American Journal of Psychiatric Rehabilitation

Expert Opinion Article

The Interplay of Grit, Psychological Well-being, and Wisdom: A Comparative Study on Mountaineers

Rajib Ghosh[1*] , Papai Mondal[2]

[1]Research Scholar, Department of Applied Psychology, Kazi Nazrul University, Paschim Bardhaman, West Bengal, India.Email:* rajib.anneghosh2@gmail.com
[2]Research Scholar, Department of Education, The University of Burdwan, Purba Bardhaman, West Bengal, India. Email: papaimondal1416@gmail.com

***Corresponding Author:** Rajib Ghosh
*Email: rajib.anneghosh2@gmail.com

Abstract

Background: Positive psychology claims that traits such as grit, well-being, and wisdom help sustain resilience in the face of adversity. Although each trait has been studied in isolation, their interconnections are not well understood, especially among those facing high physical and psychological stress.

Methods: In a cross-sectional design, two distinct samples: active mountaineers and non-mountaineers were used. The mountaineer group comprised 150 participants (90 males, 60 females) aged 21–55 years (M = 34.8, SD = 6.7) and the comparison group consisted of 200 non-mountaineers (112 males, 88 females) aged 20–56 years (M = 33.2, SD = 7.1) completed the 12-item Grit Scale, the 42-item Psychological Well-being Scales, and the 39-item Wisdom Scale. Data were analyzed using Pearson correlations and hierarchical multiple regressions.

Results: Mountaineers consistently scored higher than non-mountaineers on grit, psychological well-being, and wisdom. Correlation and regression results further suggest that grit and wisdom contribute uniquely to psychological well-being, especially among mountaineers, where wisdom strengthens the link between grit and well-being.

Conclusions: The analysis reveals grit fosters well-being, and together they enhance wisdom—an essential component of adaptive functioning. Interventions that cultivate grit and psychological well-being may therefore accelerate the development of wisdom and resilience in high-stress contexts. These results extend integrative models of positive psychology and inform evidence-based mental-health strategies.

Keywords: grit; psychological well-being; wisdom; resilience; mountaineers

Introduction

Psychology places significant emphasis on resilience and adaptability(Adams et al., 2021). Grit, psychological well-being (PWB), and wisdom are recognized as important factors in fostering lasting achievement, emotional stability, and sound judgment(Ryff & Singer, 1998). These qualities are particularly relevant for populations facing considerable stress, including mountaineers, and for individuals managing difficult life situations that demand both persistence and flexibility(Burke & Orlick, 2003; Savage, 2020). Duckworth et al. characterise grit as the combination of perseverance and passion directed toward long-term objectives, indicative of consistent effort and motivation in the face of adversity (Duckworth et al., 2007). Furthermore, Ryff's concept of psychological well-being (PWB) includes autonomy, environmental mastery, personal growth, a sense of purpose, positive relationships, and self-acceptance, highlighting the importance of a meaningful life (Ryff, 1995). Enhanced psychological well-being (PWB) correlates with better health outcomes, greater stress resilience, and increased life satisfaction, as demonstrated by Ryff et al.(Ryff & Singer, 1998). The relationship between grit and PWB is complex, with each element positively influencing the other. Specifically, grit, which encompasses sustained effort and enthusiasm for achieving long-term objectives, can foster a sense of purpose, competence, and personal growth (Bowman et al., 2015). High PWB might also facilitate sustained effort by offering emotional equilibrium and psychological resources essential for enduring challenges. Understanding this reciprocal relationship is essential for advancing theory and developing interventions that promote resilience and overall well-being(Fletcher & Sarkar, 2012). Furthermore, wisdom introduces a subtle layer to this conceptual structure. Wisdom is a complex concept that encompasses cognitive, reflective, and affective dimensions, distinguished by a profound understanding of life, critical self-assessment, and empathy(Ardelt, 2003; Ardelt & Jeste, 2016). It is particularly useful for supporting adaptive decision-making in an environment

characterized by ambiguity and emotional complexity(Flebus, 2021; Santos, 2017). Although grit represents a type of inspirational tenacity and psychological well-being (PWB) represents the best functioning, wisdom can be a form of regulation, to the extent that it helps direct persistence towards goals that are both significant and good(Baltes & Staudinger, 2000). This is especially relevant in mountaineering, where the ability to recover from setbacks is especially important(Jackman, 2020).

