Evaluation of Individual's Psychological Distance to the Society around the U.S. based on World Values Survey 2021

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PSYCH - GA 2016 - Master's Statistics

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December 20, 2023

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Introduction

Using the World Values Survey(2021), this paper amid to discuss the impacts of several predictors on individuals' psychological distance to society around the U.S.. With 4823 valid participant responses in total, we engage confidence to public services, perception of corruption among authority, and perception of security in the neighborhood as continuous variables, individuals marital status and family savings level as categorical variables, and sex as binary variable.

In this project, we generate descriptive statistics to assess the basic trend of distributions, implement t-test, one-way ANOVA, two-way ANOVA, correlations, multiple regression, chi-square test, and non-parametric test to further evaluate the relationship among chosen variables, and specific levels. Main content of this report spanning methods introduction, interpretation of data analysis and discussion, limitation, and conclusion.

Methods

The data set consists of questions responses from the survey, which has been cleaned and re-coded into specific variables according to the cohesive meaning and research purposes and hypothesis. Missing values in responses have been checked and cleaned before coding variables. Firstly, in continuous variables, NAs have been replaced by the column mean. In binary variable and categorical variables, the percentages of NAs per question were below 3%, thus missing values have been omitted lasting valid data points from 4823 participants in total.

Specifically, dependent variable *psychological distance to society* is coded as the mean of Q255, Q256, Q257, Q258, and Q259, continuous independent variable *confidence to public services* is coded as the mean of Q69, Q70, Q71, Q73, and Q74, continuous independent variable *perception of corruption among authority* is coded as the mean of Q113, Q114, Q115, Q116, and Q117, continuous independent variable

perception of security in neighborhood is coded as the mean of Q132, Q135, Q136, Q137, Q138. Binary variable *sex* is coded from Q260, the two levels are male and female. Categorical independent variable *marital status* is coded from Q273 into three levels: stay in relationship, break from relationship, and single. Categorical independent variable *family savings* is coded from Q286 into three levels: save money, just get by, and borrow. Detailed content of the questions and coding instructions are provided in Table 1(see Appendix).

To validate the hypothesises and analyze data, we generate descriptive statistics to assess the basic trend of distributions, implement t-test, one-way ANOVA, two-way ANOVA, correlations, multiple regression, chi-square test, and non-parametric test to further evaluate the relationship among chosen variables, and specific levels, which will be presented and discussed in the data analysis section.

Data Analysis and Discussion

Descriptive Statistics

Before delving into the specific relationship between different variables through parametric and non-parametric analysis, it's important to calculate the basic descriptive statistics and obtain a basic understanding of the variables' format of distribution. Descriptive statistics contains range, IQR, mean, median, mode, standard deviation(*SD*), variance, and histograms, and bar charts for visualization.

Specifically, ranges for all the continuous variables equal 0.75, the maximum and minimum score for each variable are provided in Table 2 (see Appendix). For *psychological distance to society*, a higher score represents a farther psychological distance to society. For *confidence to public services*, a higher score represents a lower confidence level towards public services. For the *perception of corruption among authority*, a higher score represents a larger corruption perceived among authority. For the *perception of security in neighborhood*, a higher score represents a higher level of security perceived in neighborhood. Mean, median, mode, IQR, standard deviation(*SD*), variance for continuous variables, and mode for categorical and binary

variables are provided in Table 2 (see Appendix). Histograms for continuous variables and bar charts for categorical and binary variables can be seen in Figure 1 and Figure 2 (see Appendix).

T-test

The way people interact and bonding with one and another can vary based on personality, culture background, educational level, etc. These may result in an individual difference on psychological distance to society, also known as the individual's' feeling of closeness to the society. We assume that if individuals have different sex, then their psychological distance to society will have significant difference. To validate the hypothesis, we perform an independent sample *t*-test between *psychological distance to society* and *sex*, to determine if there is significant difference for mean psychological distance to society levels between male and female.

The result of homogeneity of variance shows that the assumption of the homogeneity of variance has been violated since the p value for the Levene test is below .05 ($F(1, 4821) = 4.2622$, $p = <.05$), Welch's *t*-test would need to be run. In my data-set of World Values Survey 2021 (4823 observations), an independent *t*-test demonstrated that Male ($M = 0.552$, $SD = 0.157$), as compared to Female ($M = 0.567$, $SD = 0.159$), had have significant differences $p = .0005$ ($< .001$), $t(4774.8) = -3.4641$, $p = < .001$, 95% C.I. = [-0.0247, -0.0069]. The data support the hypothesis that there is significant difference of psychological distance to society exist between different sex, male's psychological distance to society is significantly closer than female. The visualization of psychological distance to society's difference between different sex is presented in the box-plot (Figure 3, see Appendix).

One-way ANOVAs

One-way ANOVA for Marital Status

We assume that there will be a statistically significant difference in psychological distance of society between two or more levels of marital status. To validate the hypothesis, we perform an one-way ANOVA between *psychological distance to society*

and *marital status*, to determine if there is significant difference for mean psychological distance to society levels between different categories of marital status.

In my data set, a one-way ANOVA was conducted to compare the effect of marital status on psychological distance to society for stay in relationship, break from relationship, and single three conditions. It revealed that there was a statistically significant difference of marital status on psychological distance to society at the $p<.01$ level for the three conditions ($F(2, 4820) = 5.988$, $p < .01$)(Figure 4, see Appendix). The assumption of a normal distribution of residuals is met, as the histogram is a normal distribution centered around zero (Figure 5, see Appendix).

To further understand the specific differences of psychological distance to society between three marital status's conditions, we performed a Tukey's HSD test as the post-hoc test (Table 3.1, see Appendix). Using a 95% confidence interval, Tukey's HSD test for multiple comparisons demonstrated a statistically significant difference in psychological distance to society between break from the relationship and stay in the relationship ($p < .05$), between single and stay in the relationship ($p < .01$). Using a 95% confidence interval, Tukey's HSD test for multiple comparisons demonstrated no statistically significant difference in psychological distance to society between the single and break from relationship ($p = 0.93$ ($> .05$)). Thus, the psychological distance to society for subjects who is single or break from relationship is significantly larger than subjects who stay in relationship, for subjects who is single or have broken from relationship, there is no significant difference between psychological distance to society.

