

Rethinking the relationship between intelligence quotient and the level of Well-Being

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Abstract.

The level of well-being is determined by both psychological health and physical living. Yet, most current research only shows the effect of Intelligence quotient (IQ) on career and wealth. Some researchers even argue that IQ has no relationship with well-being. In this literature review, I say that IQ plays essential roles in psychological and physical well-being. I first explore the relationship between psychological well-being and personality, then relate character with IQ. Secondly, I examine the relationship between IQ and the ability to research how IQ influences physical living. Finally, I found out that a high IQ may lead to depression.

Keywords: intelligence quotient, well-being, well-being, happiness, personality, psychological well-being.

1. Introduction

First of all, people cannot define the term Intelligence. Intelligence “is not knowledge but imagination” is an opinion from Einstein. Although we cannot define intelligence, we can relate intelligence to the ability to solve problems, think, plan, and learn (Gottfredson, 1994). Intelligence can be measured by standardized intelligence testing, which is one of the greatest psychological successes (Etienne Benson, 2003).

Well-being is made up of both psychological and physical aspects. For psychological well-being, there are five elements: emotional well-being (e.g., relationship with others), the ability to solve mental issues, the ability to control oneself, motivation to achieve goals, and Comprehensive life skills. Physical well-being is about the health and quality of real life (e.g., house, food) (J. Intell, 2022).

We have a preconceived notion that people with high IQs will have higher levels of well-being than those with low IQs, but interestingly, some high-IQ people are unhappy. Some psychologists believe there is no relationship between IQ and well-being; for example, Gottfredson argued that IQ “does not correlate with happiness” (Gottfredson, 2008). This literature review aims to find out whether there is a relationship between IQ and well-being or not.

2. How IQ could influence psychological well-being in the form of personality

The differences in human intelligence reflect on the personality of the human. This was proved by the research done by Chakadee Waiyavutti, Wendy Johnson, and Ian J. Deary in 2012. This research measures the personality

by the model scales of the international personality item pool (IPIP) and NEO- Five-Factor Inventory (NEO-FFI). IPIP is “a scientific collaboratory for developing advanced measures of personality and other individual differences” (IPIP website). Up to 3000 items in the questionnaires measure over 270 personality characteristics. In this research, there are 50 items.

(10 items indicate five personality scales) in the questionnaire, the participants answered the items from 1 (negative side) to 5 (positive side). The personality scales include “Extraversion (E), Agreeableness (A), Conscientiousness (C), Emotional Stability (ES), and Intellect (I)”(Chakadee Waiyavutti, Wendy Johnson and Ian J. Deary, 2012). NEO-FFI is similar to IPIP, which contains 60 items, with Neuroticism (N) replacing ES in the five personality scales. In this research, we also need information on participants’ IQ. Therefore, the 70-age MHT was taken to measure the IQ values. To select participants for the study, they first collected people who were living in the Lothian area and then excluded people who did not take MHT before 70 years old and people whose IQ is too low (under 70) or in the middle (from 101 to 107).

The study results show that people with high IQs scored much higher values in both IPIP and NEO-FFI than those with low IQs in both males and females. This suggests that people with high IQs have more stable emotions and can balance their emotional lives than those with low IQs. In this study, the researchers ensured the sample was the same size as male and female samples so the results did not contain gender bias. They also compare high IQs and people with low IQs, people under the same age and gender, ensuring other factors do not influence the correlation between IQ and personality. The results

of the study contain high internal validity. However, the study also contains some weaknesses; the research did not tell participants the research goal, which will cause demand characteristics (people may pretend they are under a high level of well-being). This may influence the results. However, the demand characteristics may occur in high-IQ and low-IQ people. Therefore, there is an immediate impact on the correlation between IQ and personality.

The study above shows a positive correlation between IQ and personality. To find out the relationship between IQ and psychological well-being, we can first build the relationship between personality and psychological well-being. Nowadays, psychological well-being is contributed by six sections: “self-acceptance, positive relation with others, autonomy, environmental mastery, purpose in life, and personal growth” (Ryff, 1995). The study designed by Aisha, Rita, Abbas, and Abdullahi defines the relationship between personality and psychological well-being. They randomly selected 100 participants (52% males and 48% females) from seven states in north-west Nigeria 2018. They applied ten-item personality traits (TIPI) to determine the personality of participants. To identify the level of well-being of participants, they make a questionnaire with a 5-point Likert scale (choose from 1 sad to 5 happy) about their life. The participants completed the questionnaires within 15 minutes. This study’s results depict a positive relationship between all personality traits and psychological well-being, excluding Neuroticism. However, the relationship between psychological well-being and Openness, Conscientiousness, and Extraversion is weak. Therefore, Agreeableness leads to high-quality psychological well-being.