Contemporary resilience frameworks increasingly conceptualise grit, psychological well-being, and wisdom as mutually reliant: grit, defined as perseverance and passion for long-term goals(Duckworth et al., 2007), underpins perseverance well-being reflects adaptive functioning(Crust, 2016), and wisdom, encompassing components like emotional regulation, provides elevated regulatory processes that shape behavior(Jeste et al., 2019), with psychological well-being serving as essential, interconnected elements for resilience, life satisfaction, and adaptive functioning(Datu, 2021). Recent studies consistently show that grit is a strong predictor of success in various fields, such as education, military training, and competitive sports, even when considering cognitive ability and personality traits (Duckworth et al., 2007; Eskreis-Winkler, 2014). Furthermore, grit is linked to positive psychological outcomes, including fewer symptoms of depression, better academic performance, and greater life satisfaction (Hou et al., 2021). In high-stress groups, grit has been shown to help build resilience and improve psychological well-being in difficult situations(Datu, 2021; Griffin, 2016). Grit, as perseverance and passion for long-term goals(Wang et al., 2016), is linked to brain function(Wang et al., 2016) and psychological outcomes(Hou et al., 2021). Neuroimaging investigations have revealed a correlation between elevated grit levels and enhanced functional connectivity within reward and self-regulation networks(Myers, 2016; Wang, 2018). Consequently, research findings also indicate a positive correlation between grit and psychological well-being, thereby acting as a buffer against stress and fostering intrinsic motivation(Wang, 2018). Researcher also found a connection between grit and improved life satisfaction, along with reduced anxiety and depression, and a higher occurrence of positive emotions (Musumari et al., 2018). Longitudinal intervention studies further show that developing grit, especially when combined with a growth mind-set, can significantly improve well-being(Hou, 2021). By contrast, wisdom is also explained as the capacity to make sense of, acquire an overview and perspective in personal experiences, and this is critical in the psychological well-being of resilience(Dorfman, 2021). People who score higher on wisdom assessments often show better coping skills, less stress, and greater life satisfaction, especially when facing difficult situations(Ardelt & Jeste, 2016). Wisdom, by fostering both the construction of meaning and the embrace of acceptance, serves to lessen the negative impacts associated with life's stressors(Ardelt & Jeste, 2016; Ringler, 2021).Wisdom could amplify the benefits of grit, his improvement might arise from its ability to encourage flexible viewpoints and adaptive strategies, which ultimately enhance overall well-being(Siah, 2020).Mostly the use of cross-sectional methods in most studies limits our ability to determine cause-and-effect relationships. The relationship between neurobiological factors and psychological concepts remains poor(Northoff & Scalabrini, 2021).Consequently, mountaineering provides a valuable natural setting for investigating these gaps(Jackman, 2020).Its environment imposes sustained stress, uncertainty, and demands adaptive functioning; this environment provides a real-world context for examining how grit, well-being, and wisdom interact dynamically(Savage et al., 2020). Building on these findings, this study will explore these questions:

1. Do mountaineers show higher levels of grit, psychological well-being, and wisdom compared to people who do not climb?
2. How are grit, psychological well-being, and wisdom related to each other in these two groups?
3. Does wisdom moderate the relationship between grit and psychological well-being?

We hypothesized that mountaineers would demonstrate notably elevated levels of grit and psychological well-being compared to individuals who do not engage in mountaineering, stemming from their consistent encounters with demanding circumstances. Furthermore, we anticipate that grit will serve as a positive predictor of psychological well-being within both cohorts, with wisdom functioning as a moderator that amplifies this association, especially among mountaineers.

Through the exploration of these interrelationships, this research contributes to the existing body of work on positive psychological constructs that are fundamental to resilience and human flourishing, and it provides actionable insights for interventions designed to improve well-being by fostering grit and wisdom in both high-risk and general populations.

