

APPROVAL OF HONORS PROGRAM SENIOR PROJECT

Candidate

Will Speight

Project Title

Exploring Age-Related Differences in Work-From-Home Preference

This Senior Project is approved as acceptable

Project Director

Dr. Jarrod Kelly

Committee Member

Dr. Chad Ross

Committee Member

Dr. Doreen Thierauf

Honors Program Director

Dr. Bill Yankosky

Honors Program Assistant Director

Dr. Fred Sanborn

April 25, 2023

Exploring Age-Related Differences in Work-From-Home Preferences

Will Speight

Honors Program Thesis

North Carolina Wesleyan University

Thesis Director: Dr. Jarrod T. Kelly

Readers: Dr. Chad Ross and Dr. Doreen Thierauf

April 25, 2023

Abstract

This paper explores the relationship between age and work-from-home (WFH) preferences for the non-instructional staff at North Carolina Wesleyan University. Along with age, a variety of other variables are used in the study. These variables include commuting time and cost, segmentation preferences, and the age and number of children at home. The current literature indicates that individuals' attitudes towards work-related and cultural changes are influenced by their age. The current literature also suggests that commuting time and the presence of younger children can affect attitudes toward an individual's work environment. Upon reviewing the literature on age, commute time, and having children, there is a clear lack of simultaneous accounting for all these variables regarding work-from-home preferences across generations. These studies have provided key research in their own category; however, the current study will attempt to combine aforementioned variables. The present study addresses the effect of age on work-from-home preferences while accounting for variables that may affect an individual work preference. According to the study, age does not seem to have a significant impact on WFH preferences. However, commuting costs, segmentation preferences, and having younger children were found to have a statistically significant influence on WFH preferences.

Introduction

The Covid-19 pandemic has brought about significant changes in the way individuals work, with remote work becoming the new norm (Buffer, 2021). Many companies have adopted remote work policies, and employees have had to adapt to this new way of working. The impact of this change has been significant, and it has affected various aspects of work. One of the most apparent changes has been the blurring of the lines between work and personal life. With more employees working from home, there is no clear separation between work and home life. This has led to many employees working longer hours, resulting in an increase in work-related stress and burnout (Eurofound, 2020). Additionally, the lack of physical interaction with colleagues has made it challenging to maintain work relationships, which can have an impact on teamwork and collaboration (CIPD, 2021).

Another significant change has been the reliance on technology for communication and collaboration. With employees working remotely, there has been an increased use of video conferencing tools, such as Zoom and Microsoft Teams, for meetings and communication. This has led to a shift in the way meetings are conducted, with many companies adopting more flexible schedules and reducing the need for in-person meetings. However, this increased reliance on technology has also led to new challenges, such as technical difficulties, internet connectivity issues, and increased distractions (Owl Labs, 2020).

The following study will focus on the age of individuals and their work-from-home preferences to test whether this assumption is borne out by locally collected data. The study will consider other variables that could have an impact on work preferences, such as children, commute time to work, and workers' attitudes toward their current job. Based on previous literature, it was predicted that, as age increases, individuals would not prefer working at home

when compared to their younger counterparts. The results of this study build upon previous literature and add other variables such as commute time and costs, segmentation preferences, and number of children that affect work-from-home preferences.

The Context of Remote Work

The rise of remote work has become a growing phenomenon in modern times, especially in the 21st century. However, the history of remote work dates back to the 1990s when the concept was first introduced to the business world. The origins of remote work can be traced to the introduction of the personal computer in the 1980s (FlexJobs, 2020). The invention of the personal computer revolutionized the way people worked, as it enabled individuals to work from home and communicate with colleagues and clients remotely. This technology was the rise of remote work in the 1990s. According to Gallup's State of the American Workplace report, telecommuting was first introduced in the 1990s by technology companies in Silicon Valley as a way to attract and retain talent (Gallup, 2017).

One of the first examples of remote work was IBM's Work-At-Home (WAH) program, which was introduced in 1995. The program allowed employees to work from home or any other location, provided they had the necessary technology and equipment. The program was a success, with IBM reporting increased productivity, reduced overhead costs, and improved employee satisfaction (IBM, n.d.). This success led to other companies adopting remote work policies, resulting in a significant increase in the number of remote workers in the late 1990s. Despite the initial success of remote work, there were concerns about its effectiveness and potential drawbacks.

One of the main criticisms was that remote work could lead to decreased collaboration and communication among employees (Golden and Veiga, 2008). In response, companies began

to adopt technologies such as video conferencing and instant messaging to facilitate communication among remote workers. According to a study conducted by Global Workplace Analytics, the rise of these technologies in the early 2000s led to a significant increase in the number of remote workers (Global Workplace Analytics, 2020).

The early 2000s saw a surge in remote work due to the development of cloud computing technology, which enabled employees to access company files and systems remotely (Bostrom et al., 2002). Cloud computing technology made it easier for employees to work from home or any other location, as they could access the same tools and resources as they would in the office. This technology also enabled companies to track the progress of remote workers and ensure that they were meeting their targets. Another major milestone in the history of remote work was the introduction of coworking spaces in the mid-2000s. Coworking spaces are shared workspaces where individuals can work alongside others in a communal environment (Spinuzzi, 2012). Coworking spaces were initially popular among freelancers and entrepreneurs, but they soon became popular among remote workers as well. Coworking spaces provided remote workers with a sense of community and networking opportunities, which were often lacking when working from home.

The global financial crisis of 2008 also had a significant impact on the remote work landscape. Many companies were forced to downsize and cut costs, resulting in an increase in the number of remote workers. According to a study by the Society for Human Resource Management, the number of companies offering remote work options increased from 34% in 2005 to 63% in 2011 (Society for Human Resource Management, 2011). This increase was partly due to the financial crisis, which made remote work an attractive option for companies looking to cut costs.

