



Definitive Thesis

The influence of extraversion tendency, perceived stress and COVID-19 on online professional networking behavior preference

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Abstract

As a response to COVID-19, governments around the world have prohibited physical gatherings, including physical networking events. Working from home has become the norm. This thesis aims to examine the impact of extraversion tendency, perceived stress and compliance to COVID-19 social distancing measures in relation to online professional networking behavior. The research question is as follows : “To what extent is extraversion tendency, perceived stress and compliance to the COVID-19 social distancing measures of the working population related to preference for online professional networking behavior preference?”

It is expected that, in line with the *Rich get Richer* perspective, extraversion tendency is positively related to professional networking behavior. Perceived stress is expected to be negatively related to online professional networking behavior, in line with the *Conservation of Resources* perspective. Compliance to COVID-19 social distancing measures is expected to be positively related to online professional network behavior.

63 participants took part in the study. They were asked to fill in a questionnaire inquiring their extraversion tendency, perceived stress, compliance to COVID-19 social distancing measures and their preference for online professional networking behavior. It was found that extraversion tendency and compliance to social distancing measures were positively related to online professional networking behavior preference, but perceived stress was not.

This thesis adds to the literature by finding additional evidence for the *Rich Get Richer* perspective and examining the *Conservation of Resources* in relation to online professional networking behavior. The findings of this thesis contribute to more understanding of online professional networking behavior.

Introduction

The novel coronavirus SARS-CoV-2 (COVID-19) is an infectious respiratory disease that was first detected in China near the end of 2019, and has since spread worldwide (Velavan & Meyer, 2020; WHO, 2020). As COVID-19 spreads primarily via human contact (Bhadra, Mukherjee & Sarkar, 2021), governments worldwide have put social distancing measures in place, in order to discourage physical contact and combat further infection (Van De Poel, 2020). These measures include, but are not limited to: encouraging people to retain physical distance from others (Van De Poel, 2020), prohibiting public events (McCloskey et al., 2020) and encouraging employees and employers to work from home, whenever possible (Van De Poel, 2020).

As of early 2020, most physical events have been prohibited as a response to the COVID-19 pandemic (Van De Poel, 2020), which makes physical networking more difficult since they rely heavily on physical networking events (Wolff & Kim, 2012). As a result, a lot of focus is currently on online professional networking behavior preference (Mecham, Menapace, Bowe & Carlson, 2021). Since it is possible that social distancing measures might persist longer than previously anticipated (Kostoff et al., 2020), and thus physical networking continues to be limited (Wolff & Kim, 2012), it is important to examine what constructs are related to online professional networking behavior preference.

Prior research has shown that a high extraversion tendency is more beneficial than a low extraversion tendency for physical networking behavior preference (Wolff & Kim, 2012), but disagreement exists if this is also the case for online professional networking behavior preference (Reer & Krämer, 2014). Perceived stress is also related to online networking behavior preference, but not much research has been done on perceived stress and online professional networking behavior preference (Wrzus et al., 2013). This thesis aims to examine online professional networking behavior preference of the working population in relation to extraversion tendency, perceived stress in an era where the norm for networking is online because of the COVID-19 pandemic (Gottlieb et al., 2020). It attempts to do so by answering the following research question : “To what extent is extraversion tendency, perceived stress and compliance to the COVID-19 social distancing measures of the working population related to preference for online professional networking behavior preference?”.

No overarching theory linking the aforementioned constructs together was found during the consultation of literature. Consequently, several individual theories regarding the constructs are used to formulate the hypotheses used in this thesis.

Online professional networking behavior preference and COVID-19

According to Wolff, Moser and Grau (2008), networking is the act of building and utilising contacts in order to obtain success in professional endeavours. Networking behavior is the development and maintenance of personal relationships in order to access and exchange work related resources (Wolff, & Kim, 2012). Furthermore, professional networking is beneficial for one's career development; it facilitates a successful career (Wolff & Moser, 2009), aids in job search (Van Hoye, Van Hooft, & Lievens, 2009) and increases job performance (Thompson, 2005). Ansmann et al. (2014) state that professional networking is a skill of utmost importance during early adulthood, as it helps recently graduated individuals in finding a job faster. This benefits both employers as well as employees, as vacancies can be filled in a more timely manner (Ansmann et al., 2014). On top of that, professional networking facilitates the sharing of relevant knowledge between organisations and employees (Wolff & Kim, 2012).

Professional networking behavior preference is related to a plethora of characteristics. Personality plays a role; Wolff and Kim (2012) found that extraversion and openness to experience is positively related to professional networking behavior preference, for example. Experiencing stress can lead to a decrease in networking intention and behavior (Wrzeszus et al., 2013).

As of early 2020, most physical events have been prohibited as a response to the COVID-19 pandemic (Van De Poel, 2020), which makes physical networking more difficult (Wolff & Kim, 2012).

This thesis aims to examine networking behavior preference in relation to extraversion tendency and perceived stress in an era where the norm for networking is in an online space (Gottlieb et al., 2020).

Extraversion tendency and online professional networking behavior preference

Extraversion tendency is a desirable trait to have when it comes to networking behavior preference because it enables individuals to thrive when building and utilizing contacts, which is an integral part of professional networking behavior preference (Wolff et al., 2008; Wolff, & Kim, 2012). Extraversion is the tendency to be energetic, optimistic and having the willingness to socialize (Goldberg, 1993). This thesis will use the trait approach of personality to view extraversion tendency (John, & Srivastava, 1999). According to the trait approach of personality, extraversion and introversion are both on the same psychological dimension; in essence, an introverted person is low on extraversion tendency and vice versa

(Carrigan, 1960; John & Srivastava, 1999). Eysenck and Eysenck (1964) describe individuals low on extraversion tendency as more quiet, introspective and reserved as opposed to individuals who are high on extraversion tendency. Extraversion tendency is related to being more sociable, outgoing and optimistic (Freyd, 1924; Eysenck & Eysenck, 1964). High extraversion tendency seems favorable in most cases because it is associated with higher mental wellbeing and less reported loneliness (Buecker, Maes, Denissen, & Luhmann, 2020; DeNeve, & Cooper, 1998; Lai, Wang, Zaho, Zhang, Yang, & Gong, 2019; Margolis, & Lyumbomirsky, 2020). Moreover, high extraversion tendency is generally associated with more professional opportunities during professional networking (Wolff, & Kim, 2012).

Wolff and Kim (2012) argue that the benefits of high extraversion tendency on networking has to do with *Social Capital Theory*. Social capital is defined as a resource in one's network that can be used to increase chances in life (Tulin, Lancee, & Volker, 2018). High extraversion tendency is related to increased social capital (Tulin et al., 2018; Wolff, & Kim, 2012); the higher one's extraversion tendency, the higher one's social capital. However, a consensus in the literature when it comes to online professional networking behavior preference and extraversion tendency has not been reached – it is unclear if high or low extraversion tendency is more beneficial.

Why is there no agreement in the literature on the role of extraversion tendency on online professional networking behavior preference? Reer and Krämer (2014) attempt to explain this discrepancy by highlighting two different perspectives – The *Rich get Richer* perspective and the *Social Compensation Perspective*. The *Rich get Richer* perspective argues that individuals high in extraversion tendency will have an easier time networking online, since they are generally more open and talkative, which allows them to make connections with relative ease on the internet as well, ever increasing their social capital (Kraut, Kiesler, Boneva, Cummings, Helgeson, & Crawford, 2002).

As a response to the *Rich get Richer* perspective, the *Social Compensation* perspective was put forward (Desjarlais, & Wiloughby, 2010). This perspective states that networking online might be easier for individuals low on extraversion tendency, since the internet removes factors that make physical networking harder. No visual cues and perceived anonymity can aid individuals low on extraversion tendency greatly when networking online, because it helps them more accurately present their true selves (Amichai-Hamburger, Wainapel, & Fox, 2002; McKenna, Green, & Gleeson, 2002).

Disagreements arose because evidence has been found for both the *Rich get Richer* perspective and the *Social Compensation* perspective (Abbas, & Mesch, 2018; Reer, &

Krämer, 2014). This begs the question to what extent extraversion tendency plays a role in online professional networking behavior preference. While both perspectives have been supported in the past, more support has been found for the *Rich get Richer* perspective (Abbes, & Mech, 2018; Gadekar, & Ang, 2020). As a result, it is expected that extraversion tendency is positively related to online professional networking behavior.

Hypothesis 1: Extraversion tendency is negatively related to online professional networking behavior preference.

Perceived Stress and networking

A meta-analysis by Wrzus, Hänel, Wagner and Neyer (2013) revealed that perceived stress has a negative impact on most kinds of networking behaviors, but that it is not yet clear what the role of perceived stress is on online professional network behavior, partly due to a lack of research (Eskin, Şavk, Uslu, & Küçükaydoğan, 2014; Willemen, Koot, Ferdinand, Goossens, & Schuengel, 2008). Perceived stress is defined as the personal reaction to and evaluation of stressors in one's environment (Fiege et al., 2005). The emergence of COVID-19 brought along many new potential sources of stress, such as death of a family member (Mousavi, Hooshyari, & Ahmadi, 2020) and in some severe cases even PTSD (Rossi et al., 2020).

