1007/s10508-020-01755-2.
- [20] G. Flett, A. Khan, and C. Su, "Mattering and Psychological Well-being in College and University Students: Review and Recommendations for Campus-Based Initiatives," *International Journal of Mental Health and Addiction*, vol. 17, no. 3, pp. 667–680, Jun. 2019, doi: 10.1007/s11469-019-00073-6.
- [21] S. Casale and G. L. Flett, "Interpersonally-Based Fears During the Covid-19 Pandemic: Reflections on the Fear of Missing Out and the Fear of Not Mattering Constructs.," *Clinical Neuropsychiatry*, vol. 17, no. 2, pp. 88–93, Apr. 2020, doi: 10.36131/CN20200211.
- [22] I. Prilleltensky, M. P. Scarpa, O. Ness, and S. Di Martino, "Mattering, wellness, and fairness: Psychosocial goods for the common good.," *American Journal of Orthopsychiatry*, vol. 93, no. 3, pp. 198–210, 2023, doi: 10.1037/ort0000668.
- [23] A. Besser, G. L. Flett, T. Nepon, and V. Zeigler-Hill, "Personality, Cognition, and Adaptability to the COVID-19 Pandemic: Associations with Loneliness, Distress, and Positive and Negative Mood States," *International Journal of Mental Health and Addiction*, vol. 20, no. 2, pp. 971–995, Apr. 2022, doi: 10.1007/s11469-020-00421-x.
- [24] K. D. Prihadi, E. S. Z. Lim, E. Sim, and K. Y. Chong, "Mattering and life satisfaction among the quarantined adults in Malaysia during the COVID-19 pandemic," *International Journal of Public Health Science (IJPHS)*, vol. 10, no. 1, pp. 189–193, Mar. 2021, doi: 10.11591/ijphs.v10i1.20684.
- [25] F. Schalkwijk, P. Luyten, T. Ingenhoven, and J. Dekker, "Narcissistic Personality Disorder: Are Psychodynamic Theories and the Alternative DSM-5 Model for Personality Disorders Finally Going to Meet?," *Frontiers in Psychology*, vol. 12, Jul. 2021, doi: 10.3389/fpsyg.2021.676733.
- [26] E. Ronningstam, "Internal Processing in Patients With Pathological Narcissism or Narcissistic Personality Disorder: Implications for Alliance Building and Therapeutic Strategies," *Journal of Personality Disorders*, vol. 34, no. Supplement, pp. 80–103, Mar. 2020, doi: 10.1521/pedi.2020.34.supp.80.
- [27] İ. Karakulak and Ü. Tazegül, "Identification of the Relationship Between Life Satisfaction and Narcissism Levels of University Students," *International Education Studies*, vol. 13, no. 7, pp. 40–46, Jun. 2020, doi: 10.5539/ies.v13n7p40.

- [28] S. L. S. Lane, “‘Is It Me? Am I Losing My Mind?’ Living with Intimate Male Partners Presenting With Subjective Narcissistic Behaviours and Attitudes,” M.S. thesis, University of Manitoba, 2020.
- [29] T. Kase, Y. Ueno, and T. Shimotsukasa, “Relationship between Dark Triad and Life Skills: An Exploratory Study of Adaptive and Maladaptive Aspects of Antisocial Personality Traits,” *The Japanese Journal of Personality*, vol. 27, no. 3, pp. 266–269, Mar. 2019, doi: 10.2132/personality.27.3.10.
- [30] I. Prilleltensky, “Mattering at the Intersection of Psychology, Philosophy, and Politics,” *American Journal of Community Psychology*, vol. 65, no. 1–2, pp. 16–34, Mar. 2020, doi: 10.1002/ajcp.12368.
- [31] O. R. Cragun, K. J. Olsen, and P. M. Wright, “Making CEO Narcissism Research Great: A Review and Meta-Analysis of CEO Narcissism,” *Journal of Management*, vol. 46, no. 6, pp. 908–936, Jul. 2020, doi: 10.1177/0149206319892678.
- [32] W. Gąsiorowska, M. Sioch, and M. A. Żemojtel-Piotrowska, “Narcissism, social support, and loneliness during the pandemic,” *Personality and Individual Differences*, vol. 181, p. 111002, Oct. 2021, doi: 10.1016/j.paid.2021.111002.
- [33] D. G. Taylor, “Putting the ‘self’ in selfies: how narcissism, envy and self-promotion motivate sharing of travel photos through social media,” *Journal of Travel & Tourism Marketing*, vol. 37, no. 1, pp. 64–77, Jan. 2020, doi: 10.1080/10548408.2020.1711847.
- [34] J. L. McCain and W. K. Campbell, “Narcissism and social media use: A meta-analytic review.,” *Psychology of Popular Media Culture*, vol. 7, no. 3, pp. 308–327, Jul. 2018, doi: 10.1037/ppm0000137.
- [35] C. Moon and C. Morais, “The effect of covert narcissism on workplace incivility: The mediating role of self-esteem and norms for respect,” *Current Psychology*, vol. 42, no. 21, pp. 18108–18122, Jul. 2023, doi: 10.1007/s12144-022-02968-5.
- [36] Y. Fang, Y. Niu, and Y. Dong, “Exploring the relationship between narcissism and depression: The mediating roles of perceived social support and life satisfaction,” *Personality and Individual Differences*, vol. 173, p. 110604, Apr. 2021, doi: 10.1016/j.paid.2020.110604.
- [37] G. D. Zimet, N. W. Dahlem, S. G. Zimet, and G. K. Farley, “The Multidimensional Scale of Perceived Social Support,” *Journal of Personality Assessment*, vol. 52, no. 1, pp. 30–41, Mar. 1988, doi: 10.1207/s15327752jpa5201_2.
- [38] F. M. Marcus and M. Rosenberg, “Mattering: Its measurement and significance in everyday life,” in *Eastern Sociological Society Meetings*, 1987.
- [39] G. J. Kafka and A. Kozma, “The construct validity of Ryff’s Scales of Psychological Well-Being (SPWB) and their relationship to measures of subjective well-being,” *Social Indicators Research*, vol. 57, no. 2, pp. 171–190, 2002, doi: 10.1023/A:1014451725204.
- [40] A. F. Hayes, “Partial, conditional, and moderated moderated mediation: Quantification, inference, and interpretation,” *Communication Monographs*, vol. 85, no. 1, pp. 4–40, Jan. 2018, doi: 10.1080/03637751.2017.1352100.

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