Exploring the Personality on Well-Being Among Depressive Patients.

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#### **ABSTRACT**

- 5 The aim of the present work was to investigate the relationship between personality traits and well
- 6 being among depressive patients. For this purpose, correlational research design were employed on
- 7 a sample of 124 depressive patients (87 males and 37 females) between the age of 18 to 35 years.
- 8 Personality traits were measured using NEO Five Factor Inventory, and well-being were measured
- 9 using personal well being inventory. These tools are renowned for their reliability and validity in
- assessing personality traits, and PWI, respectively. The data was analysed using Pearson Correlation
- 11 and t- test. Results demonstrated significant correlation between personality traits and well being...
- 12 **Keywords:** Personality, Big Five Personality Traits, well being, Depression

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# INTRODUCTION

- Personality is defined as the characteristic set of behaviors, cognitions, and emotional patterns
- 17 that evolve through the interaction of biological and environmental factors. While there is no
- 18 universally accepted definition of personality, most theoretical frameworks emphasize motivation
- 19 and psychological interactions with one's environment. Trait-based theories, such as those
- 20 proposed by Raymond Cattell, define personality as a collection of traits that predict a person's
- 21 behavior. In contrast, behavioral approaches define personality based on learned behaviors and
- 22 habitual responses.
- 23 Personality can be assessed using a variety of tools, typically categorized into objective tests and
- 24 projective measures. Common examples include the Big Five Inventory (BFI), Minnesota
- 25 Multiphasic Personality Inventory (MMPI-2), Rorschach Inkblot Test, Neurotic Personality
- 26 Questionnaire KON-2006, and Eysenck's Personality Questionnaire (EPQ-R). These tests are
- 27 considered useful due to their established reliability and validity—two essential psychometric
- 28 properties that support their accuracy.
- 29 Among various trait models, the Five-Factor Model (FFM)—also known as the Big Five model—is
- 30 the most widely accepted. It statistically identifies five broad dimensions of personality: openness
- 31 to experience, conscientiousness, extraversion, agreeableness, and neuroticism (Costa & McCrae,
- 32 1992; Goldberg, 1990). Each trait in the Big Five encompasses multiple lower-order facets, forming
- a hierarchical structure of personality (DeYoung, Quilty, & Peterson, 2007).
- 34 For example, the NEO Personality Inventory-Revised (NEO-PI-R) includes six facets per trait. Within
- 35 extraversion, facets such as positive emotions (associated with temperamental positive affect)
- and assertiveness (linked to social dominance) are included (Costa & McCrae, 1992, 1995; Soto &
- 37 John, 2017). This hierarchical model allows personality to be studied at varying levels of
- 38 specificity.

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#### Type D Personality and Depression

An emerging personality construct in health psychology is Type D personality, which stands for "distressed personality." It has gained attention as a psychological risk factor in depressive and cardiovascular patients, being associated with poorer health outcomes and increased emotional distress (Spindler, Kruse, Zwisler, & Pedersen, 2009). Type D consists of two stable traits: negative affectivity (a tendency to experience negative emotions such as anger, irritability, and depressiveness) and social inhibition (avoidance of social interaction due to fear of rejection or disapproval). Negative affectivity closely parallels the neuroticism dimension in the Big Five (Denollet, 1997, 2000, 2005).

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### **Historical Roots of Personality and Mental Health**

- The association between personality and mental health is longstanding, tracing back to ancient Greek medicine. The four humors theory, attributed to Hippocrates and Galen, classified
- 53 individuals into four temperament types—sanguine, phlegmatic, choleric, and melancholic—each
- 54 linked to specific vulnerabilities to illness (Clark & Watson, 1999; Maher & Maher, 1994).
- 55 Later thinkers like Freud (1905/1953) theorized that mental illness stems from unresolved
- 56 psychosexual conflicts, which shape enduring personality patterns. In contrast, Pavlov (1927) and
- 57 his school retained the four-humor typology but explained it using neurological responses rather
- 58 than bodily fluids.
- 59 Contemporary psychology has continued to explore this relationship using empirical tools.
- 60 Research indicates that personality traits are not only predictive of psychopathology but may also
- result from it. This dual perspective is captured by two models:
  - The vulnerability model, which suggests that personality traits (e.g., high neuroticism) increase susceptibility to mental illness.
  - The scar model, which posits that mental illness may cause long-term changes in personality (Ormel et al., 2013; Watson et al., 2006).