What could the extent of the impact of perceived stress on online professional networking behavior preference be? Prior research focusing on social networking in person found that perceived stress leads to a decrease in the willingness to socialize and reach out (Wrzus et al., 2013). A potential explanation for this could be found in the *Conservation of Resources* theory. The *Conservation of Resources* theory states that individuals try to behave in a manner that maximizes resource retention and gains, and minimizes further loss of resources. These behaviors are based on the current volume of resources an individual has (Hobfoll, 2001). Resources in the *Conservation of Resources* theory are things that individuals value, such as energies, states and objects (Hobfoll, 2001; Zhang, Kwok, Lowry, Liu, & Wu, 2019). Research by Zhang et al. (2019) found that individuals who experience more perceived stress, are less likely to use social networking sites. This is in line with the *Conservation of Resources* theory. Individuals ceased their participation on social networking sites as this was deemed stressful, thus protecting their resources from further depletion (Zhang et al., 2019). Turel, Cavagnaro and Meshi (2018) found that short abstinence of one

week from social networking sites lowers perceived stress, especially in users that excessively use social networking sites.

Even though little to no research was found on this matter, the *Conservation of Resources* theory could possibly apply to online professional networking behavior preference, as online professional networking can be quite stressful (Kintish, 2014; Turel et al., 2018). For example, stress from online professional networking can arise in the form *Technostress* (Jena, 2015). *Technostress* is the stress that arises from the inability to effectively and healthily utilize computer technology (Brod, 1984). Jena (2015) found that academia can suffer from *technostress* when they are unable to effectively use IT services provided by the academic institution, but also when they are pressured to use social networking sites such as LinkedIn but are unable to do so effectively. Atanasoff and Venable (2017) state that *technostress* adds to the level of perceived stress an individual experiences.

Stress from online professional networking is not limited only to *technostress*, however. Individuals engaging in online professional networking behavior preference can inadvertently subject themselves to upwards social comparison (perceiving others as superior) and being exposed to the sheer volume of competitors, which in turn causes stress (Muscanell,& Utz, 2016).

Online professional networking behavior preference can thus be quite stressful. It is therefore expected that, in line with the *Conservation of Resources* theory, that perceived stress is negatively related to online professional networking behavior preference. Individuals suffering from a high volume of perceived stress are less likely to engage in online professional networking behavior preference to conserve their remaining resources.

Hypothesis 2: Perceived individual stress is negatively related to for online professional networking behavior preference.

Compliance to COVID-19 and online professional networking behavior preference

Compliance to COVID-19 social distancing measures proves to be challenging; policies and measures that rely on behavior change are often difficult to enforce (Chernozhukov, Kasahara, & Schrimpf, 2021). Compliance to COVID-19 social distancing measures is defined as the intention, possibility and willingness to comply with social distancing measures (Kuiper et al., 2020). Furthermore, enforcing behavior change via fines and tracking is not feasible in most countries, as it is costly and perceived as unethical (Briscese, Lacetera, Macis, & Tonin, 2020). In an ideal situation, compliance to social

distancing measures should therefore be based on voluntary behavior (Briscese et al., 2020). However, not everyone is voluntarily compliant to these social distancing measures, resulting in some people hosting and attending physical events, despite the government's dissuasion (Kuiper et al., 2020). Compliance to these social distancing measures is related to a number of variables. Folmer et al. (2020) found that compliance to these measures decreased because people thought less of the severity of the virus, or they had less capacity to comply with social distancing measures, for example.

Wiederhold (2020) stated that at the start of the pandemic, when social distancing measures were first introduced, internet and social networking sites usage skyrocketed. Being active on social media was a way to stay in contact with other people without breaking social distancing measures. It was found in many other studies that social networking sites usage was higher during COVID-19 than normal (Issa et al., 2021; Zhang, Zhou, & Lim, 2020). Momtazmanesh et al. (2021) stated that this is because the adverse consequences that social distancing can bring (loneliness, isolation, etc.) can be partly mitigated by using social networking sites. While there is little to no literature available on online professional networking behavior preference in relation to compliance to COVID-19 social distancing measures, it is expected that compliance to COVID-19 social distancing measures is positively related to online professional networking behavior preference, as compliance is related to internet usage and social networking.

Hypothesis 3: Compliance to COVID-19 social distancing measures is positively related to online professional networking behavior preference.

Das et al. (2020) stated that compliance to COVID-19 social distancing measures can be explained through the *Theory of Planned Behavior* (TPB) (Azjen, 1991). The TPB states that behavior is based upon one's intention, and that intention is based upon the attitude, subjective norms and perceived behavioral control (Azjen, 1991). Gibson, Magnan, Kramer and Bryan (2021) found that when it came to social distancing during COVID-19, attitudes, subjective norms and perceived behavioral control were all positively related to the intention to comply with social distancing. Intention, in turn, was related to the actual behavior of social distancing (Gibson et al., 2021).

Folk, Okabe-Miyamoto, Dunn and Lyubomirsky (2020) found that high extraversion tendency is linked to less compliance to COVID-19 social distancing measures, as high extraversion tendency tends to be associated with having a harder time when it comes to

social isolation, and having more social contacts to lose. It is expected that the higher one's extraversion tendency is, the more likely it will be that the attitudes (and thus intention and behavior) towards social distancing will be lower. Therefore, it is expected that compliance to COVID-19 social distancing measures negatively moderate the relationship between extraversion tendency and online professional networking behavior preference.

Hypothesis 4: Compliance to COVID-19 social distancing measures negatively moderates the positive relationship between extraversion tendency and online professional networking behavior preference.

Research by Zhao, Wong, Wu, Choi, Wang and Lam (2020) has shown that being compliant to COVID-19 social distancing measures over a longer period of time can be detrimental to one's mental health. A systematic review by Chiesa, Antony, Wismar and Rechel (2021) revealed that stress is strongly related to prolonged compliance to COVID-19 social distancing measures and being in lockdown.

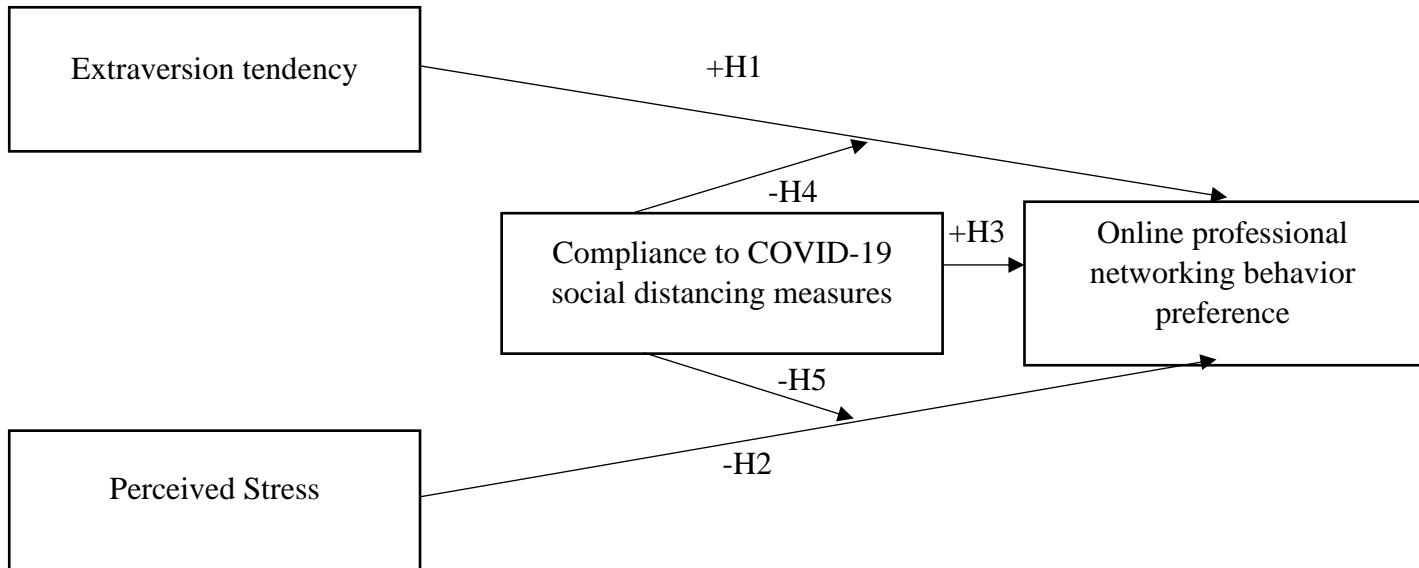
In line with the *Conservation of Resources* theory, it is expected that compliance to COVID-19 social distancing is stressful, and thus negatively moderates the relationship between perceived stress and online professional networking behavior preference.

Hypothesis 5: Compliance to COVID-19 social distancing measures negatively moderates the relationship between perceived stress and online professional networking behavior preference.

A process model of the proposed relationships and variables can be found in figure 1.

Figure 1

The process model representing the chosen relationships for hypothesis testing, consisting of extraversion tendency, perceived stress of the working population, compliance to COVID-19 social distancing measures and online professional networking behavior preference.



