A study of teleworker experiences of work-life well-being and the moderating role of personality

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Abstract

The working world has changed significantly over the last several years, with telework becoming a more sustained work practice for millions of workers. *Objective:* The present study investigated teleworker work-life well-being to determine if there are (i) differences in work-life well-being between full-time and hybrid teleworkers; (ii) a relationship between age and teleworker work-life well-being; (iii) a relationship between the Big Five personality traits and teleworker work-life well-being; (iv) if age and personality traits extraversion and neuroticism predictive teleworker work-life well-being. *Study Design:* Quantitative. Non-experimental. Cross-sectional. *Participants:* Teleworkers (n = 182); 54% Full-Time teleworkers and 46% Hybrid teleworkers. Mean age 45.98 years, 66.5% male and 33.5% female, age range 23 years – 66 years old. *Method:* Participants completed the E-Work Life Scale (EWL) and Big Five personality inventory (BFI-10). *Results:* The study results present limited support for the moderating role of the Big Five personality traits on teleworker work-life well-being, with neuroticism as the only predictor for work-life well-being in the expected direction. *Conclusion:* Future studies should consider personality traits associated with voluntary teleworker decisions. Future study recommendations and insights based on the current study findings are discussed. Future research is warranted.

Keywords: telework, work-life balance, well-being, Big Five, personality

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Introduction

Globalisation, changing trends in demographics, technology, socio-economics, and developments in information and communication technology (ICT) are driving flexible work arrangements (Schwab & Samans, 2016). Telework as a flexible work arrangement between employers and employees has become more common in organisations (Allen, Golden & Shockley, 2015). Employees can perform work remotely from the employer's premises with the help of ICT, including internet-enabled laptops and smartphones (Messenger et al., 2017). Although several scholars have proposed a definition of telework (see Bailey & Kurland, 2002; Baruch, 2000), due to the variety of methods to telework, it is generally agreed in the literature that there is no accepted telework definition (Garrett & Danziger, 2007; Sullivan, 2003). In this study, telework is defined as simply working remotely from an employer's office using ICT and can occur in many locations (e.g., home or café), varying from full-time to hybrid in frequency (Belzunegui-Eraso & Erro-Garcés (2020). Previous research indicates that the average teleworker is 46 years old and typically representative of highly qualified, well-paid, white-collar employees (e.g., knowledge-workers) with an approximate equal representation of men and women, with the home as the primary location (Gajendran & Harrison, 2007; Reynolds, 2017; Sostero, Milasi, Hurley, Fernandez-Macias & Bisello, 2020).

Telework is generally associated with improved organisational effectiveness, employee productivity, flexibility, work-life balance and well-being (Pitt-Catsouphes, Matz-Costa & MacDermid, 2007). Interestingly, an earlier study openly questioned whether providing an employee with an ICT device and an internet connection to support telework inevitably results in improved work-life balance and well-being (Whittle & Mueller, 2009). However, following the (COVID-19) pandemic outbreak, many governments mandated telework from home for non-essential workers, introducing a new work practice for tens of

millions of workers overnight (Baker, 2020). Research reports that 41 per cent of employees expressed the desire to telework at least one day per week post-pandemic and suggests that telework has been a positive development (Baker, 2020; Loh & Fishbane, 2020). Notwithstanding the substantial expansion of telework, pre-pandemic research suggests that teleworker success depends on the employees work experience without direct supervision and that personality congruence is an important factor for success (Judge & Cable, 1997; Nilles, 1998). Research warns that incongruity between individual personality and telework demand characteristics potentially adversely affect health and well-being, suggesting telework may not be a good fit for everybody (Tavares, 2017). However, pre-pandemic research remains inconclusive on the potential influences of personality traits, telework frequency and demographic variables on teleworker work-life well-being (Como, Hambley & Domene, 2021; Smith, Patmos & Pitts, 2018). The current study aims to address a gap in the literature on the telework phenomena by attempting to determine the association between age, telework frequency, personality traits and teleworker work-life well-being.

Telework

The telework phenomenon (Having several interchangeable terms in the literature, including e-work, remote work, telecommuting, work-from-home and work-from-anywhere) is hereafter referred to as telework in the current study. It is generally accepted that Nilles originated the term “telecommuting” or alternatively telework almost half a century ago as a work practice to reduce commuting in response to the global oil crisis (Nilles, 1975). Since then, the concept developed to become an innovative work practice to improve organisational effectiveness (Bailey & Kurland, 2002; Gibson, Blackwell, Dominics & Demarath, 2002; Harpaz, 2002), with organisations increasing telework arrangements for employees (Alexander, Ettema & Dijist, 2010; Allen, et al., 2015; Bailey & Kurland, 2002). Additionally, telework provides employees with the flexibility to perform work and contact

co-workers and others outside the organisation using ICT remotely for at least part of the working week (Bailey & Kurland, 2002; Baruch, 2001; Di Martino & Wirth, 1990).

Studies show that telework is usually synonymous with more advantages than disadvantages. The research proposes that organisations introduce telework programs to improve organisation effectiveness, support employee work-life balance and well-being, or a combination of the two (Pitt-Catsouphes et al., 2007). Research shows that organisations perceive increased employee productivity, commitment and performance (Martin & MacDonnell, 2012; Thevanes & Harikaran, 2020). However, the growth in telework practices has been slower than anticipated (Allen et al., 2015; Peters, den Dulk & de Ruijter, 2010). For example, in the EU-27 in 2019, 5.4 per cent of employees worked from home regularly (Eurostat, 2021). Studies speculate the lack of growth could be associated with employer trust issues (Bailey & Kurland, 2002), desire for collocated interactions (Golden, 2006; Hynes, 2014), concern over productivity (Aguilera, Lethiais, Rallet & Proulhac, 2016) and management protection of traditional work practices (Brewer, 2000; Lupton & Haynes, 2000; Nilles, 1998; Rasmussen & Corbett, 2008; Vilhelmson & Thulin, 2016).

While there is general agreement on organisational benefits, it remains controversial whether telework benefits employees. A meta-analysis of 46 studies highlights increased work-life balance, job satisfaction, flexibility, autonomy, reduced turnover intention, and reduced job stress, suggesting a favourable perspective on telework. Additionally, the study reports that hybrid telework for more than 2.5 days per week further reduced work-family conflict; however, conversely can negatively affect co-worker relationships. Restrictions to work-related interactions can occur due to physical and psychological distance (Gajendran & Harrison, 2007). However, other studies suggest that telework can reduce the distractions associated with collocated work (e.g., interruptions and office politics), which may lead to

increased job satisfaction and lower stress (Cooper & Kurland, 2002; Leonardi, Treem & Jackson, 2010; Luong & Rogelberg, 2005).

Several studies report that telework contributes positively to well-being, including lower stress (Hill, Ferris & Märtinson, 2003; Kurland & Bailey, 1999), daily scheduled flexibility (Bloom, Liang, Roberts & Ying, 2014).), greater life control (Sardeshmukh, Sharma & Golden, 2012) and control over environmental conditions at home (Montreuil & Lippel, 2003). Conversely, studies suggest that telework can increase work demands (Noonan & Glass, 2012), causes blurring between work-family life (Russell, O'Connell & McGinnity, 2009), lowers work-life boundary control (Mellner, 2016), increases the perception of isolation (Baruch, 2000; Sardeshmukh et al., 2012) and can limit career progression (Bloom et al., 2014). Recent research highlights that divergent, ambiguous and inconclusive evidence in research is a common factor due to the complexity of the telework phenomenon (Lunde et al., 2022; Song & Gao, 2018). A recent systematic literature review of telework research posits the paucity of quality research and suggests this may be due to the limited adoption of telework pre-pandemic (Athanasiadou & Theriou, 2021).

Telework and COVID-19

Telework has expanded substantially across most workforce populations since the pandemic, with almost 35 per cent more EU workers experiencing telework (Eurofound, 2020). The pandemic has resulted in a younger cohort of employees experiencing telework for the first time, with age potentially influencing the perception of the telework experience (Bellotti, Zaniboni, Balducci & Grote, 2021). Previous research suggests that older employees tend to perceive work situations positively compared to younger employees (Ong, Bergeman, Bisconti & Wallace, 2006). However, a recent telework study reports that older workers tend to emphasise the disadvantages whereas younger workers tend to emphasise the advantages (Raišienė, Rapuano, Varkulevičiūtė, & Stachová, 2020). Conversely, a recent

study of teleworkers during the pandemic found that older employees reported higher levels of work-life balance and improved productively compared to younger employees. The researcher suggests further research investigates chronological age, telework and positive emotions (Scheibe, 2021). For example, the new demands on employees to manage work and family life simultaneously in the home environment may have affected work-life well-being (OECD, 2020).

Work-Life Well-Being

The literature generally defines work-life balance as an individual's state of equilibrium between career, family responsibilities, and other personal obligations and pursuits (Dhas & Karthikeyan, 2015; Greenhaus, Ziegert & Allen, 2012; Lockwood, 2003). Alternatively, work-life conflicts can impair employee well-being, raise psychological stress and lead to work-disengagement behaviours (Hofman & Stokburger-Sauer, 2017). Work-life balance improvement is considered a significant factor in the growth of telework (Chung & van der Horst, 2018; Haddad, Lyons & Chatterjee, 2009; Mann & Holdsworth, 2003) and empirical evidence appears to confirm that work-life balance is associated with well-being (Clark, 2000; Marks & MacDermid, 1996). Research posits that fairness in compensation, job security, fulfilment, compatibility between work and non-work activities and sense of belongingness influences employee well-being (Cooper, 2008; Xanthopoulou, Bakker, Demerouti & Schaifeli, 2009). Past studies emphasise an association between perceived job characteristics and well-being outcomes (De Jonge & Schaufeli, 1998; Kelloway & Barling, 1991; Sonnentag & Zijlstra, 2006). Organisational initiatives to improve employee well-being and performance may be facilitated by understanding the factors associated with perceived job characteristics (van den Meuvel, Demerouti & Peeters, 2015).

However, the urgency to enforce telework due to the pandemic minimised both employee and organisational preparedness leading to potential adverse effects on employee

well-being (Waizenegger, McKenna, Cai & Bendz, 2020). Employees experienced the challenge of designating an appropriate workspace in the home, especially for those who share a home with family or co-habitat (Kniffin et al., 2021). Strain associated with a rapid change in the work-life environment can potentially negatively affect individual well-being (Demerouti, Mostert & Bakker, 2010). Additionally, the urgency by organisations to provision telework facilities may have presented several issues that remain unacknowledged by practitioners and researchers (Yang, 2020).

In the literature on telework work-life balance and well-being, there seems to be general agreement that the research to date is inconclusive. Sociology and social psychology theories have benefited researchers and practitioners in the application and impact of telework; however, research on telework behaviours and attitudes has been limited (Zhang, Moeckel, Moreno, Shuai & Gao, 2020). Several scholars have argued that telework does not result in work-life balance, highlighting work-family conflict (Kurland & Bailey, 1999) family-work conflict (Golden, 2006) and can diminish homes' recuperative effects (Hartig, Kylin & Johansson, 2007). However, conversely, studies found that telework improves work-life balance, with research suggesting improvements in job satisfaction (Maruyama, Hopkinson & James, 2009), leisure time (Wheatley, 2012), reduced work-family conflict (Gajendran & Harrisson, 2007) and increased well-being (Chung & van der Horst, 2018). Zhang et al., (2020) postulates that measurement instruments used to research telework and work-life balance and well-being are inconsistent due to potential biases from sample demographics and the spectrum of telework frequency studied. For example, research suggests that work-life balance measures are typically based paradoxically on valid and reliable work-life conflict psychometric measurements, and studies of telework have frequently used extemporary scales (Carlson, Grzywacz & Zivnuska, 2009; Maruyama et al., 2009).

Previous research on telework considered specific associations with job effectiveness (e.g., Noonan & Glass, 2012), work-life balance (e.g., Maruyama et al., 2009) and stress mitigation (e.g., Hartig et al., 2007). Using semi-structured interviews, a qualitative study of 11 teleworker participants explored the psychological relationship and issues impacting job effectiveness, work-life balance, and well-being. The research posits that the perceived relationship with the organisations is also a salient factor influencing teleworker work-life well-being (Grant, Wallace & Spurgeon, 2013). Building on the study, the researchers developed and validated a new self-report scale and postulates the scale is aligned to psychological theories, internally reliable and addresses a gap in research. The researchers present the E-Work Life (EWL) Scale as an instrument to measure teleworker work-life well-being across four factors "Work-Life Interference, Organisational Trust, Effectiveness and Productivity and Flexibility". The researchers suggest the instrument could be used to assist organisations and academics in developing interventions to support teleworker well-being (Grant, Wallace, Spurgeon, Tramontano & Charalampous, 2019).

For example, research highlights that home-based telework can make it harder to separate work and family roles (Kossek, Lautsch & Eaton, 2006). Due to the pandemic, employees with a strong preference for work-family segmentation experienced involuntary telework, potentially elevating role ambiguity, work-life interference, and issues detaching from work (Rudolph et al., 2021). A study of 289 working adults examined the personality characteristics that may influence work-life interference behavioural coping strategies. Results suggest that the personality traits of agreeableness and conscientiousness correlated with increased use of behavioural coping strategies when experiencing work-family and family-work conflict (Baltes, Zhdanova & Clark, 2010); however, this study did not include teleworkers. A recent study highlights that existing gaps remain in the literature concerning work-life well-being experienced by full-time and hybrid teleworkers (Como et al., 2021).

Personality Traits

Theories of personality attempt to understand and explain human behaviour from a motivational basis on the assumption that personality characteristics are comparatively stable over the lifespan, across situations and internally consistent (Maltby, Day & Macaskill, 2017, p. 166). Research establishes that personality characteristics affect how we view, approach and evaluate life and career (Spector, Jex & Chen, 1995; Steel, Schmidt & Shultz, 2008). A nomothetic theoretical approach categorises human personality characteristics by identifying consistently shared thoughts, feelings and behaviours to establish a comprehensive, limited set of trait norms (Allport, 1961). The individual difference can then be reported on a continuum as above or below each trait norm (Maltby et al., 2017). The research posits several valid and reliable personality measurement instruments (e.g., HEXACO, Myers-Briggs Type Indicator and NEO-PI-R). Developed from the Five-Factor Model of personality, Costa and McRae (1992) present the Big Five model consisting of five factors; extraversion, agreeableness, openness, conscientiousness and neuroticism measured via the (NEO-PI-R) instrument (Maltby et al., 2017). The Big Five model is the most commonly used to understand the relationship between personality traits and employee behaviour (Goodstein & Lanyon, 1999; Saari & Judge, 2004). Additionally, research postulates a robust association between the Big Five personality traits and well-being outcomes in the general population (Anglim & Grant, 2016; Sun, Kaufman & Smillie, 2017).