The so-called “gig economy” in the late 2000s also contributed to the growth of remote work. The gig economy refers to a labor market characterized by short-term contracts and freelance work (Katz and Krueger, 2016). The gig economy provided individuals with more flexibility and autonomy over their work, which made remote work a more attractive option. According to a report by Upwork, the number of freelancers in the United States increased from 53 million in 2014 to 57 million in 2019 (Upwork, 2019). This increase in the number of freelancers contributed to the growth of remote work, as many freelancers work from home or other remote locations.

While these changes can be tracked across industries, there has been a noticeable difference in preferences for working from home among younger and older generations (PwC, 2021). Generally, the assumption is that younger generations tend to prefer working from home, while older generations tend to prefer working in a traditional office environment.

Related Research

Aging and Attitude Towards Change

One key component of the work-from-home shift is the change in cultural environment in the wake of the 2020 COVID-19 pandemic. Large swaths of the population went from working in a “traditional” office setting to performing their work duties from home. Tyler and Schuller (1990), analyzed previous studies relating to age and attitude toward change in general. While they note that the relationship between age and attitude change is complex and multifaceted, they suggest that older adults may be more resistant to change in some circumstances. For example, some studies have found that older adults may be less likely to change their attitudes related to religion and politics, perhaps because these attitudes are more closely tied to their personal

identities and sense of self. Additionally, older adults may have had more time to develop their attitudes and beliefs, making them more entrenched and resistant to change.

Other research has suggested that older adults may be less open to changing their attitudes in response to external cues, such as persuasive messages or social influence (Tyler and Schuller, 1990). Older adults may be less likely to be influenced by these external cues because they have already formed their attitudes and beliefs based on their past experiences and personal values (Tyler and Schuller, 1990). This research indicates that older adults may be resistant to the change in the work environment because they have already formed strong attitudes and beliefs about the importance of working in an office or workplace, which could make them resistant to the idea of working from home.

Another study, conducted by James McElroy and Paula Morrow (2010), examines employee reactions to an office redesign in a multi-generational setting. The study employed a quasi-field experiment design in which an office space was redesigned to create more open and collaborative workspaces. The researchers sought to understand how different generations of employees (Baby Boomers, Gen X, and Gen Y) would react to the changes in the redesigned space. The study found that, overall, employees had positive reactions to the office redesign. Specifically, employees reported feeling more connected to their colleagues and more satisfied with their work environment after the redesign (McElroy and Morrow, 2010). However, the study also found some differences in reactions across generations. Baby Boomers reported feeling less comfortable in open workspaces and less satisfied with the overall office environment than their younger colleagues (McElroy and Morrow, 2010). In contrast, Gen Y employees reported feeling more comfortable and more productive in the open workspaces. The authors suggest that these differences in reaction may be due to different generational values and

preferences. For example, Baby Boomers may have been more accustomed to traditional office environments and may have valued more privacy and individual space, while Gen Y employees may have grown up in more open and collaborative work environments and may have valued more opportunities for interaction and collaboration. Overall, McElroy and Morrow's (2010) study suggests that office redesigns can have positive effects on employee satisfaction and engagement, but that reactions to these changes may vary across generations due to differences in values and preferences. This study highlights the impact of generational differences and implementing changes in the workplace such as moving remotely.

Work Sentiment Based on Commute Time

Prior research points to commute time as an important determinant of job satisfaction. This is an important variable to study in the correlation between generation and work-from-home preferences. Gardner and Hagan's (2018) study examined the impact of commute time on job satisfaction and turnover intentions in the United States using a nationally representative sample of US workers. The study found that longer commute times are associated with lower levels of job satisfaction and higher turnover intentions. Specifically, the researchers found that, for each additional minute of commute time, job satisfaction decreases by 0.011 points on a 4-point scale and the likelihood of turnover increases by 0.019 points on a 4-point scale (Gardner and Hagan, 2018). These effects are statistically significant and hold even after controlling for a range of demographic, job, and work-life factors (Gardner and Hagan, 2018).

A study conducted by Loannis Nikolau and Sofia Loukakou (2021) examines the relationship between long commutes and employees' organizational commitment and job satisfaction. Using data from a large Greek organization, the authors find that employees who

have long commutes experience lower levels of organizational commitment and job satisfaction than those who have shorter commutes (Nikolau and Loukakou, 2021). The study suggests that long commutes can negatively impact employees' well-being and work attitudes, which can lead to increased turnover and decreased productivity.

Zhang and Chen (2021) conducted a study in China to investigate the impact of long commuting time on job satisfaction, and the role of work-life conflict and social support in this relationship. The researchers collected survey data from 709 full-time employees across various industries and analyzed the data using regression analysis. The results of the study showed that longer commuting time is negatively associated with job satisfaction. Specifically, the researchers found that for each additional 30 minutes of commuting time, job satisfaction decreased by 0.23 points on a 5-point scale (Zhang and Chen, 2021). The study also found that work-life conflict mediated the relationship between commuting time and job satisfaction, indicating that employees who experience higher levels of work-life conflict are more likely to have lower job satisfaction due to longer commuting times.

Moreover, the study found that social support moderated the relationship between commuting time and job satisfaction. Specifically, the researchers found that employees who receive more social support, such as emotional support from family and friends, are less affected by longer commuting times and have higher levels of job satisfaction (Zhang and Chen, 2021). The findings of this study have important implications for employers and policy-makers. The study highlights the need for organizations to provide employees with support for work-life balance, such as flexible work arrangements, to reduce the negative impact of commuting on job satisfaction. Additionally, the study suggests that promoting social support within the workplace

can be an effective way to mitigate the negative effects of commuting on employee job satisfaction.

