MULTIPLE REGRESSION DISSCUSSION

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Multiple Regression Discussion

According to Cohen, J., Cohen, P., West, and Aiken, (2013), a multiple regression entails predicting a dependent value in an element based on two or more other independent elements.

**Q1. What is your research question?**

Based on the General Social Survey dataset, the research question would be, what is the association between the income of the respondent based on the race, sex and work status?

**Q2. What is the null hypothesis for your question?**

The null hypothesis (Ho) is: There is no significant association between the income, race, sex, and work status.

**Q3. What research design would align with this question?**

The most appropriate research design is the case study analysis because it provides an in-depth analysis of a particular issue in an investigation.

**Q4. What dependent variable was used and how is it measured?**

The dependent variable in the case scenario is the participant’s income. Notably, the variable measured is as a quantitative ratio scale.

**Q5. What independent variable is used and how is it measured?**

The independent elements in the multiple regression are the race, sex and work status. Noteworthy, the elements measured are as nominal variables.

**Q6. What were other variables added to the multiple regression models as controls?**

The variable that added would be to the multiple regression that is the Age of the respondent, as well as the highest degree attained.

**Q7 What is the justification for adding the variables?**

Notably, a person’s Age of a person, as well as the highest level of academic degree one hold, is believed to influence the level of income; thus, forming the basis of adding the two variables in the multiple regression.

**Q8. If you found significance, what is the strength of the effect?**

If the relationships among the variables were statistically significant to say at 95 percent level of confidence with a p-value of less than 0.05, the effect would be that we could at 95 percent confidence state that income level of an individual influenced is by the race, sex, as well as the highest degree, attained.

**Q9. Explain your results for a lay audience; explain what the answer to your research question.**

There exists a statistical significance among the variables, implying that the highest degree attained, the race of the person, as well as the sex of a person, signifies a person's level of income.

Reference List

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences*. Routledge.