A study on the relationship between personality and subjective well-being indicates neuroticism to be the most consistent correlate for individual subjective well-being, then extraversion and conscientiousness. The study highlights stronger correlations between negative affect and neuroticism and extraversion with positive affect (Steel et al., 2008). Research and meta-analytic studies evidence the consistent predictability of personality traits with job performance outcomes and collocated employees (e.g., Judge, Heller & Mount,

2002; Hurtz & Donovan, 2000; Tett, Jackson & Rothstein, 1991) however, there are limited studies exploring personality traits in the context of telework (Smith et al., 2018). A study of 156 employees from eight organisations suggests certain personality traits were more likely to predict the effectiveness of teleworkers versus non-teleworkers. The study found that telework may be more challenging for extraverted individuals. Higher job performance tended towards the need for autonomy, associated with introversion. The researchers posit that different personality traits may predict teleworker effectiveness compared to non-teleworkers, and organisations should consider personality traits for personnel suitable for telework (O'Neill, Hambley, Greidanus, MacDonnell & Kline (2009).

A study of 333 participants investigated teleworker attitudes with the Big Five personality traits reports a significant correlation of agreeableness and neuroticism with teleworker attitudes; however, openness, extraversion and conscientiousness did not significantly correlate. The researchers suggest that telework may provide the ability to avoid uncomfortable workplace situations, which may be preferable for individuals that score high on neuroticism. The findings may suggest that extraverts mitigate the effects of telework by facilitating social connections through other channels. Interestingly, conscientiousness did not correlate with teleworker attitudes suggesting this trait is related to work irrespective of environment. However, the researchers warn that the study sample had limited telework experience (Clark, Karau & Michalisin, 2012). A study of 94 participants investigated non-work-related teleworker behaviour. The study reports that of the Big Five personality traits, only neuroticism positively correlated with non-work-related behaviour, suggesting that the distraction of using the internet for non-work activity may result from negative emotional experiences during the workday. The research emphasises that further research is warranted given the dependence on internet technology for home-based telework and speculates that more extraverted individuals may also seek distractions from work activity through other

technology-based social interactions (O'Neill, Hambley & Bercovich, 2014). Although research reports that extraversion and neuroticism predict the majority of dimensions of well-being in the general population (Anglim & Grant, 2016; Sun et al., 2017), research on personality traits and telework behaviour remains inconclusive.

Overview Of The Findings

A review of the literature highlights the complexity associated with telework research and seems to indicate inconsistent findings concerning age, telework frequency, work-life balance, well-being and the moderating role of personality. While there is broad agreement that telework has more advantages than disadvantages, it remains controversial whether telework benefits work-life balance and associated well-being and is a good fit for everybody (Tavares, 2017). Further research is required as telework practises have grown substantially, with millions of employees new to the telework experience with continued demand from employees to request telework into the future. However, psychologists and practitioners could only advise on well-being and teleworking based on pre-pandemic research (Athanasiadou & Theriou, 2021; Bouziri et al., 2020). Past studies have yielded some important insights into telework, work-life balance and well-being. However, there are gaps in the literature investigating potential salient factors on work-life well-being, including age, full time and hybrid telework, and personality traits' moderating role.

The Current Study

The current study aims to determine the relationship between age, telework frequency personality traits and work-life well-being. Additionally, the study aims to determine if age and personality traits extraversion and neuroticism moderate work-life well-being. The research may provide potential insights to help teleworkers, employers, human resource specialists, and legislators develop strategies, policies and interventions to support

teleworkers work-life well-being. The following questions and hypotheses are investigated based on the study aims.

Research Question 1: Are the differences in work-life well-being scores between full-time and hybrid teleworkers? Hypothesis 1: There will be a difference in work-life well-being scores between full-time and hybrid teleworkers.

Research Question 2: Is there a relationship between age and teleworker work-life well-being scores? Hypothesis 2: There will be a relationship between age and teleworker work-life well-being scores.

Research Question 3: Is there a relationship between the Big Five personality traits and work-life well-being scores. Hypothesis 3: There will be a correlation between the five Big Five personality traits and teleworker work-life well-being scores.

Research Question 4: How well are work-life well-being scores explained by the predictor variables age and the Big Five personality traits; extraversion and neuroticism. Hypothesis 4: Age and the Big Five personality traits extraversion and neuroticism will make a unique contribution to predicting work-life well-being scores.

Method

Participants

A total of 182 adult teleworker participants took part in the current study (121 males and 61 females, mean age of 45.98 years, *SD* = 10.30, range 23 to 66 years). A statistical power analysis was conducted using the G*Power tool (Faul, Erdfeldr, Lang & Buchner, 2007, 2009) for the study's regression analysis. The current study sample exceeded the calculated minimum sample size of *n* = 119. Participants were recruited through non-probability, convenience sampling. Using the researcher's personal LinkedIn, Twitter, Facebook and Instagram social media accounts participants were recruited using social media postings that included a brief study description and link to the study survey. Participants were also asked to share the research study website with others, potentially increasing study participants using a snowballing effect. The study used a purposive sampling strategy that included adults over the age of 18 years old in paid contract employment, working in a telework capacity using ICT to carry out work tasks during the working week. In the sample, 53.8% self-reported as full-time teleworkers (64 males and 34 females) and 46.2% as hybrid teleworkers (57 males and 27 females). Participants were treated according to the National College of Ireland Research Ethics. Participants received no incentive or remuneration for participation in the current study.

Measures

Participants used a computer, tablet or mobile device with internet access to complete the online study. All participants completed an initial demographics survey and then completed the work-life well-being questionnaire and finally the personality questionnaire. Participants were asked to initially complete a demographics survey to report their age, gender, current employment status, employment sector, telework frequency and telework home-based environment. This information provided salient information on the study

participant's profile relating to telework. The demographics survey questions included free text and multiple-choice response options (see Appendix A).

Work-Life Well-Being Questionnaire. E-Work Life (EWL) Scale from (Grant et al., (2019). The questionnaire can be used in non-commercial research following permission from the corresponding author (Grant et al., 2019). The researcher received approval to use the EWL scale for the current study. The EWL scale contains 17 self-rated items, which provides a global score (see Appendix B). The total score is the sum of the four-factor scores: Work-Life Interference, Organisational Trust, Effectiveness and Productivity and Flexibility. Each item scale statement was modified to replace the word "e-work/e-working" with "telework/teleworking" to maintain phrase continuity throughout the study procedure. Each participant provided a rating for each item presented. The questionnaire was presented with an instruction that the participant must rate each item to complete the questionnaire. Therefore, the participant rated their response to each item with one of the following options (1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree). Item 7 is the only reverse score item and was recoded before any calculations and analysis. Each factor score was summed to calculate a total score ranging from 17 to 85. Higher total scores reflected self-reported higher overall work-life well-being.

The Work-Life Interference factor incorporates seven items developed to capture teleworker work-life balance. Item 7 of the seven items in this factor was reverse scored. For example, the item question for this factor is as follows: "*When teleworking from home, I do not know when to switch off/put work down so that I can rest"*. The Organisational Trust factor incorporates three items. For example, an item question for this factor is as follows: "*My organisation provide training in teleworking skills and behaviour"*. The Effectiveness and Productivity factor incorporates four items. For example, an item question for this factor is as follows: "*Telework makes me more effective to deliver against my key objective and*

deliverables". Finally, the Flexibility factor incorporates three items. For example, an item question for the factor is as follows: "*My supervisor gives me total control over when and how I get my work completed when teleworking"*.

The researchers postulate that the EWL scale provides internally reliable and construct validity evidence (Grant et al., 2019). The researchers emphasise that in developing and validating the EWL scale, study participants also completed three subscales of the Health Survey SF-36v 2 (Ware et al., 2008), including the General Health scale, Vitality scale and Mental Health scale. The Effectiveness and Productivity and Organisational Trust factor positively correlate with the Vitality and Mental Health scale. The Flexibility factor positively correlates with the Mental Health scale, and finally, the Work-Life Interference factor negatively correlates with the Mental Health scale. As measured by General Health, Vitality and Mental Health scale, individual well-being resulted in a statistically significant correlation with the four factors of the EWL scale (Grant et al., 2019). The factor scales reports good internal consistency based on Factor Determinacy scores; Work-Life Interference (.93), Organisational Trust (.86), Effectiveness and Productivity (.90) and Flexibility (.84), respectively (Grant et al., 2019). Factor Determinacy scores ≥ .70 suggests support for good internal consistency (Tabachnick & Fidell, 2007). The Cronbach's alpha for the EWL scale in the current study had acceptable internal consistency ($\alpha = .75$). Research indicated that a Cronbach's alpha value of .70 - .80 is acceptable for internal consistency (i.e., reliability) of scales (Fields, 2013).

Personality Questionnaire. Big Five Inventory (BFI-10) scale (Rammstedt & John, 2007). The scale can be used in non-commercial research without written approval from the authors (Rammstedt & John, 2007). The BFI-10 contains ten self-rated items, which produces a score for each core trait of the Big Five inventory (see Appendix C). The questionnaire was presented with an instruction that the participant must rate each item to complete the

questionnaire. Each trait score represents the sum score of 2-items per trait: extraversion, agreeableness, openness, conscientiousness and neuroticism. The scale for each trait represents one true and one false score item. The false score item per trait was reverse-scored and recoded before any calculations and analysis. An example of a true score question for the trait of extraversion is as follows: "*I see myself as someone who is outgoing, sociable"*, where the participant would rate their response based on one of the following options (1 = disagree strongly; 2 = disagree a little; 3 = neither agree nor disagree; 4 = agree a little; 5 = agree strongly). The false score question for the trait of extraversion is as follows: *"I see myself as someone who is reserved",* and reverse scored. Each personality trait score is summed to calculate a total score ranging from 2 to 10. Higher trait scores indicate a tendency towards each trait behaviour. Rammstedt and John (2007) highlights that the BFI-10 scale is an appropriate psychometric instrument and preserves significant correlation levels of reliability and validity with the facets of the NEO-PI-R (Costa & McCrae, 1992) and the Big Five Inventory (BFI-44) 44 item instrument (John, Donahue & Kentle, 1991). The researchers advocate that the BFI-10 provides an adequate measurement where data collection time is constrained for personality assessment research. Although the BFI-10 contains is a very short subset of the original BFI-44, studies indicate that it predicts almost 65% of BFI-44 scale variance and 85% test-retest reliability (Rammstedt & John, 2007). Previous research has shown acceptable reliability given each factor is based on two-items with Cronbach's alpha ranges for trait extraversion (.89 – .46), agreeableness (.74 – .24), conscientiousness (.82 – .62), openness (.79 – .36) and neuroticism (.82 – .55) reported (Balgiu, 2018; Rammstedt & John, 2007). The Cronbach's alpha for the BFI-10 in the current study for trait extraversion (α = .72), agreeableness (α = .24), conscientiousness (α = .57), openness (α = .26) and neuroticism (α = .62). The Cronbach's alpha obtained for extraversion, conscientiousness, and neuroticism are acceptable given they are over the minimum of .45 allowed for two-item

scales (Eisinga, Grotenhuis & Pelzer, 2012). However, a cautious interpretation of results is commensurate with the level of reliability.

Design

The current study used a quantitative, non-experimental, cross-sectional design. An alpha level of .05 was used for all statistical tests. For hypothesis one, a between-groups design was implemented based on (IV) at two levels; Full-Time and Hybrid telework and (DV) EWL scores. A within-group correlation was implemented for hypothesis two, based on two continuous variables; age and EWL scores. A within-group correlation was implemented for hypothesis three based on six continuous variables; extraversion, agreeableness, openness, conscientiousness, neuroticism traits, and EWL scores. Finally, a within-group standard multiple regression was implemented for hypothesis four based on three predictor variables (PV's): age, extraversion, and neuroticism. The criterion variable was the EWL scores related to work-life well-being.

Procedure

Participants completed the study online through a survey hosted on the Survey Monkey platform. An initial pilot study was conducted for the survey with five teleworker volunteers for feedback on any issues with the invitation, study instructions, presentation or layout, and an estimate for the time required to complete the study. No issues were reported, and the average time for study completion was 8 minutes. This study completion time was used to update the study information sheet to approximately less than 10 minutes to complete. The pilot data were included in the main analysis. The researcher published the invitation to the study on their social media accounts, including; LinkedIn, Twitter, Facebook and Instagram. The social media postings included a summarised study description, purpose and participation criteria and included an open invitation to view further study information and enrol by clicking the hyperlink or scanning the QR code (see Appendix D). The first online

page presented the Study Information Sheet (see Appendix E). The Study Information Sheet provided details about the researcher, the purpose of the study, ethical approval confirmation, confidentiality statement and highlighted any possible risks of taking part. The researcher and supervisor's contact details were provided if participants had any questions before enrolling in the study. Participants were informed that participation was voluntary, that they could not be identified during or following the study and that they could withdraw at any time without penalty. Participants were advised that once they submitted data on completion of the study, they could not withdraw, as the data would be anonymised.

The second page of the survey presented the Study Informed Consent Form (see Appendix F). To enrol in the study, participants were required to confirm that they were an adult over the age of 18 years and their participation was voluntary, and the data they provided could be used by the researcher in academic journals, conferences or events. Following consent to enrol in the study, participants were presented with a 6-item Demographics Survey (see Appendix A). Participants were asked to provide information on age, gender, current employment status, employment sector, telework frequency and telework home-based environment. Participants then completed the EWL questionnaire and finally the BFI-10 questionnaire. Following submission of final responses, participants were presented with the final page of the study; the Study Debriefing Sheet (see Appendix G). Participants were thanked for taking part and engaging in the research study and invited to share the study link with others that telework who might also like to participate in the study. Finally, a list of relevant support organisation contacts details was provided in the event that any questions in the study caused the participant distress (see Appendix G).

Ethical Considerations

The study presented a minimal risk to the participants. The survey and questionnaires used to collect data are considered appropriate to the general public. The researcher's skills

and capabilities were at the appropriate level to conduct this research. The National College of Ireland Ethics Committee provided ethical approval to the researcher prior to the commencement of the study. The Survey Monkey platform was used for this study and is ISO27001 certified for security management. All collector information was set to "off" prior to the study to ensure no electronic tracking was available that could potentially identify participants. Data collected was anonymised so that no participant could be identified during or following the study. All participants provided informed consent and were informed that they had the right to withdraw at any time during survey completion without penalty. Data were anonymised immediately after the submission of responses, and participants did not then have the right to withdraw their information. It is essential to highlight that participants may have been involved in full-time telework due to mandatory pandemic restrictions during the study phase. Some questions may have caused distress. Therefore, the Study Debriefing Sheet provided a list of appropriate contacts for support (see Appendix G).

Results

Descriptive statistics

The study data is taken from a sample of 182 participants (*n* = 182). The majority of the sample 78% (*n* = 142) worked in the IT & Telecommunication industry, 4.4% (*n* = 8) worked in Government, 2.7% (*n* = 5) in Banking and Finance, 2.2% (*n* = 4) in Education, 2.2% (*n* = 4) in Healthcare, 2.2% (*n* = 4) in Retail and Hospitality, 1.7% (*n* = 3) in Advertising and Marketing and 6.6% (*n* = 12) in Other industries. Frequencies for gender, telework frequency and employment status; see Table 1.