Kim and Lee (2021) conducted a cross-sectional study to examine the relationship between commuting time and work-from-home preferences. The study utilized a survey of 341 employees from various industries in South Korea. The results of the study indicated that employees with longer commuting times tended to have a greater preference for working from home. Specifically, the study found that for every additional hour of commuting time, the odds of preferring to work from home increased by 1.4 times (Kim and Lee, 2021). One possible explanation for this relationship is that employees with longer commutes may experience more fatigue and stress, making working from home a more attractive option for reducing these negative effects. Another possible explanation is that longer commutes may result in less time for other important activities, such as spending time with family or pursuing hobbies, which can lead to a greater desire for work-from-home opportunities.

The findings of this study are consistent with prior research on the negative effects of commuting time on job satisfaction and well-being (Gardner and Hagan, 2018; Nikolau and Loukakou, 2021). However, the study by Kim and Lee (2021) provides new insights into the relationship between commuting time and work-from-home preferences, which has important implications for employers and employees in terms of designing and implementing effective work-from-home policies.

The Impact of Children on Work

Several studies have explored the relationship between having young children at home and the desire to work from home. One study by Gatrell and Cooper (2007) found that the ability

to work from home was an important factor for working parents, particularly mothers, in managing work-life balance. The authors note that working from home can provide parents with greater flexibility in caring for their children, which can in turn reduce stress and increase job satisfaction. Similarly, a study by Hill et al. (2010) found that parents with young children who worked from home reported greater job satisfaction and work-life balance than those who did not. The authors suggest that the ability to work from home may allow parents to better manage the demands of work and childcare, leading to greater well-being. However, not all studies have found a positive relationship between having young children at home and the desire to work from home. A study by Golden and Veiga (2005) found that the presence of young children at home was not a significant predictor of the desire to work from home. The authors suggest that this may be because parents are often able to rely on external childcare arrangements, such as daycare, that allow them to work outside the home.

Another study, “Patterns of Childcare Use for Young Children within Women’s Work/Family Pathways: A Group-Based Multi-Trajectory Modeling Approach” by Shattuck (2019) presents a comprehensive analysis of childcare use among working mothers. The study aims to identify and characterize different groups of mothers based on their work and family trajectories and to examine how these trajectories are related to patterns of childcare use. The author uses data from the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), which follows a nationally representative sample of children born in the United States in 2001. The sample includes 10,700 children and their mothers who were interviewed when the children were nine months, two years, and four years old. Shattuck (2019) employs a group-based trajectory modeling approach to identify distinct patterns of maternal employment and family structure over time and to explore how these patterns are associated with different types of childcare

arrangements. The findings of the study reveal that there are four distinct groups of mothers based on their work and family trajectories: stable non-employed, stable part-time employed, unstable part-time employed, and stable full-time employed. The results also indicate that there are different patterns of childcare use associated with each group. For example, mothers who are stably non-employed are more likely to use informal care provided by relatives, while mothers who are stably full-time employed are more likely to use center-based care.

The study provides important insights into the complex relationship between maternal employment, family structure, and childcare use. The findings highlight the need for policies that support working mothers, particularly those in unstable or part-time employment, and provide affordable and high-quality childcare options that are responsive to the diverse needs of families. Shattuck's (2019) study is an important contribution to the literature on childcare use among working mothers, as it employs a novel methodological approach to identify distinct groups of mothers based on their work and family trajectories.

Working at home can provide several benefits for mothers with childcare responsibilities. Del Boca et al. (2020) found that during the COVID-19 pandemic, working from home allowed mothers to combine work and childcare responsibilities more easily than working outside the home. This is especially important as women are often expected to take on a larger share of domestic and childcare duties. By working at home, mothers can be more present for their children and take care of their needs while still being able to work. Additionally, working at home can provide mothers with more flexibility in their schedules, allowing them to better balance their work and family responsibilities. This flexibility can lead to less stress and higher job satisfaction among working mothers (Hill et al., 2008). Furthermore, mothers who work at home may also have access to more affordable or flexible childcare options, such as family

members or babysitters, which can help reduce the financial burden of traditional childcare arrangements.

Overall, the literature suggests that having young children at home can constitute an important factor in the desire to work from home, particularly for mothers. Working from home may provide parents with greater flexibility in caring for their children, leading to greater job satisfaction and work-life balance. However, the relationship between having young children at home and the desire to work from home is not always straightforward and may be influenced by external factors such as access to childcare.

The Current Study

Based on previous research, I theorize that older age groups are less likely to prefer to work from home compared to younger age groups. This theory leads to three hypotheses based on the variables mentioned above. First, I predict that younger workers are more adept at working from home and are willing to do so as opposed to their older colleagues.

Hypothesis 1: Individuals in younger age groups will express more positive work-from-home attitudes.

Secondly, I predict that the longer the commute time, the greater the desire to work from home.

Moreover, the higher the commute costs are, the higher the desire to work from home.

Hypothesis 2a: As individual commuting time increases, individuals will express more positive work-from-home attitudes.

Hypothesis 2b: As individual commuting costs increase, individuals will express more positive work-from-home attitudes.

Thirdly, I predict the individuals who have children in younger age groups have an increased desire to work from home.

Hypothesis 3: Individuals with young children under five years of age will express more

positive work-from-home attitudes.

Fourthly, I predict that as segmentation preferences increase, the desire to work from home decreases.

Hypothesis 4: Individuals who have higher segmentation preferences will express less

positive work-from-home attitudes.

These four hypotheses will be tested using an original survey described in the following section.

A survey is the best method for testing these hypotheses because it allows causal inferences to be made. This study is limited to non-instructional staff at North Carolina Wesleyan University (NCWU), a small liberal arts college located in Rocky Mount, North Carolina, and therefore only represents a niche portion of the workforce. Nevertheless, the results can be informative within the higher education sector.