One-way ANOVA for Family Savings

We assume that there will be a statistically significant difference in psychological distance of society between two or more levels of family savings. To validate the hypothesis, we perform an one-way ANOVA between *psychological distance to society* and *family savings*, to determine if there is significant difference for mean psychological distance to society levels between different categories of family savings

In my data set, a one-way ANOVA was conducted to compare the effect of family savings on the psychological distance to society for save money, just get by, and borrow

money three conditions. It revealed that there was a statistically significant difference of family savings on psychological distance to society at the $p<.001$ level for the 3 conditions ($F(2, 4820) = 18.15$, $p < .001$)(Figure 4, see Appendix). The assumption of a normal distribution of residuals is met, as the histogram is a normal distribution centered around zero (Figure 6, see Appendix).

To further understand the specific differences of psychological distance to society between three family saving's conditions, we performed a Tukey's HSD test as the post-hoc test (Table 3.2, see Appendix). Using a 95% confidence interval, Tukey's HSD test for multiple comparisons demonstrated a statistically significant difference in psychological distance to society between just get by and save money ($p < .001$), between borrow and just get by ($p < .01$). Using a 95% confidence interval, Tukey's HSD test for multiple comparisons demonstrated no statistically significant difference in psychological distance to society between borrow and save money ($p > .05$). Thus, the psychological distance to society for subjects who just get by on their family savings is significantly larger than subjects who save money or spent some savings and borrow money, there is no significant difference between psychological distance to society compared between subjects who save money and spent some savings and borrow money.

Two-way ANOVA

We assume that there will be a statistically significant difference in psychological distance of society between two or more levels of marital status, regardless the level of their family savings. In my data set, a two-way ANOVA performed to analyze the effect of individual marital status and annual family savings situation on psychological distance to society. It revealed that there was not a statistically significant interaction between marital status and family savings ($F(4, 4814) = 0.8435$, $p = 0.497(>.05)$). Simple main effects analysis showed that one's marital status didn't have a statistically significant effect on psychological distance to society ($F(2, 4814) = 2.5404$, $p = .079(>.05)$), while the simple main effect of family savings exists($F(2, 4814) = 12.1509$, $p < .001$). The box plot and line graph has provided visualized ways to understand the

main effect of independent variables on dependent variables(Figure 7&8, see Appendix).

The box plot(Figure 7) indicates that the *psychological distance to society* under different levels of *family savings* is generally having a similar tendency as the individual *marital status* changed from stay in relationship, to break from relationship, to single. More specifically, regardless of the *family savings* levels, individual's psychological distance slightly increased as the individual *marital status* change from higher companion level to lower companion level, showing no conspicuous interaction between *family savings* and *marital status*, which aligns with the two-way ANOVA results.

The pairwise contrast result adjusted by *bonferroni* demonstrated that psychological distance to society was significantly different between save money and just get by when individual is in relationship ($t(4814)$ = -4.846, $p < .001$) or single ($t(4814)$ = -2.833, $p = 0.0139$ ($<.05$)). The pairwise contrast result adjusted by *bonferroni* demonstrated that psychological distance to society was significantly different between just get by and borrow when individual is in relationship ($t(4814) = 2.843$, $p = 0.0135$ ($<.05$)).

The statistics result and the line graph(Figure 8) demonstrated that when the one is in relationship, individual's psychological distance is significantly closer when the one have save money or borrow money compared with the one who just get by, while the one who borrow money or save money have no significant difference on psychological distance to society. When the one is single, the psychological distance is also significantly closer when individual save money or borrow compared with just get by, but there is no significant difference between the one who borrow money and the other two family saving conditions. When the one is break from the relationship, the psychological distance shows no significant difference regardless the family savings conditions. Moreover, bearing in mind the statistical result which has no significant interaction between *family savings* and *marital status*, the crossing between line borrow and line just get by is possibly happens by chance in the line graph.

In short, when individual marital status changed, there is no significant change within the trend of psychological distance under different family savings level. Generally

the psychological distance to society is influenced by family savings level that just get by will have farther psychological distance compared with save money and borrow.

Correlations

Correlations for Overall Sample

We assume that there is significant correlation between each pair of independent variables. A Pearson correlation coefficient was computed to assess the linear relationship between *confidence to public services* and *perception of corruption*, indicating a significant moderate positive correlation between the two variables($r(4821) = .325$, $p < .001$). A Pearson correlation coefficient was computed to assess the linear relationship between *confidence to public services* and *perception of security in neighborhood*, indicating a significant weak negative correlation between the two variables ($r(4821) = - 0.134$, $p < .001$). A Pearson correlation coefficient was computed to assess the linear relationship between *perception of security in* neighborhood and *perception of corruption*, indicating a significant weak negative correlation between the two variables ($r(4821) = - 0.185$, $p < .001$). Therefore, we can reject the null hypothesis because the correlation between any of the combinations of the three independent variables *confidence to public services*, *perception of corruption among authority*, or *perception of security in neighborhood* has a statistically significant correlation.

As expected, the scatter plots for overall correlations (Figure 9, see Appendix) demonstrate weak negative correlations between the combination of confidence to public services and perception of security in neighborhood as well as with perception of security in neighborhood and perception of corruption overall, and a moderate positive correlation was demonstrated in the scatter plot of confidence to public services and perception of corruption among authority.

Correlations for Binary Sample Groups

A Pearson correlation coefficient was computed to assess the linear relationship between confidence to public services (IV1) and perception of corruption (IV2) for only those who were in the Female in sex. There was a significant moderate positive

correlation between the two variables in Female condition of sex ($r(2311) = .327$, $p < .001$. A Pearson correlation coefficient was computed to assess the linear relationship between confidence to public services (IV1) and perception of corruption (IV2) for only those who were in the Male in sex. There was a significant moderate positive correlation between the two variables in Male condition of sex ($r(2508) = .324$, $p < .001$). The correlation between confidence to public services (IV1) and perception of corruption (IV2) for sex has relatively similar significant positive relationship when an individual is a Female as compared to Male.