Method

Participants and procedure

To determine the number of respondents necessary for this study, a G*Power (Faul, Erdfelder, Lang, & Buchner, 2007) analysis was with a power of .80 conducted. The power analysis stated that a minimum sample size of 270 was needed.

In total, $N = 95$ employed individuals took part in the study. Data collection began the 12th of May 2021, and ended on the 2nd of July 2021. The survey used a selection criterion of holding a job (e.g. salaried employment, self-employment, volunteer work etc.) at least once during one's lifetime. One participant reported to have never been employed and was therefore not eligible to participate. Participants not agreeing with the informed consent form (8) or participants not finishing the survey, despite giving consent (21) were also excluded from analysis. After the selective questions, the total number of participants was $N = 65$. The final sample consisted of 26 men and 39 women. The age range of all participants ranged from 19 to 66 ($M = 28.15$, $SD = 10.2$). For male participants, the age ranged from 19 to 66 ($M = 29.62$, $SD = 11.02$) and for women the age ranged from 20 to 59 ($M = 27.18$, $SD = 9.63$).

This thesis followed a cross-sectional design. Participants were mostly approached via convenience sampling. Some aspects of snowball sampling were also used, as participants

were encouraged to share the survey with their network as well. The survey was in English and consisted of an information letter, informed consent form, some demographics questions and four separate instruments already in existence that have been used prior research.

Agreeing to the informed consent form was mandatory for participation. In line with the ethical guidelines, transparency was offered to participants what participation in the study meant; specifically how their data would be used and stored and that they could cease participation at any moment without negative consequences. The demographic questions consisted of age, gender, and whether or not they have been employed before. Employment in any form (voluntarily, salaried employment, self-employment) was also mandatory for participation in the study.

After the initial checks for eligibility were completed, participants were then asked to fill in the survey. When the survey ended, participants were thanked for their participation.

Measures

Apart from some demographic questions, other existing instruments have been used. The instruments that have been used before measured online professional networking behavior preference, extraversion tendency, compliance to COVID-19 social distancing measures and perceived stress. The used items and surveys can be found in Appendix 1. Online professional networking behavior preference was measured with the Short Networking Behavior Scale (*SNBS*) by Wolff and Spurk (2020). The scale consists of 18 items ($\alpha = .89$ (Wolff, & Spurk, 2020)) divided over 6 factors and are measured on a 5 point Likert scale ranging from *I - Never/rarely* to *5 - Very often/always*. To make sure that online professional networking behavior preference was measured, participants were told that the questions asked in the *SNBS* pertained to their online professional networking behavior preference rather than their ‘in-person’ networking behavior preference. The 6 factors that are measured in the *SNBS* are 1) Building internal contacts, 2) Maintaining internal contacts, 3) Using internal contacts, 4) Building external contacts, 5) Maintaining external contacts, and 6) Using external contacts. Internal contacts are the contacts that are found within one’s organisation and external contacts are the contacts outside of one’s organisation (Wolff, & Kim, 2012). Although internal and external networking behavior preference are separate factors (Wolff & Spurk, 2020), both were included in the questionnaire since they are closely related to each other and encompass a more holistic view of networking behavior preference when taken together (Wolff & Moser, 2006; Wolff & Spurk, 2020). No items had to be reverse scored. A Reliability analysis was conducted and yielded a Cronbach's Alpha of α

= .87. No items were removed from the scale. In SPSS, a variable named *Networking* was computed, which consisted of the mean score on the *SNBS* per participant.

Extraversion tendency was measured via the Big-Five Inventory (BFI) by Goldberg (1993). The entire BFI consists of 44 questions ($\alpha = .85$) (Benet-Martínez, & John, 1998) on a five-point Likert-scale ranging from *1 - Disagree strongly* to *5 - Agree strongly*. For this survey, only the eight items that measured extraversion tendency were used ($\alpha = .87$ (Benet-Martínez, & John, 1998)). A question that was asked in this part of the survey is "I see myself as someone who is talkative" (Goldberg, 1993; John & Srivastava, 1999). Questions 2, 5 and 7 were reverse-scored. In the current sample, it was found that Cronbach's Alpha for the extraversion tendency scale for all participants was $\alpha = .87$. According to George and Mallory (2003), the reliability of the scale would be classified as good. Seeing as the reliability analysis yielded satisfactory results and the removal of items would only lower the Cronbach's Alpha and was therefore deemed unnecessary. After recoding, a variable named *Extraversion* was made, which consisted of the mean score on all items of the extraversion part of the BFI.

Compliance to COVID-19 social distancing measures was measured with the *Compliance with COVID-19 Measures* by Kuiper et al. (2020). This scale by Kuiper et al. (2020) consists of five items ($\alpha = .68$) which are measured with a 7-point Likert scale from *1 - Never* to *7 - Always*. The scale measures an individual's desire, opportunity and capacity to comply with social distancing measures. Four items were used to measure whether individuals were practicing social distancing. An example would be "I still meet people outside of my direct household. Another item was used to measure whether an individual stayed home, as urged by the government. "I have stayed at home after I was ordered to do so, apart from engaging in essential activities (e.g., grocery shopping, medical appointments)." Question 3 and 4 were reverse scored. The Cronbach's Alpha for the *Compliance with COVID-19 Measures* was found to be $\alpha = .09$ in the current sample. To further examine the low outcome of the reliability analysis, an exploratory factor analysis was conducted. Only one factor had an eigenvalue higher than 1. Removal of the second question "I keep a safe distance from people outside of my direct household" would yield a Cronbach's Alpha of $\alpha = .45$. Although this is still quite low (George, & Mallory, 2003), The second question was removed because it would increase the Cronbach's Alpha. After question two was removed and the relevant items were recoded, a variable named *Compliance* was computed which consisted of the mean scores on the *Compliance with COVID-19 Measures* scale per participant .

Perceived Stress was measured with the Perceived Stress Scale (PSS-10) by Cohen, Kamarck and Mermelstein (1994). The goal of the PSS-10 is to examine one's perceived stress over the past month. The original plan of the thesis was to measure the prevalence of negative life events one goes through. However, using such a variable proved methodologically challenging and not predictive of actually experiencing stress. An alternative was found in perceived stress, as this variable seems to be more predictive of the experience of stress. Research by Baik et al. (2019) and Taylor (2015) found that the reliability of the PSS-10 was $\alpha = .82$ and $\alpha = .86$, respectively. Despite its age, the PSS-10 proves to still be adequate in terms of reliability. The PSS-10 consists of 10 items on a 5-point likert scale, from *0 - Never* to *4 - Very often*. For consistency's and simplicity's sake, the items were coded 1 to 5 in the dataset. An example of a question would be "In the last month, how often have you felt that you were unable to control the important things in your life?". Reverse-scoring was done for questions 4, 5, 7 and 8. A reliability analysis for this scale in the current sample yielded a Cronbach's Alpha of $\alpha = .90$. In this case, no items were removed. After the recoding took place, a new variable named *Stress* was computed, which contained the mean score on the PSS-10.

Statistical analysis

Statistical analysis was conducted with the use of the Statistical Program for Social Sciences (SPSS, 2017), version 26. To test Hypothesis 1, 2 and 3, three separate single regression analysis were conducted. This was done to examine how the separate independent variables related to online professional networking behavior preference. To test hypothesis 4 and 5, a model 1 (Hayes, 2017) moderation was used. For the testing of the hypotheses, a significance level of $p = .05$ was used.

Since a number of analyses relied on a regression analysis, some assumptions had to be checked. According to Field (2013) these are: a linear relationship between the independent variables and the dependent variable, absence of outliers in the variables, normally distributed residuals, homoscedasticity and an absence of multicollinearity.

To examine whether or not the assumption of a linear correlation between the independent variables was met, scatter plots and histograms were computed in SPSS. These graphs showed no parabolas or exponential growth. Therefore, the assumptions of a linear correlation between the independent variables was met successfully (Field, 2013).

A boxplot analysis was conducted to determine if the variables for *Extraversion*, *Networking*, *Stress* and *Compliance* had any outliers. Out of all these variables, the only

outlier was a score of 3.22 on *Networking*. A vertical boxplot showed that this outlier was between 1.5 and 3 interquartile range (IQR). Research by Hoaglin and Iglewicz (1987) argued that an outlier higher than 3 IQR is an extreme outlier and should always be removed. However, outliers with an IQR between 1.5 and 3 do not necessarily have to be an actual outlier. Because the score of 3.22 on *networking* was not deemed an extreme outlier (< 3 IQR), the choice was made to not remove this participant from the analysis.

A normal probability plot was done to check if the assumption of normally distributed errors was met for the dependent variable. The probability plot showed no severe outliers, therefore, the assumption was met. To check for homoscedasticity, a linear regression was done with a scatterplot of the dependent variable. The scatterplot showed that the assumption of homoscedasticity was met.

A linear regression analysis was done to determine the absence of potential multicollinearity between the independent variables. Multicollinearity was not a problem in the independent variables (*Extraversion* = .82, *VIF* = 1.22; *Stress* = .98, *VIF* = 1.02; *Compliance* = .82, *VIF* = 1.22).