Method

Participants

A total of 50 participants, drawn from the non-instructional staff at NCWU, participated in this survey. The demographics of the participants are as follows: The participants self-identified into five age groups. The first age range, 18-25 years, included 1 participant (2%). The second age range, 25- 34 years, included 9 participants (18%). The third age range, 35-44 years, included 11 participants (22%). The fourth age range, 45-54 years, included 15 participants

(30%), with this age range being the median. The fifth age range, 55-64 years, had 10 participants (20%). The final age range, 65+ years, included with 4 participants (8%). 13 participants identified as male (26%), 35 participants identified as female (70%), and 2 participants did not disclose their gender (4%). 40 (80%) of the sample identified as white/Caucasian, 7 (14%) identified as Black/African American, 1 participant (2%) identified with another racial/ethnic group not listed, and 2 (4%) did not disclose their race/ethnicity.

Procedure and Measures. The data was collected through an online survey from the dates of March 14th to March 28th, 2023. The key measures conducted in the survey were work-from-home preferences, segmentation preferences, commute time, commute cost, age, and number of children.

Work-From-Home Preferences. Participants' attitudes about work-from-home were measured using five items to form a Work-from-Home (WFH) Preferences Scale. Participants were asked to indicate their agreement with each statement using a 7-point Likert scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). The WFH Preferences Scale contained two items about participants' personal attitudes toward working from home and three items about their general attitudes about working from home. The scale contained a Cronbach's alpha value of 0.86, indicating high inter-item reliability. The text of the items is as follows:

- If given the option, I would prefer working from home rather than going to an office.
- Working in an office leaves me more satisfied with the quality of my work than working remotely. (Reverse-Scored)

- I feel that most people can do their job effectively from home.
- I feel most people are more productive working at home than in an office.
- I feel that most people get easily distracted when working from home.

Segmentation Preferences. The specific measure used for segmentation preferences in this survey was based on respondents' answers to a set of questions using a 7-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree" (Formplus, 2019). Respondents were asked to choose the option that best reflected their level of agreement or disagreement with each statement. The scale ranged from 1 (Strongly Disagree) to 7 (Strongly Agree). The questions used to measure segmentation preferences were as follows:

- "I don't like to have to think about work while I'm at home."
- "I prefer to keep work life at work."
- "I don't like work problems creeping into my home life."
- "I like to be able to leave work behind when I go home."

Commuting Time. The specific measure used for commute time in this survey was based on respondents' answers to a written response question that asked: "What is your average one-way commute time to work in minutes?" This question captured the amount of time that respondents typically spend commuting to work on a daily basis. Respondents were asked to provide a specific number of minutes as their response, providing a quantitative measure of their commute time.

Commuting Cost. The specific measure used for commute cost in this survey was based on respondents' answers to two questions that used a 7-point Likert scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). Respondents were asked to choose the option that best reflected their level of agreement or disagreement with each statement. The questions used to measure commute cost were:

- “The commute to my workplace is too long.”
- “Costs related to commuting to work significantly affect my budget.”

These questions aimed to capture how strongly respondents felt about their commuting experience and the impact it had on their work and personal lives.

Age. The specific measure used for age in this survey was based on respondents' answers to the question "How old are you?", which asked for their age as a discrete variable. The age scale used in this survey included the following options: "Under 18," "18-24 years old," "25-34 years old," "35-44 years old," "45-54 years old," "55-64 years old," and "65+ years old." Respondents were asked to choose the option that best described their age range. Due to a relatively small sample size, these groups were collapsed into three representing 18-34 year-olds, 35-54 year-olds, and 55 or more years old, roughly corresponding to younger, middle-aged, and older cohorts.

Number of Children. The specific measure used for the number of children in this survey is based on the respondents' answers to the question: "Please indicate the number of children that currently reside with you in each age group." The scale included the following different age groups for children: “0-2 years,” “3-5 years,” “6-9 years,” “10-13 years,” “14-17 years,” and “18+ years.” The respondents were asked to indicate the number of children who currently reside

with them at least 50% of the time in each of the age groups listed above. The total number of children five years of age or younger was then calculated.

Results

The results of the survey were analyzed using ordinary least squares (OLS) regression. Age, Segmentation Preferences, Commute Cost, Commute Time, and Number of Children Under 5 were included to predict work-from-home preferences. An interaction between Age and Segmentation Preferences is also included to identify if the impact of segmentation preferences varies by age group. The results of the variables in relation to work-from-home preferences are presented in Table 1.

	WFH Preferences
Age	0.474 (0.79)
Segmentation Preferences	-0.469 (3.06)***
Age * Segmentation Preferences	-0.137 (1.20)
Commute Cost	0.171 (2.00)*
Commute Time	-0.011 (1.01)
# of Children Under 5	0.466 (2.59)**
Constant	6.092 (7.14)***
R^2	0.68
N	50

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Table 1. Independent Variables Relationship to WFH Preferences

Age

Based on the regression table, the coefficient for age is 0.474 with a standard error of 0.79, indicating that age is not a significant predictor of WFH preferences at the 0.05 conventional level of significance. While I cannot substantively interpret the constituent terms of an interaction, Figure 1 highlights the weak, but negative, relationship between age and WFH preferences. The youngest age category expressed the most positive attitudes toward work-from-home, though the middle category possesses roughly equivalent attitudes. The older group, however, is less positive, though this is not a statistically significant difference. When comparing the mean of the oldest age group with the two younger groups combined, the difference does approach statistical significance, $t(1, 49)=1.54$, $p=0.13$.