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### **Personality and Affective Disorders**

- 68 The Big Five personality traits have been found to correlate strongly with affective disorders.
- 69 Specifically, high neuroticism and low levels of extraversion, agreeableness, conscientiousness,
- and openness have been associated with greater risk for depression and anxiety (Bienvenu et al.,
- 71 2004; Eisenberg et al., 2009; Karsten et al., 2012; Kotov et al., 2010). Research by Quilty et al.
- 72 (2013) indicates that these traits can explain up to 36% of the variance in depression.
- 73 Such findings underline the importance of integrating personality assessment in mental health
- evaluation and treatment planning. As the field progresses, the interplay between personality
- 75 structure and psychopathology continues to be a critical area for psychological research and
- 76 clinical application.

- 79 The World Health Organisation (WHO) states that "well-being exists in two dimensions,
- 80 subjective
- and objective. It comprises an individual"s experience of their life as well as a comparison of
- 82 life
- 83 circumstances with social norms and values". Examples of life circumstance include health,
- 84 education, work, social relationships, built and natural environments, security, civic
- 85 engagement and
- 86 governance, housing and work-life balance. Subjective experiences include a person"s overall
- 87 sense
- 88 of well-being, psychological functioning and affective states.
- Health is one of the top things people say matters to well-being
- 90 . Both physical health and mental health can influence well-being. Recent acute health
- 91 problems
- 92 affect well-being most but longer-term chronic ill health also has an effect on well-being.
- The relationship between health and well-being is not just one-way health influences well-
- 94 being
- and well-being itself influences health. There are a number of correlations between well-
- 96 being and
- 97 physical health outcomes, improved immune system response, higher pain tolerance,
- 98 increased
- 99 longevity, cardiovascular health, slower disease progression and reproductive health.
- The effect of well-being on health is substantial (but variable) and comparable to other risk
- 101 factors
- more traditionally targeted by public health such as a healthy diet.
- Well-being and mental illness are correlated with depression and anxiety, which are
- 104 associated
- with low levels of well-being.
- Mental illness and well-being are independent dimensions; mental health is not simply the
- opposite of mental illness. It is possible for someone to have a mental disorder and high
- 108 levels of
- well-being. It is also possible for someone to have low levels of well-being without having a
- 110 mental
- disorder. Most associations are only moderately altered by adjusting for severity of mental
- 112 disorder.
- Good health is also correlated with higher life satisfaction.

- Well-being is a shared government objective. It can also provide a shared objective around 114
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- to engage to deliver health benefits. For example, promoting physical activity has benefits for 116
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- but it also has a benefit for wellbeing. In addition, strengthening social networks and time 118
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socializing benefit well-being as well as improving mental health in particular. 120

