

BUSM160 - Experiments for Business and Analytics

Does Satisfaction vary between Married and Single Employees Working From Home?

Shirin Yousaf

Student ID: 240817345

Introduction

Satisfaction is a critical outcome in organizational research. It reflects an employee's emotional response to their work, with high satisfaction often indicating positive feelings and sustained engagement in one's role (Dey and Ghosh, 2017; Singh, 2014; Tinu and Adeniji, 2015). Understanding job satisfaction is essential, as it is consistently linked to productivity (Metle and Alali, 2018; Allen et al., 2003) as satisfied employees tend to be more productive, that support overall firm success.

At the same time, nature of work has shifted dramatically, especially following the COVID-19 pandemic. Once considered temporary or niche, working from home (WFH) is now a common strategy across sectors. As it evolves, understanding its impact on job satisfaction is increasingly important.

Research suggests that WFH improves satisfaction by offering employees greater flexibility, and control over their work environment (Ida, 2020; Gajendran and Harrison, 2007, and these benefits have been linked to improved work-life balance, and stronger organizational commitment (Schall, 2019; Feldman and Gainey, 1997). However, the impact of remote work is unlikely to be uniform. Differences in demographics (marital status) may shape how individuals experience WFH.

Thus, while the literature generally supports a positive relationship between WFH and satisfaction, there remains a pressing need to examine does employees benefit differently from remote work based on their demographics, like marital status. This study addresses that gap by analyzing whether being married or single leads to differing levels of job satisfaction among employees WFH as Marital status may shape remote work experiences by influencing the division of domestic responsibilities, the availability of emotional and logistical support, and the blurring of work-life boundaries.

The analysis uses satisfaction data from a large-scale randomized control trial conducted by Bloom, Liang, Roberts, and Ying at a Chinese travel agency and focuses on the WFH group only. The findings suggest no statistically significant difference in job satisfaction between married and single employees WFH, indicating that marital status does not meaningfully influence how employees experience remote work satisfaction even in marital gender comes into play. However, having a dedicated bedroom workspace is consistently linked to higher satisfaction, likely due to improved focus and clearer work-life boundaries in a private setting. Higher education is modestly but significantly negatively associated with satisfaction, possibly because more educated employees face higher job demands or expectations that are harder to meet in a home setting.

The structure of this report is as follows. It begins by outlining the research question, followed by a discussion of the hypotheses, methodological approach, and initial statistical testing. The data description section then provides an overview of the dataset, detailing key variables. This is followed by exploratory data analysis (EDA) to examine the distribution and relationships among variables of interest. Multiple linear regression models (OLS) are subsequently employed to estimate the difference in job satisfaction amongst married and single individuals within the WFH context. The report concludes by summarizing key findings and outlining directions for future research.

RESEARCH QUESTION

This study investigates whether there is a meaningful difference in job satisfaction between married and single employees WFH. While the rise of remote work has generated widespread interest in employee outcomes, relatively little is known about how these outcomes vary across individual demographic profiles i.e marital status for this research.

A foundational contribution to this area is the field experiment by Bloom et al., which randomly assigned employees at a Chinese travel agency to either work from home or remain in the office over 9 month period. The study found that WFH led to improvements in productivity, job satisfaction, and a reduction in attrition by 50%. However, while Bloom et al. demonstrated that WFH increased satisfaction, they did not assess whether these outcomes varied based on employee's marital status. Notably, they observed that those who volunteered for WFH were more likely to be married, have children, and possess lower levels of education, pointing to underlying demographic patterns. However, the study focused on who opted in, rather than examining does differences in marital status influence satisfaction outcomes during WFH.

In parallel, a separate body of literature has examined the relationship between marital status and job satisfaction, with numerous studies (e.g., Austrom et al., 1988; Federico et al., 1976; Garrison & Muchinsky, 1977; Watson, 1981) finding that married employees tend to report higher satisfaction than their unmarried peers. These differences are often attributed to the emotional support, household stability, and structured routines that accompany marriage factors that can help employees better navigate work stress and maintain work-life balance.

Despite the development of both literatures on WFH outcomes on satisfaction and marital status on job satisfaction, there is a surprising lack of research exploring how the two interact. This study addresses that gap by asking:

Does job satisfaction vary between married and single employees working from home?