As we argued before, there is a positive correlation between IQ and personality, which includes the personality traits Agreeableness and Conscientiousness, which are positively correlated to psychological well-being. As a result, people with high IQs tend to have a high level of psychological well-being.

3. How intelligence affects physical well-being

Physical well-being is health, lifestyle, and behaviors about sleep, diet, physical activity, hygiene, and relaxation (Marie Stevenson 2021). It cannot be denied that people define a high level of physical well-being with wealth since money can ensure a material life (food, clothing, house, car). In this part of the literature review, I will focus on the impact of IQ on wealth (an important element in physical well-being).

What is wealth? Wealth is money and valuable resources that people own by themselves. (Deloitte, 2013).

The money here is measured in two parts: one is the income, and the other is the deposit. There is a positive relationship between income and IQ. This relationship was proved by Wachtel (1976). In his study, he found that people’s incomes increased as the quality of schools they attended and the levels they attained increased. A high level of education represents a high IQ here. However, there are some weaknesses in Wachtel’s study. Firstly, he randomly chose the participants with different growing environments, which means that many other variables could influence the income of participants. This indicates the internal validity of the results is low. Secondly, to analyze Wachtel’s study, we need to assume the level of education is equal to IQ. However, there are differences between the two items. To increase the internal validity between IQ and income, Rowe, Vesterdal, and Rodgers designed research that found the relationship between IQ and income with siblings. To make the experiment more rigorous, they divided participants into half-siblings and full-siblings, deciding whether they were with their biological mother and father during 0-18. The measurement for participants’ IQ is the AFOT (score on the understanding of words, the ability to complete paragraphs, arithmetic reasoning, and mathematics). In this research, the researchers control more variables than the Wachtel study, which means the results are more valid. The results of Rowe, Vesterdal, and Rodgers’ study depict a strong relationship between IQ and income.

People have different IQs due to varying genes, and parents can pass down genes with high IQs to the next generation (Rowena, 2016). As a result, people with high IQ usually have a biological mother or father with high IQ. Few people who scored high on the IQ test are under poor life (Herrnstein, Murray, 1994). Therefore, high-IQ people are likelier to stay at a higher social status than low-IQ people. Social standing can be heritable, which has been proved by Rowe, Vesterdal, and Rodgers’s study. In Table 4 of the results of Rowe, Vesterdal, and Rodgers’ study, we can see that a common genetic factor decided the variation in all observed variables: IQ, education, and income (from 0.34 to 0.72).

Similarly, a common shared environmental factor was also determined on the variation of all three observed variables: IQ, education, and income (from 0.29 to 0.48). Therefore, people inherited from parents with IQ genes and social standing are likelier to have high income. As high IQ people have more value of income, they also can get high heritage from their parents. These are both included in a wealth of people.

In conclusion, there is a strong positive correlation between IQ and wealth. Wealth plays an important role in high quality of life. People with high wealth are more

likely to have a high level of physical well-being.

4. Intelligence and psychological disorder

Plenty of positive correlations are associated with high intelligence, for example, in income and personality. However, this is a one-sided perspective that high intelligence is always an advantage. People with high intelligence are more likely to suffer from psychological disorders. Karpinski's research supports this perspective. The study participants were selected from American Mensa members, and then the experimenters sent the invitation directly by email. The participants include 60% male and 40% female, which means that the results of this study may contain gender bias. The majority of participants attended a high level of education, which indicates that the participants have high intelligence. The participants were provided a link to access the questionnaire through email. In the questionnaire, they were asked about the main two sections. The first section concerns the general information and quality of everyday life about themselves and their family members. The second part asks whether the participants feel they suffer from a disorder or have been formally diagnosed by a professional. The results of this study show that there are 239 ADHD diagnoses (7.4%) in a total of 3715 participants. Compared to normal people, there are only 4.1% ADHD diagnoses. The comparison of the results depicts that people with high intelligence are more likely to suffer from the specified disorder, which means that high IQ may be one of the reasons that cause this disorder. As expected, the risk rate of people with high intelligence getting psychological disorders, including depressive disorder, dysthymic disorder, and bipolar disorder, is higher than people with normal levels of intelligence. What surprised me is that the risk rate of suffering physiological diseases in high-intelligence people is much higher than that of people with normal intelligence. The study selection of the participants' sample in the form of volunteers is correct since participants are willing to answer the questionnaire. This can prevent participants from completing the questionnaire and reduce the demand characteristics. The results also contain high internal validity since there is a clear relationship between the independent variable (people with high intelligence or normal intelligence) and dependent variables (risk rate of suffering under disorders). There are also some weaknesses in this study. Using The questionnaire is not accurate in determining whether participants are under a disorder since some of them may not even notice or realize they are having the disorder.