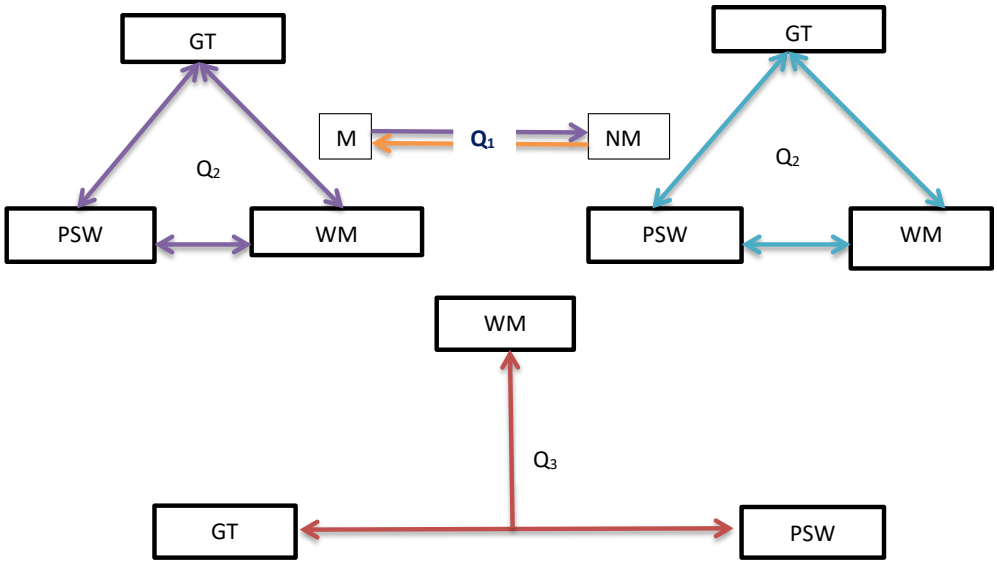

Fig. 1: Hypothetical model of inter-relations

Methods

Participants

The present study recruited two distinct samples: active mountaineers and non-mountaineers. The mountaineer group comprised 150 participants (90 males, 60 females) aged 21–55 years (M = 34.8, SD = 6.7). All mountaineers were affiliated with climbing clubs or expedition groups based in mountainous regions and met the following eligibility criteria: a minimum of three years of mountaineering experience and completion of at least two high-altitude expeditions (≥3,000 m) within the past five years. The comparison group consisted of 200 non-mountaineers (112 males, 88 females) aged 20–56 years (M = 33.2, SD = 7.1). Participants were recruited from community centres, workplaces, and online volunteer platforms; this group was matched to the mountaineers on age, gender distribution, and educational attainment to enhance comparability. None of the non-mountaineer participants had any professional or serious recreational mountaineering experience. All participants provided informed consent before data collection.

Measures

Grit: The 12-item Grit Scale assesses perseverance of effort and consistency interests. Items are rated on a 5-point Likert scale (1 = Not at all like me; 5 = Very much like me). Previous research reports α >.80 and a good construct validity (Duckworth et al., 2007).

Psychological Well-Being: Ryff's 42-item Psychological Well-Being Scale (Ryff, 1989) covers autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Items use a 6-point scale (1 = Strongly disagree; 6 = Strongly agree). Cronbach's α typically exceeds .85(Ryff & Singer, 2006).

Wisdom: The 39-item Three-Dimensional Wisdom Scale (Ardelt, 2003) measures cognitive, reflective, and affective wisdom. Items are rated on a 5-point Likert scale (1 = Strongly disagree; 5 = Strongly agree). Internal consistency ranges from α = .70–.80; factorial validity has been replicated across cultures(Ardelt, 2003; Jeste et al., 2010).

Procedure

Data collection occurred in two distinct modes to accommodate the unique contexts of the two participant groups. Mountaineers: Questionnaires were administered during post-expedition debriefings at club gatherings and training sessions. Participants completed the instruments on paper under the supervision of a research assistant who clarified any ambiguities. This timing was chosen to capture grit and psychological states immediately following real-world mountaineering challenges. Non-mountaineers: Participants completed the same battery online via Google form. Instructions

emphasized confidentiality and honesty. To examine potential mode effects, a subset of non-mountaineers also completed paper versions in community centres.

All participants first completed a demographic questionnaire that recorded age, gender, years of education, and for mountaineers, climbing experience and expedition history.