A Pearson correlation coefficient was computed to assess the linear relationship between confidence to public services (IV1) and perception of security in neighborhood (IV3) for only those who were in the Female in sex. There was a significant weak negative correlation between the two variables in Female condition of sex ($r(2311) =$ -0.148, $p < .001$. A Pearson correlation coefficient was computed to assess the linear relationship between confidence to public services (IV1) and perception of security in neighborhood (IV3) for only those who were in the Male in sex. There was a significant weak positive correlation between the two variables in Male condition of sex ($r(2508) =$ -0.122, $p < .001$). The correlation between confidence to public services (IV1) and perception of security in neighborhood (IV3) for sex have a slightly stronger significant negative relationship when an individual is a Female as compared to Male.

A Pearson correlation coefficient was computed to assess the linear relationship between perception of security in neighborhood (IV3) and perception of corruption (IV2) for only those who were in the Female in sex. There was a significant weak to moderate negative correlation between the two variables in Female condition of sex ($r(2311) = -0.169$, $p < .001$). A Pearson correlation coefficient was computed to assess the linear relationship between perception of security in neighborhood (IV3) and perception of corruption (IV2) for only those who were in the Male in sex. There was a significant weak to moderate negative correlation between the two variables in Male condition of sex ($r(2508) = -0.195$, $p < .001$). The correlation between perception of security in neighborhood (IV3) and perception of corruption (IV2) for sex have a

slightly stronger significant negative relationship when an individual is a Male as compared to Female.

Therefore, we can reject the null hypotheses that the sex has no impact on the correlation strength between confidence to public services (IV1) and perception of security in neighborhood (IV3), and perception of security in neighborhood (IV3) and perception of corruption (IV2), because whether or not an individual is female or male does seem to influence confidence to public services (IV1),perception of corruption (IV2), and perception of security in neighborhood (IV3). We can accept the null hypotheses that the sex has no impact on the correlation strength between confidence to public services (IV1) and perception of corruption (IV2), because the correlation strength is relatively the same (Female:.327, Male:.324) regardless individuals' sex.

Generally speaking, the correlations indicate that individuals who are female tend to have a higher chance of having a higher confidence to public services, a lower perception of corruption, and a higher perception of security in neighborhood.

The scatter plots(Figure 10, see Appendix) did demonstrate what the main effects presented in the correlations between the combination of confidence to public services and perception of security in neighborhood,confidence to public services and perception of corruption among authority as well as with perception of security in neighborhood and perception of corruption depending on the binary variable. Nevertheless, the these three scatter plots also illustrated an ordinal interaction (sloping in the same direction with different slope, but do not actually cross) between the two binary variable (sex) levels. This may be measurement-induced mirages that generally won't influence the interpretation of main effect correlations or ANOVA results. However, it would be more robust if we are more prudent and take the measurement induced error etc. into consideration when discussing the data representatives.

Multiple Regression

Multiple Regression for Overall Sample

We assume that individual's *psychological distance to society* value can be

predicted by an increased level of *confidence to public service*, an increased *perception of corruption*, and an increased security perceived. The result reveals that the overall p value for the multiple regression is significant at $p < 001$ withe the multiple R^2 value being 0.0511 which means that approximately 5.1% of variation is explained by the predictor variables. Specifically, level of confidence to public service has a significant weak to moderate positive relationship with psychological distance to society($p < .001$, slope = 0.222), while perception of corruption($p = 0.229$) and perception of security in neighborhood($p = 0.368$) have no significant relationship with psychological distance to society at this point.

In conclusion, though the multiple R^2 is rather small, combine with the information of significance level for every predictor, our hypothesis is partly correct that confidence to public services would share a positive relationship with individual psychological distance to the society, which means the one who has less confidence to the public service could have larger psychological distance to the society.

Multiple Regression for Binary Sample Groups

Within the Female group of the binary variable (*sex*), as *psychological distance to society* increases, there is predicted to be a positive relationship with *confidence to public services*, a positive relationship with *perception of corruption* and a positive relationship with *perception of security of neighborhood*, which agrees with the hypothesis of the overall regression. Predictions for this hypothesis did not change from the overall regression hypothesis because even with the separation of the data along the binary variable, directionality of the slopes are believed to not be contingent on the levels of the binary variable in this data set. The p value for the multiple regression is significant at $p < 001$ withe the multiple R^2 value being 0.0491 which means that approximately 4.9% of variation is explained by the predictor variables. Specifically, level of confidence to public service has a significant weak to moderate positive relationship with psychological distance to society ($p < .001$, slope = 0.216), while perception of corruption ($p = 0.447$) and perception of security in neighborhood ($p = 0.608$) have no significant relationship with psychological distance to society at this

point.

In conclusion, though the multiple R^2 is rather small, combine with the information of significance level for every predictor, our hypothesis is partly correct that for female group, *confidence to public services* would share a positive relationship with individual *psychological distance to the society*, which means the one who has less *confidence to the public service* could have larger *psychological distance to the society*.

Within the Male group of the binary variable (*sex*), as *psychological distance to society* increases, there is predicted to be a positive relationship with *confidence to public services*, a positive relationship with *perception of corruption* and a positive relationship with *perception of security of neighborhood*, which agrees with the hypothesis of the overall regression. Predictions for this hypothesis did not change from the overall regression hypothesis because even with the separation of the data along the binary variable, directionality of the slopes is believed to not be contingent on the levels of the binary variable in this data set.

The overall p value for the multiple regression is significant at $p < .001$ withe the multiple R^2 value being 0.05459 which means that approximately 5.5% of variation is explained by the predictor variables. Specifically, level of confidence to public service has a significant weak to moderate positive relationship with psychological distance to society ($p < .001$, slope = 0.229), and perception of security in the neighborhood has a significant weak positive relationship with psychological distance to society ($p < .05$, slope = 0.036), while perception of corruption ($p = 0.422$) have no significant relationship with psychological distance to society at this point.

In conclusion, though the multiple R^2 is rather small, combined with the information of significance level for every predictor, our hypothesis is partly correct that for the male group, *confidence to public services* and *perception of security in the neighborhood* would share a positive relationship with individual *psychological distance to the society*, which means the one who has less *confidence to the public services* or less *perception of security in the neighborhood* could have larger *psychological distance to the society*.