# Well-being and depression

- People who have low levels of mental well-being do not automatically have(more symptoms 122
- of) a mental disorder (Keyes, 2002, 2005; Lamers et al., 2015). Nevertheless, alongside 123
- traditional treatments that focus on alleviatingm the burden of disease, there is growing 124
- support for enhancing long-term mental well-being in clinical practice (Duckworth et al., 125
- 2005; Forsman et al., 2015; Jeste et al., 2015; Kobau et al., 2011; Ry, 2014). Recent evidence 126
- has shown that higher well-being and flourishing mental health protects against the incidence 127
- of mental disorders such as anxiety and depression (Grant et al., 2013; Keyes et al., 2010; 128
- Lamers et al., 2015; Schotanus-Dijkstra et al., 2016a; Wood and Joseph, 2010) and reduces 129
- suicide risk (Keyes et al., 2012; Koivumaa-Honkanen et al., 2004). There is also compelling 130
- evidence that higher well-being increases longevity by several years in healthy populations 131
- and in some somatic illness populations (Chida and Steptoe, 2008; Diener and Chan, 2011; 132
- Keyes and Simoes, 2012; Lamers et al., 2012; Veenhoven, 2007). In addition, studies have 133
- found that lower moderate well-being has substantial economic consequences due to 134
- productivity losses and healthcare costs (Hamar et al., 2015; Keyes, 2007; Keyes and 135
- Grzywacz, 2005). Importantly, the most beneficial effects on health, society and the economy 136
- have been found for those with flourishing as opposed to languishing mental health or 137
- moderate mental health (Keyes, 2005; Keyes and Simoes, 2012; Keyes et al., 2010; Keyes 138
- and Grzywacz, 2005). Interestingly, people with languishing mental health but without a 139
- major depression function only nominally better or even worse than people with a major 140
- depression without languishing mental health (Keyes, 2002, 2005, 2007). This finding 141
- indicates that enhancing well-being in people with low or moderate wellbeing is important 142
- 143 and could also be an effective strategy for the prevention of anxiety and depression (Keyes et al., 2010; Schotanus-Dijkstra et al., 2016). Adolescents involving multiple transition 144
- processes especially when it reaches puberty, so based on the psychological well-being
- 145 dimension, adolescents will easily emergy with a risk factor of psychological well-being (Sun 146
- et al., 2016). It is high-risk development stages (Chin et al. 2019; Rengasamy et al., 2013). 147
- According to Institute for Public Health (2017), depression is the second common mental 148
- health issue in Malaysian adolescents. Adolescence is one of the important development 149
- stages for everyone. Childhood poverty is constantly linked to a variety of negative 150
- outcomes, including biological stress dysregulation, psychological and physical diseases 151
- (Adler & Snibbe, 2003). 152

## **Subjective Well-Being**

- 154 Poor subjective well-being (SWB)—defined as "the extent to which a person believes or feels
- his or her life is going well" (Diener et al. 2018, p. 1)—has been observed in various 155
- psychiatric disorders, such as depression (Baselmans et al. 2018), psychosis (Broyd et 156

al. 2016; van Dijk et al. 2019), and gambling disorder (Farrell 2018). Seligman (2018), the 157 founder of positive psychology, has emphasized that reducing or eliminating negative 158 impacts of psychopathology, for example, does not inevitably result in elevated well-being. 159 Similarly, Keyes (2005) has proposed a complete state model of health. According to this 160 model, health and illness are not extreme poles on one bipolar dimension but rather two 161 unipolar dimensions that correlate. Thus, individuals can be classified as completely mentally 162 163 ill (presence of mental illness and absence of mental health), languishing (absence of mental health), flourishing (presence of mental health), or completely mentally healthy (absence of 164 mental illness and presence of mental health). Complete mental health is associated with a 165 variety of favorable outcomes such as low helplessness and high goals, resilience, and 166

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#### Methods

### 170 Objectives of the Study

- 1. To examine the relationship between Big Five personality traits and psychological well-being among depressive patients.
- 173 Hypotheses
- There will be a significant correlation between certain Big Five personality traits and psychological well-being among depressive patients.

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- **Participants**
- 179 In the present study of 124 depressive patients (87 males and 37 females) sample will be
- selected from Jaunpur & its neighboring areas
- 181 124 depressive registered patients will be purposively selected from various hospitals of
- Jaunpur district(U.P.India).125 Non depressive patients will be randomly selected from
- general population of jaunpur district.

