



## BAHRIA UNIVERSITY, (Karachi Campus)

*Department of Software Engineering*

**Assignment 2 - Fall 2022**

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|--------------------|--|---------------|-----------------------|
| COURSE TITLE:      | <b><u>INTRODUCTION TO PSYCHOLOGY</u></b> | COURSE CODE:  | <b><u>PSY-102</u></b> |
| Class:             | <b>BSE-V &amp; III</b>                   | Shift:        | <b>Morning</b>        |
| Course Instructor: | <b>MARVI MAKHDOOM</b>                    | Time Allowed: | <b>2 Weeks</b>        |
| Submission Date:   | <b>15<sup>th</sup> NOV, 2022</b>         | Max. Marks:   | <b>5 Marks</b>        |

### Question No. 1

[CLO3: 5 Marks]

Choose any topic related to psychology, search 3 researches on that and report its research type, hypothesis, methodology, findings and its implications.

You can find these articles within reputable journals, such as the **American Journal of Psychology**, **Cognitive Psychology**, **Emotion**, **Journal of Abnormal Psychology**, **Journal of Applied Psychology**, **Journal of Counseling Psychology**, **Journal of Educational Psychology**, **Journal of Personality and Social Psychology**, and **Memory**. The study should have been performed within the past 10 years. (C2, PLO5)

## **ANSWER**

### **RESEARCH No 01**

**“Trauma during Childhood Triples the Risk of Suffering a Serious Mental Disorder in Adulthood”**

**RESEARCH TYPE:**

**02-131212-049**

This research is for children who experienced emotional abuse, the most prevalent disorder reported was anxiety. Trauma also increased the risks for psychosis, OCD, and bipolar disorder. Significantly, those who experience trauma during childhood were 15 times more likely to be diagnosed with borderline personality disorder later in life.

### **HYPOTHESIS:**

Childhood trauma significantly increases the risk of being diagnosed with a mental health disorder later in life.

### **METHODOLOGY:**

The study analyses the fourteen reviews and meta-analyses published to date in specialized journals on this issue, and is the first to take into account the full range of existing mental disorders.

In total, the studies analyzed incorporate more than 93,000 cases, revealing a direct link between suffering psychological trauma at a pediatric age and the risk of developing a mental pathology later in life.

The most common childhood traumas are emotional, physical and sexual abuse, as well as emotional or physical neglect and bullying, although there are many others.

Suffering one of these situations damages the brain, causing physical as well as psychological consequences in the form of various disorders. In the case of emotional abuse, the most frequent trauma is associated with the most prevalent disorder in the population, that of anxiety. But there is also a relationship between childhood trauma and other pathologies, such as psychosis, which is linked to all traumas, obsessive-compulsive disorder or bipolar disorder.

Given these results, Bridget Hogg, a researcher at the IMIM-Hospital del Mar, psychologist and first author of the study, believes that patients need an approach that not only takes into account physical factors, but also their history. In this sense, "It is necessary to guide the patient through their life history, to really review what has happened to them. Currently, we question what isn't working, but not what has happened in their life, because this requires opening up potentially painful subjects, and it is avoided."

Participants answered questions about their social environments before age 18, including experiences with emotional, physical, or sexual mistreatment, neglect,

and substance abuse in the household. The researchers combined this information with anonymized medical records to build on existing research about how childhood traumas affect health outcomes. In addition, for people with this type of pathology who have suffered previous traumas, the course of the disease is worse.

### **FINDINGS:**

The risk of suffering from borderline personality disorder increases up to fifteen times in the case of having experienced trauma during childhood. The study also highlights the fact that other traumas such as catastrophes, violent deaths or family abuse can affect people, generating structural and functional changes in the brain that open the door to future mental disorders.

### **IMPLICATIONS:**

Mental health disorders such as anxiety, attachment, post-traumatic stress and depression disorders. Self-harming or suicidal thoughts. Learning disorders, including poor language and cognitive development. Developmental delay, eating disorders and physical ailments are the effects of childhood abuse that are usually seen in adulthood.

## **RESEARCH No 02**

**“Money matters to happiness—perhaps more than previously thought”**

### **RESEARCH TYPE:**

Conventional wisdom suggests that “money can’t buy you happiness”

Research from Wharton's Matthew Killingsworth shows that higher earners feel an increased sense of control over life. People with higher incomes were generally more satisfied with their lives.

### **HYPOTHESIS:**

Higher incomes lead to higher life satisfaction.

### **METHODOLOGY:**

Through an app he created called Track Your Happiness, people recorded this a few times each day, with check-in times randomized per participant. To measure experienced well-being, each check-in asked them, "How do you feel right now?" on a scale ranging from "very bad" to "very good." At least once during the process, participants also answered the question, "Overall, how satisfied are you with your life?" on a scale of "not at all" to "extremely." This measured evaluative well-being.

Secondary measures of experienced well-being included 12 specific feelings, five positive (confident, good, inspired, interested, and proud) and seven negative (afraid, angry, bad, bored, sad, stressed, and upset). Secondary measures of evaluative well-being included two other measures of life satisfaction collected on an intake survey.