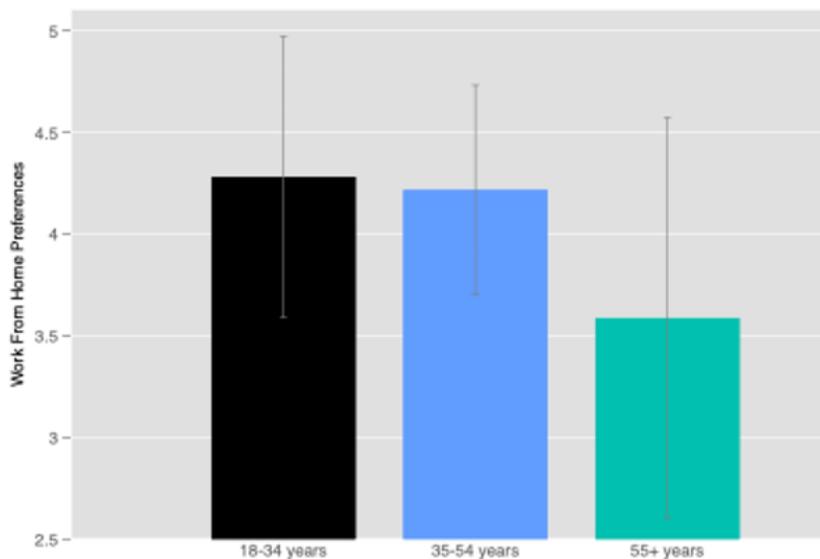


Figure 1. Mean of WFH Preferences by Age Group

Commute Time and Cost

In the table, the coefficient for commute cost, 0.171, is significant at the 0.10 alpha level ($p=0.051$), which means that as commute cost increases by one unit, WFH preference also

increases by 0.171 units, holding other factors constant. Similarly, the coefficient for commute time is negative, -0.011, though not significant ($p > 0.1$), indicating that there is a non-significant but negative relationship between commute time and WFH preferences in this sample, contrary to expectations. These results suggest that commute cost, but not commute time, is a significant factor that influences WFH preferences. Figure 2 illustrates the relationship commute costs have on work from home preferences.

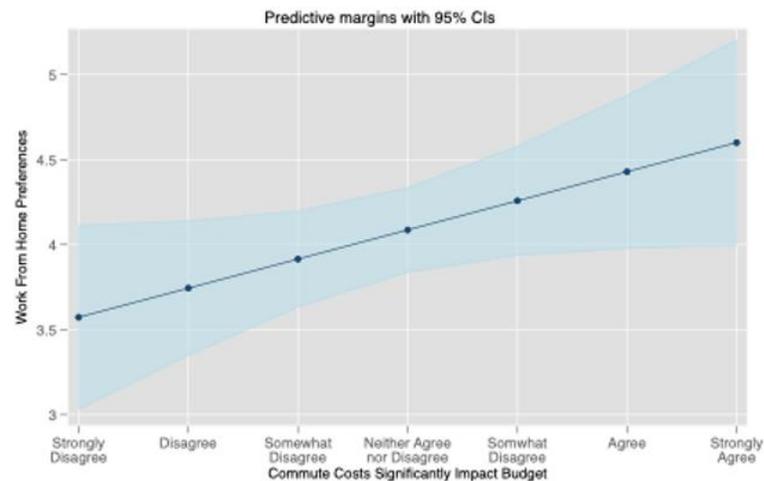


Figure 2. Commute Costs and WFH Preferences

Based on Figure 2, as an individual's budget is impacted by their commute costs, the increase in preference to work-from-home.

Number of Children under 5 Years of Age

The regression analysis shows that the number of children under 5 has a statistically significant positive relationship with WFH preferences at the 0.05 level ($p = 0.01$). This indicates that as the number of children under 5 residing with the respondent increases, their preference for working from home also increases. The coefficient of 0.466 indicates that holding all other variables constant, a one-unit increase in the number of children under five is associated with a

0.466 unit increase in WFH preferences. Figure 3 illustrates this relationship between children under 5 and WFH preferences.

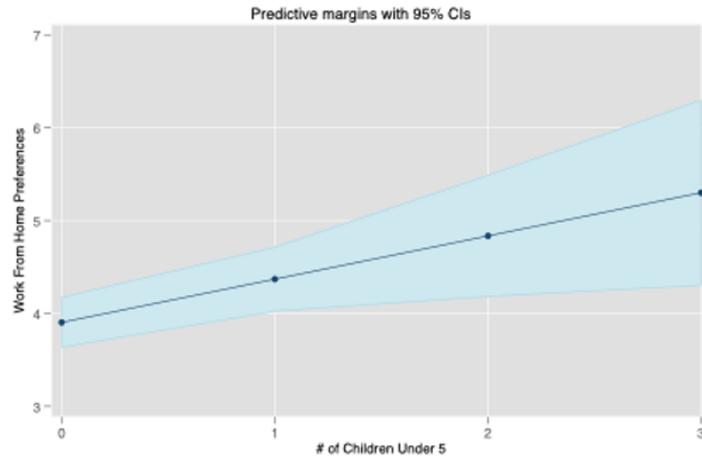


Figure 3. # of Children under 5 and WFH Preferences

The figure shows the significant relationship between the number of children under 5 years of age and WFH preferences. As the number of children under 5 increases, WFH preferences increase. Participants with young children seem to express much more positive attitudes toward working from home.

Segmentation Preferences

The regression results show that segmentation preferences have a significant negative effect on WFH preferences (coefficient = -0.469, $p < 0.01$). This means that individuals who strongly prefer to keep their work and personal life separate are less likely to prefer working from home. The interaction between age and segmentation preferences did not reach statistical significance (coefficient = -0.137, $p > 0.05$), suggesting that the effect of segmentation preferences on WFH preferences is consistent across different age groups. Overall, this suggests that segmentation preferences are an important factor to consider in understanding individuals'

preferences for working from home. Figure 4 illustrates segmentation preferences by age group to WFH preferences.