This question is both timely and important. Remote work is not experienced uniformly across all employees. For example, married individuals may benefit from support and routine but also face more intense caregiving demands. In contrast, single individuals may enjoy greater autonomy but risk social isolation or lack of support. These divergent experiences may influence how satisfied employees feel in WFH settings yet current research provides little empirical evidence on this point.

By focusing on the intersection of marital status and WFH satisfaction, this study contributes to a more nuanced understanding of how difference in demographic (marital status) may shape remote work satisfaction. In doing so, it responds to calls for more targeted and inclusive workplace policies that recognize the diversity of employee circumstances in an evolving work landscape.

HYPOTHESIS AND METHODS

The objective of this analysis is to investigate whether job satisfaction differs among employees working from home (WFH) based on their marital status. To guide the analysis, we propose the following hypotheses:

Null Hypothesis (H_0): There is no significant difference in job satisfaction between married and single WFH employees.

Alternative Hypothesis (H_1): There is a significant difference in job satisfaction between married and single WFH employees.

These hypotheses build directly on the earlier discussion, aiming to test whether job satisfaction among WFH employees differs by their marital status based on the assumption that household structure, responsibilities, and levels of social support may shape remote work experiences. While such differences are theoretically plausible, empirical evidence remains limited, making this analysis a timely and valuable contribution.

To test these hypotheses, we first conducted a two-sample independent t-test, which is appropriate for comparing the means of two independent groups on a continuous outcome. The results indicate no statistically significant difference in satisfaction between married and single employees ($p = 0.9081$), with nearly identical group means. The 95% confidence interval includes zero, confirming that marital status does not have a statistically significant effect on satisfaction, hence failing to reject the Null hypothesis.

To examine the question rigorously, we used linear regression OLS models using the Bloom et al. filtered dataset to be discussed below and used clustered standard errors. These models incorporate key demographic and household/job related characteristics to better isolate the role of marital status in shaping satisfaction among remote workers.

DATA DESCRIPTION

As noted earlier, the dataset used in this analysis originates from the experimental study conducted by Bloom et al. in a Chinese travel agency. For the purpose of this study, the analysis focuses exclusively on the satisfaction data, as it is most directly aligned with the research question.

Since our research focuses on employees WFH, we filtered the sample to those with `expgroup_treatment = 1`. This filtering reduced the dataset from 855 to 428 observations, representing only those working from home. As there were no missing values in the selected variables, no additional cleaning was required.

Figure 1: Dataset Overview

Statistic	N	Mean	St. Dev.	Min	Max
surveyno	428	3.500	1.119	2	5
satisfaction	428	4.951	1.364	1	7
general	428	73.979	12.361	32	100
life	428	22.327	7.310	4	38
personid	428	29,730.780	11,757.550	3,906	45,238
expgroup_treatment	428	1.000	0.000	1	1
age	428	24.682	3.605	18	35
tenure	428	27.318	22.506	2.000	96.000
grosswage	428	3.032	0.765	1.388	5.295
children	428	0.112	0.316	0	1
bedroom	428	0.963	0.190	0	1
commute	428	102.738	60.995	20	300
men	428	0.458	0.499	0	1
married	428	0.206	0.405	0	1
volunteer	428	0.860	0.348	0	1
high_educ	428	0.336	0.473	0	1
T_pid	428	0.000	0.000	0	0

Figure 1 shows the overall statistics of the filtered data.

This section presents data overview and visualisation on how overall/average satisfaction varies across key demographic and household characteristics. The aim is to identify descriptive patterns that may indicate underlying relationships.

The satisfaction data includes three distinct measures: general satisfaction, life satisfaction, and overall satisfaction. Among these, overall satisfaction is selected as the dependent variable because it most comprehensively reflects an employee's well-being in the context of work experience and the key explanatory variable is marital status. To produce a more accurate and robust estimation, the analysis also includes a set of control variables with established theoretical and empirical links to job satisfaction. The dataset includes five survey waves, one conducted before the treatment and four administered during the experimental period. As the research focuses on job satisfaction during remote work, only data from surveys 2 through 5 are included in the analysis. Additional variables in dataset are as followed.

