**Appendix**

**The Mediating Role of Job Involvement between Job Satisfaction and Organizational Commitment in a Small and Medium Size Business Enterprise.**

You are being invited to participate in a research study entitled "The Mediating Role of Job Involvement between Job Satisfaction and Organizational Commitment in a Small and Medium Size Business Enterprise". This study is being done by Enrico C. Mendoza of De La Salle University - Manila. You were randomly selected to participate in this study.

The purpose of this research is to assess the significance and impact of job involvement as a mediating variable in between employee job satisfaction and employee organizational commitment. If you agree to take part in this study, you will be asked to complete an online survey/questionnaire. This survey will ask you about certain aspects of your views and opinions and this will take you approximately 10 minutes to complete.

The researcher believes there are no known risks associated with this research study; however, as with any online related activity the risk of a breach of confidentiality is always possible. To the best of the researcher's ability your answers in this study will remain confidential. We will minimize any risks by maintaining your anonymity and that all responses to this questionnaire are and will always be stored using encryption technology as provided by Google.

Your participation in this study is completely voluntary and you can withdraw at any time.

If you have questions about this project or if you have a research-related problem, you may contact the researcher, Enrico Mendoza thru email address enrico\_c\_mendoza@dlsu.edu.ph. If you have any questions concerning your rights as a research subject, you may contact the De La Salle University Manila Research Ethics Office at (02) 524-4611 loc. 513 or REO@dlsu.edu.ph. Please print a copy of this page for your records.

**Organizational Commitment Scale**

Listed below are **a** series of statements that represent possible feelings that individuals might have about the company or organization for which they work. Thinking about your own feelings, please indicate the extent of your agreement or disagreement with each statement by circling the one response that most accurately reflects your feelings.

1. I am willing to put in **a** great deal of effort beyond that normally expected in order to help this organization be successful.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |
|  |  |  |  |  |  |  |  |  |

1. I talk up this organization to my friends as a great organization to work for.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

1. I feel very high loyalty to this organization.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |
|  |  |  |  |  |  |  |  |  |

1. I would accept almost any type of job assignment in order to keep working for this organization.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

1. I find that my values and the organization's values are very similar.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

1. I am proud to tell others that I am part of this organization.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

1. I could just as well be not working for a different organization even if the type of work was similar.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

1. This organization really inspires the very best in me in the way of job performance.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

1. It would take a very big change in my present circumstances to cause me to leave.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

1. I am extremely glad that I chose this organization to work for, over others at the time I joined.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

l1. There's way too much to be gained by sticking with this organization indefinitely.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

12. Often, I find it easy to agree with this organization's policies on important matters relating to its employees.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

13.I really care about the fate of this organization.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

l4. For me, this is the best of all possible organizations for which to work.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

15. Deciding not to work for this organization would be a definite mistake on my part.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

**Job Involvement Scale**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

1. The major satisfaction in my life comes from my job.
2. Sometimes I lay awake at night, thinking ahead to the next day’s work.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

1. I live, eat and breath my job.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

1. I am very much involved personally in my work.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

**Job Satisfaction Scale**

Listed below are **a** series of statements about your present job. Thinking about your present job, please indicate the extent of your agreement or disagreement with each statement by circling the one response that most accurately reflects your personal thoughts and opinions.

1. I get along with supervisors.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

1. All my talent and skills are used.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

1. I feel good about my job.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

1. I receive recognition for a job well done.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |
|  |  |  |  |  |  |  |  |  |

1. I feel good about working at this company.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

1. I feel close to the people at work.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

1. I feel secure about my job.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

1. I believe management is concerned about me.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

1. On the whole, I believe work is good for my physical health.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

1. My salary is good.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |
| Strongly Disagree |  | Disagree |  | Neither Agree nor Disagree  |  | Agree |  | Strongly Agree |

**Demographics**

Your name and personal information will NOT be used for any other purpose except for this research study alone.