As the relationship between confidence in public services and psychological distance to society stayed generally consistent across all three levels, it supports our hypothesis that confidence in public service has a positive relationship with psychological distance to society. Perception of corruption showed no significant relationship with psychological distance to society at all three levels. The only difference was the binary variable in which sex differences existed in the relationship between the perception of security in the neighborhood and psychological distance to society. Specially, in the male group there is a very weak positive relationship between these two variables, while in the female group there is no significant relationship, which means that for the male, the one with a more negative perception of corruption could also have a further psychological distance to the society. As the positive relationship between the perception of corruption and psychological distance is too small, its value for the general multiple regression model is quite limited.

Chi-Squared Test

We assume that the frequency counts of the two categorical variables (*marital status* and *family savings*) are related in that the distribution of individuals among each of the marital status levels of stay in relationship, break from relationship, and single are not equal (significant difference exists) across the family savings levels of save money, just get by, and borrow. We perform a Chi-squared test between individual's *psychological distance* based on the groups generated from the two categorical variables.

The Chi-squared test between family savings and marital status resulted in a p value of $p < .01$ meaning that the counts among the categorical are significant and did not occur by chance (Figure 11, see Appendix). Since the group sizes are inconsistent, the percentage tables are more beneficial in this analysis because it shows the comparison from row, column or cell perspectives.

The row percentage chart shows that for the three marital statuses(in relationship, break from relationship, and single), the percentage differences of individuals at different family savings level. No matter in what marital status, the *just get by* stage

dominates the majority of individuals' family saving situations, which exceeded 40% at every marital status. No matter in what marital status, individuals who are in the *borrow* stage is minimized, whose percentages are all below 26% at every marital status.

The column percentage chart shows that for the 3 family savings stages(save money, just get by, and borrow) , the percentage differences of individuals at different marital statuses. No matter in what family savings stage, the *in relationship* status dominates the majority of individuals' marital status, which exceeded 50% at every family savings stages. No matter in what family savings stage, the *break from relationship* status is minimized, whose percentages are all around 10% at every family savings stages.

Non-Parametric Test

Mann Whitney U test

We assume that there is a significant difference in perception of security in neighborhood between levels of *sex* (Male and Female). More specifically, a higher perception of security in neighborhood will be seen in those in the Male group than in the Female group. To validate the hypothesis, we have performed a Mann-Whitney U test. The test resulted in a insignificant p value (p = 8.879e-07 > .05), meaning that there is no significant difference in the perception of security in neighborhood between the Female and Male groups as demonstrated by the difference in medians (Female = 0.75, Male = 0.75) (Figure 12, see Appendix). The result from Mann Whitney U test reject the previous hypothesis, the degree of perception of security in the neighborhood is generally the same between male and female groups.

Kruskal-Wallis H test

We assume that there is a significant difference in *perception of corruption* among levels of *family savings*. More specifically, a lower perception of corruption will be presented in those of a higher family savings level. To validate the hypothesis, we have performed a Kruskal-Wallis H test. The test resulted in a significant p value ($p <$ 0.001) meaning that there is a significant difference in the median of perception of

corruption between the different levels of family savings, which supported the hypothesis (Figure 13, see Appendix). Specifically, The median of level of perception of corruption for family savings group of save money is 0.55, while the median for group of just get by and borrow money are both 0.6.

We can further infer that for the one who save money have significantly lower perception of corruption compared with the individuals who just get by or need to borrow money. Generally, a linear trend was shown in the bar graph that a lower perception of corruption will be presented in those of a higher family savings level.

Conclusion and Limitation

The evaluation of individuals' psychological distance to society based on the World Values Survey 2021 provided valuable insights into the interplay of various predictors. Employing diverse statistical analyses, including t-tests, ANOVAs, correlations, Chi-squared tests, and non-parametric tests, the study aimed to uncover patterns in psychological distance associated with perceptual factors.

Main Takeaways

Independent sample t-test revealed a significant difference in psychological distance between males and females, suggesting that males tend to have a closer psychological distance to society than females.

One-way ANOVA analysis indicated a significant difference in psychological distance among different marital status and family savings levels. Tukey's HSD test further revealed that psychological distance was significantly larger for individuals who were single or had broken from a relationship compared to those who stayed in a relationship, and individuals just getting by had a significantly larger psychological distance compared to those saving money or borrowing.

Correlation analyses revealed significant relationships between confidence in public services, perception of corruption, and perception of security in the neighborhood. Weak negative correlations were found between confidence and corruption, confidence and security, and a moderate positive correlation between corruption and security.

Multiple regression analysis demonstrates a significant positive relationship between psychological distance and confidence in public services, explaining approximately 5.1% of the variation. This finding was consistent across gender groups, suggesting that individuals with lower confidence in public services tend to perceive a larger psychological distance to society.

Chi-squared test, highlighted significant relationships between marital status and family savings, emphasizing the prevalence of the "just get by" stage across marital statuses. The Mann-Whitney U test did not reveal a significant difference in the perception of security in the neighborhood between male and female groups. However, the Kruskal-Wallis H test indicated a significant difference in the perception of corruption among different levels of family savings, with individuals saving money exhibiting lower corruption perceptions.

Limitations and Future Directions

Despite these valuable findings, the study has limitations. The relatively small multiple R^2 values (5.1%) in the subsequent multiple regression analysis indicate that psychological distance is influenced by factors beyond those considered in this analysis. The cross-sectional design and reliance on self-reported survey data introduce potential biases and limit causal inferences. Future research endeavors could explore additional factors influencing psychological distance, such as cultural nuances, socio-economic variables, and personal experiences. Longitudinal studies may provide a deeper understanding of the dynamic nature of psychological distance over time.

In conclusion, while this study offers valuable insights into the predictors of psychological distance to society, acknowledging its limitations underscores the need for continued research to refine our understanding of this complex phenomenon.