Table 1

Frequencies for gender, telework frequency and employment status on each demographic variable (n = 182)

Variable	Frequency	Valid %
Gender		
Male	121	66.5
Female	61	33.5
Telework Frequency		
Full-Time Telework	98	53.8
Hybrid Telework	84	46.2
Employment Status		
Full-Time	169	92.9
Part-Time	13	7.1

Descriptive statistics for each of the measured variables in the current study are presented in Table 2. A preliminary analysis indicated that EWL work-life well-being scores and age approximated normality; however, personality traits (extraversion, agreeableness and conscientiousness) were negatively skewed and not normally distributed. Personality traits neuroticism and openness were positively skewed and not normally distributed. Personality trait orientation (extraversion, openness, agreeableness and conscientiousness) were moderate-to-high in the current study sample. Additionally, no outliers were identified following inspection of the data for all continuous variables. Histograms for all continuous variables (see Appendix I).

Table 2

Descriptive statistics for age, work-life well-being (EWL), personality traits (BFI-10) and probability distribution (n = 182)

Variable	*M* [95% CI]	*Median*	*SD*	Skewness	Kurtosis	Range
Age	45.98 [44.47, 47.48]	47.00	10.30	-.466	-.306	23 - 66
EWL	59.49 [58.43, 60.56]	59.00	7.26	-.150	-.262	40 - 75
Personality Traits						
Extraversion	7.19 [6.89, 7.50]	7.00	2.13	-.331	.-867	2 - 10
Openness	6.85 [6.60, 7.09]	7.00	1.67	.052	-.505	3 - 10
Agreeableness	7.72 [7.50, 7.94]	8.00	1.50	-.253	-.500	4 - 10
Conscientiousness	8.93 [8.74, 9.13]	9.00	1.31	-1.063	.022	5 - 10
Neuroticism	5.07 [4.76, 5.38]	5.00	2.13	.358	-.786	2 - 10

Inferential statistics

Hypothesis 1: The difference in work-life well-being (as measured by the EWL) between full-time and hybrid teleworkers was investigated using an independent samples t-test. Preliminary analyses were performed to ensure no violation of assumptions of normality and homogeneity of variance. The EWL Q-Q plot presented a reasonably straight line of observable values plotted against expected values for normal distribution. Shapiro-Wilk test of normality was non-significant (p = .214). Levene's test for equality of variance was non-significant (p = .964). The independent samples t-test indicates no significant difference in scores for full-time teleworkers (M = 59.61, SD = 7.36) and hybrid teleworkers (M = 59.36, SD = 7.7.19); t(180) = .236, p = .814), two-tailed. The magnitude of the differences in the means (mean difference = .26, 95% CI = -1.88, 2.39) was very small (Cohen's d = .04). The current study results suggest that work-life well-being scores are similar for full-time and hybrid teleworkers.

Hypothesis 2: The relationship between age and work-life well-being (as measured by the EWL) was investigated using a Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. The EWL and Age variable Q-Q plot presented a reasonably straight line of observable values plotted against expected values for normal distribution. Visual inspection of the Scatterplot associated with the EWL and Age variable did not show parabolic or exponential curves; therefore, the data meet the assumptions of linearity; additionally, the linear regression scatterplot shows that residuals were distributed uniformly; therefore, the data meet the assumptions of homoscedasticity. Pearson product-moment correlation coefficient indicates no correlation between the two variables (r = .009, n = 182, p = .900), two-tailed. The two variables shared approximately .0% of the variance in common. The current study results suggest no association between age and work-life well-being scores.

Hypothesis 3: The relationship between the Big Five personality traits (as measured by the BFI-10) and work-life well-being (as measured by the EWL) was investigated using a correlation coefficient. Preliminary analyses were performed to ensure no violations of normality; extraversion, agreeableness, openness, conscientiousness and neuroticism were highly skewed and not normally distributed. Therefore a non-parametric Spearman's Rho rank-order correlation was conducted. There was a weak, negative correlation between the two variables neuroticism and work-life well-being scores, which was statistically significant ($r_s(182) = -.253$, $p < .01$). This indicates that the two variables share approximately 6% of the variance in common. Results indicate that higher levels of neuroticism are associated with lower levels of work-life well-being. There was no significant correlation between the other Big Five personality trait (i.e., extraversion, agreeableness, openness and conscientiousness) variables and work-life well-being; see Table 3.

Table 3

Correlations for all continuous variables (n = 182)

Variable	1.	2.	3.	4.	5.	6.
1. Extraversion	-					
2. Agreeableness	.130	-				
3. Openness	.070	.032	-			
4. Conscientiousness	.151*	.129	-.013	-		
5. Neuroticism	-.318**	-.236**	-.019	-.205**	-	
6. Work-Life Well-being	.90	.90	-.041	.026	-.253**	-

Note: Statistical significance: *$p < .05$; **$p < .01$ (2-tailed)

Hypothesis 4: To investigate how well work-life well-being (as measured by the EWL) could be predicted by age and the Big Five personality traits extraversion and neuroticism (as measured by the BF1-10), a standard multiple regression was performed. Preliminary analyses were conducted to ensure no violations of linearity, multicollinearity and homoscedasticity. No variables had a bivariate correlation above .7, and Tolerance and VIF were in acceptable range. Normal P-P plot presented a reasonable straight line. The Scatterplot of standardised residuals displayed a rectangular distribution of scores. The review indicated that the data was a good fit for multiple regression analysis. As no *a prior* hypotheses about the order of entry of the predictor variables had been made, the analysis was conducted using a direct technique. The three predictor variables explained 6.8% of the variance in work-life well-being scores, (F (3, 178) = 4.307, p = .006). As can be seen from Table 4, neuroticism was the only significant predictor of work-life well-being scores, recording a beta value (β = -.266, p = .001). The results indicated that increased levels of neuroticism predict lower levels of teleworker work-life well-being.

Table 4

Standard multiple regression model predicting work-life well-being scores (n = 182)

Variable	R^2	*B*	*SE*	β	*t*	*p*
Model	.068**					.006
Age		-.057	.054	-.081	-1.052	.294
Extraversion		.087	.262	.025	.332	.740
Neuroticism		-.908	.278	-.266**	-3.264	.001

Note: R^2 = R-squared; B = unstandardised beta value; SE = standard errors of B; β = standardised beta value; Statistical significance: $^{**}p < .01$

To summarise, there was a significant negative correlation between the personality trait neuroticism and work-life well-being scores. Higher levels of neuroticism were associated with lower levels of work-life well-being. Additionally, the personality trait neuroticism predicted work-life well-being scores to a statistically significant level, indicating that increased levels of neuroticism predict lower levels of teleworker work-life well-being. Although work-life well-being levels were higher for full-time teleworkers, the finding was not significant, with a very small difference in work-life well-being levels between full-time and hybrid teleworkers.

Discussion

The current study used a quantitative, non-experimental, cross-sectional design and aimed to determine the relationship between age, telework frequency, personality traits and work-life well-being. Additionally, the study aimed to determine if age and personality traits extraversion and neuroticism moderated work-life well-being. Prior research has shown that telework is generally more beneficial for employees; however, existing gaps remain in the literature related to work-life well-being outcomes (Como et al., 2021; Grant et al., 2019). It is generally accepted that telework will increase into the future with increased demand expected post-pandemic (Baker, 2020). However, views differ on telework frequency associated with work-life well-being outcomes. Previous studies have focused on the relationship between age, telework and work-life balance attitudes (Maruyama et al., 2009; Ong et al., 2006; Raišienė et al., 2020), with limited empirical research investigating a relationship between age and teleworker work-life well-being outcomes (Schiebe, 2021). Prior findings suggest there may be a threshold effect where the increased frequency of teleworking may not be beneficial to work-life well-being (Maryuyama et al., 2009; Gajendran & Harrison, 2007; Golden, 2006). Additionally, previous research postulates a robust association between the Big Five personality traits and well-being outcomes in the general population (Anglim & Grant, 2016; Sun et al., 2017). Prior telework research asserts the importance of personality traits with teleworker success, suggesting telework may not be a good fit for everybody (Tavares, 2017; Smith et al., 2018). Through this research four hypotheses were formulated to address the study's aims.

Firstly, for hypothesis one, an independent samples t-test was performed to determine the differences in work-life well-being scores between full-time and hybrid teleworkers. The results of the analysis were non-significant. Although slightly higher for full-time teleworkers, the findings suggest that work-life well-being scores are similar for full-time and

hybrid teleworkers, and hypothesis one is rejected. The study findings are inconsistent with previous research on telework frequency that indicates some evidence of positive affect from moderate levels of telework (Gajendran & Harrison, 2007; Heiden, Widar, Wiitavaara & Boman, 2020; Mueller & Niessen, 2018; Pyöriä, 2011). However, a comparative analysis is challenging as telework frequency is dichotomous in the current study. For example, previous research considered work-life balance and telework frequency based on the number of telework days per month (Gajendran & Harrison, 2007; Heiden et al., 2020), purposively sampled teleworkers working a minimum of two days per month and excluded full-time teleworkers (Mueller & Niessen, 2018) and categorised telework frequency based on part-time home-based telework, work-from-anywhere teleworker and occasional teleworker (Rodríguez-Modroño & López-Igual, 2021). Additionally, research maintains that full-time telework has developed significantly in response to the pandemic and is only emerging as an area of telework research (Chong, Huang & Chang, 2020; Como et al., 2021).

In terms of a possible explanation for the similarity of work-life well-being levels, the sample teleworker population in the current study may provide some insights. Although teleworker frequency is relatively equally distributed in the study sample, the majority of participants identified as ICT sector employees (i.e., 78%). Research suggests that employees in the ICT sector may not have been as affected by the temporal adjustment to full-time telework frequency given the widespread adoption of telework in this cohort pre-pandemic (Ágota-Aliz, 2021). Research suggests that a developed practice of working from home can potentially lead to habituating work behaviour best suited to the individual (Pyöriä, 2011). Although not hypothesised in the current study, 76 per cent of the ICT sector participants reported having a dedicated room in their home for telework, suggesting an established telework environment with a physical boundary between work and domestic life. A recent systematic review of ergonomics and the telework phenomenon establishes that home-office,

health and well-being remain an under-researched area (de Macêdo et al., 2020). The study findings potentially add further insights to the literature by identifying the ICT telework cohort for further research. Future mixed methods research with an ICT cohort may posit work practices and strategies that teleworkers and organisations can consider to overcome potential challenges and consequently improve teleworker work-life well-being independent of telework frequency.

Results of the correlation analysis for hypothesis two revealed no relationship between age and work-life well-being. Findings suggest that age is not related to work-life well-being scores, and hypothesis two is rejected. We are aware of only a few studies investigating the relationship between age and work-life well-being, with studies reporting mixed findings. For example, previous research suggests that older teleworkers reported higher work-life balance levels (e.g., Maruyama et al., 2009; Morganson, Major, Oborn, Verive & Heelan, 2010). However, there are sample differences between the current and previous studies, making a comparative investigation difficult. The current study sample ranged between 23 – 66 years old from different organisations. Previous studies investigated work-life balance in a cohort of 35 – 64 year old teleworkers from a single organisation (Maruyama et al., 2009; Morganson et al., 2010). A study investigating age and non-teleworker employee well-being reports higher levels of resilience and emotional competency in older employees associated with minor disturbance to subjective well-being compared to younger employees (Scheibe, 2021).

However, a recent study on telework, work-life balance and subjective well-being included a large sample of 18 – 34 year old teleworkers within a study of 18 – 64 year old participants. Contrary to earlier research, the current study reports a negative linear relationship between age and subjective well-being. The research highlights that the younger and middle-aged cohort in the study report few challenges when teleworking and are more

amiable to communication technologies than older teleworkers. Interestingly, the study also reports that the duration of experience of telework pre-pandemic presents a positive linear relationship with teleworker work-life balance (Raišienė et al., 2020). One possible explanation for age not being related to work-life well-being in the current study is the pre-pandemic experience in the current study sample. The predominance of ICT sector teleworkers in the current study with potentially pre-pandemic telework experience may have weakened the expected association between age and work-life well-being scores. For example, the EWL scale was developed based on a teleworker sample with a minimum of two years of telework experience (Grant et al., 2019). To our knowledge, this is the first study to investigate the relationship between age and work-life well-being using the EWL scale. Further validation of the EWL scale with samples excluding the ICT sector is warranted. Future studies should investigate other variables (e.g., length of service with employer and length of professional career) that may potentially attenuate a relationship between age and work-life well-being outcomes.

For hypothesis three, we proposed that there would be a relationship between the Big Five personality traits and teleworker work-life well-being. Results of the rank-order correlation revealed that of the Big Five personality traits, only neuroticism uniquely correlated with work-life well-being. There was a statistically significant negative correlation between neuroticism and work-life well-being scores. Findings suggest that higher levels of neuroticism are associated with lower levels of work-life well-being, and hypothesis three is partially accepted. However, a comparative analysis of the current study and previous research is complex, as there is a gap in the literature that investigates the Big Five personality traits, telework and domain of work-life well-being (Como et al., 2020; Smith et al., 2018; Zhang et al., 2020). To data the most empirical data on telework and the Big Five personality traits reports on job performance and postulates a significant correlation with

extraversion, neuroticism and conscientiousness (Clark et al., 2012; O'Neill et al., 2009; O'Neill et al., 2014; Schulze & Krumm, 2017), in addition, agreeableness, openness, conscientiousness and neuroticism correlated with telework attitudes, with individuals higher in neuroticism more favourable to telework (Clark et al., 2012). It is important to note that the BFI-10 short-scale reported questionable scale reliability in the current study sample. Additionally, to our knowledge, this is the first study to investigate the Big Five personality traits using the EWL scale. Therefore a cautious interpretation of the results should be applied.

Although the hypothesis is partially accepted, the finds were surprising for the trait extraversion and conscientiousness. For example, previous research suggests that extravert individuals may consider an incompatibility between their personality and telework due to the lack of social connection opportunities, and conscientiousness may relate to work irrespective of location (Clark et al., 2012). It is important to highlight that the current study sample presented, in general, a strong extravert and conscientiousness orientation which may have resulted in the correlation results. As previously mentioned, the dominance of ICT sector teleworkers in the study sample may have mediated study finds. It could be inferred that the use of communication applications in the ICT sector is more developed than other sectors, potentially facilitating the needs of both extravert and conscientiousness tendencies and work-life well-being levels. Future research should consider teleworker individual difference and the potential moderating role of technology on work-life well-being outcomes.

Finally, for hypothesis four, we proposed that age and the personality traits extraversion and neuroticism will make a unique contribution to predicting work-life well-being scores. Findings of the standard multiple regression revealed that the model explained a small variance in work-life well-being scores; however, neuroticism predicted work-life well-being scores to a statistically significant level and hypothesis four is partially accepted.