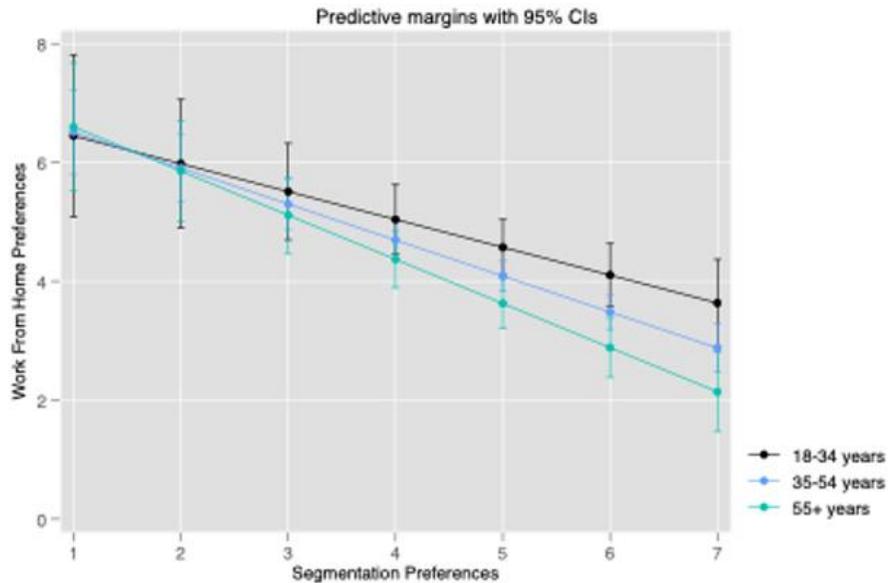


Figure 4. Segmentation Preferences on WFH Preferences by Age Group

The results of the survey based on the sample size at North Carolina Wesleyan University show that age does not have a statistical significance in WFH preference; however, commute cost, number of children under 5, and segmentation preferences do.

Discussion

In summary, the regression analysis shows that age does not have a statistically significant effect on work-from-home preferences ($p = 0.435$). Therefore, we cannot accept the first hypothesis that younger individuals express more positive work-from-home attitudes. The regression table shows that commute time does not have a statistically significant effect on work-from-home preferences ($p = .318$). Therefore, we cannot accept hypothesis 2a that as individual

commuting time increases individuals will express more positive work-from-home attitudes. However, the regression table shows that commute cost has a statistically significant effect on work-from-home preferences ($p = 0.051$). The positive coefficient suggests that, as commuting costs increase, the desire to work from home also increases. Therefore, we can accept hypothesis 2b that as individual commuting costs increase individuals will express more positive work-from-home attitudes. The regression table shows that the number of children under 5 has a statistically significant effect on work-from-home preferences ($p = 0.013$). The positive coefficient suggests that individuals with young children express more positive work-from-home attitudes than those without. The results show a significant positive association between having young children under 5 years of age and expressing positive work-from-home attitudes, which was in alignment with our 3rd hypothesis. This finding is consistent with the idea that caring for young children can be a significant factor in work-from-home decisions. The regression table shows that segmentation preferences have a statistically significant effect on work-from-home preferences ($p = 0.004$). The negative coefficient suggests that individuals with higher segmentation preferences express less positive work-from-home attitudes than those with lower segmentation preferences. Therefore, we can accept the fourth hypothesis that individuals who have higher segmentation preferences will express less positive work-from-home attitudes. This finding is consistent with the idea that some individuals may prefer more separation between work and home life.

Conclusion

This study addressed a gap in the literature relating to WFH preferences by proposing a unique survey that measured a range of variables. The study was not able to provide statistical importance for age and its relation to WFH preferences. However, it was successful in providing statistical importance for other variables that do affect WFH preferences. This study was able to find that commuting cost, number of children under five, and segmentation preferences do affect attitudes toward WFH. These results show that staff at North Carolina Wesleyan University WFH preferences depend on how much their commute time affects their budget, if they have children who are under 5, and their segmentation preferences towards work.

The findings from this survey have several implications for the staff at North Carolina Wesleyan University who participated in it. One of the main implications is that younger age categories (below 55) are more positive (attitudes above the midpoint) towards working from home, although this difference was not found to be statistically significant, possibly due to the small sample size. Nonetheless, this suggests that NCWU may want to take into account the age of their employees when considering a remote work policy. This implies that workplaces with a younger workforce may benefit from offering more work-from-home opportunities to attract and retain younger talent. By doing so, NCWU can maintain employee satisfaction and productivity while also potentially reducing the costs associated with maintaining an office.

In addition, the study found that as commuting costs increase, the desire to work from home increases. This finding implies that workplaces that provide financial incentives for employees to work from home, such as reimbursement for home office equipment or a transportation stipend, may be more attractive to employees who face higher commuting costs.

By doing so, NCWU can retain employees who may otherwise leave for a job with lower commuting costs.

Personal values regarding the separation of work and home are more important than age according to the study. The study found that individuals with higher segmentation preferences expressed fewer positive attitudes toward working from home. This suggests that the importance of work-life balance and the desire for a clear separation between work and home life varies across individuals, regardless of age. While age may play a role in work-from-home attitudes, it is not the only determining factor. Instead, NCWU may need to consider individual preferences when developing remote work policies.

Furthermore, the study's finding on segmentation preferences implies that NCWU may need to provide more flexibility in their remote work policies. For instance, some employees may prefer a hybrid model where they can work from home on certain days but be in the office for others. Such a model would allow individuals to customize their work arrangement to their preferences and better balance their work and home life. Additionally, by providing flexibility, NCWU may be able to attract a wider range of employees with different work styles and preferences, leading to a more diverse and inclusive work environment.

The study found that individuals with young children express more positive attitudes toward working from home than those without. This finding suggests that providing work-from-home opportunities can be of great benefit to employees with young children. For working parents, the ability to work from home can allow for a better work-life balance, as they can more easily tend to their children's needs while still being able to complete their work tasks. By offering work-from-home options, NCWU can support working parents and help to alleviate the stress and challenges associated with balancing work and family responsibilities.