One of the reasons that high-intelligence people are more likely to suffer from psychological issues is that high-intelligence people have more developed nervous systems. Many researchers found that people with high ability at creating have poor mental health, for example, writers, poets, and artists (Jamison, 1993). People with strong nervous systems tend to overanalyze. They tend to rethink and analyze the events of their daily life, which can exhaust them since they enlarge their negative emotion when rethinking the item. The strong rethinking is processed not only on everyday events but also on the meaning of life and death. They fill their time with passive thinking, which makes them more likely to be depressed. The relationship between personality and psychological well-being can also prove this. We found a negative correlation between Neuroticism and psychological well-being (Aisha, Rita, Abbas, and Abdullahi, 2020). People with high intelligence often have particularly high demands, which they often cannot achieve on their own, making them not easily satisfied and happy. What's worse is that they are generally successful in life, which means they are less able than people with normal intelligence to accept their failures. It's hard for highly intelligent people to come out with disappointed emotions when they fail, and they torture themselves with negative emotions for a long time by rethinking them repeatedly. Because of the special way intelligent people think, they normally cannot empathize with them. As a result, high-intelligence people find it difficult to build close relationships with friends. They tend to isolate themselves as no one can share emotions and ideas. Social isolation affects mental and physical health (Leigh-Hurt, 2017). In today's society, highly intelligent people usually have a high level of education and engage in mental work, meaning they exercise much less than manual workers. High-intelligence people seek to do everything; for example, they seek to go outside. Little exercise causes plenty of diseases and sickness. Intelligence positively correlates to insomnia (Peter, Robert, Martin, 2020). This kind of regimen leads to heart disease and increases the level of anxiety.

5. Conclusion

In this literature review, I have argued that intelligence plays a positive role in psychological well-being by relating both to personality. I then argued that the strong positive correlation between intelligence and wealth indicates that highly intelligent people have a high quality of physical well-being. I also discussed that nowadays, high intelligence is not always positive. I found that high-intelligence people are more likely to be depressed and

anxious, and they are at a higher risk of suffering from both psychological and physical disorders than people with low intelligence.

Overall, this literature review has argued there is a correlation between IQ and well-being. However, it still contains some research gaps. It is meaningful to find out whether the country influences the relationship between high intelligence and well-being. It is valuable for researchers to find out whether highly intelligent people contain a gene that makes them depressed.

The findings from the literature review highlight the importance of further study to find out the effective method to reduce symptoms of psychological disorders in high-intelligence people and prevent psychological disorders in people with high IQs. Therefore, to process the study further, we can firstly enlarge the size of the study sample to include people from every country and sort them into different MBTI (Myers Briggs type). This is to discover more factors impacting the relationship between intelligence and well-being. To find out the way to keep high-intelligence people away from psychological disorders, we can focus on these areas. Firstly, it is significant to discover how to prevent highly intelligent people from rethinking too much, especially in rethinking failure. Secondly, it is necessary to find out how they can keep a close relationship with others and not isolate themselves. Last but not least, we can find medicine to cure them.

In conclusion, the study on the relationship between intelligence and well-being is far from homogeneous since the exact nature of their relationship remains controversial. Therefore, a more comprehensive and detailed study is needed in this field. The findings from this literature review can

Provide insights for psychologists, researchers, and educators interested in the real well-being of high-intelligence people and highlight the need for future research to find out more factors that can influence the level of well-being and how to help the high-intelligence people with poor mental health.

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