However, personality traits and the relationship between telework and work-life well-being remains largely unexplored in the literature (Charalampous, Grant & Tramontano, 2021). The exceptions are studies that investigate telework and individual difference concerning affective well-being (Anderson, Kaplan & Vega, 2014) and personality traits as predictors for virtual team success (Luse, McElroy, Townsend & DeMarie, 2013), which negated the ability for an appropriate investigation with the current study methodology. Interestingly, a recent UK longitudinal study investigated the work-life well-being of full-time workers prior to the pandemic and again during involuntary telework. The study findings suggest that well-being was not negatively affected for the majority of workers (Pelly, Doyle, Daly & Delaney, 2021). Although cautious interpretation of the current study results should be applied, heterogeneity in age and personality traits extraversion and neuroticism may potentially be weak predictors of work-life well-being based on the findings of the current study sample. Future research is warranted in new telework samples to replicate the current study results.

Overall the results show that neuroticism is associated with lower telework work-life well-being. The study findings should be considered when recruiting and selecting employees best suited for telework. Organisations should consider interventions that can support individuals with a tendency towards neuroticism, including access to counselling services, mentoring and wellness programs to support emotional regulation and work demands. Further organisational understanding of employee personality traits is an important factor before establishing any intervention that supports improved work-life well-being.

Strengths and Limitations of Existing Study

The study had several strengths. The primary strength of the study was the promotion of the study across several social media platforms at a time when involuntary telework continued to be applied by some organisations due to the pandemic. The situation may have supported the recruitment of a large sample with a relatively even distribution of full-time

and hybrid teleworkers. Additionally, the sample represented a broad age range. A second strength of the study is that it provided further reliability and validity of the EWL scale. Finally, the study highlighted potential areas for future research, including the home-based work environment, the potential moderating effect of ICT usage in relation to personality traits, and telework experience prior to full-time telework on work-life well-being.

However, the study had several limitations. Firstly, the study is cross-sectional, based on self-report, with 78 per cent of the sample from the ICT sector; therefore, findings are not generalisable. This may be a minor limitation as only neuroticism presented a statistically significant finding related to work-life well-being. Secondly, the EWL scale required approval from the author to use and maybe a barrier to further research and replication of this study. Thirdly, telework frequency defined as “hybrid” represented a broad temporal variable, making comparative analysis with previous studies difficult. Finally, the BFI-10 instrument results presented limitations and may not have provided a good fit for the study. For example, participants may not have understood some of the questions. For the trait extraversion, over 30 per cent of participants identified with being reserved and also outgoing and sociable. Can you be both at the same time? Therefore the robustness of the scale is considered a limitation in the study.

Conclusion

In summary, due to the pandemic, millions of employees have been part of the largest ever telework experiment. Our study investigated teleworker work-life well-being related to age, telework frequency, and personality's moderating role. Our study found that the personality trait neuroticism negatively affected work-life well-being. The novel nature of this study highlights the complexity involved in telework research, with potentially many other factors influencing teleworker work-life well-being. In general, the view is that over the last two years, teleworking has been a positive development, and demand from employees to

sustain hybrid teleworking into the future is evident. However, it is also important to recognise that telework may not suit everybody. Future research should employ mixed-methods research studies with ICT employee samples. It is generally accepted that this sector is the most developed in terms of telework adoption and may provide insights to inform future work-life well-being practices and policies. Additionally, future research should consider the home-office set-up of teleworkers. Study findings may inform human resource policy, legislation and tax relief changes to support teleworkers' physical health and work-life well-being. As teleworkers gradually return to the office, longitudinal research on sustained telework may provide insights into additional support and work-life well-being intervention. Future research should consider personality traits associated with voluntary teleworker decisions on preferred work locations and duration of telework. It is important to highlight that legislative changes have emerged to support employee rights to request telework and disconnect during non-work hours (e.g., Ireland, Spain, Austria) and are in the draft phase in other countries (see Eurofound, 2021). Teleworker health and well-being guidelines need to emerge from this legislation, evidenced by research supporting teleworkers' work-life well-being.

References

Ágota-Aliz, B. (2021). Flexible working practices in the ICT industry in achieving work-life balance. *Studia Universitatis Babes-Bolyai Sociologia*, *66*(1), 29-50. doi: 10.2478/subbs-2021-0002

Aguilera, A., Lethiais, V., Rallet, A., & Proulhac, L. (2016). Home-based telework in France: Characteristics, barriers and perspectives. *Transportation Research Part A: Policy And Practice*, *92*, 1-11. doi: 10.1016/j.tra.2016.06.021

Alexander, B., Ettema, D., & Dijst, M. (2010). Fragmentation of work activity as a multi-dimensional construct and its association with ICT, employment and sociodemographic characteristics. *Journal Of Transport Geography*, *18*(1), 55-64. doi: 10.1016/j.jtrangeo.2009.05.010

Allen, T., Golden, T., & Shockley, K. (2015). How effective is telecommuting? Assessing the status of our scientific findings. *Psychological Science In The Public Interest*, *16*(2), 40-68. doi: 10.1177/1529100615593273

Allport, G. (1961). *Pattern and growth in personality*. New York: Holt, Rinehart & Winston.

Anderson, A., Kaplan, S., & Vega, R. (2014). The impact of telework on emotional experience: When, and for whom, does telework improve daily affective well-being?. *European Journal Of Work And Organizational Psychology*, *24*(6), 882-897. doi: 10.1080/1359432x.2014.966086

Anglim, J., & Grant, S. (2014). Predicting psychological and subjective well-Being from personality: Incremental prediction from 30 facets Over the Big 5. *Journal Of Happiness Studies*, *17*(1), 59-80. doi: 10.1007/s10902-014-9583-7

Athanasiadou, C., & Theriou, G. (2021). Telework: Systematic literature review and future research agenda. *Heliyon*, *7*(10), e08165. doi: 10.1016/j.heliyon.2021.e08165

References

Bailey, D., & Kurland, N. (2002). A review of telework research: findings, new directions, and lessons for the study of modern work. *Journal Of Organizational Behavior*, *23*(4), 383-400. doi: 10.1002/job.144

Baker, M. (2020). *Gartner HR Survey Reveals 41% of Employees Likely to Work Remotely at Least Some of the Time Post Coronavirus Pandemic.* Retrieved from Gartner https://www.gartner.com/en/newsroom/press-releases/2020-04-14-gartner-hr-survey-reveals-41--of-employees-likely-to-

Balgiu, B. (2018). The psychometric properties of the Big Five inventory-10 (BFI-10) including correlations with subjective and psychological well-being. *Global Journal Of Psychology Research: New Trends And Issues*, *8*(2), 61-69. doi: 10.18844/gjpr.v8i2.3434

Baltes, B., Zhdanova, L., & Clark, M. (2010). Examining the relationships between personality, coping strategies, and work-family conflict. *Journal Of Business And Psychology*, *26*(4), 517-530. doi: 10.1007/s10869-010-9207-0

Baruch, Y. (2000). Teleworking: Benefits and pitfalls as perceived by professionals and managers. *New Technology, Work And Employment*, *15*(1), 34-49. doi: 10.1111/1468-005x.00063

Baruch, Y. (2001). The status of research on teleworking and an agenda for future research. *International Journal Of Management Reviews*, *3*(2), 113-129. doi: 10.1111/1468-2370.00058

Bellotti, L., Zaniboni, S., Balducci, C., & Grote, G. (2021). Rapid review on COVID-19, work-related aspects, and age differences. *International Journal Of Environmental Research And Public Health*, *18*(10), 5166. doi: 10.3390/ijerph18105166

References

Belzunegui-Eraso, A., & Erro-Garcés, A. (2020). Teleworking in the context of the Covid-19 crisis. *Sustainability*, *12*(9), 3662. doi: 10.3390/su12093662

Bloom, N., Liang, J., Roberts, J., & Ying, Z. (2014). Does working from home work? Evidence from a Chinese experiment. *The Quarterly Journal Of Economics*, *130*(1), 165-218. doi: 10.1093/qje/qju032

Bouziri, H., Smith, D., Descatha, A., Dab, W., & Jean, K. (2020). Working from home in the time of Covid-19: How to best preserve occupational health?. *Occupational And Environmental Medicine*, *77*(7), 509-510. doi: 10.1136/oemed-2020-106599

Brewer, A. (2000). Work design for flexible work scheduling: Barriers and gender implications. *Gender, Work & Organization*, *7*(1), 33-44. doi: 10.1111/1468-0432.00091

Carlson, D., Grzywacz, J., & Zivnuska, S. (2009). Is work-family balance more than conflict and enrichment?. *Human Relations*, *62*(10), 1459-1486. doi: 10.1177/0018726709336500

Charalampous, M., Grant, C., & Tramontano, C. (2021). "It needs to be the right blend": A qualitative exploration of remote e-workers' experience and well-being at work. *Employee Relations: The International Journal*, *44*(2), 335-355. doi: 10.1108/er-02-2021-0058

Chong, S., Huang, Y., & Chang, C. (2020). Supporting interdependent telework employees: A moderated-mediation model linking daily COVID-19 task setbacks to next-day work withdrawal. *Journal Of Applied Psychology*, *105*(12), 1408-1422. doi: 10.1037/apl0000843

References

Chung, H., & van der Horst, M. (2018). Women's employment patterns after childbirth and the perceived access to and use of flexitime and teleworking. *Human Relations*, *71*(1), 47-72. doi: 10.1177/0018726717713828

Clark, S. (2000). Work/Family border theory: A new theory of work/family balance. *Human Relations*, *53*(6), 747-770. doi: 10.1177/0018726700536001

Clark, L. A., Karau, S. J., & Michalisin, M. D. (2012). Telecommuting attitudes and the 'big five' personality dimensions. *Journal of Management Policy and Practice*, *13*(3), 31-46.

Como, R., Hambley, L., & Domene, J. (2021). An exploration of work-life wellness and remote work during and beyond COVID-19. *Canadian Journal of Career Development*, *20*(1), 46-56.

Cooper, C. (2008). Mental health and well-being at work: the disposal workforce. *International Journal Of Public Health*, *53*(5), 225-226. doi: 10.1007/s00038-008-8090-1

Cooper, C., & Kurland, N. (2002). Telecommuting, professional isolation, and employee development in public and private organizations. *Journal Of Organizational Behavior*, *23*(4), 511-532. doi: 10.1002/job.145

Costa, P., & McCrae, R. (1992). Normal personality assessment in clinical practice: The NEO Personality Inventory. *Psychological Assessment*, *4*(1), 5-13. doi: 10.1037/1040-3590.4.1.5

De Jonge, J., & Schaufeli, W. (1998). Job characteristics and employee well-being: A test of Warr's Vitamin Model in health care workers using structural equation modelling. *Journal Of Organizational Behavior*, *19*(4), 387-407. doi: 10.1002/(sici)1099-1379(199807)19:4<387::aid-job851>3.0.co;2-9

References

de Macêdo, T., Cabral, E., Silva Castro, W., de Souza Junior, C., da Costa Junior, J., & Pedrosa, F. et al. (2020). Ergonomics and telework: A systematic review. *Work*, *66*(4), 777-788. doi: 10.3233/wor-203224

Demerouti, E., Mostert, K., & Bakker, A. (2010). Burnout and work engagement: A thorough investigation of the independency of both constructs. *Journal Of Occupational Health Psychology*, *15*(3), 209-222. doi: 10.1037/a0019408

Dhas, M. D. B., & Karthikeyan, D. P. (2015). Work-life balance challenges and solutions: overview. *International Journal of Research in Humanities and Social Studies*, *12*(2).

Di Martino, V., & Wirth, L. (1990). Telework: A new way of working and living. *International Labour Review.* Vol. 129 No. 5. p 529.

Eisinga, R., Grotenhuis, M., & Pelzer, B. (2012). The reliability of a two-item scale: Pearson, Cronbach, or Spearman-Brown?. *International Journal Of Public Health*, *58*(4), 637-642. doi: 10.1007/s00038-012-0416-3

Eurofound. (2020). *Living, working and COVID-19*. Retrieved from the Publication Office of the European Union https://www.eurofound.europa.eu/publications/report /2020/living-working-and- covid-19

Eurofound. (2021). *Health and well-being at work*. Retrieved from the Publication Office of the European Union https://www.eurofound.europa.eu/topic/health-and-well-being-at-work

Eurostat. (2021). *Employed persons working from home as a percentage of the total employment, by sex, age and professional status* [Data file). Retrieved from https://ec.europa.eu/eurostat/data/database?node_code=lfsa_ehomp

References

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioural, and biomedical sciences. *Behavior Research Methods*, *39*, 175-191

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, *41*(4), 1149-1160. doi: 10.3758/brm.41.4.1149

Fields, A. (2013). *Discovering statistics using IBM SPSS Statistics*. London: Sage Publications.

Gajendran, R., & Harrison, D. (2007). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *Journal Of Applied Psychology*, *92*(6), 1524-1541. doi: 10.1037/0021-9010.92.6.1524

Garrett, R., & Danziger, J. (2007). Which telework? Defining and testing a taxonomy of technology-mediated work at a distance. *Social Science Computer Review*, *25*(1), 27-47. doi: 10.1177/0894439306293819

Gibson, J., Blackwell, C., Dominicis, P., & Demerath, N. (2002). Telecommuting in the 21st century: Benefits, issues, and a leadership model which will work. *Journal Of Leadership Studies*, *8*(4), 75-86. doi: 10.1177/107179190200800407

Golden, T. (2006). The role of relationships in understanding telecommuter satisfaction. *Journal Of Organizational Behavior*, *27*(3), 319-340. doi: 10.1002/job.369

Goodstein, L. D., & Lanyon, R. I. (1999). Applications of personality assessment to the workplace: A review. *Journal of business and psychology*, *13*(3), 291-322. doi:10.1023/A:1022941331649

References

Grant, C., Wallace, L., & Spurgeon, P. (2013). An exploration of the psychological factors affecting remote e-worker's job effectiveness, well-being and work-life balance. *Employee Relations*, *35*(5), 527-546. doi: 10.1108/er-08-2012-0059

Grant, C., Wallace, L., Spurgeon, P., Tramontano, C., & Charalampous, M. (2019). Construction and initial validation of the E-Work Life Scale to measure remote e-working. *Employee Relations*, *41*(1), 16-33. doi: 10.1108/er-09-2017-0229

Greenhaus, J., Ziegert, J., & Allen, T. (2012). When family-supportive supervision matters: Relations between multiple sources of support and work–family balance. *Journal Of Vocational Behavior*, *80*(2), 266-275. doi: 10.1016/j.jvb.2011.10.008

Haddad, H., Lyons, G., & Chatterjee, K. (2009). An examination of determinants influencing the desire for and frequency of part-day and whole-day homeworking. *Journal Of Transport Geography*, *17*(2), 124-133. doi: 10.1016/j.jtrangeo.2008.11.008

Hartig, T., Kylin, C., & Johansson, G. (2007). The telework trade-off: Stress mitigation vs. constrained restoration. *Applied Psychology*, *56*(2), 231-253. doi: 10.1111/j.1464-0597.2006.00252.x

Harpaz, I. (2002). Advantages and disadvantages of telecommuting for the individual, organization and society. *Work Study*, *51*(2), 74-80. doi: 10.1108/00438020210418791

Heiden, M., Widar, L., Wiitavaara, B., & Boman, E. (2020). Telework in academia: Associations with health and well-being among staff. *Higher Education*, *81*(4), 707-722. doi: 10.1007/s10734-020-00569-4

References

Hill, E., Ferris, M., & Märtinson, V. (2003). Does it matter where you work? A comparison of how three work venues (traditional office, virtual office, and home office) influence aspects of work and personal/family life. *Journal Of Vocational Behavior*, *63*(2), 220-241. doi: 10.1016/s0001-8791(03)00042-3

Hofmann, V., & Stokburger-Sauer, N. (2017). The impact of emotional labor on employees' work-life balance perception and commitment: A study in the hospitality industry. *International Journal Of Hospitality Management*, *65*, 47-58. doi: 10.1016/j.ijhm.2017.06.003

Hurtz, G., & Donovan, J. (2000). Personality and job performance: The Big Five revisited. *Journal Of Applied Psychology*, *85*(6), 869-879. doi: 10.1037/0021-9010.85.6.869

Hynes, M. (2014). Telework isn't Working: A policy review. *The Economic and Social Review, 44*(4), 579–602.