The dataset includes several demographic and household/job-related variables relevant to job satisfaction. Each employee is identified by a unique Person ID, which allows tracking across multiple survey waves. Age is included to examine whether satisfaction varies across life stages, as older employees may have different work–life expectations than younger ones. Tenure captures the number of months employed at the company and reflects organizational attachment or role stability, which may influence satisfaction. Gross wage measures monthly income, allowing for the assessment of whether financial compensation impacts remote work satisfaction.

Higher education is represented as a binary variable indicating whether the employee holds a tertiary-level degree, helping to explore whether more educated individuals experience satisfaction differently. Children is a binary indicator showing whether the employee has dependent children, providing insight into how caregiving responsibilities shape remote work experiences. Bedroom captures whether the employee has a separate room for work, Lastly, Gender is included to test whether satisfaction varies systematically between men and women.

Figure 2: Marital Status Distribution of Employees

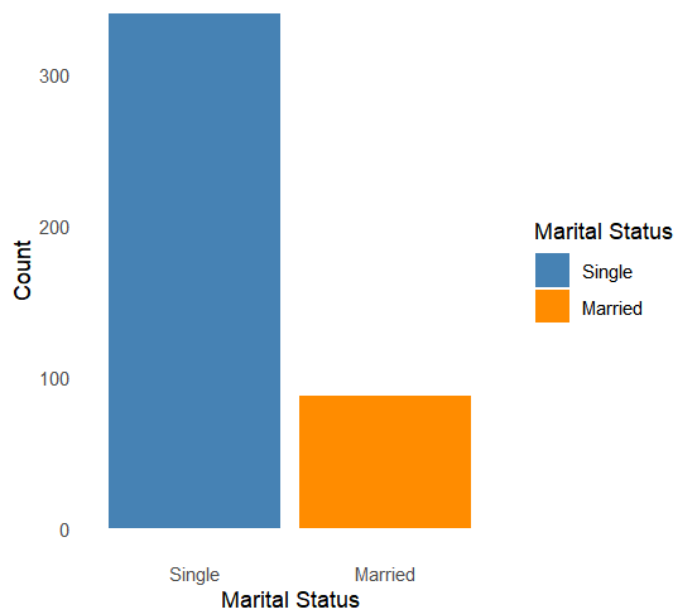


Figure 2 illustrates the distribution of marital status among WFH employees, showing how many respondents are single versus married. It indicates that ~ 80% of participants are single, while only 20% are married, highlighting that the majority of employees in the sample are single.

Figure 3: Average Satisfaction by Marital Status

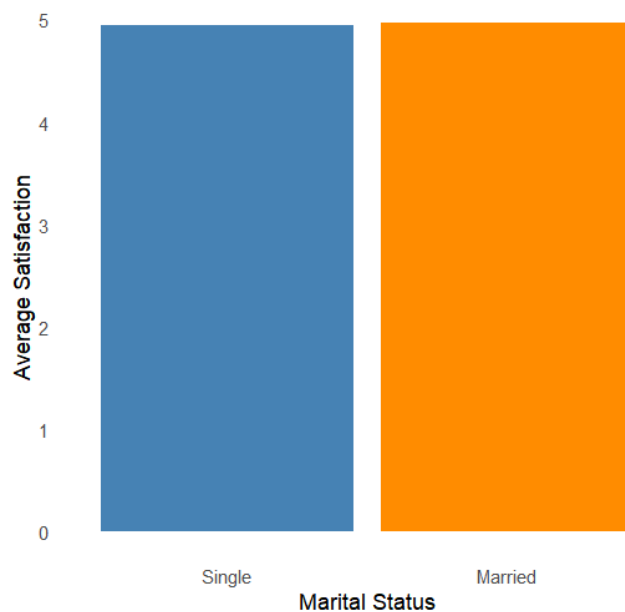


Figure 3 shows the average satisfaction reported by single and married employees WFH. This comparison is important for assessing whether marital status influences employee satisfaction, as the structure of home life and the distribution of domestic responsibilities often shaped by marital status can significantly affect how individuals experience remote

work. For some, WFH offers increased flexibility to manage household demands; for others, it may blur the boundaries between work and personal life, increasing stress. While both groups report high satisfaction, married employees appear to be slightly more satisfied than their single counterparts that can be because of flexibility of remote work may better support the additional responsibilities often faced by married individuals, such as household management. However, the gap is minimal, suggesting that marital status may play only a limited role in shaping overall satisfaction. Further statistical analysis is required to determine whether this difference is statistically significant.