Results

Descriptive statistics

A two tailed Pearson correlation was conducted to examine the age of the sample and the variables used in the analyses. The variables networking and extraversion showed a significant positive correlational relationship. More significant correlational relationships were found between compliance and networking, as well as compliance and extraversion. A complete overview of the correlational table and descriptive statistic can be found in table 1.

Table 1

The descriptive statistics of the sample ($N = 65$) consisting of the mean, standard deviations, and correlations of the variables used for analyses and age.

	M	SD	1	2	3	4	5
1. Networking	2.01	0.45					
2. Extraversion	3.01	0.70	.28*				
3. Stress	2.88	0.70	.09	-.11			
4. Compliance	4.34	0.99	.27*	.42**	-.11		
5. Age	28.15	10.19	-.07	-.07	-.21	-.06	

Note. * = $p < .05$, ** = $p < .01$

Testing of hypotheses

To test hypothesis 1, a single linear regression was conducted with Networking as the dependent variable, and Extraversion as an independent variable. Extraversion tendency was significantly related to online professional networking behavior preference ($R^2 = .08$, $F(1, 63) = 5.29$, $p = .03$). Another single linear regression was conducted to test hypothesis 2, where Stress was the independent variable, and Networking the dependent variable. The result of this linear regressions analysis in this sample yielded the following result: Perceived stress was not related to online professional networking behavior preference ($R^2 = .01$, $F(1, 63) = 0.47$, $p = .50$). A final single linear regression analysis was done to test hypothesis 3, where Compliance was the independent variable and Networking the dependent variable. The results showed that compliance to COVID-19 social distancing measures was significantly related to online professional networking behavior preference ($R^2 = .07$, $F(1, 63) = 4.90$, $p = .03$). Table 2 shows the outcomes of all the single regression analyses.

Table 2

All single regression analyses for Extraversion, Stress, and Compliance predicting Networking, including the (un)standardized Beta-coefficients, 95% confidence intervals, t-values and p-values.

Variable	B	95% CI		t	p
		[LL, UL]	β		
Extraversion	0.176*	[.023, .333]	0.278	2.300	.03
Stress	0.055	[-.105, .215]	0.086	.683	.50
Compliance	0.121*	[.012, .230]	0.269	2.214	.03

Note. * = $p < .05$

Moderation analyses with Process 3.5 by Hayes with model 1 was used to test hypotheses 4 and 5. For Hypothesis 4, the dependent variable was Networking, the independent variable Extraversion and the moderator variable was Compliance. For this sample, it was found that compliance to COVID-19 social distancing measures does not significantly moderate the relationship between extraversion tendency and online professional networking behavior preference ($B = .14$, 95% CI (-.03, .31), $p = .12$).

Table 3

Outcome of the moderation analysis where Compliance moderates the relation between Extraversion and Networking.

Variable	Coefficient	95% CI		t	p
		[LL, UL]	se (HC3)		
constant	1.97	[1.85, 2.09]	.060	32.9	.001
Extraversion	.18	[-0.16, 0.37]	.096	1.83	.072
Compliance	.03	[-.098, .160]	.063	.46	.65
interaction	.14	[-.033, .310]	.086	1.61	.11

For Hypothesis 5, the dependent variable was Networking, the independent variable Stress and the moderator variable was Compliance. For this sample, it was found that compliance to COVID-19 social distancing measures does not significantly moderate the relationship between perceived stress and online professional networking behavior preference ($B = .12$, 95% CI (-.09, .32), $p = .26$).

Table 4

Outcome of the moderation analysis where Compliance moderates the relation between Stress and Networking.

Variable	Coefficient	95% CI		t	<i>p</i>
		[LL, UL]	se (HC3)		
constant	2.02	[1.90, 2.13]	.056	35.7	.001
Stress	.090	[-.099, 0.28]	.094	.95	.34
Compliance	.14*	[-.009, .270]	.064	2.14	.036
interaction	.12	[-.086, .320]	.100	1.15	.25

Note. * = *p* < .05

Discussion

The aim of this study was to examine the relationship between extraversion tendency, perceived stress and compliance to COVID-19 social distancing measures on online professional networking behavior preference. The research question was as follows: The data analysis of this thesis found support for hypothesis 1 and 3, but not for hypothesis 2, 4 and 5. The results showed that extraversion tendency and compliance to social distancing measures were positively related to online professional networking behavior preference (hypothesis 1 and 3), but perceived stress was not significantly related to professional networking behavior preference (hypothesis 2). Compliance to social distancing measures did not moderate the relationship between neither extraversion tendency (hypothesis 4) and online professional networking behavior preference nor perceived stress and online professional networking behavior preference (hypothesis 5).

In line with the expectations, it was found that extraversion tendency was significantly related to online professional networking behavior preference. The consensus is that, traditionally, high extraversion tendency is advantageous for and related to more networking behavior preference, both socially and professionally (Davis, Wolff, Forret, & Sullivan, 2020). others argue that extraversion tendency should not matter in an online setting (Davis et al., 2020; Zack, 2019) and some found that higher extraversion tendency is more beneficial than low extraversion tendency when it comes to online networking as well (Davis et al., 2020; Van De Ven, Bogaert, Serlie, Brandt, & Denissen, 2017). As touched upon in the introduction, there are two perspectives at odds when it comes to online networking, namely the *Rich get Richer* perspective (Kraut et al., 2002) and the *Social Compensation* (Desjarlais, &

Wiloughby, 2010) perspective. The outcome of this study may have found evidence for the *Rich get Richer* perspective reigning supreme over the *Social Compensation* perspective when it comes to online professional networking as well. However, this should be taken with caution, as other research has found that the *Rich get Richer* perspective and the *Social Compensation* perspective may not be entirely mutually exclusive (Aikins, 2021).

It was hypothesised that perceived stress would be negatively related to online professional networking behavior preference. However, this was not the case for this study. The hypothesis was based on the *Conservation of Resources* theory, which states that one experiences stress, they will try to converse and restore their remaining energy. Prior research has found that perceived stress leads to a decrease in online social networking, but this has not been researched before when it comes to online professional networking, until now. This study did not find any evidence that the *Conservation of Resources* theory also applies to online professional networking behavior preference. However, future research could examine this theory in relation to online professional networking behavior preference more in-depth.

Another hypothesis was that compliance to COVID-19 social distancing measures would be positively related to online professional networking behavior preference, which was confirmed for this sample. It makes sense that such a relation was found; the more compliant someone is to the COVID-19 social distancing measures, the more likely they are to stay at home and use the internet for their networking goals (Gottlieb et al., 2020; Kuiper et al., 2020). Moreover, compliance to social distancing measures is related to more usage of social networking sites. This study may have taken a first step in finding evidence that this is also the case for online professional networking in a working population.

Unfortunately, it is not possible to draw this causal conclusion from this study, as the traditional offline networking an individual does, was not measured. Therefore, online professional networking and traditional (physical) networking cannot be compared. This however, could be interesting to examine in future research where two types of professional networking (both online and offline) are examined.

Compliance to COVID-19 social distancing measures did not moderate the relationships between extraversion tendency and perceived stress on online professional networking behavior preference. It was expected that the more compliance one showed, the more the effect of extraversion tendency on professional networking behavior preference would be decreased. The data and analyses showed that this was not the case for this sample. The same expectation was held for compliance and the effect of stress on online professional networking behavior preference, but was once again not found. However, more research is

needed to see how the social distancing measures taken against COVID-19 influence professional networking behavior preference as a whole. In hindsight, the scale used by Kuiper et al. (2020) was lacking greatly in internal consistency with an α of .09 when not removing any questions and an α of .45 when removing the question 2. It would be advisable to look towards another scale to measure social distancing behavior. Another scale to measure compliance to social distancing measures should be chosen in future research. An option would be *The Social Distancing Scale* by Prachthauser, Cassisi, An-Le, & Nicasio (2020), which is a 14-item scale with adequate reliability scores. It encompasses more facets of social distancing (E.G. Working from home, protective behaviors and familial contact) than the scale Kuiper et al. (2020) used.

The findings of this study help to examine important factors in the face of the COVID-19 pandemic, which continues to stay relevant. Although vaccinations have become more readily available worldwide (Kostoff et al. 2021), scientists warn that it will not mean an immediate end to the pandemic, as it might take time for the effects of vaccination to become apparent (Kostoff et al., 2021; *The Lancet Microbe*, 2021). As a result, it is entirely possible that social distancing measures, albeit possibly less severe, will be put back in place (Van De Poel, 2020).

Moreover, the pandemic and lockdowns have inadvertently caused large-scale economic damage (Coibion, Gorodnichenko, & Weber, 2020; Davis, Liu, & Sheng, 2021). This leads to an increment in job loss in most countries, which in turn can cause physical and mental problems (Crayne, 2020; McDowell, Herring, Lansing, Brower, & Meyer, 2020).

Research by Bauer, Keveloh, Mamertino and Weber (2020) has shown that competition in finding a job has increased since the start of the pandemic, and the actual need for employers has dwindled. From the vacancies that are left, most are filled through online efforts and networking (Ansman et al., 2014; Hensvik, Le Babanchon, & Rathelot, 2021). As a result, research regarding networking behavior preference in times of COVID-19 will stay relevant in the time to come. This thesis finds evidence that high extraversion tendency could be more related to online professional networking behavior preference than low introversion and that compliance to the social distancing norms will lead to more online professional networking behavior preference.