Age: \*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Gender: \*

* + Male
	+ Female

Highest Education Completed: \*

* + High School
	+ College/University Bachelors' Degree
	+ Masters Degree
	+ PhD/Doctorate Degree

Job Level \*

* + Staff
	+ Supervisor
	+ Middle Manager
	+ Top Management

Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**R COMMANDER SCRIPT**

|  |  |
| --- | --- |
| R version 3.5.0 (2018-04-23) -- "Joy in Playing"Copyright (C) 2018 The R Foundation for Statistical ComputingPlatform: x86\_64-w64-mingw32/x64 (64-bit)R is free software and comes with ABSOLUTELY NO WARRANTY.You are welcome to redistribute it under certain conditions.Type 'license()' or 'licence()' for distribution details.R is a collaborative project with many contributors.Type 'contributors()' for more information and'citation()' on how to cite R or R packages in publications.Type 'demo()' for some demos, 'help()' for on-line help, or'help.start()' for an HTML browser interface to help.Type 'q()' to quit R.> library("Rcmdr", lib.loc="~/R/win-library/3.5")Loading required package: splinesLoading required package: RcmdrMiscLoading required package: carLoading required package: carDataLoading required package: sandwichLoading required package: effectslattice theme set by effectsTheme()See ?effectsTheme for details.RcmdrMsg: [1] NOTE: R Commander Version 2.5-1: Sun Mar 10 11:02:12 2019Rcmdr Version 2.5-1Attaching package: 'Rcmdr'The following object is masked from 'package:car': ConfintWarning messages:1: package ‘Rcmdr’ was built under R version 3.5.1 2: package ‘RcmdrMisc’ was built under R version 3.5.1 3: package ‘car’ was built under R version 3.5.1 4: package ‘carData’ was built under R version 3.5.1 5: package ‘sandwich’ was built under R version 3.5.1 6: package ‘effects’ was built under R version 3.5.1 > library("RcmdrMisc", lib.loc="~/R/win-library/3.5")Rcmdr> hr <- Rcmdr+ readXL("C:/ENRICO/ENRICO June 19, 2017/DLSU PhD/BUS215D HR/HOMEWORK/HR Responses 3.xlsx",Rcmdr+ rownames=FALSE, header=TRUE, na="", sheet="Sheet1", stringsAsFactors=TRUE)RcmdrMsg: [2] NOTE: The dataset hr has 71 rows and 34 columns.Rcmdr> hr$ji <- with(hr, (ji1+ ji2+ ji3+ ji4)/4)RcmdrMsg: [3] NOTE: The dataset hr has 71 rows and 35 columns.Rcmdr> hr$js <- with(hr, (js1+ js2+ js3+ js4+ js5+ js6+ js7+ js8+ js9+ js10)/10)RcmdrMsg: [4] NOTE: The dataset hr has 71 rows and 36 columns.Rcmdr> hr$oc <- with(hr, (oc1+ oc2+ oc3+ oc4+ oc5+ oc6+ oc7+ oc8+ oc9+ oc10+ oc11+ Rcmdr+ oc12+ oc13+ oc14+ oc15)/15)RcmdrMsg: [5] NOTE: The dataset hr has 71 rows and 37 columns.Rcmdr> library(abind, pos=17)Rcmdr> library(e1071, pos=18)Rcmdr> normalityTest(~ji, test="shapiro.test", data=hr) **Shapiro-Wilk normality test**Data: jiW = 0.85391, p-value = 0.0000007734Rcmdr> normalityTest(~js, test="shapiro.test", data=hr) Shapiro-Wilk normality testdata: jsW = 0.88968, p-value = 0.00001371Rcmdr> normalityTest(~oc, test="shapiro.test", data=hr) Shapiro-Wilk normality testdata: ocW = 0.86465, p-value = 0.000001751Rc**mdr> RegModel.1 <- lm(ji~js, data=hr)**Rcmdr> summary(RegModel.1)Call:lm(formula = ji ~ js, data = hr)Residuals: Min 1Q Median 3Q Max -2.7754 -0.2383 0.1642 0.3469 1.4417 Coefficients: Estimate Std. Error t value Pr(>|t|) (Intercept) 0.3191 0.5167 0.618 0.539 js 0.8792 0.1253 7.014 0.00000000126 \*\*\*---Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1Residual standard error: 0.6573 on 69 degrees of freedomMultiple R-squared: 0.4162, Adjusted R-squared: 0.4078 F-statistic: 49.19 on 1 and 69 DF, p-value: 0.000000001255Rcmdr> library(zoo, pos=19)Warning: package 'zoo' was built under R version 3.5.1Attaching package: 'zoo'The following objects are masked from 'package:base': as.Date, as.Date.numericRcmdr> library(lmtest, pos=19)Rcmdr> bptest(ji ~ js, varformula = ~ fitted.values(RegModel.1), studentize=FALSE, Rcmdr+ data=hr) **Breusch-Pagan test**data: ji ~ jsBP = 0.1562, df = 1, p-value = 0.6927Rcmdr> resettest(ji ~ js, power=2:3, type="regressor", data=hr) **RESET test**data: ji ~ jsRESET = 2.0736, df1 = 2, df2 = 67, p-value = 0.1337Rcmdr> hr<- within(hr, {Rcmdr+ residuals.RegModel.1 <- residuals(RegModel.1)Rcmdr+ rstudent.RegModel.1 <- rstudent(RegModel.1) Rcmdr+ })RcmdrMsg: [6] NOTE: The dataset hr has 71 rows and 39 columns.Rcmdr> normalityTest(~residuals.RegModel.1, test="shapiro.test", data=hr) Shapiro-Wilk normality testdata: residuals.RegModel.1W = 0.90702, p-value = 0.00006627Rcmdr> normalityTest(~rstudent.RegModel.1, test="shapiro.test", data=hr) Shapiro-Wilk normality testdata: rstudent.RegModel.1W = 0.88013, p-value = 0.000006082Rcmdr> oldpar <- par(oma=c(0,0,3,0), mfrow=c(2,2))Rcmdr> plot(RegModel.1)Rcmdr> par(oldpar)Rcmdr> RegModel.2 <- lm(oc~js, data=hr)**Rcmdr> summary(RegModel.2)**Call:lm(formula = oc ~ js, data = hr)Residuals: Min 1Q Median 3Q Max -1.16651 -0.17020 -0.02306 0.15438 0.70218 Coefficients: Estimate Std. Error t value Pr(>|t|) (Intercept) 0.43186 0.24798 1.742 0.086 . js 0.88214 0.06016 14.663 <2e-16 \*\*\*---Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1Residual standard error: 0.3155 on 69 degrees of freedomMultiple R-squared: 0.757, Adjusted R-squared: 0.7535 F-statistic: 215 on 1 and 69 DF, p-value: < 2.2e-16Rcmdr> bptest(oc ~ js, varformula = ~ fitted.values(RegModel.2), studentize=FALSE, Rcmdr+ data=hr) **Breusch-Pagan test**data: oc ~ jsBP = 4.795, df = 1, p-value = 0.02854Rcmdr> resettest(oc ~ js, power=2:3, type="regressor", data=hr) **RESET test**data: oc ~ jsRESET = 2.6387, df1 = 2, df2 = 67, p-value = 0.07887Rcmdr> hr<- within(hr, {Rcmdr+ residuals.RegModel.2 <- residuals(RegModel.2)Rcmdr+ rstudent.RegModel.2 <- rstudent(RegModel.2) Rcmdr+ })RcmdrMsg: [7] NOTE: The dataset hr has 71 rows and 41 columns.Rcmdr> normalityTest(~residuals.RegModel.2, test="shapiro.test", data=hr) Shapiro-Wilk normality testdata: residuals.RegModel.2W = 0.96711, p-value = 0.0594Rcmdr> normalityTest(~rstudent.RegModel.2, test="shapiro.test", data=hr) Shapiro-Wilk normality testdata: rstudent.RegModel.2W = 0.95187, p-value = 0.008455Rcmdr> oldpar <- par(oma=c(0,0,3,0), mfrow=c(2,2))Rcmdr> plot(RegModel.2)Rcmdr> par(oldpar)Rcmdr> RegModel.3 <- lm(oc~ji, data=hr)R**cmdr> summary(RegModel.3)**Call:lm(formula = oc ~ ji, data = hr)Residuals: Min 1Q Median 3Q Max -1.12633 -0.19214 -0.02129 0.19371 2.11033 Coefficients: Estimate Std. Error t value Pr(>|t|) (Intercept) 2.1797 0.2759 7.901 3.04e-11 \*\*\*ji 0.4733 0.0691 6.850 2.49e-09 \*\*\*---Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1Residual standard error: 0.4938 on 69 degrees of freedomMultiple R-squared: 0.4047, Adjusted R-squared: 0.3961 F-statistic: 46.92 on 1 and 69 DF, p-value: 0.00000000249Rcmdr> bptest(oc ~ ji, varformula = ~ fitted.values(RegModel.3), studentize=FALSE, Rcmdr+ data=hr) **Breusch-Pagan test**data: oc ~ jiBP = 53.422, df = 1, p-value = 2.69e-13Rcmdr> resettest(oc ~ ji, power=2:3, type="regressor", data=hr) **RESET test**data: oc ~ jiRESET = 1.0702, df1 = 2, df2 = 67, p-value = 0.3487Rcmdr> hr<- within(hr, {Rcmdr+ residuals.RegModel.3 <- residuals(RegModel.3)Rcmdr+ rstudent.RegModel.3 <- rstudent(RegModel.3) Rcmdr+ })RcmdrMsg: [8] NOTE: The dataset hr has 71 rows and 43 columns.Rcmdr> normalityTest(~residuals.RegModel.3, test="shapiro.test", data=hr) Shapiro-Wilk normality testdata: residuals.RegModel.3W = 0.91864, p-value = 0.0002069Rcmdr> normalityTest(~rstudent.RegModel.3, test="shapiro.test", data=hr) Shapiro-Wilk normality testdata: rstudent.RegModel.3W = 0.86967, p-value = 0.000002597Rcmdr> oldpar <- par(oma=c(0,0,3,0), mfrow=c(2,2))Rcmdr> plot(RegModel.3)Rcmdr> par(oldpar)**LEVENE’S TEST**Rcmdr> with(hr, tapply(ji, gender, var, na.rm=TRUE)) Female Male 0.776464 0.698975 Rcmdr> leveneTest(ji ~ gender, data=hr, center="median")Levene's Test for Homogeneity of Variance (center = "median") Df F value Pr(>F)group 1 0.0328 0.8569 69 Rcmdr> with(hr, tapply(js, gender, var, na.rm=TRUE)) Female Male 0.2876877 0.5192246 