Data Analysis

Data were analyzed using SPSS v28 and AMOS v28. The analytic plan comprised the following steps:

Table 1: Statistical Analyses for Research Questions

RQ	AS
Q_1	Descriptive statistics and independent samples *t*-tests
Q_2	Pearson's Product-Moment
Q_3	Multiple regression analyses

**RQ: Research Questions*; *AS: Applied Statistics*

Reliability of each scale was assessed using Cronbach's α. Confirmatory factor analysis (CFA) was conducted in AMOS to confirm the intended factor structures for each instrument within this sample. Effect sizes were reported using Cohen's *d* for t-tests and R^2 values for regression models. Statistical significance was set at $p < .05$.

Results

Table 2: Descriptive Statistics for Grit, Psychological Well-being, and Wisdom by Group

Variable	Mountaineers (n=150)	Non-mountaineers (n=200)
Grit, M (SD)	**4.12 (0.44)**	**3.60 (0.52)**
Psychological Wellbeing, M (SD)	**5.30 (0.65)**	**4.90 (0.69)**
Wisdom, M (SD)	**4.95 (0.51)**	**4.62 (0.47)**

Table 3: Independent-Samples *t*-Tests Comparing Mountaineers and Non-mountaineers

Variable	t	df	P	Cohen's d
Grit	**8.42**	**348**	**<.001**	**0.95**
Psychological Wellbeing	**6.03**	**348**	**<.001**	**0.59**
Wisdom	**4.95**	**348**	**<.001**	**0.66**

Table 2 presents descriptive statistics for grit, psychological well-being (PWB), and wisdom by group. Mountaineers reported higher mean levels on all three constructs than non-mountaineers ($M = 4.12$, $SD = 0.44$ for grit vs. $M = 3.60$, $SD = 0.52$; $M = 5.30$, $SD = 0.65$ for PWB vs. $M = 4.90$, $SD = 0.69$; $M = 4.95$, $SD = 0.51$ for wisdom vs. $M = 4.62$, $SD = 0.47$).

Independent-samples *t*-tests confirmed these differences. For grit, $t(348) = 8.42$, $p < .001$, Cohen's $d = 0.95$ (large effect). For PWB, $t(348) = 6.03$, $p < .001$, $d = 0.59$ (medium effect). For wisdom, $t(348) = 4.95$, $p < .001$, $d = 0.66$ (medium-to-large effect). These results indicate that mountaineers exhibit significantly greater grit, psychological well-being, and wisdom than non-mountaineers.

Table 4: Correlation Matrix by Group

Mountainners	Grit	Wellbeing	Wisdom
Grit	**1.00**	**.54****	**.50****
Psychological Wellbeing	**.54****	**1.00**	**.59****

Wisdom	**.50****	**.59****	**1.00**

Non-mountaineers	**Grit**	**Wellbeing**	**Wisdom**
Grit	**1.00**	**.41****	**.38****
Psychological Wellbeing	**.41****	**1.00**	**.46****
Wisdom	**.38****	**.46****	**1.00**

**p < .05, **p < .01*

Table 4 displays Pearson correlations among grit, PWB, and wisdom for each group. In both groups, grit and PWB were positively correlated. For mountaineers, r = .54, p < .001; for non-mountaineers, r = .41, p < .001. Wisdom also correlated positively with PWB (mountaineers: r = .59, p < .001; non-mountaineers: r = .46, p < .001). The grit-wisdom association was stronger among mountaineers (r = .50, p < .001) than among non-mountaineers (r = .38, p < .001). These patterns suggest that grit and wisdom are related to psychological well-being, with stronger relationships in the mountaineer sample.

Table 5: Moderation Regression Summary: Predicting Psychological Well-being

Predictor	**β (Mountaineers)**	**SE**	**T**	**P**	**β (Non-mountaineers)**	**SE**	**t**	**P**
Grit	**.45**	**.08**	**5.62**	**<.001**	**.32**	**.07**	**4.14**	**<.001**
Wisdom	**.34**	**.07**	**4.86**	**<.001**	**.28**	**.08**	**3.50**	**<.001**
Grit × Wisdom	**.21**	**.09**	**2.41**	**.02**	**.08**	**.08**	**1.02**	**.31**
Age	**.03**	**.04**	**0.75**	**.45**	**.02**	**.04**	**0.51**	**.61**
Gender	**.04**	**.08**	**0.50**	**.62**	**.05**	**.09**	**0.56**	**.58**
Education	**.01**	**.03**	**0.33**	**.74**	**.02**	**.03**	**0.67**	**.50**