Unfortunately, this thesis is not without faults. The first thing to note is the sample. 93 individuals entered the survey, but only 65 respondents actually provided full data that was usable in the analysis. The initial goal of sample size was higher. However, due to logistical issues and time constraints, this number was not met. The small sample size hurt the validity

of the results. The G*Power analysis stated that a minimum of 270 respondents were needed for this study, but unfortunately that number was not met.

Moreover, sampling was done via convenience sampling in the Netherlands, which may have caused selection bias in the form of a WEIRD-Setting. A WEIRD-setting is an acronym that is used when a sample has an overrepresentation of respondents from a western, educated, industrialized, rich and democratic setting, Clarke-Stewart and Park (2014) argue that a vast majority of the research done using a WEIRD-sample. A WEIRD-setting hurts the generalisability of the findings to populations do not fall into the WEIRD-category. Unfortunately, Dogruyol, Alper and Yilmaz (2019) state that having a diverse sample, free of an overrepresentation is methodologically and logically challenging. For this study in particular, it may hurt the generalisation because online networking relies on internet connection (Wolff & Kim, 2012), which is not as readily available in non-WEIRD-countries.

Another problem in the sample was the distribution of some variables. A Shapiro-Wilk test for normality showed that the variables for *Age* ($W(65) = .67, p = <.001$) and *Compliance* ($W(65) = .95, p = .01$) were not normally distributed. The cause of having a sample that is not normally distributed can be due to a number of factors. According to Ghasemi and Zahediasl (2012) one of those factors is a sample that is lacking in size, which is likely the case for this thesis. Furthermore, since the age of the sample is not normally distributed, the generalisability to the rest of the working population is decreased (Neuman, 2009).

The variable for compliance to COVID-19 social distancing measures left much to be desired. The initial Cronbach's Alpha was $\alpha = .09$, which was exorbitantly low. Removal of question 2 of the scale gave an alpha of $\alpha = .45$. In the end, the choice was made to remove question, to increase the Cronbach's Alpha. However, a Cronbach's alpha of $\alpha = .45$ is still inadequately low according to (George & Mallery, 2003). Moreover, making it so that a scale only has 4 questions that are seemingly quite unrelated to each other, hurts the internal validity of this thesis quite a bit. Future research could adopt different scales for compliance to COVID-19 social distancing measures, or use a large sample size.

Future research could also focus on the differentiation between internal and external networking. Wolff and Kim (2012) state that these are two separate constructs; internal networking is the professional networking that occurs inside one's organisation, and external networking is the professional networking that occurs outside of one's organisation. In this thesis, no differentiation is made between these constructs; they all fit under the variable for online professional networking. Wolff and Spurk (2020) state that internal and external

networking are both highly related, but distinct constructs. As such, it might be worthwhile to make a differentiation between these constructs in future research.

Another recommendation for future research is in the way participants are clustered. After the start of this thesis project, an article by Baumann and Utz (2021) was published. Their study examined whether or not individuals differed in their online versus offline networking. It was found that anxiety can lead people to prioritize online networking over offline networking (Baumann & Utz, 2021). Moreover, Baumann & Utz (2021) concluded that four different clusters of networkers (both offline and online) exist: *The Minimal* (1), *The Heavy* (2), *The Mainly Offline* (3) and *The Mainly Online* (4). Significant differences exist between these groups in terms of professional networking behavior. *The Minimal* networkers are often reactive, and engage more in offline networking than online, *The Heavy* networkers are more proactive, and are active in both offline and online networking. *The mainly Offline* networkers prefer networking in offline settings and *The Mainly Online* networkers often shy away from offlinenetworking in favor of an online setting.

In addition, Baumann and Utz (2021) state that individuals in the different clusters have different wants and needs and that research based on the aforementioned clusters and professional social networking sites (LinkedIn, etc.) is needed to facilitate those wants and needs. This thesis lacked clustering of this kind, but Baumann and Utz (2021) state that this could be of great methodological and scientific importance. Therefore, it would be beneficial for future research to include these clusters.

Another limitation of this study is that it was cross-sectional, which is why causal inferences cannot be derived from this thesis. Future research could follow participants longitudinally and examine how their networking behavior preference as a whole (both offline as well as physical) changes over time.

This thesis sought to examine the effects of extraversion tendency , perceived stress and social distancing measures taken against COVID-19 on online professional networking behavior preference. Results showed that high extraversion tendency in this sample was related to more online professional networking behavior preference. The same was found for compliance to COVID-19social distancing measures, but not for perceived stress. These results aid in the debate whether or not high extraversion tendency is beneficial for online networking behavior preference, and italso shines a light on what the effects of social distancing measures are on online networkingbehavior preference. However, since the pandemic is not yet over, and the severity tends to ebb and flowduring the year it is important for scientists to keep a close eye on networking behavior preference in times of COVID-19.

Literature

- Abbas, R., & Mesch, G. (2018). Do rich teens get richer? Facebook use and the link between offline and online social capital among Palestinian youth in Israel. *Information, Communication & Society*, 21(1), 63–79. doi:10.1080/1369118X.2016.1261168.
- Aikins, D. E. (2021). *Redirect your efforts: Extraversions effect on the informational benefits received from active and passive LinkedIn use* (Master's thesis)
- Allen, J. G., Madan, A., & Fowler, J. C. (2015). Reliability and validity of the Stressful Life Events Screening Questionnaire among inpatients with severe neuropsychiatric illness. *Bulletin of the Menninger Clinic*, 79(3), 187-202. doi: 10.1521/bumc.2015.79.3.187.
- Amichai-Hamburger, Y., Wainapel, G., & Fox, S. (2002). "On the Internet no one knows I'm an introvert": Extroversion, neuroticism, and Internet interaction. *Cyberpsychology & Behavior*, 5(2), 125-128.
- Ansmann, L., Flickinger, T. E., Barello, S., Kunneman, M., Mantwill, S., Quilligan, S., ... & Aelbrecht, K. (2014). Career development for early career academics: Benefits of networking and the role of professional societies. *Patient Education and Counseling*, 97(1), 132-134. doi:10.1016/j.pec.2014.06.013.
- Atanasoff, L., & Venable, M. A. (2017). Technostress: Implications for adults in the workforce. *The Career Development Quarterly*, 65(4), 326-338.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
- Baik, S. H., Fox, R. S., Mills, S. D., Roesch, S. C., Sadler, G. R., Klonoff, E. A., & Malcarne, V. L. (2019). Reliability and validity of the Perceived Stress Scale-10 in Hispanic Americans with English or Spanish language preference. *Journal of Health Psychology*, 24(5), 628-639.
- Bauer, A., Keveloh, K., Mamertino, M., & Weber, E. (2020). Competing for jobs: How COVID-19 changes search behaviour in the labour market (No. 33/2020). IAB-Discussion Paper.
- Baumann, L.A, & Utz, S. (2021). Professional networking: Exploring differences between offline and online networking. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 15(1), 202-210. doi:10.5817/CP2021-1-2.
- Benet-Martínez, V., & John, O. P. (1998). Los Cinco Grandes across cultures and ethnic groups: Multitrait-multimethod analyses of the Big Five in Spanish and English. *Journal of Personality and Social Psychology*, 75(3), 729.
- Bhadra, A., Mukherjee, A., & Sarkar, K. (2021). Impact of population density on Covid-19

- infected and mortality rate in India. *Modeling Earth Systems and Environment*, 7(1), 623-629.
- Brod, C. (1984). *Technostress: The human cost of the computer revolution*. Reading, Massachusetts: Addison-Wesley.
- Buecker, S., Maes, M., Denissen, J. J., & Luhmann, M. (2020). Loneliness and the Big Five Personality Traits: A Meta-analysis. *European Journal of Personality*, 34(1), 8-28. doi: 10.1002/per.2229.
- Carrigan, P. M. (1960). Extraversion-introversion as a dimension of personality: A reappraisal. *Psychological Bulletin*, 57(5), 329-355.
- Chernozhukov, V., Kasahara, H., & Schrimpf, P. (2021). Causal impact of masks, policies, behavior on early COVID-19 pandemic in the US. *Journal of Econometrics*, 220(1), 23-62.
- Chiesa, V., Antony, G., Wismar, M., & Rechel, B. (2021). COVID-19 pandemic: health impact of staying at home, social distancing and 'lockdown' measures—a systematic review of systematic reviews. *Journal of public health*
- Coibion, O., Gorodnichenko, Y., & Weber, M. (2020). The cost of the covid-19 crisis: Lockdowns, macroeconomic expectations, and consumer spending. *National Bureau of Economic Research*, 14(2), 330-335.
- Crayne, M. P. (2020). The traumatic impact of job loss and job search in the aftermath of COVID-19. *Psychological Trauma: Theory, Research, Practice, and Policy*, 12(S1), S180.
- Das, A. K., Abdul Kader Jilani, M. M., Uddin, M. S., Uddin, M. A., & Ghosh, A. K. (2021). Fighting ahead: adoption of social distancing in COVID-19 outbreak through the lens of theory of planned behavior. *Journal of Human Behavior in the Social Environment*, 31(1-4), 373-393.
- Davis, S. J., Liu, D., & Sheng, X. S. (2021). Stock prices, lockdowns, and economic activity in the time of coronavirus (No. w28320). *National Bureau of Economic Research*.
- Davis, J., Wolff, H. G., Forret, M. L., & Sullivan, S. E. (2020). Networking via LinkedIn: An examination of usage and career benefits. *Journal of Vocational Behavior*, 118, 103396.
- DeNeve, K. M., & Cooper, H. (1998). The happy personality: A metaanalysis of 137 personality traits and subjective well-being. *Psychological Bulletin*, 124(2), 197–229.
- Eskin, M., Şavk, E., Uslu, M., & Küçükaydoğan, N. (2014). Social problem-solving,