John, O., Donahue, E., & Kentle, R. (1991). Big Five Inventory. *Psyctests Dataset*. doi: 10.1037/t07550-000

Judge, T., & Cable, D. (1997). Applicant personality, organizational culture, and organizational attraction. *Personnel Psychology*, *50*(2), 359-394. doi: 10.1111/j.1744-6570.1997.tb00912.x

Judge, T., Heller, D., & Mount, M. (2002). Five-factor model of personality and job satisfaction: A meta-analysis. *Journal Of Applied Psychology*, *87*(3), 530-541. doi: 10.1037/0021-9010.87.3.530

Kelloway, E., & Barling, J. (1991). Job characteristics, role stress and mental health. *Journal Of Occupational Psychology*, *64*(4), 291-304. doi: 10.1111/j.2044-8325.1991.tb00561.x

References

Kniffin, K., Narayanan, J., Anseel, F., Antonakis, J., Ashford, S., & Bakker, A. et al. (2021). COVID-19 and the workplace: Implications, issues, and insights for future research and action. *American Psychologist*, *76*(1), 63-77. doi: 10.1037/amp0000716

Kossek, E., Lautsch, B., & Eaton, S. (2006). Telecommuting, control, and boundary management: Correlates of policy use and practice, job control, and work–family effectiveness. *Journal Of Vocational Behavior*, *68*(2), 347-367. doi: 10.1016/j.jvb.2005.07.002

Kurland, N., & Bailey, D. (1999). The advantages and challenges of working here, there anywhere, and anytime. *Organizational Dynamics*, *28*(2), 53-68. doi: 10.1016/s0090-2616(00)80016-9

Leonardi, P., Treem, J., & Jackson, M. (2010). The connectivity paradox: Using technology to both decrease and increase perceptions of distance in distributed work arrangements. *Journal Of Applied Communication Research*, *38*(1), 85-105. doi: 10.1080/00909880903483599

Lockwood, N. R. (2003). Work/life balance. *Challenges and Solutions, SHRM Research, USA*, 2-10.

Loh, T., & Fishbane, L. (2020). *COVID-19 Makes the Benefits of Telework Obvious.* Retrieved from The Brookings Institution https://www.brookings.edu/blog/the-avenue/2020/03/17/covid-19-makes-the-benefits-of-telework-obvious/

Lunde, L., Fløvik, L., Christensen, J., Johannessen, H., Finne, L., & Jørgensen, I. et al. (2022). The relationship between telework from home and employee health: A systematic review. *BMC Public Health*, *22*(1). doi: 10.1186/s12889-021-12481-2

References

Luong, A., & Rogelberg, S. (2005). Meetings and more meetings: The relationship between meeting load and the daily well-being of employees. *Group Dynamics: Theory, Research, And Practice*, *9*(1), 58-67. doi: 10.1037/1089-2699.9.1.58

Lupton, P., & Haynes, B. (2000). Teleworking – the perception-reality gap. *Facilities*, *18*(7/8), 323-328. doi: 10.1108/02632770010340726

Luse, A., McElroy, J., Townsend, A., & DeMarie, S. (2013). Personality and cognitive style as predictors of preference for working in virtual teams. *Computers In Human Behavior*, *29*(4), 1825-1832. doi: 10.1016/j.chb.2013.02.007

Maltby, J., Day, L., & Macaskill, A. (2017). *Introduction to personality, individual differences and intelligence* (4th ed., p. 166-189). Harlow: Pearson/Prentice Hall.

Mann, S., & Holdsworth, L. (2003). The psychological impact of teleworking: stress, emotions and health. *New Technology, Work And Employment*, *18*(3), 196-211. doi: 10.1111/1468-005x.00121

Marks, S., & MacDermid, S. (1996). Multiple roles and the self: A theory of role balance. *Journal Of Marriage And The Family*, *58*(2), 417. doi: 10.2307/353506

Martin, B., & MacDonnell, R. (2012). Is telework effective for organizations?. *Management Research Review*, *35*(7), 602-616. doi: 10.1108/01409171211238820

Maruyama, T., Hopkinson, P., & James, P. (2009). A multivariate analysis of work-life balance outcomes from a large-scale telework programme. *New Technology, Work And Employment*, *24*(1), 76-88. doi: 10.1111/j.1468-005x.2008.00219.x

Mellner, C. (2016). After-hours availability expectations, work-related smartphone use during leisure, and psychological detachment. *International Journal Of Workplace Health Management*, *9*(2), 146-164. doi: 10.1108/ijwhm-07-2015-0050

References

Messenger, J., Vargas Llave, O., Gschwind, L., Boehmer, S., Vermeylen, G., & Wilkens, M. (2017). *Working anywhere, anytime: The effects on the world of work*. Retrieved from the Publication Office of the European Union https://www.eurofound.europa.eu/publications/report/2020/living-working-and-covid-19

Montreuil, S., & Lippel, K. (2003). Telework and occupational health: A Quebec empirical study and regulatory implications. *Safety Science*, *41*(4), 339-358. doi: 10.1016/s0925-7535(02)00042-5

Morganson, V., Major, D., Oborn, K., Verive, J., & Heelan, M. (2010). Comparing telework locations and traditional work arrangements. *Journal Of Managerial Psychology*, *25*(6), 578-595. doi: 10.1108/02683941011056941

Mueller, T., & Niessen, C. (2018). Self-leadership in the context of part-time teleworking. *Academy Of Management Proceedings*, *2018*(1), 14292. doi: 10.5465/ambpp.2018.14292abstract

Nilles, J.M. (1975). Telecommunications and organizational decentralization. *IEEE Transactions On Communications*, *23*(10), 1142-1147. doi: 10.1109/tcom.1975.1092687

Nilles, J.M. (1998). *Managing telework: Strategies for managing the virtual workforce* (pp. 271-275). New York: John Wiley & Sons.

Noonan, M., & Glass, J. (2012). The hard truth about telecommuting. *Monthly Lab. Rev.*, *135*, 38.

O'Neill, T., Hambley, L., & Bercovich, A. (2014). Prediction of cyberslacking when employees are working away from the office. *Computers In Human Behavior*, *34*, 291-298. doi: 10.1016/j.chb.2014.02.015

References

O'Neill, T., Hambley, L., Greidanus, N., MacDonnell, R., & Kline, T. (2009). Predicting teleworker success: An exploration of personality, motivational, situational, and job characteristics. *New Technology, Work And Employment*, *24*(2), 144-162. doi: 10.1111/j.1468-005x.2009.00225.x

OECD. (2020). *COVID-19: Protecting people and societies.* Retrieved from https://www.oecd.org/coronavirus/policy-responses/covid-19-protecting-people- and-societies-e5c9de1a/

Ong, A., Bergeman, C., Bisconti, T., & Wallace, K. (2006). Psychological resilience, positive emotions, and successful adaptation to stress in later life. *Journal Of Personality And Social Psychology*, *91*(4), 730-749. doi: 10.1037/0022-3514.91.4.730

Pelly, D., Doyle, O., Daly, M., & Delaney, L. (2021). *Worker well-being before and during the COVID-19 restrictions: A longitudinal study in the UK* (No. WP21/05). Working Paper Series.

Peters, P., den Dulk, L., & de Ruijter, J. (2010). May I work from home? Views of the employment relationship reflected in line managers' telework attitudes in six financial-sector organizations. *Equality, Diversity And Inclusion: An International Journal*, *29*(5), 517-531. doi: 10.1108/02610151011052799

Pitt-Catsouphes, M., Matz-Costa, C., & MacDermid, S. (2007). HRD responses to work—family stressors. *Advances In Developing Human Resources*, *9*(4), 527-543. doi: 10.1177/1523422307305491

Pyöriä, P. (2011). Managing telework: risks, fears and rules. *Management Research Review*, *34*(4), 386-399. doi: 10.1108/01409171111117843

References

Raišienė, A., Rapuano, V., Varkulevičiūtė, K., & Stachová, K. (2020). Working from home—Who is happy? A survey of Lithuania's employees during the COVID-19 quarantine period. *Sustainability*, *12*(13), 5332. doi: 10.3390/su12135332

Rammstedt, B., & John, O. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal Of Research In Personality*, *41*(1), 203-212. doi: 10.1016/j.jrp.2006.02.001

Rasmussen, E., & Corbett, G. (2008). Why isn't teleworking working?. *New Zealand Journal of Employment Relations*, *33*(2), 20-32

Reynolds, B. (2017). *Here are the Key Findings in the 2017 State of Telecommuting Report*. Retrieved from https://www.flexjobs.com/employer-blog/key-findings-2017-state-of-telecommuting-report/

Rodríguez-Modroño, P., & López-Igual, P. (2021). Job quality and work—life balance of teleworkers. *International Journal Of Environmental Research And Public Health*, *18*(6), 3239. doi: 10.3390/ijerph18063239

Rudolph, C., Allan, B., Clark, M., Hertel, G., Hirschi, A., & Kunze, F. et al. (2021). Pandemics: Implications for research and practice in industrial and organizational psychology. *Industrial And Organizational Psychology*, *14*(1-2), 1-35. doi: 10.1017/iop.2020.48

Russell, H., O'Connell, P., & McGinnity, F. (2009). The impact of flexible working arrangements on work-life conflict and work pressure in Ireland. *Gender, Work & Organization*, *16*(1), 73-97. doi: 10.1111/j.1468-0432.2008.00431.x

Saari, L., & Judge, T. (2004). Employee attitudes and job satisfaction. *Human Resource Management*, *43*(4), 395-407. doi: 10.1002/hrm.20032

References

Sardeshmukh, S., Sharma, D., & Golden, T. (2012). Impact of telework on exhaustion and job engagement: A job demands and job resources model. *New Technology, Work And Employment*, *27*(3), 193-207. doi: 10.1111/j.1468-005x.2012.00284.x

Scheibe, S. (2021). Employee age moderates within-person associations of daily negative work events with emotion regulation, attention, and well-being. *European Journal Of Work And Organizational Psychology*, *30*(6), 872-886. doi: 10.1080/1359432x.2021.1873772

Schulze, J., & Krumm, S. (2017). The "virtual team player". A review and initial model of knowledge, skills, abilities, and other characteristics for virtual collaboration. *Organizational Psychology Review*, *7*(1), 66-95. doi: 10.1177/2041386616675522

Schwab, K., & Samans, R. (2016). *The future of jobs report.* Retrieved from World Economic Forum https://www3.weforum.org/docs/WEF_Future_of_Jobs.pdf

Smith, S., Patmos, A., & Pitts, M. (2018). Communication and teleworking: A study of communication channel satisfaction, personality, and job satisfaction for teleworking employees. *International Journal Of Business Communication*, *55*(1), 44-68. doi: 10.1177/2329488415589101

Song, Y., & Gao, J. (2018). Does telework stress employees out? A study on working at home and subjective well-being for wage/salary workers. *SSRN Electronic Journal*. doi: 10.2139/ssrn.3301758

Sonnentag, S., & Zijlstra, F. (2006). Job characteristics and off-job activities as predictors of need for recovery, well-being, and fatigue. *Journal Of Applied Psychology*, *91*(2), 330-350. doi: 10.1037/0021-9010.91.2.330

References

Sostero, M., Milasi, S., Hurley, J., Fernandez-Macias, E., & Bisello, M. (2020), "Teleworkability and the COVID-19 crisis: A new digital divide?", *JRC Working Papers Series on Labour, Education and Technology* 2020/05, JRC121193, European Commission.

Spector, P., Jex, S., & Chen, P. (1995). Relations of incumbent affect-related personality traits with incumbent and objective measures of characteristics of jobs. *Journal Of Organizational Behavior*, *16*(1), 59-65. doi: 10.1002/job.4030160108

Steel, P., Schmidt, J., & Shultz, J. (2008). Refining the relationship between personality and subjective well-being. *Psychological Bulletin*, *134*(1), 138-161. doi: 10.1037/0033-2909.134.1.138

Sullivan, C. (2003). What's in a name? Definitions and conceptualisations of teleworking and homeworking. *New Technology, Work And Employment*, *18*(3), 158-165. doi: 10.1111/1468-005x.00118

Sun, J., Kaufman, S., & Smillie, L. (2017). Unique associations between big five personality aspects and multiple dimensions of well-being. *Journal Of Personality*, *86*(2), 158-172. doi: 10.1111/jopy.12301

Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston, MA: Allyn & Bacon

Tavares, A. (2017). Telework and health effects review. *International Journal Of Healthcare*, *3*(2), 30. doi: 10.5430/ijh.v3n2p30

Tett, R., Jackson, D., & Rothstein, M. (2006). Personality measures as predictors of job performance: A meta-analytic review. *Personnel Psychology*, *44*(4), 703-742. doi: 10.1111/j.1744-6570.1991.tb00696.x

References

Thevanes, N., & Harikaran, S. (2020). Work-Life balance and organizational performance: The mediating role of organizational citizenship behavior. *Asian Journal Of Social Sciences And Management Studies*, *7*(4), 280-287. doi: 10.20448/journal.500.2020.74.280.287

van den Heuvel, M., Demerouti, E., & Peeters, M. (2015). The job crafting intervention: Effects on job resources, self-efficacy, and affective well-being. *Journal Of Occupational And Organizational Psychology*, *88*(3), 511-532. doi: 10.1111/joop.12128

Vilhelmson, B., & Thulin, E. (2016). Who and where are the flexible workers? Exploring the current diffusion of telework in Sweden. *New Technology, Work And Employment*, *31*(1), 77-96. doi: 10.1111/ntwe.12060

Ware, J.E., Kosinski, M., Bjorner, J.B., Turner-Bowker, D.M., Gandek, B. and Maruish, M.E. (2008). *User's manual for the SF-36v2 health survey* (2nd ed.). London: Quality Metric Incorporated.