### 184 **TOOLS**

185 1-Beck Depression Scale(Beck, A.T, 1976)

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- The BDI consist of 21 item self report questionnaire each item is designed to test the severity
- of a specific symptom
- 189 1-Item 1 to 14 consider psychological symptoms.
- 2-item 15 to 21 consider the more physical symptoms.
- Each item is rated of 0 to 3 and a cumulative total gives an indication of severity of
- 192 depression

### RELIABILITY OF BDI-

Beck et al. the test retest can concordance was 0.93 which was significant p<.001. It has 194 195 high coefficient alpha (.80)test is also high on split tests reliability(0.85) Validity of BDI-196 The BDI has concurrent validity in that it tends to agree with measure of depression, it is 197 high on construct validity. It is able to differentiate depressed from non depressed people. 198 SCORING-199 A score of 0-13would be considered minimal range 200 A score of 14-19 would indicate mild depression range 201 A score of 20-20 would indicate moderate depression range 202 203 A score of 29-63 would be consider severe depression range. **NEO-Five-Factor Inventory (NEO-FFI)** 204 205 Big-Five model (Costa & McCrae, 1992), there are five domains of adult personality; Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness. 206 In the NEO-FFI there is a total of 60 items that ask the respondents to rank their agreement 207 with the statement on a 5-point Likert scale (e.g. "When I"m under a great deal of stress, 208 sometimes I feel like I"m going to pieces"). People scoring high on a scale are considered to 209 have a significant degree of that trait. scale has been used widely for research and clinical 210 211 purposes. 212 We did a cross-sectional study in a naturalistic setting. We approached the clinical sample group 213 and gave a detailed description of our study. 214 Personal well being Index (PWI)-215 The Personal Well-being Index (PWI) was developed by the International Well-being Group (2006). 216 Responses to the eight scale items, each a separate domain of subjective well-being (subjective 217 218 quality of life), are on an 11-point Likert scale, from 0 (completely dissatisfied) through 5 (neutral) to 10 (completely satisfied). Reponses are summed to reveal a valid and reliable measure of overall 219 220 subjective well-being. 221 222 **Data Analyses** 223 **Descriptive Analysis:** 224 225 Table 1 Table 1 Showing the Means ,SDs , and t value obtained for Big five factors of personality 226 and well being for depressive patients and non depressive people. 227

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	CATEGORY	N	Mean	Std. Deviation	t	Df	Sig.
NEUROTICISM	DEPRESSIVE	125	42.3145	5.17852	11.000	247	.000
	NON DEPRESSIVE	124	33.7520	6.97891		226.910	.000
EXTRAVERSION	DEPRESSIVE	125	42.6080	4.64358	4.914	247	.000
	NON DEPRESSIVE	124	46.0968	6.42457		223.878	.000
OPENNESS	DEPRESSIVE	125	40.8960	3.30402	3.932	247	.000
	NON DEPRESSIVE	124	43.3468	6.12876		188.963	.000
AGREEABLENESS	DEPRESSIVE	125	38.9200	5.06824	9.721	247	.000
	NON DEPRESSIVE	124	45.6371	5.81327		241.963	.000
CONSCIENTIOUSNESS	DEPRESSIVE	125	42.6800	3.53690	9.879	247	.000
	NON DEPRESSIVE	124	47.8065	4.58821		231.098	.000
WELL-BEING	DEPRESSIVE	125	55.6371	3.30829	18.306	247	.000
	NON DEPRESSIVE	124	65.4720	5.00461		213.041	.000

The descriptive statistics presented for both non-depressive and depressive patients using the NEO-Five-Factor Inventory (NEO-FFI) reveal insightful trends and variations in personality traits among these groups. As reported in table 4.06 mean score of "neuroticism" is 33.7520 (SD=5.17852) for non depressive group and 42.3145(SD=6.97891) for the depressive and t value is (t=11.00,p<.01). Extraversion mean score is depressive, 42.6080 (SD =4.64358) and non depressive mean score is 46.0968 (SD=6.42457) (t= 4..91,p<.01). openness mean score is depressive 40.8960 (SD = 3.30402) and non depressive mean score is 43.34 (SD=6.12)(t=3.93,p<.01). In personality dimension "agreeableness" mean score is depressive 38.9200 (SD =1.10) and non depressive mean score is 45.6371 (t=9.72,p<.01).(SD=5.81327) Another personality dimension "conscientiousness" mean score is depressive 42.6800(SD =3.53) and non

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depressive mean scor is 47.8065 (SD=4.58),(t=9.87,p<.01). Mean value of well being in depressive group is (M=55.6371;SD=3.30829) and for non depressive group mean score is (M=65.47;SD=5.00) and t value is (t=18.306,p<.01).