- perceived stress, negative life events, depression and life satisfaction in psoriasis. *Journal of the European Academy of Dermatology and Venereology*, 28(11), 1553-1559.
- Eysenck, H. J. & Eysenck, S. G. B. (1964). The Eysenck Personality Inventory. *British Journal of Educational Studies*, 14(1), 140-140. doi: 10.2307/3119050.
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175-191
- Field, A. (2013). Discovering statistics using IBM SPSS Statistics (4th edition). Thousand Oaks: SAGE Publications.
- Folk, D., Okabe-Miyamoto, K., Dunn, E., & Lyubomirsky, S. (2020). Did social connection decline during the first wave of COVID-19?: The role of extraversion. *Collabra: Psychology*, 6(1).
- Freyd, M. (1924). Introverts and Extroverts. *Psychological Review*, 31(1), 74.
- Gadekar, R., & Ang, P. H. (2020). Is Social Media Use Socially Enhancing or Compensating?. *Journal of Creative Communications*, 15(3), 269-288.
- George, D., & Mallory, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 update* (4th ed.). Boston: Allyn & Bacon.
- Ghasemi, A., & Zahediasl, S. (2012). Normality tests for statistical analysis: a guide for non-statisticians. *International Journal of Endocrinology and Metabolism*, 10(2), 486-489. doi:10.5812/ijem.3505.
- Gibson, L. P., Magnan, R. E., Kramer, E. B., & Bryan, A. D. (2021). Theory of Planned Behavior Analysis of Social Distancing During the COVID-19 Pandemic: Focusing on the Intention–Behavior Gap. *Annals of Behavioral Medicine*, 55(8), 805-812.
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist*, 48, 26–34.
- Gottlieb, M., Egan, D. J., Krzyzaniak, S. M., Wagner, J., Weizberg, M., & Chan, T. (2020). Rethinking the approach to continuing professional development conferences in the era of COVID-19. *Journal of Continuing Education in the Health Professions*, 40(3), 187-191. doi: 10.1097/CEH.0000000000000310.
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford publications.
- Hensvik, L., Le Barbanchon, T., & Rathelot, R. (2021) Job search during the COVID-19 crisis. *Journal of Economics*, 194.

- Hoaglin, D. C., & Iglewicz, B. (1987). Fine-tuning some resistant rules for outlier labeling. *Journal of the American Statistical Association*, 82(400), 1147-1149.
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology*, 50(3), 337-421.
- IBM Corporation (2017). *IBM SPSS Statistics for Windows, Version 26.0*. Amonk, NY: IBM Corporation.
- Issa, T., Jaafari, M. A., Alqahtani, A. S., Alqahtani, S., Issa, T., Maketo, L., & Pervaiz, S. (2021). Benefits and challenges of social networking during COVID-19: personal perspective. *International Journal of Web Based Communities*, 17(2), 135-148.
- John, O. P., & Srivastava, S. (1999). *The Big-Five trait taxonomy: History, measurement, and theoretical perspectives* (Vol. 2, pp. 102-138). Berkeley: University of California.
- Kintish, W. (2014). *Business Networking-The Survival Guide: How to make networking less about stress and more about success*. United Kingdom: Pearson.
- Kostoff, R. N., Briggs, M. B., Porter, A. L., Aschner, M., Spandidos, D. A., & Tsatsakis, A. (2020). COVID 19: Post lockdown guidelines. *International Journal of Molecular Medicine*, 46(2), 463-466
- Kuiper, M. E., de Bruijn, A. L., Reinders Folmer, C., Olthuis, E., Brownlee, M., Kooistra, E. B.,... & Van Rooij, B. (2020). The intelligent lockdown: Compliance with COVID-19 mitigation measures in the Netherlands.
- Lai, H., Wang, S., Zhao, Y., Zhang, L., Yang, C., & Gong, Q. (2019). Brain gray matter correlates of extraversion: A systematic review and meta-analysis of voxel-based morphometry studies. *Human Brain Mapping*, 40(14), 4038-4057. doi: 10.1002/hbm.24684.
- Margolis, S., & Lyubomirsky, S. (2020). Experimental manipulation of extraverted and introverted behavior and its effects on well-being. *Journal of Experimental Psychology: General*, 149(4), 719–731. doi:10.1037/xge0000668.
- McCloskey, B., Zumla, A., Ippolito, G., Blumberg, L., Arbon, P., Cicero, A., ... & Borodina, M. (2020). Mass gathering events and reducing further global spread of COVID-19: a political and public health dilemma. *The Lancet*, 395(10230), 1096-1099. doi:10.1016/S0140-6736(20)30681-4.
- McDowell, C. P., Herring, M. P., Lansing, J., Brower, C., & Meyer, J. D. (2020). Working from home and job loss due to the COVID-19 pandemic are associated with greater time in sedentary behaviors. *Frontiers in Public Health*, 8, 750.

- Mecham, J. C., Menapace, D. C., Bowe, S. N., & Carlson, M. L. (2021). Recruitment and networking with social media for the otolaryngology match in the COVID-19 pandemic. *Otolaryngology–Head and Neck Surgery, 164*(3), 545-546.
- Momtazmanesh, S., Samieefar, N., Uddin, L. Q., Ulrichs, T., Kelishadi, R., Roudenok, V., ... & Rezaei, N. (2021). Socialization During the COVID-19 Pandemic: The Role of Social and Scientific Networks During Social Distancing. *Advances in experimental medicine and biology, 1318*, 911-921.
- Muscanell, N., & Utz, S. (2016). Social networking for scientists: an analysis on how and why academics use ResearchGate. *Online Information Review, 41*(5), 744-759. Doi: 10.1108/OIR-07-2016-0185.
- Neuman, W. L. (2009). *Understanding Research*. Harlow, Great-Britain: Pearson Education Limited.
- Park, D., Yu, A., Metz, S. E., Tsukayama, E., Crum, A. J., & Duckworth, A. L. (2018). Beliefs about stress attenuate the relation among adverse life events, perceived distress, and self-control. *Child Development, 89*(6), 2059-2069.
- Reer, F., & Krämer, N. C. (2014). Underlying factors of social capital acquisition in the context of online-gaming: Comparing World of Warcraft and Counter-Strike. *Computers in Human Behavior, 36*, 179-189.
- Rossi, R., Soccia, V., Talevi, D., Mensi, S., Niolu, C., Pacitti, F., ... & Di Lorenzo, G. (2020). COVID-19 pandemic and lockdown measures impact on mental health among the general population in Italy. *Frontiers in Psychiatry, 11*, 790.
- Taylor, J. M. (2015). Psychometric analysis of the ten-item perceived stress scale. *Psychological Assessment, 27*(1), 90-96.
- Thompson, J. A. (2005). Proactive Personality and Job Performance: A Social Capital Perspective. *Journal of Applied Psychology, 90*(5), 1011–1017. doi:10.1037/0021-9010.90.5.1011
- Tulin, M., Lancee, B., & Volker, B. (2018). Personality and Social Capital. *Social Psychology Quarterly, 81*(4), 295-318. doi:10.1177/0190272518804533.
- Turel, O., Cavagnaro, D. R., & Meshi, D. (2018). Short abstinence from online social networking sites reduces perceived stress, especially in excessive users. *Psychiatry Research, 270*, 947-953
- Van De Poel, P. (2020). Zoeken naar het nieuwe normaal. *Skipr, 13*(3), 26-33.
- Van Hoye, G., Van Hooft, E. A., & Lievens, F. (2009). Networking as a job search behaviour:

- A social network perspective. *Journal of Occupational and Organizational Psychology*, 82(3), 661-682. doi:10.1348/096317908X360675
- Van de Ven, N., Bogaert, A., Serlie, A., Brandt, M. J., & Denissen, J. J. (2017). Personality perception based on LinkedIn profiles. *Journal of Managerial Psychology*.
- Velavan, T. P., & Meyer, C. G. (2020). The COVID-19 epidemic. *Tropical Medicine & International Health*, 25(3), 278.
- Wiederhold, B. K. (2020). Social media use during social distancing.
- Willemen, A. M., Koot, H. M., Ferdinand, R. F., Goossens, F. A., & Schuengel, C. (2008). Change in psychopathology in referred children: The role of life events and perceived stress. *Journal of Child Psychology and Psychiatry*, 49(11), 1175-1183.
- Wolff, H. G., & Kim, S. (2012) The relationship between networking behaviors and the Big Five personality dimensions. *Career Development International*, 17(1), 43-66.
- Wolff, H. G., & Moser, K. (2006). Entwicklung und validierung einer networkingskala. *Diagnostica*, 52(4), 161-180.
- Wolff, H. G., & Moser, K. (2009). Effects of networking on career success: a longitudinal study. *Journal of Applied Psychology*, 94(1), 196. doi: 10.1037/a0013350
- Wolff, H. G., Moser, K., & Grau, A. (2008). Networking: Theoretical foundations and constructvalidity. Readings in applied organizational behavior from the Lüneburg Symposium, 101-118. Rainer Hampp Mehring, Germany.
- Wolff, H. G., & Spurk, D. (2020). Developing and Validating a Short Networking Behavior Scale (SNBS) from Wolff and Moser's (2006) measure. *Journal of Career Assessment*, 28(2), 277-302. doi: 10.1177/1069072719844924.
- World Health Organization. (2020). Coronavirus disease 2019 (COVID-19): situation report, 72.
- Wrzus, C., Hänel, M., Wagner, J., & Neyer, F. J. (2013). Social network changes and life events across the life span: a meta-analysis. *Psychological Bulletin*, 139(1), 53-69.
- Zack, D. (2019). *Networking for people who hate networking: A field guide for introverts, the overwhelmed, and the underconnected*. Berrett-Koehler Publishers.
- Zhang, S., Kwok, R.C.W, Lowry, P.B, Liu, Z. and Wu, J. (2019). The influence of role stress on self-disclosure on social networking sites: a conservation of resources perspective, *Information & Management*, 50(3), 103-147. doi: 10.1016/j.im.2019.02.002.
- Zhang, D., Zhou, L., & Lim, J. (2020). From networking to mitigation: the role of social media and analytics in combating the COVID-19 pandemic. *Information Systems Management*, 37(4), 318-326.

- Zhao, S. Z., Wong, J. Y. H., Wu, Y., Choi, E. P. H., Wang, M. P., & Lam, T. H. (2020). 'Social distancing compliance under COVID-19 pandemic and mental health impacts: a population-based study. *International journal of environmental research and public health*, 17(18), 66-92.

Appendices

Appendix 1, Questionnaire

Questionnaire

Demographic data

Age: Open question

Gender:

Male

Female

Other:

Have you ever been employed? e.g. salaried employment at an organisation, self-employment, volunteer work :

Yes/No.

If employed:

Salaried-employment.

Self-employed with personnel

Self-employed without personnel

Volunteer work

Other: Open question.

On average, how many hours do you work per week?

If unemployed:

When (Month and year) was the last time you were employed? Type 'Never' if you have never been employed:

Individuals who have never been employed will not be able to take part in the survey.

1. The Big Five Inventory (BFI) for extraversion

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others?

Please pick a number 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.

1. I see myself as someone who is talkative []
2. I see myself as someone who is reserved []
3. I see myself as someone who is full of energy []
4. I see myself as someone who generates a lot of enthusiasm []
5. I see myself as someone who tends to be quiet []
6. I see myself as someone who has an assertive personality []
7. I see myself as someone who is sometimes shy, inhibited []
8. I see myself as someone who is outgoing, sociable []

2. Perceived Stress Scale (PSS-10)

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling how often you felt or thought a certain way. Questions can be answered on a scale from 0 to 4.

0 = Never, 1 = Almost Never, 2 = Sometimes, 3 = Fairly Often, 4 = Very Often

1. In the last month, how often have you been upset because of something that happened unexpectedly?

2. In the last month, how often have you felt that you were unable to control the important things in your life?
3. In the last month, how often have you felt nervous and “stressed”?
4. In the last month, how often have you felt confident about your ability to handle your personal problems?
5. In the last month, how often have you felt that things were going your way?
6. In the last month, how often have you found that you could not cope with all the things that you had to do?
7. In the last month, how often have you been able to control irritations in your life?
8. In the last month, how often have you felt that you were on top of things?
9. In the last month, how often have you been angered because of things that were outside of your control?
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

3. Corona Compliance Survey

These questions are about your compliance to social distancing measures that are enforced to halt the spread of COVID-19. Indicate to what extent you do the following from 1 (never) to 7 (always).

1 = Never

2 = Almost never

3 = Occasionally

4 = Frequently

5 = Usually

6 = Almost always

7 = Always

Compliance to social distancing measures to contain the Coronavirus

Since the authorities took measures to contain the coronavirus:

1. I still meet people outside of my direct household
2. I keep a safe distance from people outside of my direct household
3. I still visit others (friends or relatives) outside of my direct household

4. I still allow others (friends or relatives) to visit my direct household

Stay at home measures

Since the authorities took measures to contain the coronavirus:

5. I have stayed home after I was ordered to do so, apart from engaging in essential activities (e.g., grocery shopping, medical appointments)

4. The Short Networking Behavior Scale (SNBS)

Part 1. Internal Networking

In the first part, the statements pertain to behavior that could describe interaction patterns among colleagues within your company or organization.

These interactions are not to be limited to colleagues you depend on and work with on a daily basis, but should include all members of your organization.

If you are unemployed right now, answer the questions as if you were still employed at your previous job.

1 = Never/Very Seldom

2 = Sometimes

3 = frequently

4 = Very often/always

1. In my Organization, I approach employees I know by sight and start a conversation
2. I use events in my organization to make new contacts
3. If I want to meet a person from my organization who could be of professional importance to me, I take the initiative and introduce myself
4. I catch up with colleagues from other departments of my organization about what they are working on.
5. If I can't help a colleague from another department of my organization directly, I will keep an eye out for him/her.
6. I discuss problems with colleagues from other departments of my organization that they are having with their work

7. I discuss upcoming organizational changes with colleagues from other departments of my organization.
8. When I need answers to sensitive questions I turn to reliable colleagues to find out more about the matter.
9. At informal occasions I exchange professional tips and hints with colleagues from other departments of my organization.

Part 2. External contacts

The following parts deal with behavior patterns directed towards acquaintances from other organizations. These acquaintances are not members of your organization, but with whom you talk about job-related matters. This includes people from other companies, administrative departments, universities or other organizations.

1. I develop informal contacts with professionals outside the organization, in order to have personal links beyond the company.
2. I use external events to build new contacts with people from other organizations
3. When I meet a person from another organization who could be an important business contact for me, I compare notes with him/her about our common work areas.
4. I meet with acquaintances from other organizations outside of regular working hours.
5. I meet with acquaintances from other organizations that could be of professional importance to me at casual get-togethers
6. I use business events outside of the organization (Trade shows, conferences) to talk to business acquaintances on a personal level.
7. If I meet acquaintances from other organizations, I approach them to catch up on news and changes in their professional lives.
8. I exchange professional tips and hints with acquaintances from other organizations
9. I confide in acquaintances outside of the organization for job-related matters.

Appendix 2, Syntax of SPSS file

* Encoding: UTF-8.

* Age and Gender

MEANS TABLES=Age BY Gender

/CELLS=MEAN COUNT STDDEV RANGE.

*Recoding age as a ratio (Age per participant was entered by hand)

DATASET ACTIVATE DataSet1.

COMPUTE AgeRatio=19.

EXECUTE.

FREQUENCIES VARIABLES=Age

/STATISTICS=STDDEV RANGE MEAN MEDIAN MODE SUM

/ORDER=ANALYSIS.

FREQUENCIES VARIABLES=Age AgeRatio

/STATISTICS=STDDEV RANGE MEAN MEDIAN MODE SUM

/ORDER=ANALYSIS.

(ageRatio is now the same variable as age, but now shows up properly as a ratio)

*Mean Age

FREQUENCIES VARIABLES=AgeRatio

/STATISTICS=STDDEV RANGE MEAN MEDIAN MODE

/ORDER=ANALYSIS.

*Mean age per Gender

*Mean Age Male

USE ALL.

COMPUTE filter_\$(Gender = 1).

VARIABLE LABELS filter_\$ 'Gender = 1 (FILTER)'.

VALUE LABELS filter_\$ 0 'Not Selected' 1 'Selected'.

FORMATS filter_\$(f1.0).

FILTER BY filter_\$.