Waizenegger, L., McKenna, B., Cai, W., & Bendz, T. (2020). An affordance perspective of team collaboration and enforced working from home during COVID-19. *European Journal Of Information Systems*, *29*(4), 429-442. doi: 10.1080/0960085x.2020.1800417

Wheatley, D. (2012). Good to be home? Time-use and satisfaction levels among home-based teleworkers. *New Technology, Work And Employment*, *27*(3), 224-241. doi: 10.1111/j.1468-005x.2012.00289.x

Whittle, A., & Mueller, F. (2009). 'I could be dead for two weeks and my boss would never know': Telework and the politics of representation. *New Technology, Work And Employment*, *24*(2), 131-143. doi: 10.1111/j.1468-005x.2009.00224.x

References

Xanthopoulou, D., Bakker, A., Demerouti, E., & Schaufeli, W. (2009). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal Of Vocational Behavior*, *74*(3), 235-244. doi: 10.1016/j.jvb.2008.11.003

Yang, K. (2020). Unprecedented challenges, familiar Paradoxes: COVID-19 and governance in a new normal state of risks. *Public Administration Review*, *80*(4), 657-664. doi: 10.1111/puar.13248

Zhang, S., Moeckel, R., Moreno, A., Shuai, B., & Gao, J. (2020). A work-life conflict perspective on telework. *Transportation Research Part A: Policy And Practice*, *141*, 51-68. doi: 10.1016/j.tra.2020.09.007

Appendix A

Demographic Survey

1. Age: What is your age?
   (Please type your age as a numerical value (e.g. 18)

   [ ]

2. Gender: How do you identify?

   ○ Man
   ○ Woman
   ○ Non-binary
   ○ Prefer to self-describe

   [ ]

3. What is your current employment status?

   ○ Employed Full-Time
   ○ Employed Part-Time
   ○ Freelance – Self Employed
   ○ Prefer to self-describe

   [ ]

4. In which sector do you currently work?

   ○ Advertising & Marketing
   ○ Banking & Finance
   ○ Education
   ○ Government
   ○ Healthcare
   ○ IT & Telecommunications
   ○ Real Estate
   ○ Retail & Hospitality
   ○ Other

   [ ]

5. Telework Frequency: Where do you perform your current job?
   (Telework includes Remote Working | Working from Home (WFH) | Telecommuting | Teleworking | e-Working | Working from Anywhere (WFA).

   ○ Full-Time Teleworker (Work entirely remote from the main office)
   ○ Hybrid Teleworker (Mixture of working in main office and remotely from main office)

6. Telework Home-based Environment: When working from home, how do you define the primary location you use in your home for telework?

   - ○ I have a dedicated room in my home for telework (I telework from a room that provides a physical boundary between my work and domestic life (e.g., home office or study room)
   - ○ I share a space in my home when I telework (there is no physical boundary between my work and domestic life (e.g., kitchen, living room, dining room)

Appendix B

17-Item Version of E-Work Life Scale (Grant et al., 2019)

Instructions: "Please indicate your agreement or otherwise to the statements below"

(5 point- Likert Scale: 1 = strongly disagree - 5 = strongly agree)

Items:

Item No	Item	Dimension
1.	My social life is not poor when *teleworking* remotely	Work/Life interference
2.	My *teleworking* does not take up time that I would like to spend with my family/friends or on other non-work activities	Work/Life interference
3.	When *teleworking* remotely I do not often think about work related problems outside of my normal working hours	Work/Life interference
4.	I am happy with my work-life balance when *teleworking* remotely	Work/Life interference
5.	Constant access to work through *teleworking* is not very tiring	Work/Life interference
6.	I do not feel that work demands are much higher when I am *teleworking* remotely	Work/Life interference
7.	When *teleworking* from home I do not know when to switch off/put work down so that I can rest ***(Recode)***	Work/Life interference
8.	My organisation provides training in *teleworking* skills and behaviours	Organisational Trust
9.	I trust my organisation to provide good *teleworking* facilities to allow me to e-work effectively	Organisational Trust
10.	My organisation trusts me to be effective in my role when I *telework* remotely	Organisational Trust
11.	When *teleworking* I can concentrate better on my work tasks	Effectiveness/ Productivity
12.	*Teleworking* makes me more effective to deliver against my key objectives and deliverables	Effectiveness/ Productivity
13.	If I am interrupted by family/other responsibilities whilst *teleworking* from home, I still meet my line manager's quality expectations	Effectiveness/ Productivity
14.	My overall job productivity has increased by my ability to *telework* remotely/from home	Effectiveness/ Productivity
15.	My work is so flexible I could easily take time off *teleworking* remotely, if and when I want to	Flexibility
16.	My line manager allows me to flex my hours to meet my needs, providing all the work is completed	Flexibility
17.	My supervisor gives me total control over when and how I get my work completed when *teleworking*	Flexibility

Appendix C

Big Five Inventory (BFI-10) Scale (Rammstedt & John, 2007)

Instructions: For example, how well does the statement *I see myself as someone who is reserved to describe your personality*. Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement.

(1) Disagree strongly	(2) Disagree a little	(3) Neither agree nor disagree	(4) Agree a little	(5) Agree strongly

I see myself as someone who…

1. _____ is reserved
2. _____ is generally trusting
3. _____ tends to be lazy
4. _____ is relaxed, handles stress well
5. _____ has few artistic interests
6. _____ is outgoing, sociable
7. _____ tends to find fault with others
8. _____ does a thorough job
9. _____ gets nervous easily
10. _____ has an active imagination
11. _____ *is considerate and kind to almost everybody**

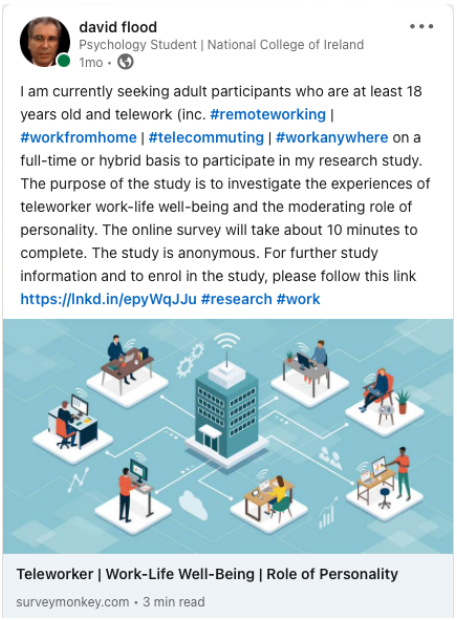
SCORING INSTRUCTIONS

Extraversion: 1R, 6
Agreeableness: 2, 7R
Conscientiousness: 3R, 8
Neuroticism: 4R, 9
Openness: 5R, 10

Appendix D

Invitation to Participate in Study (Social Media Postings)

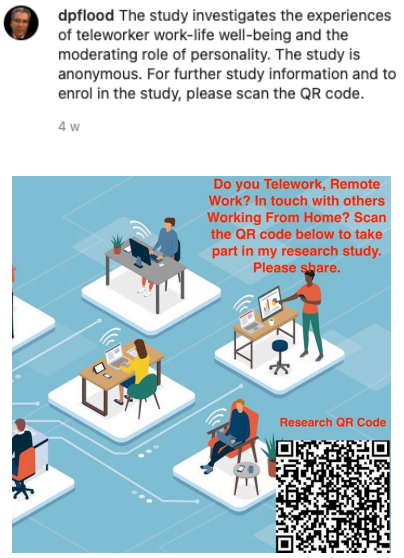
LinkedIn



Twitter

Facebook

Instagram



Appendix E

Study Information Sheet

STUDY TITLE: Teleworker Experiences of Work-Life Well-being and the Moderating Role of Personality.

STUDY INFORMATION: Before you decide, please read the following details.

WHO IS THE RESEARCHER, AND WHAT IS THE STUDY ABOUT?
I am a final year undergraduate in the Department of Psychology at the National College of Ireland. As part fulfilment of my degree, I am undertaking a research study under the supervision of Michèle Kehoe. The study aims to investigate the relationship between telework, work-life well-being and personality to provide insights that can potentially assist teleworkers and their employers in developing strategies that can ensure teleworker work-life well-being.

WHAT WILL THE STUDY INVOLVE?
The study will involve answering a short initial survey and then the completion of two questionnaires. The first questionnaire is a work-life well-being questionnaire, and the second is a short personality questionnaire. It is estimated that the study will take approximately 10 minutes to complete.

WHO HAS APPROVED THIS STUDY?
The study has been reviewed and approved by the National College of Ireland Ethics Committee, and a copy of this approval can be provided on request.

CAN I TAKE PART IN THE STUDY?
I need to recruit adults 18 years or older. Working in a telework capacity away from their main office location during the working week. You can be a full-time or hybrid teleworker. Telework includes Remote Working | Working from Home (WFH) | Telecommuting | Teleworking | e-Working | Working from Anywhere (WFA).

DO I HAVE TO PARTICIPATE IN THIS STUDY?
No. This study is voluntary, and you are not obligated to participate in the study. However, I hope you will provide some of your time to complete a survey and two short questionnaires. If you decide you would like to become a participant, you will be required to provide consent, confirming that you have read both the study information sheet and the consent sheet to proceed. If you decide to change your mind while answering the survey or questionnaires, you can withdraw from the study at any time without providing any reasons for doing so by just closing or exiting out of your web browser. However, your data cannot be withdrawn following completion of the study and submission of your final responses, as your data will effectively be anonymised following your submission.

IS THERE ANY RISK TO TAKING PART?
The survey and questionnaires should not present any risks to you. However, some questions about well-being may cause some distress related to happiness, family interactions and relationship with an employer. If this does occur and you experience any distress and no longer wish to continue, you can withdraw from the study at any time. Additionally, you can contact my research supervisor if you feel the study experience did not match the study brief outlined here.

WILL MY PARTICIPATION IN THIS STUDY BE CONFIDENTIAL?
Yes. The data collected from you will be anonymised to ensure that you cannot be identified during or following the study. Data will be anonymised immediately after you submit your final responses. All data will be encrypted, password protected and stored on an external storage drive in the researcher's office. The data file will only be accessible to the researcher and academic supervisor. Data will be retained for 5 years in accordance with the NCI data retention policy.

WHAT WILL HAPPEN TO THE RESULTS OF THE STUDY?
The results of the study will be presented in my final dissertation, which will be submitted to the National College of Ireland. The results of the project may be submitted to academic journals for publication and presented at conferences or events.

CONTACT FOR FURTHER INFORMATION
Researcher: David Flood Email: x19136676@student.ncirl.ie
Supervisor: Michèle Kehoe | Lecturer | National College of Ireland | Email michele.kehoe@ncirl.ie

Appendix F

Study Informed Consent Form

STUDY TITLE: Teleworker Experiences of Work-Life Well-being and the Moderating Role of Personality.

- I am an adult over the age of 18 years.
- I have read the Study Information Sheet, and by confirming consent, I wish to volunteer for this study.
- I understand that my information during this study will remain confidential, and my identity will remain anonymous during and after the study.
- I understand that I have the right to withdraw from the study at any time by closing or exiting out of my web browser.
- After submitting my final responses, I understand that I will be unable to withdraw my information as the data will be anonymised immediately following submission.
- I understand that I can contact the researcher if I have any questions or require further information on the study at the contact details provided in the study information sheet.
- I understand that if I feel the study experience did not match the study information briefing, I am free to contact the researcher's supervisor at the contact details provided in the study information sheet.
- I understand that a copy of the research findings can be provided to me upon request.
- I accept that the data I provide can be published in academic journals or used in conferences or events and that all data will be anonymised.

Do you confirm consent to participate in this study?

☐ I consent to enrol in the study

Appendix G

Study Debriefing Sheet

Dear study participant,

I would like to thank you for taking part in my study and engaging with my research. If you feel that others would also like to participate in this research, I would be very grateful if you would consider sharing the study link with them. I very much appreciate the time you have given today.

The study aims to investigate the relationship between telework, work-life well-being and personality. Your contribution to this research is greatly appreciated. This area of research is very valuable as more and more people conduct their working week in a telework capacity. I hope this research will highlight areas that could assist teleworkers and employers in developing strategies and policies that could enhance teleworker work-life well-being. If you would like to receive a copy of the research finding produced from this study, please feel free to contact me directly via email: x19136676@student.ncirl.ie.

If you have been affected by any of the questions in this study, please find below further information and support services you may wish to consider contacting.