Appendix

Table 1 *Variables Selection and Coding*

	Variables Name	***Questions Content***
Continuous Variables	*Psychological Distance to Society*[1]	*Do you agree or disagree with the following statements? People have different views about themselves and how they relate to the world. Using this card, would you tell me how close you feel to…?* *Q255 - Your village, town, or city* *Q256 - Your county, region, district* *Q257 - Country* *Q258 - Continent; e.g., Europe, Asia etc.* *Q259 - World*
	Confidence to Public Services	*Could you tell me how much confidence you have in them: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all?* *Q69 - The Police* *Q70 - Justice System/Courts* *Q71 - The Government* *Q73 - Parliament* *Q74 - The Civil Services*
	Perception of Corruption among Authority	*Tell me for each group if you believe it is none of them, few of them, most of them or all of them?* *Q 113 - State authorities* *Q114 - Business executives* *Q115 - Local authorities* *Q116 - Civil service providers* *Q117 - Journalists and media*
	Perception of Security in Neighborhood	*How frequently do the following things occur in your neighborhood?* *Q132 - Robberies* *Q135 - Racist behavior* *Q136 - Drug sale in street* *Q137 - Street violence and fights* *Q138 - Sexual harassment*
Binary Variable	*Sex*	*Q260 - Respondent's sex* *1.- Male 2.- Female*
Categorical Variable	*Marital Status* *Recode into 3 levels: stay in relationships (1,2); break from relationships (3,4); single (5,6)*	*Q273 - Are you currently ....* *1.- Married 2.- Living together as married 3.- Divorced 4.- Separated 5.- Widowed 6.- Single*
	Family Savings *Recode into 3 levels: save money (1), just get by (2), borrow (3,4)*	*Q286 - During the past year, did your family…* *1.- Save money 2.- Just get by* *3.- Spent some savings and borrowed money* *4.- Spent savings and borrowed money*

Note. [1]*Dependent Variable.*

Table 2 *Descriptive Statistics*

Variable	*Max*	*Min*	*Range*	*IQR*	*Mean*	*Median*	*Mode*	*SD*[1]	*Var*[2]
Psychological Distance	*1.00*	*0.25*	*0.75*	*0.20*	*0.559*	*0.550*	*0.50*	*0.158*	*0.025*
Confidence to Public Services	*1.00*	*0.25*	*0.75*	*0.20*	*0.673*	*0.650*	*0.75*	*0.157*	*0.025*
Perception of Corruption	*1.00*	*0.25*	*0.75*	*0.20*	*0.611*	*0.600*	*0.50*	*0.128*	*0.017*
Perception of Security	*1.00*	*0.25*	*0.75*	*0.30*	*0.726*	*0.750*	*0.75*	*0.188*	*0.035*
Marital Status	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*In Rela*[3]	*NA*	*NA*
Family Savings	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*JGB*[4]	*NA*	*NA*
Sex	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*Male*	*NA*	*NA*

Note.[1]*Standard Deviation,* [2]*Variance,* [3]*Stay in relationship,* [4]*Just get by.*

Table 3.1 *Post-hoc Multiple Comparisons of Means for Marital Status: Tukey HSD*

Marital Status	*Difference*	*Lower.CI*[1]	*Upper.CI*	*p value*
break rela – in rela	*0.0179*	*0.0003*	*0.0356*	*0.0460 **
single – in rela	*0.0150*	*0.0034*	*0.0266*	*0.0069 ***
single – break rela	*-0.0029*	*-0.0214*	*0.0156*	*0.9285*

Note.[1] *95% Confidence Interval; * p < .05, ** p < .01.*

Table 3.2 *Post-hoc Multiple Comparisons of Means for Family Savings: Tukey HSD*

Marital Status	*Difference*	*Lower.CI*[1]	*Upper.CI*	*p value*
just get by – save money	*0.0315*	*0.0191*	*0.0440*	*3.3e-08 ****
single – break rela	*-0.0029*	*-0.0214*	*0.0156*	*0.9285*
borrow – just get by	*-0.0185*	*-0.039*	*-0.0052*	*0.0033 ***