Figure 4: Average Satisfaction by Gender & Marital Status

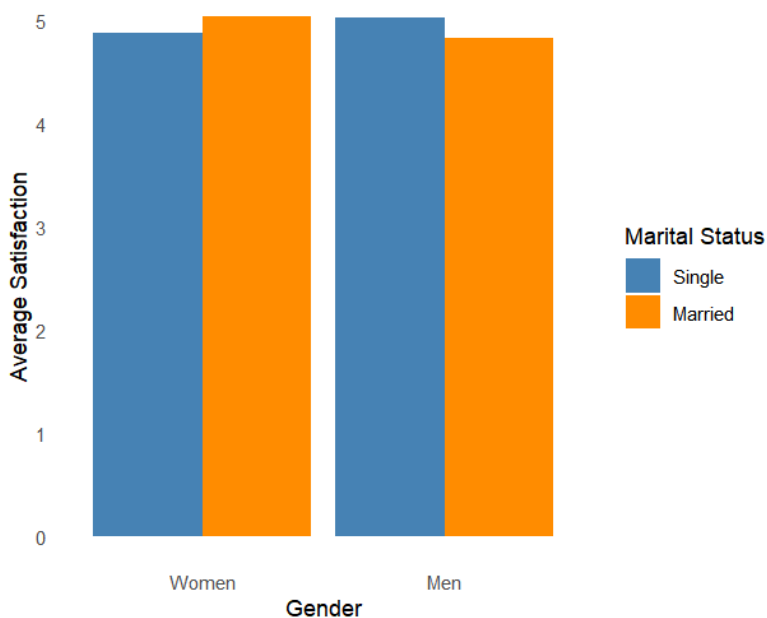


Figure 4 shows average satisfaction levels by gender and marital status among WFH employees. This comparison helps assess whether the relationship between marital status and satisfaction differs by gender. Married women report slightly higher satisfaction than single women, possibly due to spousal support in managing domestic responsibilities. Conversely, single men appear slightly more satisfied than married men, which may reflect fewer household demands. While differences are modest, the pattern suggests that gendered roles may influence how marital status shapes remote work satisfaction.

Figure 5: Average Satisfaction by Bedroom

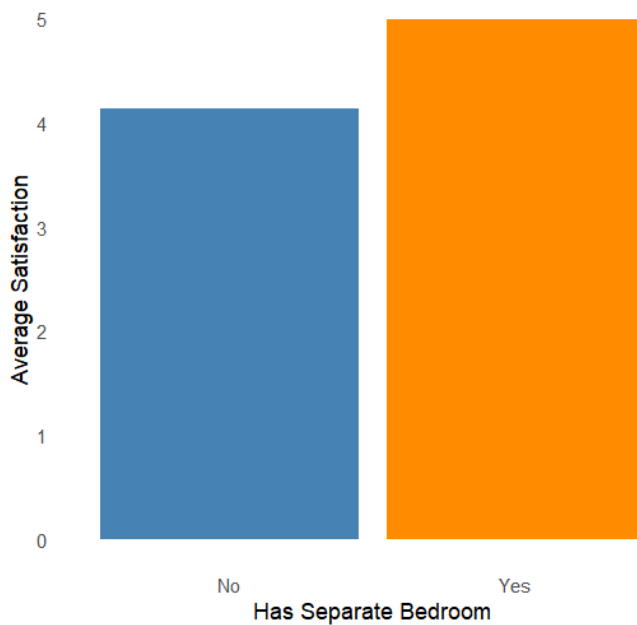


Figure 5 presents the average satisfaction of employees working from home, based on whether they have access to a separate bedroom as a dedicated workspace. Employees with such a space report noticeably higher satisfaction, suggesting that physical work environment through factors like privacy, reduced distractions, and clearer work-life boundaries can significantly shape remote work experiences. This highlights how home infrastructure may influence one's ability to benefit from remote work, raising considerations for equitable policy design.