EXECUTE.

```
FREQUENCIES VARIABLES=AgeRatio  
/STATISTICS=STDDEV RANGE MEAN MEDIAN MODE  
/ORDER=ANALYSIS.
```

*Mean Age Female

```
USE ALL.  
COMPUTE filter_$(Gender = 2).  
VARIABLE LABELS filter_$ 'Gender = 2 (FILTER)'.  
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.  
FORMATS filter_$(f1.0).  
FILTER BY filter_$.  
EXECUTE.
```

```
FREQUENCIES VARIABLES=AgeRatio  
/STATISTICS=STDDEV RANGE MEAN MEDIAN MODE  
/ORDER=ANALYSIS.
```

```
FILTER OFF.  
USE ALL.  
EXECUTE.
```

*Recoding Extraversion scale

```
RECODE Extraversion_2 Extraversion_5 Extraversion_7 (1=5) (2=4) (3=3) (4=2) (5=1).  
EXECUTE.
```

*Recoding PSS-10 Scale

```
RECODE Stress_4 Stress_5 Stress_7 Stress_8 (1=5) (2=4) (3=3) (4=2) (5=1).  
EXECUTE.
```

*Recoding Compliance Scale

```
RECODE Compliance_3 Compliance_4 (1=7) (2=6) (3=5) (4=4) (5=3) (6=2) (7=1).
EXECUTE.
```

*Reliability analyses

*Extraversion

RELIABILITY

```
/VARIABLES=Extraversion_1 Extraversion_2 Extraversion_3 Extraversion_4
Extraversion_5
Extraversion_6 Extraversion_7 Extraversion_8
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE SCALE
/SUMMARY=TOTAL COV CORR.
```

*Stress

RELIABILITY

```
/VARIABLES=Stress_1 Stress_2 Stress_3 Stress_4 Stress_5 Stress_6 Stress_7 Stress_8
Stress_9
Stress_10
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE SCALE
/SUMMARY=TOTAL COV CORR.
```

*Compliance to COVID-19 measures

RELIABILITY

```
/VARIABLES=Compliance_1 Compliance_2 Compliance_3 Compliance_4 Compliance_5
/SCALE('ALL VARIABLES') ALL
```

```
/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE SCALE
/SUMMARY=TOTAL COV CORR.
```

*Factor analysis Compliance

FACTOR

```
/VARIABLES Compliance_1 Compliance_2 Compliance_3 Compliance_4 Compliance_5
/MISSING LISTWISE
/ANALYSIS Compliance_1 Compliance_2 Compliance_3 Compliance_4 Compliance_5
/PRINT INITIAL ROTATION
/PLOT EIGEN
/CRITERIA MINEIGEN(1) ITERATE(25)
/EXTRACTION PC
/CRITERIA ITERATE(25)
/ROTATION VARIMAX
/METHOD=CORRELATION.
```

*Networking behavior

RELIABILITY

```
/VARIABLES=Internal_Networking_1 Internal_Networking_2 Internal_Networking_3
Internal_Networking_4 Internal_Networking_5 Internal_Networking_6
Internal_Networking_7
Internal_Networking_8 Internal_Networking_9 ExternalNetworking_1
ExternalNetworking_2
ExternalNetworking_3 ExternalNetworking_4 ExternalNetworking_5
ExternalNetworking_6
ExternalNetworking_7 ExternalNetworking_8 ExternalNetworking_9
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE SCALE
```

/SUMMARY=TOTAL COV CORR.

*Computing new variables for mean scores

*Extraversion

COMPUTE Extraversion=(Extraversion_1 + Extraversion_2 + Extraversion_3 +
Extraversion_4 +
Extraversion_6 + Extraversion_7 + Extraversion_8) /8.

*Networking

COMPUTE Networking=(Internal_Networking_1 + Internal_Networking_2 +
Internal_Networking_3 +
Internal_Networking_4 + Internal_Networking_5 + Internal_Networking_6 +
Internal_Networking_7 +
Internal_Networking_8 + Internal_Networking_9 + ExternalNetworking_1 +
ExternalNetworking_2 +
ExternalNetworking_3 + ExternalNetworking_4 + ExternalNetworking_5 +
ExternalNetworking_6 +
ExternalNetworking_7 + ExternalNetworking_8 + ExternalNetworking_9) / 18.
EXECUTE.

*Stress

COMPUTE Stress=(Stress_1 + Stress_2 + Stress_3 + Stress_4 + Stress_5 + Stress_6 +
Stress_7 + Stress_8 + Stress_9 + Stress_10) /10.
EXECUTE.

*Compliance

(Second question was left out to increase The Cronbach's alpha)

```
COMPUTE Compliance=(Compliance_1 + Compliance_3 + Compliance_4 + Compliance_5)  
/ 4.  
EXECUTE.
```

*Test for Normal distribution

```
EXAMINE VARIABLES=Extraversion AgeRatio Networking Stress Compliance  
/PLOT BOXPLOT STEMLEAF NPLOT  
/COMPARE GROUPS  
/STATISTICS DESCRIPTIVES  
/CINTERVAL 95  
/MISSING LISTWISE  
/NOTOTAL.
```

*Check for other assumptions of linear regression

*Check for outliers in the data.

```
EXAMINE VARIABLES=Extraversion Networking Stress Compliance  
/PLOT BOXPLOT STEMLEAF  
/COMPARE GROUPS  
/STATISTICS DESCRIPTIVES EXTREME  
/CINTERVAL 95  
/MISSING LISTWISE  
/NOTOTAL.
```

* Check for linear correlation in the independent variables

CORRELATIONS

```
/VARIABLES=Extraversion Stress Compliance  
/PRINT=TWOTAIL NOSIG  
/MISSING=PAIRWISE.
```

* Checking for para/hyperboles and exponentiality in graphs

GGRAPH

```
/GRAPHDATASET NAME="graphdataset"
  VARIABLES=Stress[LEVEL=scale] Extraversion[LEVEL=scale]
  Compliance[LEVEL=scale]
  MISSING=LISTWISE REPORTMISSING=NO
  /GRAPHSPEC SOURCE=VIZTEMPLATE(NAME="Scatterplot Matrix
  (SPLOM)"[LOCATION=LOCAL]
  MAPPING( "all"="Extraversion"[DATASET="graphdataset"]
  "all"="Stress"[DATASET="graphdataset"]
  "all"="Compliance"[DATASET="graphdataset"])
  VIZSTYLESHEET="Traditional"[LOCATION=LOCAL]
  LABEL='SCATTERPLOT MATRIX (SPLOM): Compliance-Extraversion-Stress'
  DEFAULTTEMPLATE=NO.
```

*Checking for multicollinearity

REGRESSION

```
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Networking
/METHOD=ENTER Extraversion
/METHOD=ENTER Extraversion Stress
/METHOD=ENTER Extraversion Stress Compliance.
```

*Checking for homoscedasticity

REGRESSION

```
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE
```

```
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Networking
/METHOD=ENTER Extraversion
/METHOD=ENTER Extraversion Stress
/METHOD=ENTER Extraversion Stress Compliance
/SCATTERPLOT=(*ZRESID ,*ZPRED).
```

*Checking for normality of residuals

REGRESSION

```
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Networking
/METHOD=ENTER Extraversion
/METHOD=ENTER Extraversion Stress
/METHOD=ENTER Extraversion Stress Compliance
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/RESIDUALS NORMPROB(ZRESID).
```

* Linear regression analysis for Extraversion and Professional Online Networking Behavior

REGRESSION

```
/DESCRIPTIVES MEAN STDDEV CORR SIG N
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA CHANGE
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT Networking
/METHOD=ENTER Extraversion.
```

*Linear regression analysis for Perceived Stress and Professional Online Networking Behavior

REGRESSION

```
/DESCRIPTIVES MEAN STDDEV CORR SIG N  
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA CHANGE  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT Networking  
/METHOD=ENTER Stress.
```

*Linear regression analysis for Compliance to COVID-19 Social Distancing Measures and Professional Online Networking Behavior

REGRESSION

```
/DESCRIPTIVES MEAN STDDEV CORR SIG N  
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA CHANGE  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT Networking  
/METHOD=ENTER Compliance.
```

*Figure for the (un)standardized coefficients

REGRESSION

```
/DESCRIPTIVES MEAN STDDEV CORR SIG N  
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA CHANGE  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT Networking  
/METHOD=ENTER Extraversion Stress Compliance.
```

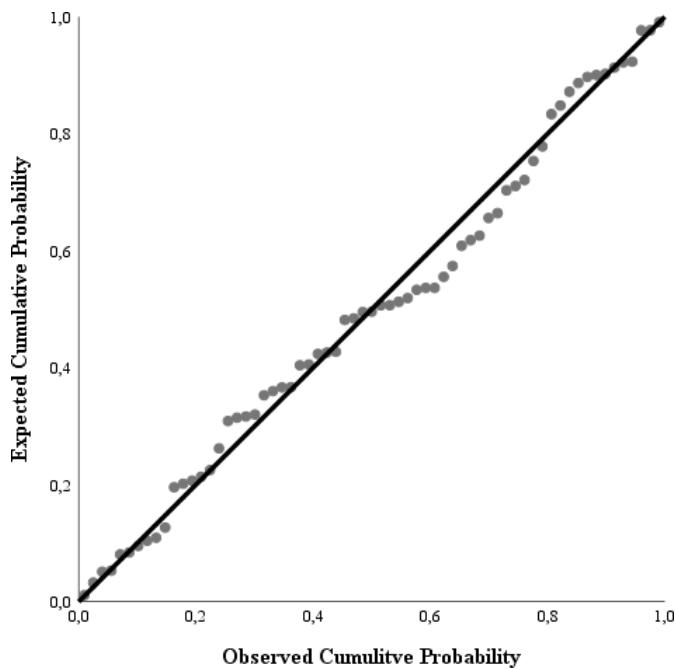
* Correlation Analysis for the Correlation table with means and standarddeviations

CORRELATIONS

```
/VARIABLES=Extraversion Networking Stress Compliance AgeRatio
/PRINT=TWOTAIL NOSIG
/STATISTICS DESCRIPTIVES
/MISSING=PAIRWISE.
```

Appendix 3

The Probability plot for the error distributions of the variable online professional networking behavior preference.



Appendix 4

The scatterplot of standardized predicted values and standardized residuals for online professional networking behavior preference.