Note.[1] *95% Confidence Interval; *** p < .001, ** p < .01.*

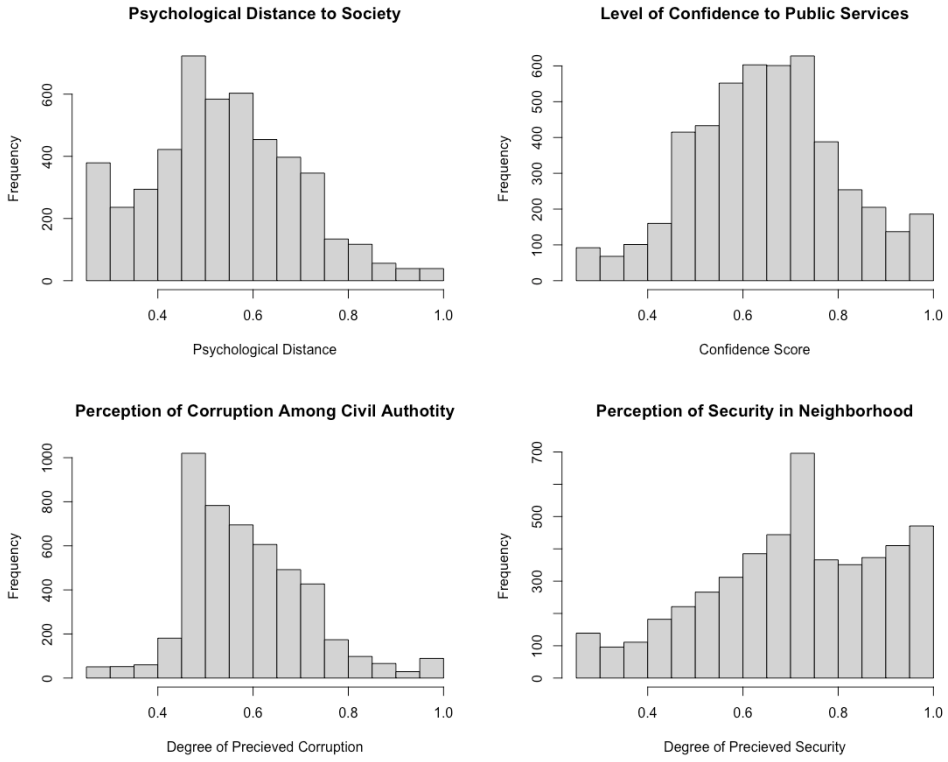

Figure 1. Histograms for Continuous Variables

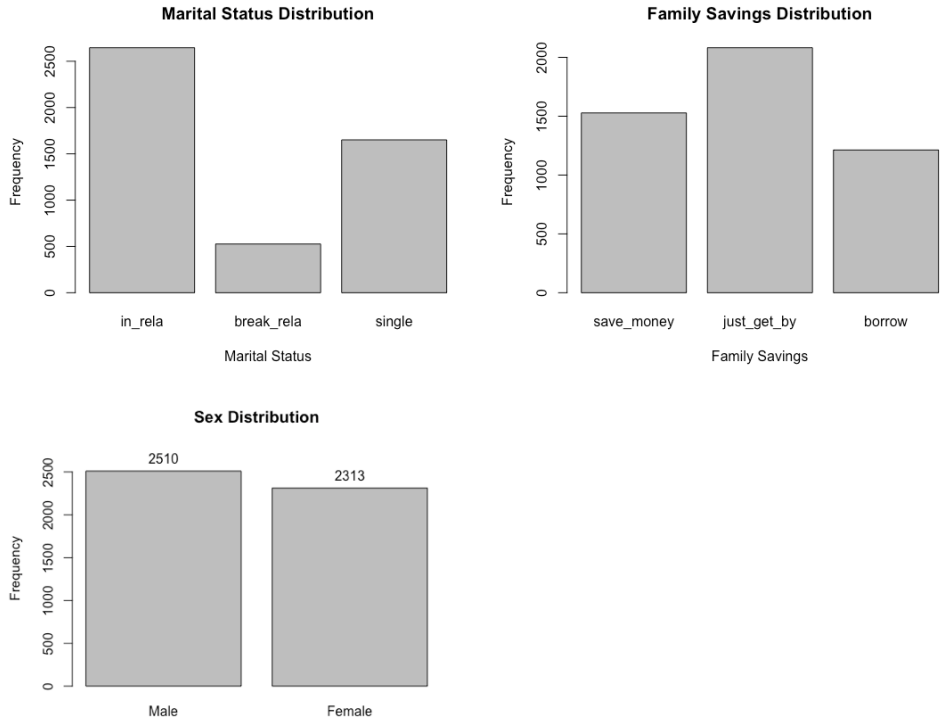

Figure 2. Bar Charts for Categorical and Binary Variables

Figure 3. Box-plot for T-test

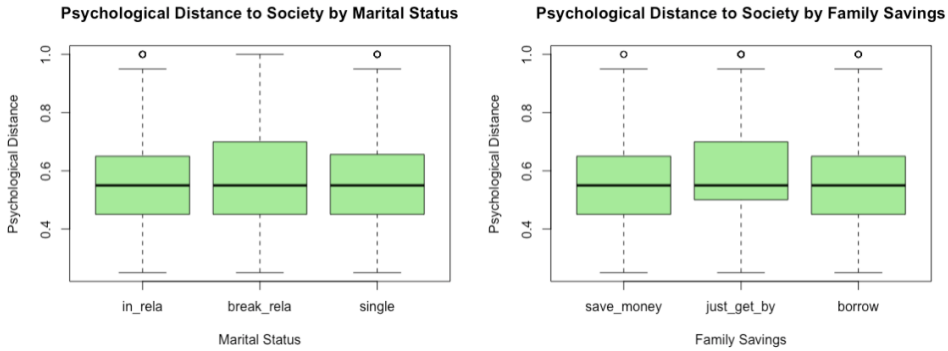

Figure 4. Psychological Distance by Categorical Variables