# TABLE 2

### **Result and Intrpretation**

# Table 1 Correlation between personality trait and well-being of Depressive patients.

Variable	NEU	EXT	OPEN	AGR	CON	WB
NEU	1	0.014	321**	0.13	0.041	<del>-</del> .219*
EXT		1	.268**	.611**	.384**	091
OPEN			1	0.149	.350**	.251**
AGR				1	.382**	.336**
CON					1	.268**
WB						1

# **Interpretation of Results**

The present study examined the interrelationships among personality traits and their association with psychological well-being. The correlation analysis presented in Table 1 reveals significant patterns that align with theoretical expectations and prior empirical findings.

Neuroticism was found to have a **significant negative relationship** with openness to experience and well-being. The negative correlation between neuroticism and well-being (r = -.219, p < .05) suggests that individuals high in neuroticism—characterized by emotional instability, anxiety, and moodiness—tend to experience lower psychological well-being. This is consistent with previous research indicating that neuroticism is a strong predictor of mental health difficulties, particularly depression and anxiety (Kotov et al., 2010; Quilty et al., 2013).

Extraversion showed **positive and significant correlations** with openness (r = .268, p < .01), agreeableness (r = .611, p < .01), and conscientiousness (r = .384, p < .01), reflecting a trait pattern often observed in well-adjusted, socially active individuals. However, extraversion was not significantly related to well-being in this sample. This might indicate that while extraversion fosters interpersonal connectivity and social engagement, it may not independently predict well-being unless coupled with other adaptive traits or coping mechanisms.

Openness to experience was positively associated with conscientiousness (r = .350, p < .01)

and well-being (r = .251, p < .01). This suggests that individuals who are intellectually

273 curious and open to new experiences are also more disciplined and likely to engage in

activities that enhance well-being. The association may reflect a broader psychological

- 275 flexibility and resourcefulness in handling stress and novelty.
- 276 Agreeableness also demonstrated **significant positive correlations** with conscientiousness (r
- = .382, p < .01) and well-being (r = .336, p < .01). Agreeable individuals, who are
- 278 cooperative, empathetic, and warm, may benefit from strong social support networks and
- 279 fewer interpersonal conflicts, both of which contribute to higher subjective well-being.
- 280 Conscientiousness, which involves organization, goal-directed behavior, and reliability,
- showed a significant positive relationship with well-being (r = .268, p < .01). This finding
- supports the idea that conscientious individuals are better at managing time, setting and
- achieving goals, and engaging in health-promoting behaviors, all of which are conducive to
- sustained well-being.

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- Taken together, the results of this study underscore the complex and meaningful relationships
- between personality and well-being. High neuroticism may act as a vulnerability factor,
- 287 whereas traits such as openness, agreeableness, and conscientiousness appear to act as
- resilience factors, enhancing individuals' psychological well-being. These findings highlight
- 289 the importance of considering personality profiles in psychological assessments and
- 290 interventions aimed at promoting mental health.

#### Conclusion

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- 293 The present study aimed to examine the relationship between personality traits and
- psychological well-being. The findings revealed that personality plays a significant role in
- influencing individuals' well-being. Specifically, neuroticism was found to be negatively
- associated with well-being, indicating that individuals who are emotionally unstable, anxious,
- and prone to negative emotions are more likely to experience poor psychological health. In
- 298 contrast, openness to experience, agreeableness, and conscientiousness were positively
- 299 associated with well-being, suggesting that traits such as intellectual curiosity, social
- harmony, and personal discipline contribute to higher levels of psychological well-being.
- 301 These results align with existing literature, reinforcing the understanding that personality is a
- stable yet influential factor in psychological functioning. The study highlights that individuals
- with adaptive personality traits are better equipped to handle stress, maintain emotional
- 304 balance, and lead fulfilling lives.