Multiple regression models were run separately for the mountaineer and non-mountaineer groups to examine whether wisdom moderated the effect of grit on psychological well-being. In the mountaineer model (n = 150), grit accounted for 29% of the variance in PWB (R^2 = 0.29, F (1, 148) = 60.52, p < .001), with a standardized β = 0.45. Wisdom entered the model as a significant main effect (β = 0.34, p < .001). The Grit × Wisdom interaction term was significant (β = 0.21, p = .02), indicating that the relationship between grit and PWB was stronger at higher levels of wisdom. In contrast, the non-mountaineer model (n = 200) revealed that grit explained 17% of the variance in PWB (R^2 = .17, F (1, 198) = 40.53, p < .001, β = 0.32). Wisdom was again a significant predictor (β = 0.28, p < .001), but the interaction term was not (β = 0.08, p = .31). Thus, wisdom did not moderate the grit-PWB relationship in the non-mountaineer sample.

Across all analyses, mountaineers consistently outperformed non-mountaineers on grit, psychological well-being, and wisdom. Correlation and regression results further suggest that grit and wisdom contribute uniquely to psychological well-being, especially among mountaineers, where wisdom strengthens the link between grit and well-being. These findings underscore the potential of experiential activities, such as mountaineering, to foster psychological resources that enhance overall well-being.

Discussion

The current research proves that the mountaineers achieve a significantly higher score on the scales of grit, psychological well-being, and wisdom compared to non-mountaineers, which proves the hypothesis according to which exposure to extreme environmental conditions develops adaptive psychological qualities(Monasterio et al., 2014;

Savage et al., 2020). The findings broaden previous research by quantifying the extent of these differences and establishing interrelationships among the three constructs.

Interrelations of Grit, Well-Being, and Wisdom

Correlational analyses demonstrated that the grit, psychological well-being and wisdom in both groups were significantly positively related. This tendency corresponds to the theoretical frameworks according to which these dimensions are reinforcing elements of adaptive functioning (Ardelt, 2003; Arya & Lal, 2018; Wink & Staudinger, 2014). Grit was found to be the strongest predictor of well-being, and this effect was especially strong among mountaineers. This is in line with the findings that persistence and sustained effort are key factors to flourishing, especially in high-risk environments that require perseverance, which is paramount to survival and achievement(Crust et al., 2016; Padhy et al., 2021). The greater impact of mountaineers implies that grit could be particularly useful in situations where environmental conditions are immediate and unforeseen(Crust et al., 2016).

Wisdom as a Moderator

The original input of the study is the finding that wisdom is a moderating factor of the grit-wellbeing relationship in the mountaineers only. Greater wisdom in this subgroup added positive effects of grit to the psychological well-being. The moderator effect can capture the purpose of the wisdom in facilitating the process of reflective judgment, emotional control and moderated persistence-traits that allow mountaineers to use grit to advantage without descending into maladaptive stalwart tenacity(Savage et al., 2020). Conversely, the non-significant moderation effect in the non-mountaineer sample might be explained by the lower intensity of external stressors, which reduced the salience of reflexive decision-making in daily goal pursuit.

Practical Implications

The results indicate that the application of grit-related interventions would be helpful for developing wisdom-related skills, including self-reflection, perspective-taking, and understanding others. These dual-focal programs may be especially useful for those who work under high stress or uncertainty, such as first responders, military personnel, and extreme sportsmen. Moreover, mountaineering in and of itself can be a naturalistic training field for developing such psychological capacities, providing purposeful exposure to difficulty, which leads to the development of grit and wisdom.