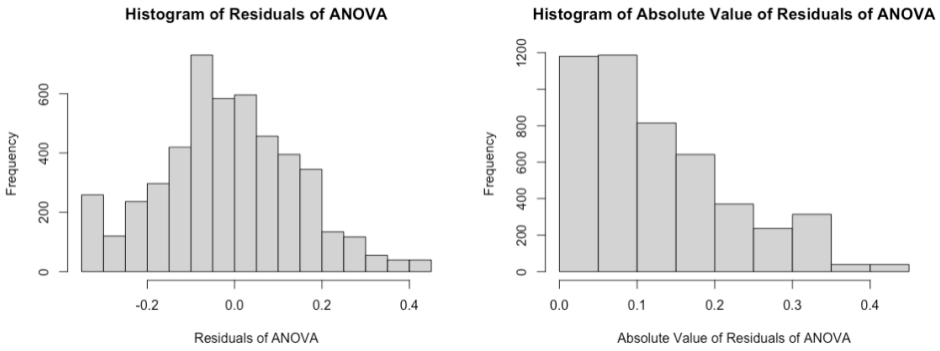

Figure 5. Histograms of Residuals for Marital Status

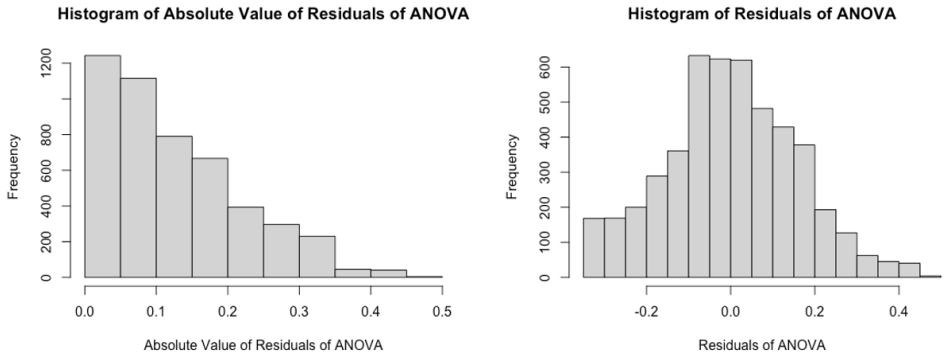

Figure 6. Histograms of Residuals for Family Savings

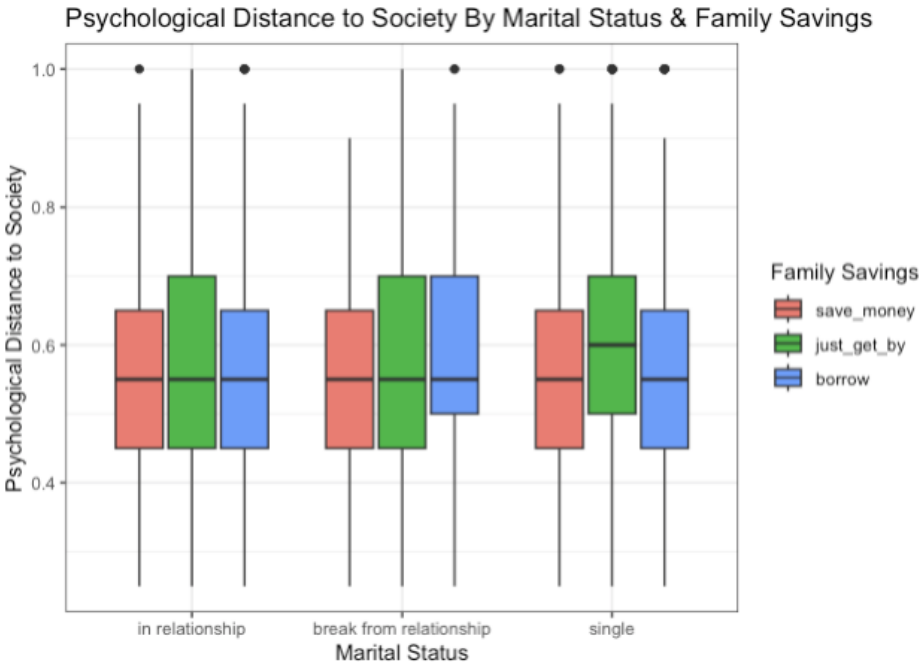

Figure 7. Box plot for two-way ANOVA

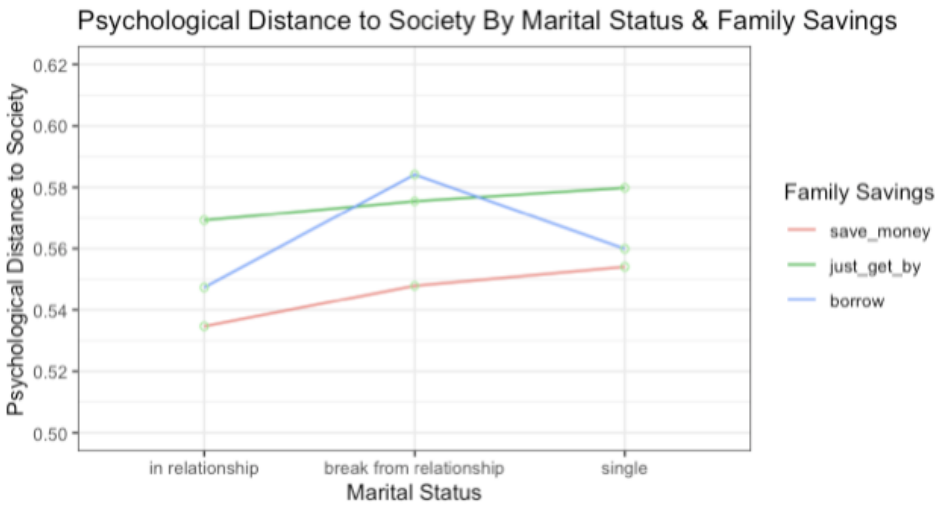

Figure 8. Line graph for two-way ANOVA