Rcmdr> leveneTest(js ~ gender, data=hr, center="median")Levene's Test for Homogeneity of Variance (center = "median") Df F value Pr(>F)group 1 0.6403 0.4263 69 Rcmdr> with(hr, tapply(oc, gender, var, na.rm=TRUE)) Female Male 0.3636703 0.4547158 Rcmdr> leveneTest(oc ~ gender, data=hr, center="median")Levene's Test for Homogeneity of Variance (center = "median") Df F value Pr(>F)group 1 0.1249 0.7248 69 **T TEST**Rcmdr> t.test(ji~gender, alternative='two.sided', conf.level=.95, var.equal=FALSE, Rcmdr+ data=hr) Welch Two Sample t-testdata**: ji by gender**t = -0.23595, df = 68.924, p-value = 0.8142alternative hypothesis: true difference in means is not equal to 095 percent confidence interval: -0.4547149 0.3585305sample estimates:mean in group Female mean in group Male  3.878378 3.926471 Rcmdr> t.test(js~gender, alternative='two.sided', conf.level=.95, var.equal=FALSE, Rcmdr+ data=hr) Welch Two Sample t-testdata: **js by gender**t = 0.088492, df = 60.728, p-value = 0.9298alternative hypothesis: true difference in means is not equal to 095 percent confidence interval: -0.2901589 0.3170269sample estimates:mean in group Female mean in group Male  4.081081 4.067647 Rcmdr> t.test(oc~gender, alternative='two.sided', conf.level=.95, var.equal=FALSE, Rcmdr+ data=hr) Welch Two Sample t-testdata: **oc by gender**t = -0.63214, df = 66.436, p-value = 0.5295alternative hypothesis: true difference in means is not equal to 095 percent confidence interval: -0.4003799 0.2077991sample estimates:mean in group Female mean in group Male  3.980180 4.076471 Rcmdr> with(hr, Hist(ji, scale="frequency", breaks="Sturges", col="darkgray"))Rcmdr> scatterplot(ji~js, regLine=FALSE, smooth=FALSE, boxplots=FALSE, data=hr)Rcmdr> scatterplot(oc~js, regLine=FALSE, smooth=FALSE, boxplots=FALSE, data=hr)Rcmdr> scatterplot(oc~ji, regLine=FALSE, smooth=FALSE, boxplots=FALSE, data=hr)Rcmdr> numSummary(hr[,"age", drop=FALSE], statistics=c("mean", "sd", "quantiles", Rcmdr+ "skewness", "kurtosis"), quantiles=c(0,.25,.5,.75,1), type="2") mean sd skewness kurtosis 0% 25% 50% 75% 100% n 36.30986 10.95131 0.5165833 -0.3953053 20 27.5 35 43.5 66 71Rcmdr> local({Rcmdr+ .Table <- with(hr, table(educ))Rcmdr+ cat("\ncounts:\n")Rcmdr+ print(.Table)Rcmdr+ cat("\npercentages:\n")Rcmdr+ print(round(100\*.Table/sum(.Table), 2))Rcmdr+ .Probs <- c(0.2,0.2,0.2,0.2,0.2) Rcmdr+ chisq.test(.Table, p=.Probs)Rcmdr+ })counts:educ College Doctorate High School Masters Degree  53 1 14 1 2 percentages:educ College Doctorate High School Masters Degree  74.65 1.41 19.72 1.41 2.82  Chi-squared test for given probabilitiesdata: .TableX-squared = 141.04, df = 4, p-value < 2.2e-16Rcmdr> local({Rcmdr+ .Table <- with(hr, table(gender))Rcmdr+ cat("\ncounts:\n")Rcmdr+ print(.Table)Rcmdr+ cat("\npercentages:\n")Rcmdr+ print(round(100\*.Table/sum(.Table), 2))Rcmdr+ })counts:genderFemale Male  37 34 percentages:genderFemale Male  52.11 47.89 Rcmdr> local({Rcmdr+ .Table <- with(hr, table(position))Rcmdr+ cat("\ncounts:\n")Rcmdr+ print(.Table)Rcmdr+ cat("\npercentages:\n")Rcmdr+ print(round(100\*.Table/sum(.Table), 2))Rcmdr+ })counts:positionMiddle Manager Staff Supervisor Top Management  8 43 17 3 percentages:positionMiddle Manager Staff Supervisor Top Management  11.27 60.56 23.94 4.23 Rcmdr> local({Rcmdr+ .Table <- with(hr, table(educ))Rcmdr+ cat("\ncounts:\n")Rcmdr+ print(.Table)Rcmdr+ cat("\npercentages:\n")Rcmdr+ print(round(100\*.Table/sum(.Table), 2))Rcmdr+ })counts:educ College Doctorate High School Masters Degree  53 1 14 1 2 percentages:educ College Doctorate High School Masters Degree  74.65 1.41 19.72 1.41 2.82 Rcmdr> numSummary(hr[,"age", drop=FALSE], statistics=c("mean", "sd", "quantiles", Rcmdr+ "skewness", "kurtosis"), quantiles=c(0,.25,.5,.75,1), type="2") mean sd skewness kurtosis 0% 25% 50% 75% 100% n 36.30986 10.95131 0.5165833 -0.3953053 20 27.5 35 43.5 66 71Rcmdr> with(hr, Hist(age, scale="frequency", breaks="Sturges", col="darkgray"))**CRONBACH ALPHA**