HSE Helpline - https://www2.hse.ie/well-being/mental-health/yourmentalhealth-information-line.html Tel 1800111888

NHS - https://www.nhs.uk/service-search/mental-health/find-an-urgent-mental-health-helpline

Wellness@Work – Aware - https://www.aware.ie/education/wellnesswork/

Workplace Well-being Ireland - https://www.workwellireland.ie

Mental Health Ireland - https://www.mentalhealthireland.ie/get-support/

Tackle Your Feelings - https://www.tackleyourfeelings.com/need-help/

GROW Ireland https://grow.ie Tel 1890 474474

Samaritans 24-Hour Helpline – 116-123 (Ireland & UK)

Many thanks,

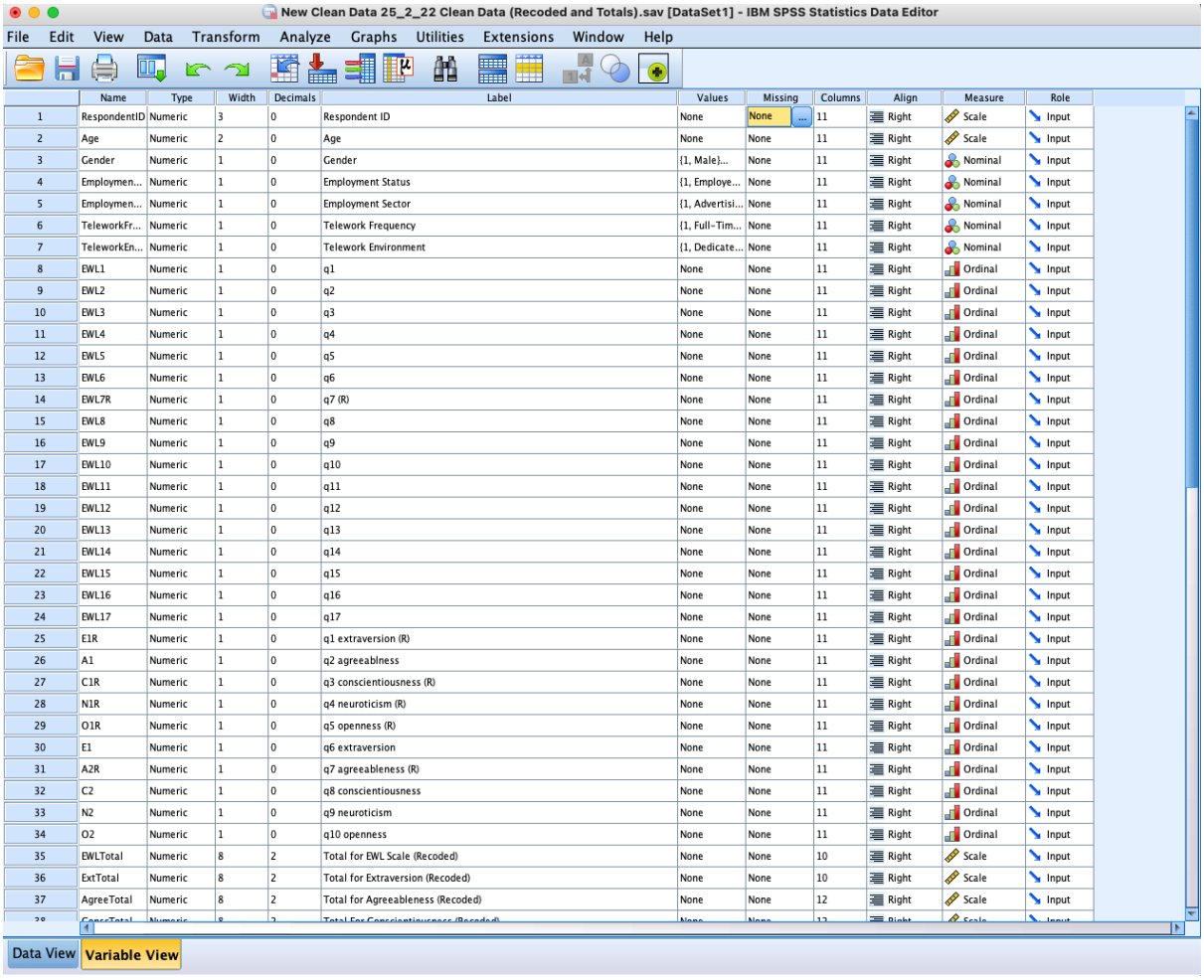
David Flood

Researcher: David Flood Email: x19136676@student.ncirl.ie
Supervisor: Michèle Kehoe | Lecturer | National College of Ireland | Email michele.kehoe@ncirl.ie

Appendix H

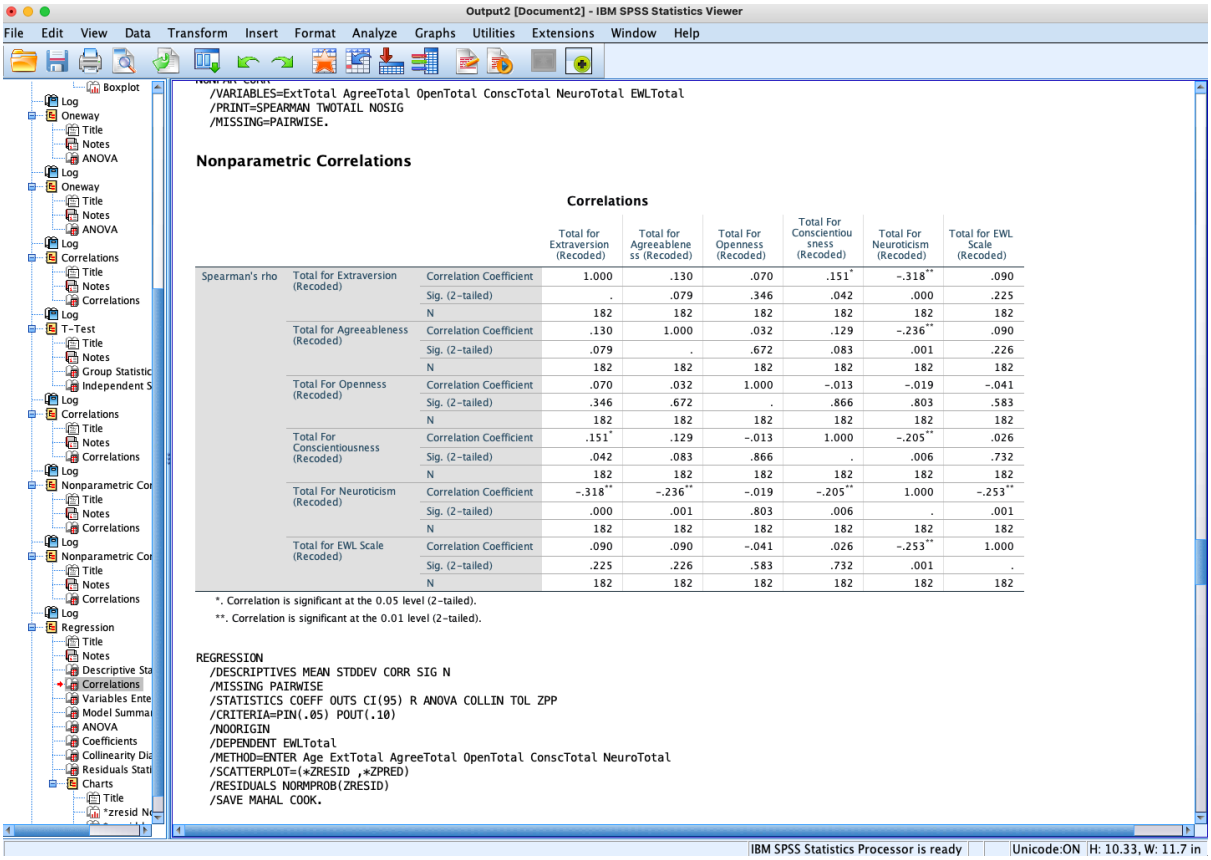
Evidence of Data

(File available on request)



	Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
1	RespondentID	Numeric	3	0	Respondent ID	None	None	11	Right	Scale	Input
2	Age	Numeric	2	0	Age	None	None	11	Right	Scale	Input
3	Gender	Numeric	1	0	Gender	{1, Male}...	None	11	Right	Nominal	Input
4	Employmen...	Numeric	1	0	Employment Status	{1, Employe...	None	11	Right	Nominal	Input
5	Employmen...	Numeric	1	0	Employment Sector	{1, Advertisi...	None	11	Right	Nominal	Input
6	TeleworkFr...	Numeric	1	0	Telework Frequency	{1, Full-Tim...	None	11	Right	Nominal	Input
7	TeleworkEn...	Numeric	1	0	Telework Environment	{1, Dedicate...	None	11	Right	Nominal	Input
8	EWL1	Numeric	1	0	q1	None	None	11	Right	Ordinal	Input
9	EWL2	Numeric	1	0	q2	None	None	11	Right	Ordinal	Input
10	EWL3	Numeric	1	0	q3	None	None	11	Right	Ordinal	Input
11	EWL4	Numeric	1	0	q4	None	None	11	Right	Ordinal	Input
12	EWL5	Numeric	1	0	q5	None	None	11	Right	Ordinal	Input
13	EWL6	Numeric	1	0	q6	None	None	11	Right	Ordinal	Input
14	EWL7R	Numeric	1	0	q7 (R)	None	None	11	Right	Ordinal	Input
15	EWL8	Numeric	1	0	q8	None	None	11	Right	Ordinal	Input
16	EWL9	Numeric	1	0	q9	None	None	11	Right	Ordinal	Input
17	EWL10	Numeric	1	0	q10	None	None	11	Right	Ordinal	Input
18	EWL11	Numeric	1	0	q11	None	None	11	Right	Ordinal	Input
19	EWL12	Numeric	1	0	q12	None	None	11	Right	Ordinal	Input
20	EWL13	Numeric	1	0	q13	None	None	11	Right	Ordinal	Input
21	EWL14	Numeric	1	0	q14	None	None	11	Right	Ordinal	Input
22	EWL15	Numeric	1	0	q15	None	None	11	Right	Ordinal	Input
23	EWL16	Numeric	1	0	q16	None	None	11	Right	Ordinal	Input
24	EWL17	Numeric	1	0	q17	None	None	11	Right	Ordinal	Input
25	E1R	Numeric	1	0	q1 extraversion (R)	None	None	11	Right	Ordinal	Input
26	A1	Numeric	1	0	q2 agreeablness	None	None	11	Right	Ordinal	Input
27	C1R	Numeric	1	0	q3 conscientiousness (R)	None	None	11	Right	Ordinal	Input
28	N1R	Numeric	1	0	q4 neuroticism (R)	None	None	11	Right	Ordinal	Input
29	O1R	Numeric	1	0	q5 openness (R)	None	None	11	Right	Ordinal	Input
30	E1	Numeric	1	0	q6 extraversion	None	None	11	Right	Ordinal	Input
31	A2R	Numeric	1	0	q7 agreeableness (R)	None	None	11	Right	Ordinal	Input
32	C2	Numeric	1	0	q8 conscientiousness	None	None	11	Right	Ordinal	Input
33	N2	Numeric	1	0	q9 neuroticism	None	None	11	Right	Ordinal	Input
34	O2	Numeric	1	0	q10 openness	None	None	11	Right	Ordinal	Input
35	EWLTotal	Numeric	8	2	Total for EWL Scale (Recoded)	None	None	10	Right	Scale	Input
36	ExtTotal	Numeric	8	2	Total for Extraversion (Recoded)	None	None	10	Right	Scale	Input
37	AgreeTotal	Numeric	8	2	Total for Agreeableness (Recoded)	None	None	12	Right	Scale	Input

Evidence of Data

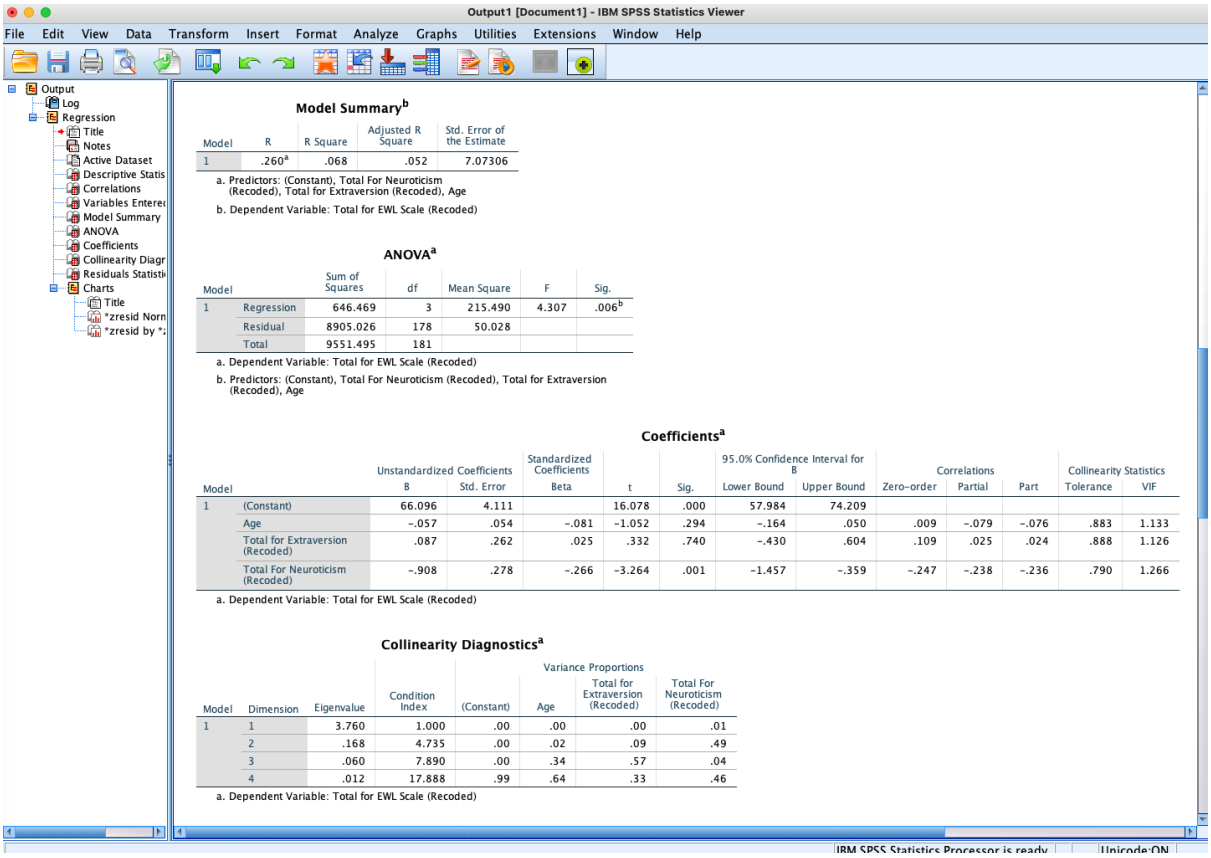


			Total for Extraversion (Recoded)	Total for Agreeableness (Recoded)	Total For Openness (Recoded)	Total For Conscientiousness (Recoded)	Total For Neuroticism (Recoded)	Total for EWL Scale (Recoded)
Spearman's rho	Total for Extraversion (Recoded)	Correlation Coefficient	1.000	.130	.070	.151*	-.318**	.090
		Sig. (2-tailed)	.	.079	.346	.042	.000	.225
		N	182	182	182	182	182	182
	Total for Agreeableness (Recoded)	Correlation Coefficient	.130	1.000	.032	.129	-.236**	.090
		Sig. (2-tailed)	.079	.	.672	.083	.001	.226
		N	182	182	182	182	182	182
	Total For Openness (Recoded)	Correlation Coefficient	.070	.032	1.000	-.013	-.019	-.041
		Sig. (2-tailed)	.346	.672	.	.866	.803	.583
		N	182	182	182	182	182	182
	Total For Conscientiousness (Recoded)	Correlation Coefficient	.151*	.129	-.013	1.000	-.205**	.026
		Sig. (2-tailed)	.042	.083	.866	.	.006	.732
		N	182	182	182	182	182	182
	Total For Neuroticism (Recoded)	Correlation Coefficient	-.318**	-.236**	-.019	-.205**	1.000	-.253**
		Sig. (2-tailed)	.000	.001	.803	.006	.	.001
		N	182	182	182	182	182	182
	Total for EWL Scale (Recoded)	Correlation Coefficient	.090	.090	-.041	.026	-.253**	1.000
		Sig. (2-tailed)	.225	.226	.583	.732	.001	.
		N	182	182	182	182	182	182

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Evidence of Data



Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.260[a]	.068	.052	7.07306

a. Predictors: (Constant), Total For Neuroticism (Recoded), Total for Extraversion (Recoded), Age

b. Dependent Variable: Total for EWL Scale (Recoded)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	646.469	3	215.490	4.307	.006[b]
	Residual	8905.026	178	50.028		
	Total	9551.495	181			

a. Dependent Variable: Total for EWL Scale (Recoded)

b. Predictors: (Constant), Total For Neuroticism (Recoded), Total for Extraversion (Recoded), Age