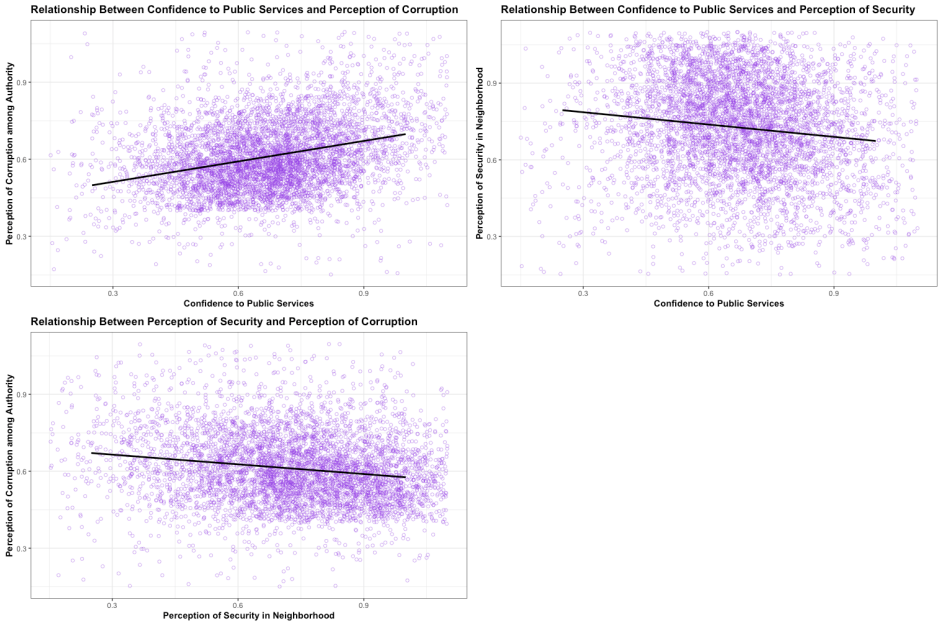

Figure 9. Correlation for Overall Sample

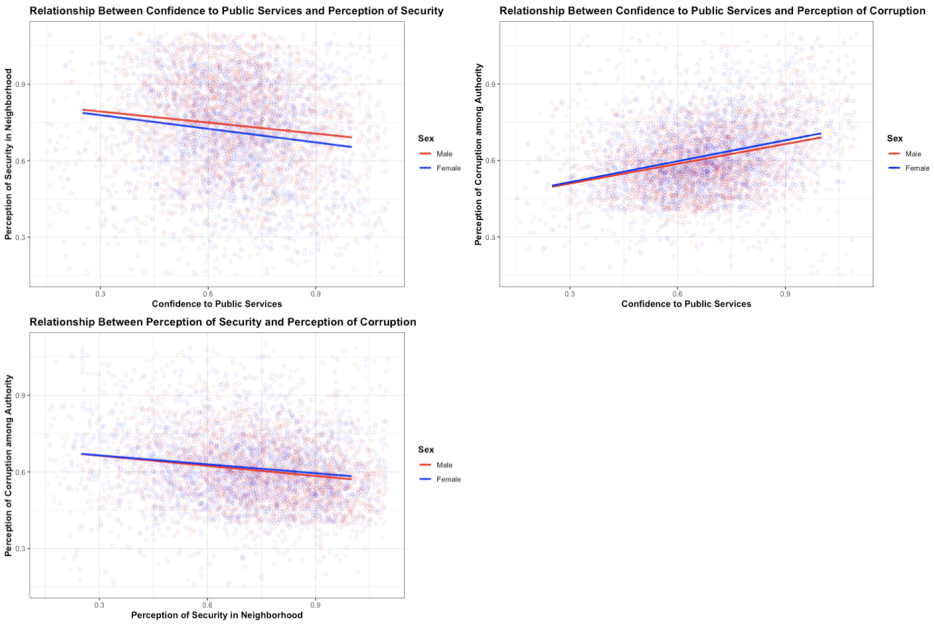

Figure 10. Correlations for Binary Sample

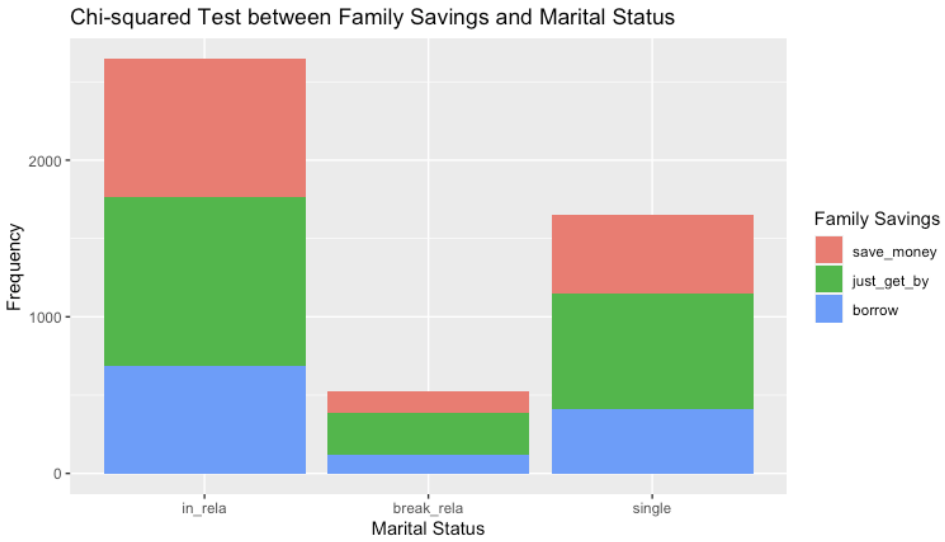

Figure 11. Chi-squared test

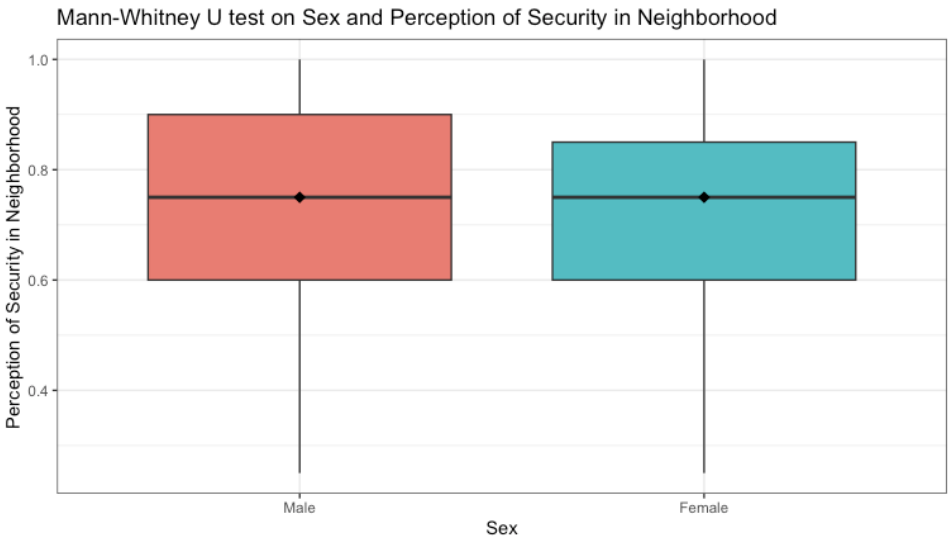

Figure 12. Mann-Whitney U test

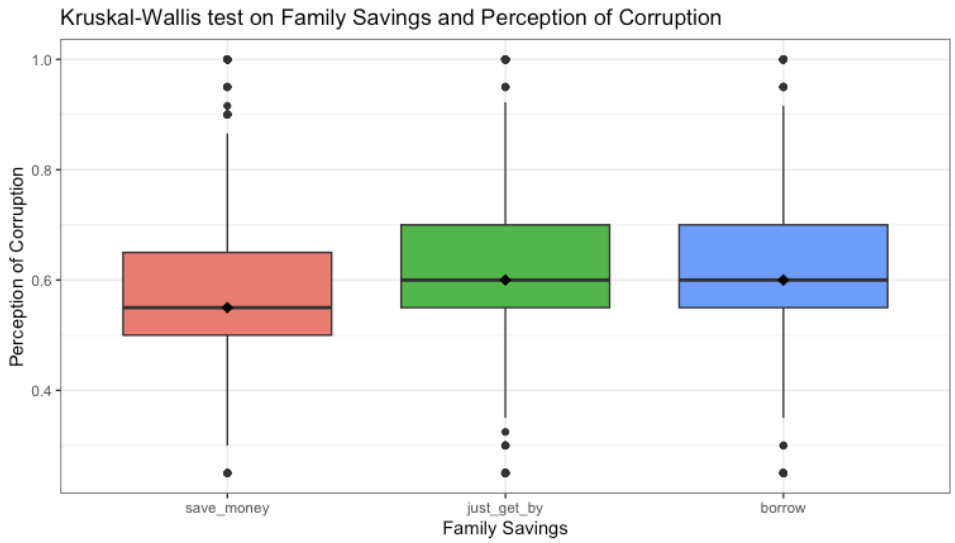

Figure 13. Kruskal-Wallis H test