The overall descriptive data show that marital status alone does not significantly impact satisfaction, but satisfaction levels vary slightly across gender and marital status, suggesting potential gendered dynamics in remote work experiences. Most WFH employees also report having access to a separate workspace, indicating a generally favorable home setup. These observations underscore the importance of accounting for both demographic and household factors and motivate further analysis through regression models.

DATA ANALYSIS

OLS MODELS

Table 1 : Dedicated Bedroom Workspace Is a Key Predictor of Satisfaction Among WFH Employees

	<i>Dependent variable:</i>		
	Model 1 (1)	Satisfaction Model 2 (2)	Model 3 (3)
Married	0.019 (0.213)	0.268 (0.366)	0.308 (0.369)
Age		0.012 (0.032)	0.014 (0.031)
Tenure		-0.001 (0.005)	-0.001 (0.005)
Gross Wage		-0.104 (0.150)	-0.101 (0.150)
Bedroom		0.757*** (0.238)	0.747*** (0.242)
Men		0.099 (0.203)	0.118 (0.220)
Children		-0.415 (0.424)	-0.418 (0.420)
Higher Education		-0.390* (0.201)	-0.383* (0.209)
Married × Men			-0.128 (0.521)
Constant	4.947*** (0.111)	4.345*** (0.746)	4.293*** (0.716)
Observations	428	428	428
R ²	0.00003	0.038	0.039
Adjusted R ²	-0.002	0.020	0.018
Residual Std. Error	1.365 (df = 426)	1.350 (df = 419)	1.351 (df = 418)
F Statistic	0.013 (df = 1; 426)	2.097** (df = 8; 419)	1.874* (df = 9; 418)

Note: *p<0.1; **p<0.05; ***p<0.01

ANALYSIS

Table 1 presents the results of three OLS linear regression models estimating the determinants of job satisfaction among employees working from home (WFH), with a specific focus on marital status as the key explanatory variable. Model 1 serves as a baseline, examining the effect of marital status alone on overall satisfaction. Model 2 extends this by incorporating selected relevant control variable. Model 3 further builds on this by introducing an interaction term between marital status and gender to test whether the effect of marriage on satisfaction differs between men and women. In all models, the dependent variable is overall job satisfaction. Clustered standard errors are used on Person ID to account for repeated responses from the same employees, ensuring more accurate inference by correcting for potential within-person correlation.

Model 1 provides a baseline estimate of the relationship between the key variable marital status and the dependent variable, job satisfaction, without including any additional controls. The coefficient on the married variable is positive (0.019) but extremely small and statistically insignificant, suggesting that being married, when considered in isolation, does not have a meaningful association with satisfaction among employees working from home. This indicates no notable difference in satisfaction between married and single individuals, thereby motivating the inclusion of control variables in subsequent models to account for potential omitted variable bias.

Model 2 is a more comprehensive model using marital status as the main explanatory variable, alongside relevant control variables including age, tenure, gross wage, gender, presence of children, higher education, and access to a separate bedroom for work. The coefficient for Married increases to 0.268, yet remains statistically insignificant, suggesting that even after adjusting for relevant variables being married does not show a strong correlation with satisfaction. The increase from Model 1 may suggest a suppressed relationship in the initial model, but the continued lack of statistical significance in all 3 models implies that marital status, on its own, does not emerge as a reliable predictor of job satisfaction in the WFH context, indicating no meaningful difference in satisfaction levels between married and single employees. This insignificance may reflect offsetting dynamics—while married employees may benefit from spousal support, they may also face increased household responsibilities; conversely, single employees may enjoy greater autonomy but lack emotional or logistical support. These contrasting effects may neutralize each other, resulting in no observable net difference in satisfaction.

More importantly, Model 2 and Model 3 reveals statistically significant relationships between satisfaction and other variables. The most notable is having an independent Bedroom, which has a consistent large positive coefficient of 0.757 and 0.747 is significant at the 1% level. This result indicates that having a separate bedroom workspace is strongly correlated with higher satisfaction, regardless of marital status or other demographic characteristics, since private workspace likely enhances focus, minimizes distractions, and supports clearer boundaries between professional and personal life. The consistency and magnitude of this effect underscore the importance of home infrastructure in shaping satisfaction outcomes and raise important considerations for equity in remote work conditions.