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	66.096	4.111		16.078	.000	57.984	74.209					
	Age	-.057	.054	-.081	-1.052	.294	-.164	.050	.009	-.079	-.076	.883	1.133
	Total for Extraversion (Recoded)	.087	.262	.025	.332	.740	-.430	.604	.109	.025	.024	.888	1.126
	Total For Neuroticism (Recoded)	-.908	.278	-.266	-3.264	.001	-1.457	-.359	-.247	-.238	-.236	.790	1.266

a. Dependent Variable: Total for EWL Scale (Recoded)

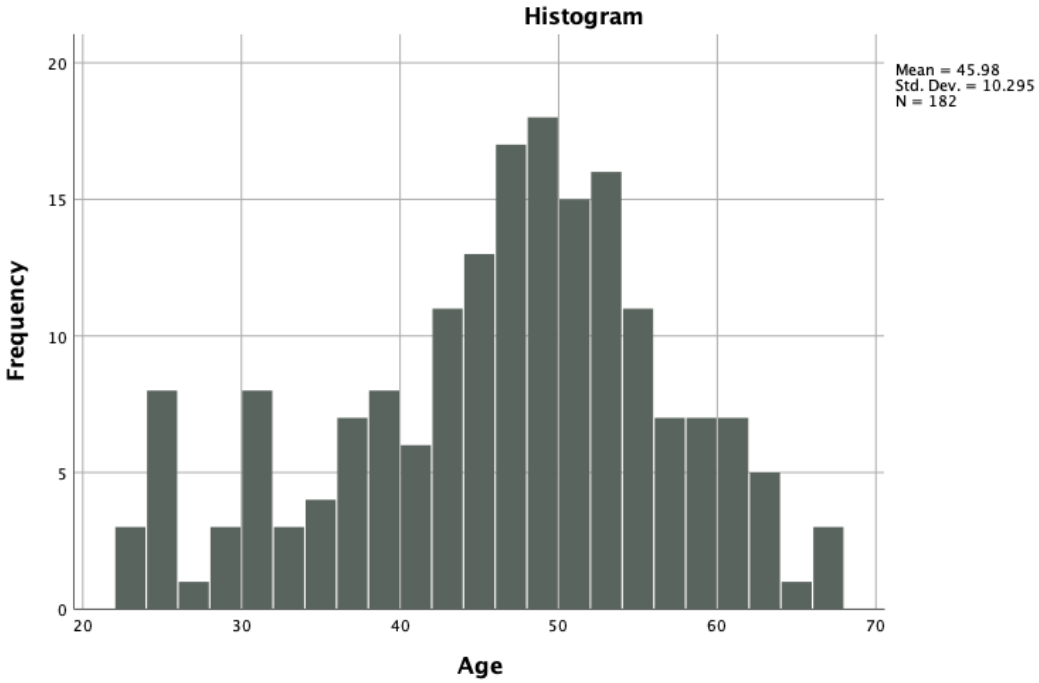
Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	Age	Total for Extraversion (Recoded)	Total For Neuroticism (Recoded)
1	1	3.760	1.000	.00	.00	.00	.01
	2	.168	4.735	.00	.02	.09	.49
	3	.060	7.890	.00	.34	.57	.04
	4	.012	17.888	.99	.64	.33	.46

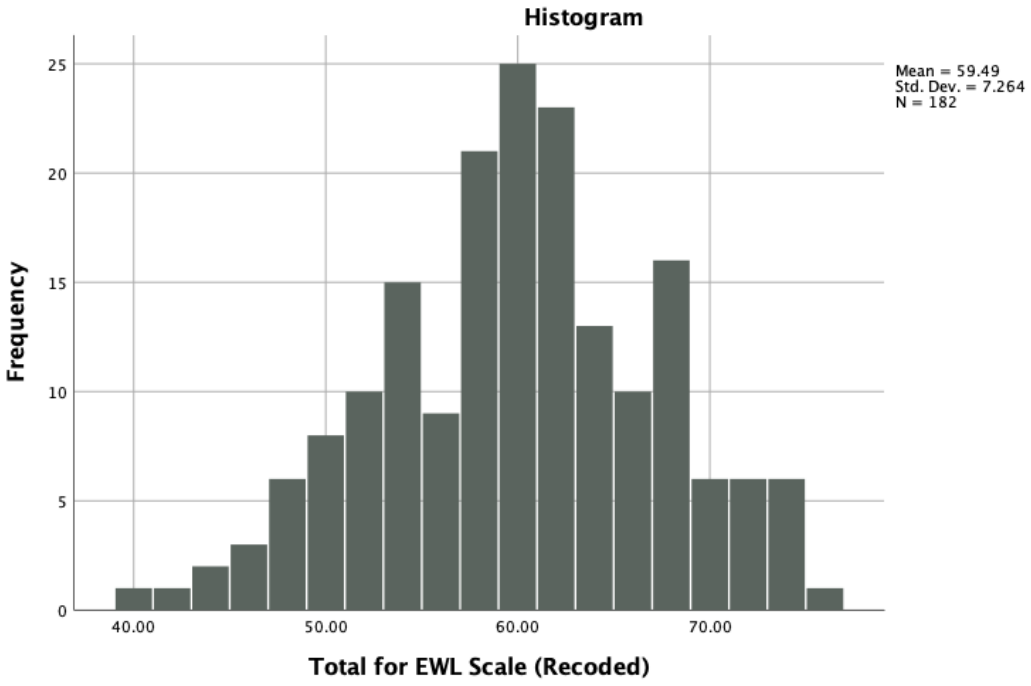
a. Dependent Variable: Total for EWL Scale (Recoded)

Appendix I

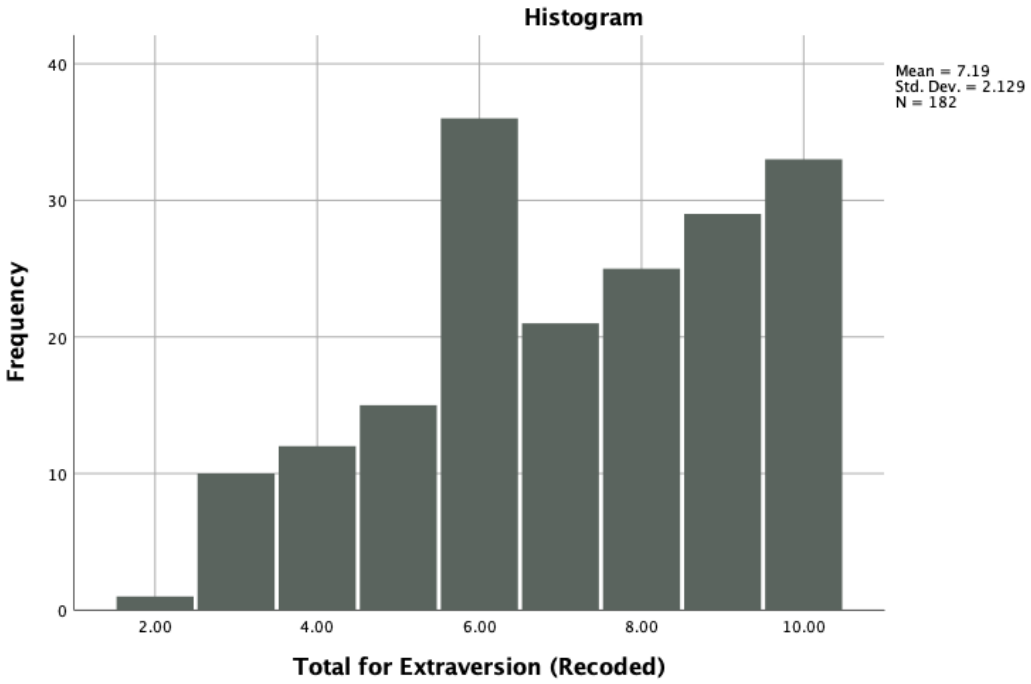
Histogram For Age



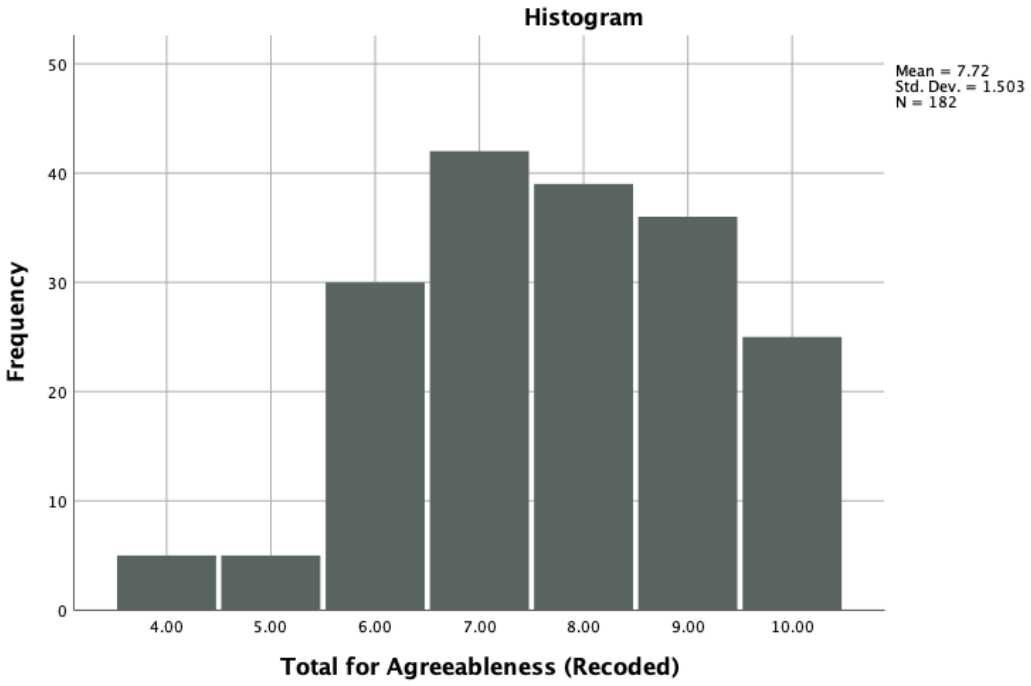
Histogram For Work-life Well-being (EWL Scale)



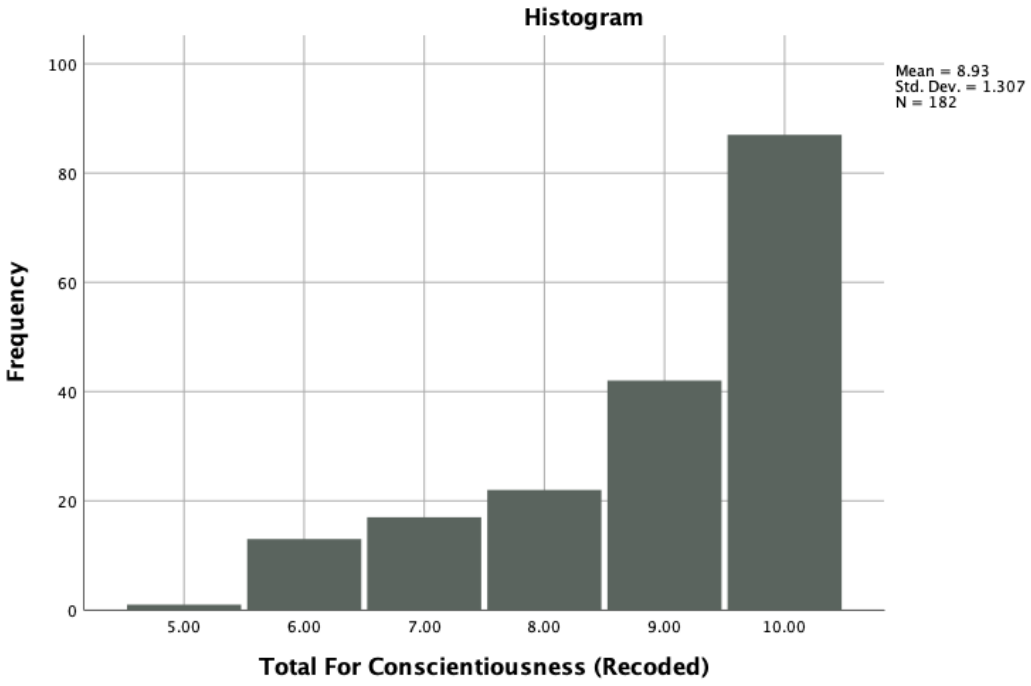
Histogram For Extraversion



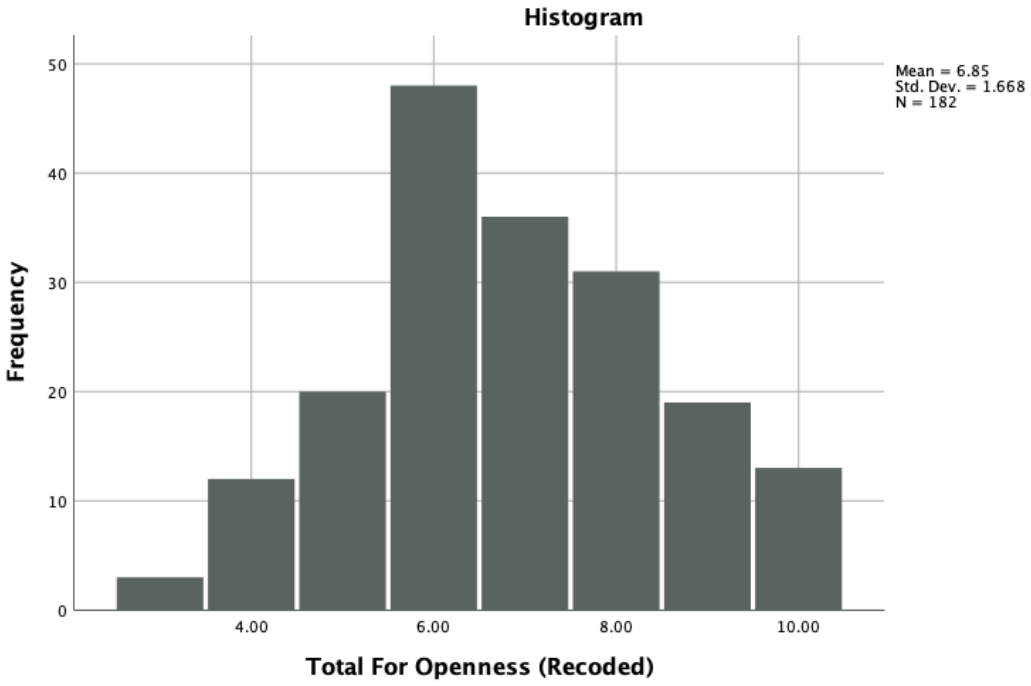
Histogram For Agreeableness



Histogram For Conscientiousness



Histogram For Openness



Histogram For Neuroticism