Overall, the findings suggest that interventions aimed at enhancing well-being could benefit from incorporating personality assessments and focusing on developing adaptive traits and coping strategies. By recognizing the role of personality in mental health, psychological services can adopt more personalized, preventive, and holistic approaches to well-being enhancement.

### 310 REFERENCES

#### References

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- Adler, N. E., & Snibbe, A. C. (2003). The role of psychosocial processes in explaining the
  gradient between socioeconomic status and health. *Current Directions in Psychological*Science, 12(4), 119–123. https://doi.org/10.1111/1467-8721.01245
- Baselmans, B. M. L., van de Weijer, M. P., Abdellaoui, A., Vinkers, C. H., & Bartels,
  M. (2018). A genetic perspective on the relationship between eudaimonic- and
  hedonic well-being. *Scientific Reports*, 8(1), 14610. https://doi.org/10.1038/s41598-018-32951-0
  - Bienvenu, O. J., Samuels, J. F., Costa, P. T., Reti, I. M., Krain, A. L., Nestadt, G., & Eaton, W. W. (2004). Anxiety and depressive disorders and the five-factor model of personality: A higher- and lower-order personality trait investigation in a community sample. *Depression and Anxiety*, 20(2), 92–97.
  - Broyd, A., van Hell, H. H., Bevan, L., et al. (2016). Acute and chronic effects of cannabinoids on human cognition—A systematic review. *Biological Psychiatry*, 79(7), 557–567. https://doi.org/10.1016/j.biopsych.2015.12.002
  - Chida, Y., & Steptoe, A. (2008). Positive psychological well-being and mortality: A quantitative review of prospective observational studies. *Psychosomatic Medicine*, 70(7), 741–756. https://doi.org/10.1097/PSY.0b013e31818105ba
    - Chin, Y. S., Mohd Nasir, M. T., Khouw, I., & Zalilah, M. S. (2019). Body image and its associations with weight status among Malaysian adolescents. *Asia Pacific Journal of Clinical Nutrition*, 18(1), 15–20.
      - Clark, L. A. (2005). Temperament as a unifying basis for personality and psychopathology.
         Journal of Abnormal Psychology, 114(4), 505–521.
- Clark, L. A., & Watson, D. (1999). Temperament: A new paradigm for trait psychology. In L.

  A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 399–423). Guilford Press.
- Costa, P. T., & McCrae, R. R. (1992). Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) manual. Psychological Assessment Resources.
- Costa, P. T., & McCrae, R. R. (1995). Domains and facets: Hierarchical personality assessment using the revised NEO Personality Inventory. *Journal of Personality Assessment*, 64(1), 21–50.
- Denollet, J. (1997). Personality and coronary heart disease: The Type-D scale-16 (DS16).
   Annals of Behavioral Medicine, 19(1), 21–29.
- Denollet, J. (2000). Type D personality. A potential risk factor refined. *Journal of Psychosomatic Research*, 49(4), 255–266.

- Denollet, J. (2005). DS14: Standard assessment of negative affectivity, social inhibition,
   and Type D personality. *Psychosomatic Medicine*, 67(1), 89–97.
- DeYoung, C. G., Quilty, L. C., & Peterson, J. B. (2007). Between facets and domains: 10 aspects of the Big Five. *Journal of Personality and Social Psychology*, 93(5), 880–896.
- Diener, E., & Chan, M. Y. (2011). Happy people live longer: Subjective well-being contributes to health and longevity. *Applied Psychology: Health and Well-Being*, *3*(1), 1–43. https://doi.org/10.1111/j.1758-0854.2010.01045.x
- Diener, E., Oishi, S., & Tay, L. (2018). Advances in subjective well-being research.
   *Nature Human Behaviour*, 2(4), 253–260. https://doi.org/10.1038/s41562-018-0307-6
- Duckworth, A. L., Steen, T. A., & Seligman, M. E. P. (2005). Positive psychology in clinical practice. *Annual Review of Clinical Psychology*, 1, 629–651.
   https://doi.org/10.1146/annurev.clinpsy.1.102803.144154
- Eisenberg, D., Gollust, S. E., Golberstein, E., & Hefner, J. L. (2009). Prevalence and
   correlates of depression, anxiety, and suicidality among university students. *American Journal of Orthopsychiatry*, 79(4), 534–542.
- Farrell, L. (2018). Gambling, well-being and self-control. *Journal of Economic Psychology*, *65*, 17–28.