Another notable finding is the effect of Higher Education, which is negatively correlated to satisfaction, with a coefficient of -0.394 in Model 2, and statistically significant at the 10% level. This suggests that employees with higher education report lower satisfaction on average. One possible explanation is that more educated individuals often occupy roles with

greater complexity, responsibility, or cognitive demands, which may be harder to manage in a home setting without adequate resources or support. The fact that this relationship holds across models, even with controls, suggests it reflects more than just surface-level differences.

Model 2 also includes several control variables that, while not statistically significant, show suggestive trends. Tenure, gross wage, and having children are negatively associated with satisfaction, possibly reflecting challenges tied to rigid work preferences, high job demands, or difficulty balancing caregiving with remote work. In contrast, age and being male show small positive effects, which may relate to job stability or fewer domestic interruptions. Though not conclusive, these patterns hint how personal and household dynamics can subtly shape remote work satisfaction.

Model 3 introduces an interaction between marital status and gender (Married \times Men) to explore whether the effect of being married on job satisfaction differs between men and women. While not central to the primary research question, this extension provides deeper insight into potential gender-based dynamics within the remote work context. However, interaction coefficient is negative (-0.128) and statistically insignificant, indicating that married men report slightly lower satisfaction than married women that is likely due to more distractions and additional household tasks they may need to uptake while WFH affecting satisfaction. However, as neither the interaction nor the main effects are significant, the result reinforces the conclusion that marital status alone or in combination with gender is not a strong predictor of satisfaction in WFH settings hence the difference in satisfaction based upon whether an individual is married is also insignificant.

Overall, the analysis reveals that having a dedicated bedroom workspace is the strongest and most consistent predictor of increased satisfaction for employees working from home. In contrast, higher education is significantly associated with lower satisfaction, potentially due to greater job demands or expectations. The R^2 values across Models 2 and 3 are modest (3.8–3.9%), which is typical for subjective outcomes like satisfaction, where much variation remains unobserved. Nonetheless, the F-statistics are statistically significant, indicating that the set of predictors collectively improves model fit compared to a null model.

CONCLUSION

This analysis examined whether job satisfaction differs between married and single employees WFH, using randomized experimental data from a Chinese travel agency. Despite theoretical expectations and slight hint in EDA that difference in marital status might vary satisfaction i.e married employees will be slightly more satisfied, regression analyses found no statistically significant effect of marital status as a predictor of satisfaction,

indicating no meaningful difference in satisfaction between married and single individuals. A step further gender interactions with married also showed no significant moderating effect. These findings suggest that assumptions about marriage inherently improving or diminishing remote work satisfaction may be overstated, at least in the short term.

Interestingly, the analysis did reveal that environmental conditions, particularly having a separate bedroom for work, had a strong and consistent association with satisfaction. This reinforces the idea that physical space, often overlooked in policy design, plays a critical role in shaping the quality of remote work. In contrast, higher education was modestly but negatively associated with satisfaction, possibly reflecting greater job demands or higher expectations among more educated employees. This finding indicates that cognitive or professional strain might dampen the benefits of remote work for this group.

However, there are limitations to this study. First, the narrow age range (average age of 24.7) and the context of a single organization in China limit generalizability. Secondly, marital status was treated as a simple binary, ignoring potentially important distinctions like cohabiting or divorced. Finally, the absence of single parents in the dataset limited the ability to examine the impact of caregiving responsibilities on satisfaction. Since all employees with children were married, including both variables in the model led to multicollinearity, preventing a meaningful analysis of parenthood as a potential moderator.

Future research could enrich these findings by using more nuanced measures of detailed family structure, qualitative data on home dynamics, or broader samples across sectors. As remote work becomes more embedded in organizational life, understanding its differential impact across diverse personal circumstances remains essential for inclusive policy design.

REFERENCES

Bloom et al. (2013) Working Paper:

Bloom, N., Liang, J., Roberts, J. and Ying, Z.J., 2013. *Does working from home work? Evidence from a Chinese experiment*. NBER Working Paper No. 18871. National Bureau of Economic Research. Available at: <http://www.nber.org/papers/w18871>.