In addition, offering remote work options for parents with young children can also lead to increased employee satisfaction and retention. When parents feel supported by their employer, they are more likely to stay with the organization long-term, reducing turnover costs and potentially increasing productivity. Additionally, remote work options can make NCWU more attractive to potential employees with young children.

Factors Specific to NCWU

There are several other factors besides the variables studied in the research specific to NCWU that should be taken into account when considering remote work policies. One of these factors is the geographic dispersion of the university's employees. NCWU has multiple campuses across the state of North Carolina, meaning that many employees may live far from their primary worksite. In such cases, offering work-from-home options can help to alleviate the burden of commuting and allow employees to better balance their work and personal lives. Additionally, remote work options can help to increase collaboration and communication among employees located at different campuses, as virtual meetings and other tools can be utilized to bridge the distance between locations. If employees are dispersed across a wide area, a remote work policy can help to reduce the need for long commutes and make it easier for employees to collaborate and communicate with one another. Additionally, remote work options can help to improve the work-life balance of employees who live far away from the campus, potentially reducing turnover rates and increasing employee satisfaction.

However, there are also potential challenges associated with geographic dispersion and remote work policies. Communication and collaboration can be more difficult when employees are not physically present in the same location, and managers may need to put additional effort into building and maintaining team cohesion. Additionally, there may be technological barriers

to remote work, such as insufficient internet access in some areas. Therefore, NCWU may need to carefully consider the needs and challenges of their geographically dispersed workforce when developing remote work policies, and may need to invest in technologies and processes to facilitate effective remote work across the organization.

The uniqueness of higher education is another factor that is specific to NCWU and should be taken into consideration when developing remote work policies. Higher education institutions have specific requirements and responsibilities that may differ from those of other organizations. For example, faculty members may need to be physically present on campus for certain activities such as lectures, office hours, and committee meetings. Additionally, the availability of certain equipment, such as specialized lab equipment, may be limited to on-campus locations. However, there are also aspects of higher education that may lend themselves well to remote work opportunities. For instance, administrative staff members may be able to complete many of their tasks from home, such as answering emails, conducting virtual meetings, and completing paperwork. Remote work opportunities may also allow faculty members to engage in research activities that require extended periods of focused work, without the distractions that can arise in a busy office or lab setting. Therefore, when developing remote work policies for NCWU, it will be important to consider the unique requirements and opportunities that exist within higher education. By tailoring policies to the specific needs and circumstances of the university, NCWU can ensure that remote work opportunities are effective and beneficial for both employees and the institution as a whole.

In addition to the factors mentioned previously, it's important to consider the specific culture and values of NCWU when developing remote work policies. As a higher education institution, NCWU has a unique culture and set of values that may differ from those of other

organizations. For example, NCWU may place a high value on collaboration and face-to-face interactions among faculty and staff, which could potentially be impacted by remote work policies. It's important to consider how remote work may affect the sense of community and shared purpose that exists on campus. While remote work can offer many benefits, such as increased flexibility and reduced commuting costs, it can also lead to a sense of isolation and disconnection from colleagues. This is particularly relevant in the higher education context, where collaboration and knowledge sharing are crucial for academic success.

Therefore, when developing remote work policies at NCWU, it's important to strike a balance between accommodating individual preferences and needs, and maintaining a strong sense of community and shared purpose. This may involve offering a hybrid model, where employees have the flexibility to work from home on certain days but are required to be on campus for others. Additionally, NCWU may want to consider implementing regular in-person meetings or events to foster a sense of community and collaboration among remote workers. Furthermore, the values and priorities of NCWU may differ from those of other organizations, and this should be taken into account when developing remote work policies. For instance, NCWU may prioritize work-life balance and family-friendly policies over strict adherence to traditional work schedules. By aligning remote work policies with the unique culture and values of NCWU, the institution can create a work environment that supports employee wellbeing and productivity, while also promoting its mission and values.

Overall, the study's findings suggest that remote work policies can have significant benefits for both employees and employers at NCWU. By accommodating individual preferences and needs, NCWU can improve employee satisfaction and retention, while also potentially reducing costs associated with maintaining an office. Furthermore, by offering work-from-home

options for parents with young children, organizations can support their employees in achieving a better work-life balance, ultimately leading to a more productive and engaged workforce.

References

- Buffer. (2021). The state of remote work: The COVID-19 edition. Buffer.
<https://lp.buffer.com/state-of-remote-work-2021>
- Bostrom, R. P., Olfman, L., Sein, M. K., & Munro, M. C. (2002). eWork: A framework for understanding and organizing the practice of telecommuting. *Journal of Organizational Computing and Electronic Commerce*, 12(2), 105-128.
https://doi.org/10.1207/s15327744joce1202_2
- Currie, J., Eveline, J. (2011). E-technology and work/life balance for academics with young children. *Higher Education* 62, 533–550. <https://doi.org/10.1007/s10734-010-9404-9>
- Eurofound. (2020). Living, working and COVID-19. Publications Office of the European Union.
<https://www.eurofound.europa.eu/publications/report/2020/living-working-and-covid-19>
- FlexJobs. (2020). The history of remote work. <https://www.flexjobs.com/blog/post/history-of-remote-work/>
- Formplus. (2019, September 5). The 4, 5, and 7 point likert scale + [questionnaire examples]. Formplus. <https://www.formpl.us/blog/point-likert-scale>
- Gallup. (2017). State of the American Workplace.
<https://www.gallup.com/workplace/238085/state-american-workplace-report-2017.aspx>
- Gardner, J. S., & Hagan, K. A. (2018). The impact of commute time on job satisfaction and turnover intentions: Evidence from the United States. *Applied Research in Quality of Life*, 13(3), 583-597. <https://doi.org/10.1007/s11482-018-9630-7>
- Gatrell, C., & Cooper, C. (2007). Work-life balance and the demand-control-support model:

Implications for the 'new' NHS. *International Journal of Health Care Quality Assurance*, 20(1), 35-47. <https://doi.org/10.1108/09526860710726838>

Global Workplace Analytics. (2020). *Work-at-Home after COVID-19-Our Forecast*.