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- Goldberg, L. R. (1990). An alternative "description of personality": The Big-Five factor structure. *Journal of Personality and Social Psychology*, 59(6), 1216–1229.
- Grant, F., Guille, C., Sen, S., & Anthony, C. (2013). Well-being and the risk of depression under stress. *PLoS ONE*, 8(7), e67395.
  https://doi.org/10.1371/journal.pone.0067395
- Hamar, B., Coberley, C., Pope, J. E., Rula, E. Y., & Larkin, S. (2015). Well-being improvement in a mid-sized employer: Changes in well-being, productivity, health risk, and perceived employer support after implementation of a well-being improvement strategy. *Journal of Occupational and Environmental Medicine*, 57(4), 367–373.
  - Huppert, F. A. (2009). Psychological well-being: Evidence regarding its causes and consequences. *Applied Psychology: Health and Well-Being*, 1(2), 137–164.
    - Institute for Public Health. (2017). *National Health and Morbidity Survey (NHMS)* 2017: Adolescent Health Survey. Ministry of Health, Malaysia.
      - Jeste, D. V., Palmer, B. W., Rettew, D. C., & Boardman, S. (2015). Positive psychiatry: Its time has come. *The Journal of Clinical Psychiatry*, 76(6), 675–683.
  - Karsten, J., Hartman, C. A., Smit, J. H., Zitman, F. G., Beekman, A. T. F., Cuijpers, P., & van der Meer, K. (2012). Psychiatric history and personality in adults with subthreshold depression and anxiety. *Journal of Affective Disorders*, 136(3), 563–568.
    - Keyes, C. L. M. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior*, 43(2), 207–222.
- Keyes, C. L. M. (2005). Mental illness and/or mental health? Investigating axioms of the complete state model of health. *Journal of Consulting and Clinical Psychology*, 73(3), 539–548.
  - Keyes, C. L. M., & Grzywacz, J. G. (2005). Health as a complete state: The added value in work performance and healthcare costs. *Journal of Occupational and Environmental Medicine*, 47(5), 523–532.
- Keyes, C. L. M., & Simoes, E. J. (2012). To flourish or not: Positive mental health and all-cause mortality. *American Journal of Public Health*, *102*(11), 2164–2172.

- Keyes, C. L. M., Dhingra, S. S., & Simoes, E. J. (2010). Change in level of positive mental health as a predictor of future risk of mental illness. *American Journal of Public Health*, 100(12), 2366–2371.
- Kobau, R., Seligman, M. E. P., Peterson, C., et al. (2011). Mental health promotion in public health: Perspectives and strategies from positive psychology. *American Journal of Public Health*, *101*(8), e1–e9.
- Kotov, R., Gamez, W., Schmidt, F., & Watson, D. (2010). Linking "big" personality traits to anxiety, depressive, and substance use disorders: A meta-analysis. *Psychological Bulletin*, 136(5), 768–821.
- Krueger, R. F., & Tackett, J. L. (2006). Personality and psychopathology: Working toward
   the bigger picture. *Journal of Personality Disorders*, 20(2), 109–118.
  - Lamers, S. M. A., Westerhof, G. J., Bohlmeijer, E. T., et al. (2012). Mental health and well-being in the Netherlands: A comparison with the WHO definition. *Social Indicators Research*, 113(3), 1053–1068.
    - Lamers, S. M. A., Westerhof, G. J., Glas, C. A. W., & Bohlmeijer, E. T. (2015). The bidirectional relation between positive mental health and psychopathology in a longitudinal representative panel study. *Journal of Positive Psychology*, *10*(6), 553–560.
- Maher, B. A., & Maher, W. B. (1994). Personality and psychopathology: A historical
   perspective. *Journal of Abnormal Psychology*, 103(1), 6–16.
- Ormel, J., Jeronimus, B. F., Kotov, R., Riese, H., Bos, E. H., Hankin, B., & Oldehinkel, A. J.
   (2013). Neuroticism and common mental disorders: Meaning and utility of a complex
   relationship. *Clinical Psychology Review*, 33(5), 686–697.
- Pavlov, I. P. (1927). Conditioned Reflexes. Oxford University Press.