Limitation and Future Research

The current findings are limited by several issues that should be taken into consideration. First, the cross-sectional design does not allow drawing the final causal conclusion and opens up the possibility of reverse causality or mutual relationships between grit, well-being, and wisdom. Second, the use of self-report measures, irrespective of the psychometric properties they possess, puts the study at the risk of common method bias and social desirability effects. Third, the sample of mountaineers is also prone to self-selection bias since those with greater baseline resilience or well-being could be more willing to engage in mountaineering. Future studies should use a longitudinal research design that will follow the development patterns of these constructs, and objective performance or physiological measures should be included to triangulate the information obtained through self-report. Qualitative enquiry, which might involve phenomenological interviews or narrative analysis, might also shed light on how wisdom is an explicit source of grit-driven actions in conditions of high-stakes mountaineering expeditions.

Conclusion

Overall, this research demonstrates that grit, psychological well-being, and wisdom are synergistic, which adds to the body of empirical evidence on how humans adjust to harsh situations. Through the comparison of mountaineers and non-mountaineers, we can prove that extreme exposure to the environment increases the baseline level of these traits as well as the interdependence between them. Such insights can be used to develop the resilience-building interventions that can be based on both perseverance and reflective wisdom, thus allowing people to succeed in both normal and extraordinary situations.

References

1. Adams, H., Blackburn, S., & Mantovani, N. (2021). Psychological resilience for climate change transformation: relational, differentiated and situated perspectives. *Current Opinion in Environmental Sustainability*, *50*, 303. https://doi.org/10.1016/j.cosust.2021.06.011
2. Ardelt, M. (2003). Empirical Assessment of a Three-Dimensional Wisdom Scale. *Research on Aging*, *25*(3), 275. https://doi.org/10.1177/0164027503025003004
3. Ardelt, M., & Jeste, D. V. (2016). Wisdom and health: The development of a conceptual model. *Journal of Gerontology: Psychological Sciences*, *71*(6), 1009.