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| cmdr> reliability(cov(hr[,c("ji1","ji2","ji3","ji4")], use="complete.obs"))Alpha reliability = 0.9033 Standardized alpha = 0.9029 Reliability deleting each item in turn: Alpha Std.Alpha r(item, total)ji1 0.8590 0.8595 0.8284ji2 0.8810 0.8816 0.7665ji3 0.8446 0.8443 0.8656ji4 0.9082 0.9092 0.6852Rcmdr> reliability(cov(hr[,c("js1","js2","js3","js4","js5","js6","js7","js8","js9",Rcmdr+ "js10")], use="complete.obs"))Alpha reliability = 0.9311 Standardized alpha = 0.9315 Reliability deleting each item in turn: Alpha Std.Alpha r(item, total)js1 0.9329 0.9342 0.5274js2 0.9270 0.9276 0.6693js3 0.9222 0.9222 0.7717js4 0.9195 0.9204 0.8141js5 0.9181 0.9191 0.8386js6 0.9316 0.9319 0.5689js7 0.9169 0.9177 0.8671js8 0.9206 0.9214 0.7950js9 0.9214 0.9217 0.7919js10 0.9277 0.9274 0.6814Rcmdr> reliability(cov(hr[,c("oc1","oc2","oc3","oc4","oc5","oc6","oc7","oc8","oc9",Rcmdr+ "oc10","oc11","oc12","oc13","oc14","oc15")], use="complete.obs"))Alpha reliability = 0.9382 Standardized alpha = 0.9462 Reliability deleting each item in turn: Alpha Std.Alpha r(item, total)oc1 0.9356 0.9442 0.6390oc2 0.9344 0.9433 0.6783oc3 0.9321 0.9406 0.7865oc4 0.9376 0.9466 0.5390oc5 0.9318 0.9413 0.7678oc6 0.9303 0.9399 0.8191oc7 0.9346 0.9438 0.6659oc8 0.9304 0.9394 0.8403oc9 0.9535 0.9539 0.2137oc10 0.9313 0.9401 0.8101oc11 0.9300 0.9393 0.8501oc12 0.9308 0.9404 0.8027oc13 0.9319 0.9413 0.7653oc14 0.9307 0.9400 0.8150oc15 0.9340 0.9431 0.6897 |

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