"This process provided repeated snapshots of people's lives, which collectively gives us a composite image, a stop-motion movie of their lives," he says. In total, 33,391 employed, 18- to 65-year-olds in the United States provided 1,725,994 reports of experienced well-being. "Scientists often talk about trying to get a representative sample of the population," he adds. "I was trying to get a representative sample of the moments of people's lives". Killingsworth then calculated the average level of well-being for each person and analyzed its relationship to people's income. In part, he was trying to confirm the findings of a 2010 paper that suggested that as people earn more money their well-being increases, but experienced well-being plateaus once annual household income hits \$75,000.

“It’s a compelling possibility, the idea that money stops mattering above that point, at least for how people actually feel moment to moment,” he says. “But when I looked across a wide range of income levels, I found that all forms of well-being continued to rise with income. I don’t see any sort of kink in the curve, an inflection point where money stops mattering. Instead, it keeps increasing”. Here, “income” refers to a concept known as  $\log(\text{income})$ ; rather than each dollar mattering the same to each person, each dollar starts to matter less the more a person earns. “We would expect two people earning \$25,000 and \$50,000, respectively, to have the same difference in well-being as two people earning \$100,000 and \$200,000, respectively. In other words, proportional differences in income matter the same to everyone.”

Beyond that, Killingworth’s work also provides a deeper understanding of the link between income and happiness. Higher earners are happier, in part, because of an increased sense of control over life, he says. “When you have more money, you have more choices about how to live your life. You can likely see this in the pandemic. People living paycheck to paycheck who lose their job might need to take the first available job to stay afloat, even if it’s one they dislike. People with a financial cushion can wait for one that’s a better fit. Across decisions big and small, having more money gives a person more choices and a greater sense of autonomy.”

Yet it might be best not to define success in monetary terms, he says. “Although money might be good for happiness, I found that people who equated money and success were less happy than those who didn’t. I also found that people who earned more money worked longer hours and felt more pressed for time”. Though the study does show that income matters beyond a previously believed threshold, Killingworth also doesn’t want the takeaway to enforce an idea that people should focus more on money. In fact, he found that, in actuality, income is only a modest determinant of happiness.

### **FINDINGS:**

Money helps us get some of life's intangibles — freedom or independence, opportunity to make the most of our skills and talents, the ability to choose our own course in life, and financial security. With money, much good can be done and much unnecessary suffering can be avoided or eliminated.

### **IMPLICATIONS:**

When we reflect on what we have in our life instead of what we don't, we are happier. This concept comes from a ton of research on scarcity. Our perception of having less of something than others has a big impact on our happiness, even it's just our perception. So, when we think of all the great things we have in our lives, we could increase our happiness without increasing our wealth. "While it's true that having more money doesn't usually make us less happy, it's also true that simply having more money doesn't guarantee happiness," Norton says. However, after a certain point, an increase in salary has little impact on your happiness.

### **RESEARCH No 03**

**"Green space around primary schools may improve students' academic performance while traffic pollution may be detrimental, our study shows"**

### **RESEARCH TYPE:**

This cross-sectional study examined mean academic scores in Years 3 and 5 for primary schools (851) in Greater Melbourne. Scores were from the 2018 'National Assessment Program – Literacy and Numeracy' (NAPLAN) in five domains: 'Reading'; 'Writing'; 'Spelling'; 'Grammar & Punctuation' and 'Numeracy'.

### **HYPOTHESIS:**

Higher exposure to green land use area is also significantly associated with increased academic performance while traffic pollution may be detrimental.

### **METHODOLOGY:**

With increasing urbanization globally, consideration needs to be given to the location of schools. Children need to grow and learn in environments that promote their physical health, as well as their cognitive development and academic learning.

Exposure to traffic-related air pollution at school, where children spend much of their waking hours, has been associated with poorer performance in tests of brain health and development. Air pollution may be more detrimental to the health of children compared with adults, due to children's physiology and rapid growth. Researchers wanted to investigate if greenery and traffic pollution have clear links with academic performance, an indicator of cognitive development. The researchers measured the amount of greenery in the school grounds, and then the traffic pollution and greenery around the school grounds within distances of 100m - 2,000m.

Researchers found school-level academic performance in reading, numeracy, grammar and punctuation was better on average for schools located in areas with more greenery.

Our statistical modelling included data on socioeconomic levels of the area as well as variations in schools, such as parental occupation and proportion of Indigenous students.

We compared the NAPLAN scores of similar socioeconomic-status schools and found higher scores in greener areas. For example, when comparing schools with the highest and lowest levels of green within 300 m, researchers found statistically significant differences of an average 20 points in reading scores for year 5.

Poorer performance was associated with higher levels of traffic-related air pollution surrounding schools. Reading scores in year 5 were around 16 points lower, on average, in schools with the highest levels of traffic-related air pollution within 300m of schools, compared with those with lowest levels.

### **FINDINGS:**

Greenery can help reduce air pollution in several ways including filtering the air through plant surfaces and foliage. But other factors that may play a role in the association between greenery and academic performance are related to the type

and location of greenery. Better performance among children in greener areas could be due to attention restoration, stress reduction or reducing harmful environmental exposures (such as noise from traffic and air pollution).

**IMPLICATIONS:**

Town and school planners, as well as educators, should consider where schools are located and how their surrounding environments may be improved to promote childhood learning and health. Our findings show preliminary evidence that greener environments with low traffic levels around primary schools may promote children's academic performance.

**THE END**