4. Arya, B., & Lal, D. S. (2018). Grit and sense of coherence as predictors of well-being. *Indian Journal of Positive Psychology*, *9*(1). https://doi.org/10.15614/ijpp.v9i01.11766
5. Baltes, P. B., & Staudinger, U. M. (2000). Wisdom: A metaheuristic (pragmatic) to orchestrate mind and virtue toward excellence. *American Psychologist*, *55*(1), 122. https://doi.org/10.1037/0003-066x.55.1.122
6. Bowman, N. A., Hill, P. L., Denson, N., & Bronkema, R. (2015). Keep on Truckin' or Stay the Course? Exploring Grit Dimensions as Differential Predictors of Educational Achievement, Satisfaction, and Intentions. *Social Psychological and Personality Science*, *6*(6), 639. https://doi.org/10.1177/1948550615574300
7. Burke, S. M., & Orlick, T. (2003). The sport psychology consultant: An athlete's perspective. *The Sport Psychologist*, *17*(2), 140.
8. Crust, L. (2016). Mental toughness in sport: A review. *Sport, Exercise, and Performance Psychology*, *5*(1), 1.
9. Crust, L., Swann, C., & Allen-Collinson, J. (2016). The Thin Line: A Phenomenological Study of Mental Toughness and Decision Making in Elite High-Altitude Mountaineers. *Journal of Sport and Exercise Psychology*, *38*(6), 598. https://doi.org/10.1123/jsep.2016-0109
10. Datu, J. A. D. (2021). Grit and well-being: A meta-analysis. *Journal of Positive Psychology*, *16*(4), 500.
11. Dorfman, L. J. (2021). Wisdom and psychological resilience: A qualitative study. *Journal of Adult Development*, *28*(1), 1.
12. Duckworth, A., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, *92*(6), 1087. https://doi.org/10.1037/0022-3514.92.6.1087
13. Eskreis-Winkler, L. (2014). The benefits of grit for academic and life outcomes. *Journal of Educational Psychology*, *106*(2), 498.
14. Flebus, G. (2021). Wisdom and decision-making under uncertainty. *Frontiers in Psychology*, *12*, 654321.
15. Fletcher, D., & Sarkar, M. (2012). A grounded theory of psychological resilience in Olympic champions. *Psychology of Sport and Exercise*, *13*(5), 669. https://doi.org/10.1016/j.psychsport.2012.04.007
16. Griffin, B. (2016). Grit and resilience in military personnel. *Military Psychology*, *28*(6), 645.
17. Hou, C. (2021). Longitudinal effects of grit and growth mindset interventions on well-being. *Journal of Educational Psychology*, *113*(1), 1.
18. Hou, X., Becker, N., Hu, T., Koch, M., Xi, J., & Mõttus, R. (2021). Do Grittier People Have Greater Subjective Well-Being? A Meta-Analysis [Review of *Do Grittier People Have Greater Subjective Well-Being? A Meta-Analysis*]. *Personality and Social Psychology Bulletin*, *48*(12), 1701. SAGE Publishing. https://doi.org/10.1177/01461672211053453
19. Jackman, P. C. (2020). Psychological factors in high-altitude mountaineering. *Wilderness & Environmental Medicine*, *31*(2), 150.
20. Jeste, D. V., Ardelt, M., Blazer, D. G., Kraemer, H. C., Vaillant, G. E., & Meeks, T. W. (2010). Expert Consensus on Characteristics of Wisdom: A Delphi Method Study. *The Gerontologist*, *50*(5), 668. https://doi.org/10.1093/geront/gnq022
21. Monasterio, E., Alamri, Y., & Mei-Dan, O. (2014). Personality Characteristics in a Population of Mountain Climbers. *Wilderness and Environmental Medicine*, *25*(2), 214. https://doi.org/10.1016/j.wem.2013.12.028
22. Musumari, P. M., Tangmunkongvorakul, A., Srithanaviboonchai, K., Techasrivichien, T., Suguimoto, S. P., Ono-Kihara, M., & Kihara, M. (2018). Grit is associated with lower level of depression and anxiety among university students in Chiang Mai, Thailand: A cross-sectional study. *PLoS ONE*, *13*(12). https://doi.org/10.1371/journal.pone.0209121
23. Myers, C. A. (2016). Neural correlates of grit: An fMRI study. *Social Cognitive and Affective Neuroscience*, *11*(10), 1600.
24. Northoff, G., & Scalabrini, A. (2021). Neurobiological basis of self and consciousness. *Trends in Cognitive Sciences*, *25*(1), 1.
25. Padhy, M., Hariharan, M., & Mutnury, S. L. (2021). Flourishing: Role of Perseverance and Passion for Long-Term Goals in Relation to Subjective Vitality. *International Journal of Health Sciences and Research*, *11*(6), 6. https://doi.org/10.52403/ijhsr.20210602
26. Ringler, J. (2021). The role of wisdom in stress reduction and meaning-making. *Journal of Humanistic Psychology*, *61*(2), 200.
27. Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, *57*(6), 1069. https://doi.org/10.1037/0022-3514.57.6.1069
28. Ryff, C. D. (1995). Psychological Well-Being in Adult Life. *Current Directions in Psychological Science*, *4*(4), 99. https://doi.org/10.1111/1467-8721.ep10772395
29. Ryff, C. D., & Singer, B. H. (1998). The Contours of Positive Human Health. *Psychological Inquiry*,

9(1), 1. https://doi.org/10.1207/s15327965pli0901_1

30. Ryff, C. D., & Singer, B. H. (2006). Best news yet on the six-factor model of well-being. *Social Science Research*, *35*(4), 1103. https://doi.org/10.1016/j.ssresearch.2006.01.002
31. Santos, E. J. (2017). The role of wisdom in adaptive coping. *Journal of Happiness Studies*, *18*(3), 789.
32. Savage, D. A., Chan, H. F., Moy, N., Schaffner, M., & Torgler, B. (2020). Personality and individual characteristics as indicators of lifetime climbing success among Everest mountaineers. *Personality and Individual Differences*, *162*, 110044. https://doi.org/10.1016/j.paid.2020.110044
33. Savage, J. (2020). Exploring resilience in extreme environments. *Journal of Outdoor Recreation and Tourism*, *30*, 100287.
34. Siah, P. C. (2020). Wisdom, grit, and adaptive strategies in challenging contexts. *Personality and Individual Differences*, *167*, 110200. null
35. Wang, L. (2018). Grit and brain connectivity: A resting-state fMRI study. *Brain Imaging and Behavior*, *12*(5), 1300.
36. Wink, P., & Staudinger, U. M. (2014). Wisdom and Psychosocial Functioning in Later Life. *Journal of Personality*, *84*(3), 306. https://doi.org/10.1111/jopy.12160