<https://globalworkplaceanalytics.com/work-at-home-after-covid-19-our-forecast>

Golden, A. G., & Veiga, J. F. (2005). The impact of extent of telecommuting on job satisfaction: Resolving inconsistent findings. *Journal of Management*, 31(2), 301-318.

<https://doi.org/10.1177/0149206304272314>

Hill, E. J., Hawkins, A. J., Ferris, M., & Weitzman, M. (2001). Finding an extra day a week:

The positive influence of perceived job flexibility on work and family life balance. *Family*

Relations, 50(1), 49-58. <https://doi.org/10.1111/j.1741-3729.2001.00049.x>

IBM. (n.d.). *The IBM Work-At-Home Solution*.

<https://www.ibm.com/services/learning/pdfs/WorkAtHomeSolution.pdf>

Katz, L. F., & Krueger, A. B. (2016). The rise and nature of alternative work arrangements in the United States, 1995-2015. National Bureau of Economic Research.

<https://doi.org/10.3386/w22667>

Kim, S., & Lee, Y. (2021). Impact of commuting time on work-from-home preferences: A cross-sectional study. *Journal of Facilities Management*, 19(1), 38-51.

<https://doi.org/10.1108/JFM-10-2020-0069>

McElroy, J. C., & Morrow, P. C. (2010). Employee reactions to office redesign: A naturally

occurring quasi-field experiment in a multi-generational setting. *Human Relations*, 63(5), 609–636. <https://doi.org/10.1177/0018726709342932>

Nikolaou, I., & Loukakou, S. (2021). Impact of long commutes on organizational commitment and job satisfaction. *Journal of Transport Geography*, 93, 102995. <https://doi.org/10.1016/j.jtrangeo.2021.102995>

Owl Labs. (2020). State of remote work 2020. <https://www.owlabs.com/state-of-remote-work/2020>

Rachel M Shattuck, Patterns of Childcare Use for Young Children within Women's Work/Family Pathways: A Group-Based Multi-Trajectory Modeling Approach, *Social Forces*, Volume 100, Issue 3, March 2022, Pages 1251–1283, <https://doi.org/10.1093/sf/soab034>

Spinuzzi, C. (2012). Working alone together: Coworking as emergent collaborative activity. *Journal of Business and Technical Communication*, 26(4), 399-441. <https://doi.org/10.1177/1050651912444070>

Society for Human Resource Management. (2011). Workplace Flexibility in the 21st Century: Meeting the Needs of the Changing Workforce. <https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/Documents/Workplace%20Flexibility%20in%20the%2021st%20Century%20Meet%20the%20Needs%20of%20the%20Changing%20Workforce.pdf>

Tyler, T. R., & Schuller, R. A. (1991). Aging and attitude change. *Journal of Personality and Social Psychology*, 61(5), 689–697. <https://doi.org/10.1037/0022-3514.61.5.689>

Upwork. (2019). Freelancing in America: 2019.

<https://www.upwork.com/press/2019/10/03/freelancing-in-america-2019/>

PwC. (2021). US remote work survey: How COVID-19 is changing the way America works.

PwC. <https://www.pwc.com/us/en/library/covid-19/us-remote-work-survey.html>

Zhang, M., & Chen, L. (2021). The impact of long commuting time on job satisfaction in China:

The role of work-life conflict and social support. *Transportation Research Part A: Policy*

and Practice, 148, 359-371. <https://doi.org/10.1016/j.tra.2021.09.005>

Appendix: Survey Instrument

Indicate your agreement with the following statements:	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
If given the option, I would prefer working from home rather than going to an office (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working in an office leaves me more satisfied with the quality of my work than working remotely (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If given the option, I would work completely from home (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The amount of time my job takes up makes it difficult to fulfill home responsibilities (2)	<input type="radio"/>						
Things I want to do at home do not get done because of the demands my job puts on me (3)	<input type="radio"/>						
My job produces strain that makes it difficult to fulfill home duties (4)	<input type="radio"/>						
Due to work-related duties, I have to make changes to my plans for home activities (5)	<input type="radio"/>						

Q20 Please indicate your agreement with the following statements:

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Generally speaking, I am very satisfied	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I like to get together with my coworkers outside of work (8)

Q9 Do you currently have children who reside with you for at least 50% of the time?

- Yes (1)
- No (2)

Display This Question:

If Do you currently have children who reside with you for at least 50% of the time? = Yes

Q11 Please indicate the number of children that currently reside with you in each age group:

0-2 years (1) _____

3-5 years (2) _____

6-9 years (3) _____

10-13 years (4) _____

14-17 years (5) _____

18+ years (6) _____

Q21 How do you describe yourself?

- Male (1)
 - Female (2)
 - Non-binary / third gender (3)
 - Prefer to self-describe (4)
-
- Prefer not to say (5)

Q22 Choose one or more races that you consider yourself to be

- White or Caucasian (1)
- Black or African American (2)
- American Indian/Native American or Alaska Native (3)
- Asian (4)
- Native Hawaiian or Other Pacific Islander (5)
- Other (6)
- Prefer not to say (7)

Q23 How old are you?

- Under 18 (1)
- 18-24 years old (2)
- 25-34 years old (3)
- 35-44 years old (4)
- 45-54 years old (5)
- 55-64 years old (6)
- 65+ years old (7)