Atif and Zubairi (2018) Journal Article:

Atif, T. and Zubairi, S.A., 2018. Impact of marital status on job satisfaction, organizational commitment and work-life balance: A study on employees working in banking sector of Pakistan. *The Islamic Culture*, 40, pp.1–15.

Jamaludin, N.L. and Kamal, S.A., 2023. The relationship between remote work and job satisfaction: The mediating role of perceived autonomy. *Information Management and Business Review*, 15(3), pp. 10-22.

Wolor, C.W., Musyaffi, A.M., Khairunnisa, H. and Fadillah, N., 2023. Are married female employees satisfied with working from home during the COVID-19 pandemic? ResearchGate. Available at: <https://www.researchgate.net/publication/370923539> [Accessed 3 May 2025].

Debnath, T., 2023. Work-from-home provides benefits to family and workplace that impact on job satisfaction: An evidence from Bangladesh. *American Journal of Interdisciplinary Research and Innovation (AJIRI)*, 1(3). Available at: <https://doi.org/10.54536/ajiri.v1i3.1118> [Accessed 3 May 2025].

Staton, A. (2018) *Relationships between job satisfaction, gender, marital status, and parental status of PK-12 administrators identifying as Christian*. Doctoral dissertation. Liberty University.

AI was used during the preparation of this report to refine code syntax, improve structural clarity, and enhance the cohesion and precision of written language.

CODE

Download Packages

```
install.packages("estimatr")
```

```
install.packages("fixest")
```

```
install.packages("dplyr")
```

```
install.packages("ggplot2")
```

```
install.packages("haven")
```

```
install.packages("stargazer")
```

```
install.packages("dplyr")
```

```
install.packages("sandwich")
```

```
install.packages("lmtest")
```

Packages

```
library(estimatr)
```

```
library(dplyr)
```

```
library(foreign)
```

```
library(stargazer)
```

```
library(haven)
```

```
library(ggplot2)
```

```
library(Hmisc)
```

```
library(ggplot2)
```

```
library(chron)
```

```
library(lattice)
```

```
library(dummies)
```

```
library(lfe)
```

```
library(fixest)
```

```
library(sandwich)
```

```
library(lmtest)
```

```
library(miceadds)
```

```
library(multiwayvcov)
```

```
library(dplyr)
```

```
library(sandwich)
```

```
library(lmtest)
```

```
Satisfaction_data <- data.frame(Satisfaction)
```

```
stargazer(Satisfaction_data, type="text")
```

```
# Filter the data for employees working from home (expgroup_treatment = 1)
```

```
Satisfaction_wfh_data <- Satisfaction_data[Satisfaction_data$expgroup_treatment == 1, ]
```

```
# View the filtered data
```

```
View(Satisfaction_wfh_data)
```

```
#Checking for any null values in Overall Satisfaction column
```

```
any(is.na(Satisfaction_wfh_data))
```

```
# Create summary statistics table as HTML
```

```
Satisfaction_de <- data.frame(Satisfaction_wfh_data)
```

```
stargazer(Satisfaction_de, type = "html", out = "Satisfaction_summary.html")
```


GRAPHS

1. Marital Status Distribution: Married vs Single (WFH)

```
ggplot(data = Satisfaction_wfh_data, aes(x = factor(married), fill = factor(married))) +  
  geom_bar() +  
  labs(  
    x = "Marital Status",  
    y = "Count",  
    title = "Figure 1: Marital Status Distribution of Employees"  
  ) +  
  scale_x_discrete(labels = c("0" = "Single", "1" = "Married")) +  
  scale_fill_manual(  
    values = c("0" = "steelblue", "1" = "darkorange"),  
    labels = c("Single", "Married"),  
    name = "Marital Status"  
  ) +  
  theme_minimal() +  
  theme(panel.grid = element_blank())
```