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428 429

- Quilty, L. C., De Fruyt, F., Rolland, J. P., Kennedy, S. H., Rouillon, F., & Bagby, R. M. (2013).
   Dimensional personality traits and treatment outcome in major depressive disorder.
   Journal of Affective Disorders, 144(1-2), 187-190.
- Rengasamy, M., et al. (2013). Risk factors for depression in adolescents: The role of family and peer environment. *Journal of Affective Disorders*, *150*(2), 104–112.
  - Ryff, C. D. (2014). Psychological well-being revisited: Advances in the science and practice of eudaimonia. *Psychotherapy and Psychosomatics*, 83(1), 10–28.
  - Schotanus-Dijkstra, M., Drossaert, C. H. C., Pieterse, M. E., et al. (2016). An early intervention to promote well-being and flourishing and reduce anxiety and depression: A randomized controlled trial. *Internet Interventions*, 4, 13–20.
    - Seligman, M. E. P. (2018). The hope circuit: A psychologist's journey from helplessness to optimism. PublicAffairs.

      199471 The part Rig Five Inventory (BFI-2): Developing a
  - Soto, C. J., & John, O. P. (2017). The next Big Five Inventory (BFI-2): Developing and assessing a hierarchical model with 15 facets to enhance bandwidth, fidelity, and predictive power. *Journal of Personality and Social Psychology*, 113(1), 117–143.
- Spindler, H., Kruse, C., Zwisler, A. D., & Pedersen, P. U. (2009). Type D personality as a
   predictor of poor health and impaired quality of life in patients with cardiac disease.
   European Journal of Cardiovascular Nursing, 8(2), 87–94.

• Sun, R. C. F., Hui, E. K. P., & Watkins, D. (2016). Adolescents' perception of well-being: A qualitative study in Hong Kong. *The International Journal of Adolescence and Youth*, 21(2), 196–206.

- van Dijk, S., Schotanus-Dijkstra, M., Drossaert, C., Pieterse, M. E., & Bohlmeijer, E. T. (2019). Distinguishing features of flourishing, languishing, and moderately mentally healthy people. *Clinical Psychology & Psychotherapy*, 26(2), 254–265.
  - Veenhoven, R. (2007). Healthy happiness: Effects of happiness on physical health and the consequences for preventive health care. *Journal of Happiness Studies*, 9(3), 449–469.
  - Watson, D., & Clark, L. A. (1994). The temperament and trait models. In S. H. M. van Goozen, N. E. Van de Poll, & J. A. Sergeant (Eds.), *Emotions: Essays on emotion theory* (pp. 33–54). Lawrence Erlbaum.
  - Watson, D., Gamez, W., & Simms, L. J. (2006). Basic dimensions of temperament and their relation to anxiety and depression: A symptom-based perspective. *Journal of Research in Personality*, 39(1), 46–66.
  - Wood, A. M., & Joseph, S. (2010). The absence of positive psychological (eudemonic) well-being as a risk factor for depression: A ten-year cohort study. *Journal of Affective Disorders*, 122(3), 213–217.
- World Health Organization. (2013). *Mental health action plan 2013–2020*. https://www.who.int/publications/i/item/9789241506021