2. Average Satisfaction by Marital Status

```
Satisfaction_wfh_data %>%  
  group_by(married) %>%  
  summarise(avg_satisfaction = mean(satisfaction, na.rm = TRUE)) %>%  
  ggplot(aes(x = factor(married), y = avg_satisfaction, fill = factor(married))) +  
  geom_bar(stat = "identity", show.legend = FALSE) +
```

```

labs(x = "Marital Status", y = "Average Satisfaction",

      title = "Figure 2: Average Satisfaction by Marital Status") +

scale_x_discrete(labels = c("0" = "Single", "1" = "Married")) +

scale_fill_manual(values = c("0" = "steelblue", "1" = "darkorange")) +

theme_minimal() +

theme(panel.grid = element_blank())

```

3. Average Satisfaction by Gender and Marital Status

```

Satisfaction_wfh_data %>%

  group_by(men, married) %>%

  summarise(avg_satisfaction = mean(satisfaction, na.rm = TRUE)) %>%

  ggplot(aes(x = factor(men), y = avg_satisfaction, fill = factor(married))) +

  geom_bar(stat = "identity", position = "dodge", show.legend = TRUE) +

  labs(x = "Gender", y = "Average Satisfaction",

        title = "Average Satisfaction by Gender and Marital Status (WFH)") +

  scale_x_discrete(labels = c("0" = "Women", "1" = "Men")) +

  scale_fill_manual(name = "Marital Status",

                    labels = c("Single", "Married"),

                    values = c("0" = "steelblue", "1" = "darkorange")) +

  theme_minimal() +

  theme(panel.grid = element_blank())

```

4. Average Satisfaction by Having or Not Having Bedroom (WFH employees)

```

Satisfaction_wfh <- Satisfaction_wfh_data # Reset, as you did

Satisfaction_wfh %>%

  group_by.bedroom) %>%

  summarise(avg_satisfaction = mean(satisfaction, na.rm = TRUE)) %>%

```

```

ggplot(aes(x = factor(bedroom), y = avg_satisfaction, fill = factor(bedroom))) +
geom_bar(stat = "identity", show.legend = FALSE) +
labs(
  title = "Average Satisfaction by Bedroom Workspace",
  x = "Has Separate Bedroom",
  y = "Average Satisfaction"
) +
scale_x_discrete(labels = c("0" = "No", "1" = "Yes")) +
scale_fill_manual(values = c("0" = "steelblue", "1" = "darkorange")) +
theme_minimal() +
theme(panel.grid = element_blank())

```

HYPOTHESIS

Perform the t-test to check if marital status affects satisfaction

```

t_test_result <- t.test(satisfaction ~ factor(married), data = Satisfaction_wfh_data,
  var.equal = TRUE)

```

Display the result

```
print(t_test_result)
```

OLS MODELS

Model 1: Simple Model with Married and Satisfaction (No Controls)

```
model_married <- lm(satisfaction ~ married, data = Satisfaction_wfh_data)
```

Model 2: Main Model with Married and Relevant Control Variables

```
model_main <- lm(satisfaction ~ married + age + tenure + grosswage + bedroom + men +
children + high_educ,
data = Satisfaction_wfh_data)
```

Model 3: Interaction of married with gender and relevant control variables

```
model_genderint <- lm(satisfaction ~ married * men + age + tenure + grosswage + bedroom
+ children + high_educ,
data = Satisfaction_wfh_data)
```

Compute clustered standard errors for each model individually

```
cluster_se1 <- sqrt(diag(vcovCL(model_married, cluster = ~personid)))
cluster_se2 <- sqrt(diag(vcovCL(model_main, cluster = ~personid)))
cluster_se3 <- sqrt(diag(vcovCL(model_genderint, cluster = ~personid)))
```

Generate Stargazer output with all 3 models

```
stargazer(model_married, model_main, model_genderint,
type = "html", # Use "text" for console output if preferred
se = list(cluster_se1, cluster_se2, cluster_se3, cluster_se4),
title = " Table 1 : Dedicated Bedroom Workspace Is a Key Predictor of Satisfaction
Among WFH Employees",
dep.var.labels = "Satisfaction",
column.labels = c("Model 1", "Model 2", "Model 3", "Model 4"),
covariate.labels = c("Married", "Age", "Tenure", "Gross Wage", "Bedroom",
"Men", "Children", "Higher Education",
"Married × Men","Constant"),
digits = 3,
align = TRUE,
out = "all_models_clustered.html")
```