Use of Technology at Night & Job Demands in Bank Managers: Boosting and Explanatory Influence of Personality Traits in Procrastination

Mamoona Mushtaq¹, Shaista Jabeen², Niaz Ahmad³, Saima Bano⁴, Amber Malik⁵

¹Professor of Psychology, Govt. Graduate College, Township, Lahore, Punjab, Pakistan.
²Associate Professor, Department of Psychology, Forman Christian College (a Chartered University) Lahore, Punjab, Pakistan.
³Visiting Faculty, Department of Applied Psychology, University of Okara, Okara, Punjab, Pakistan.
⁴Lecturer, Department of Psychology, University of South Asia, Raiwind Road Campus, Punjab, Pakistan.
⁵Assistant professor, Department of Mass Communication, Punjab Higher Education Department, Lahore Punjab, Pakistan.

Corresponding Author: shaistajabeen@fccollege.edu.pk

Keywords: Technology Use at Night, Job Demands, Personality Traits, Procrastination

The present study sought a correlation of procrastination with the use of technology at night, and job demands by examining the personality traits of bank managers. Five personality traits (extraversion, conscientiousness, neuroticism, agreeableness, and openness to experience) were proposed to moderate procrastination, use of technology at night, and job demands. Bank managers (N = 200) were administered the Procrastination Scale, Big Five Personality Traits, Use of technology at night, and Job demands scale. For data analysis, AMOS software and SPSS version 23 were used. A significant positive correlation between procrastination with the use of technology at night and neuroticism and a negative correlation with job demands, extroversion, agreeableness, conscientiousness, and openness to experience was explored. Extrovert personality negatively moderated the relationship between the use of technology at night and procrastination and positively moderated the relationship between job demands and procrastination. Conscientiousness personality trait negatively moderated the relationship between the use of technology at night and job demands with procrastination. Neuroticism personality traits positively moderated the relationship between the use of technology at night and procrastination and negatively moderated the relationship between job demands and procrastination. Finally, openness to experience had negatively moderated the relationship between the use of technology at night and procrastination among bank managers. The results have implications for the managers in understanding their personality type and its binding with procrastination.
1. Introduction

Procrastination is an intentional delay of a planned course of action despite the expectation of negative or worse-off outcomes (Buro, 2006; Howell, et al., 2006; Hines, 2023 Steel, 2007). Procrastination, as Steel (2011) describes, is related to the lesser levels of well-being and health. Procrastination is exceptionally chronic in the working world (Ferrari et al., 2007). Procrastination is linked with worse health conditions, including increased stress, and poor health (Siroi et al., 2023). It encompasses more than a quarter of majority of people’s working days, estimating the cost bear by employers around $10,000 per employee per annum (D’Abate & Eddy, 2007; Steel, 2011). The risk that employees may sometimes engage in non-work-related activities e.g., use of technology at night has been noted (Metin, et al., 2018), and increasing demand for social media use has caused a lot many work-to-family and family-to-work conflicts and decisional procrastination of work (Kocak, et al., 2023). Therefore, they may spend extensive work hours (which results with less attention and more tiredness) or they may try to complete their assignments with much urgency (likelihood of making more mistakes) to finish their daily tasks, Therefore, procrastination behaviors, can result in employees’ poorer job performance.

In modern times, where technology hovers over everything we do, and there has been a trend that people start to blame technology for the delay in their due assignments rather than themselves. Not only working people do this practice but students also blame the use of technology for the delay in their assignments (Meier et al., 2016). Therefore, it does not seem appropriate to blame technology for procrastination because technology is becoming a part and parcel of our lives on daily basis (Reinecke, et al., 2018). Most people have access to smartphones (Zaqreen, et al., 2023). More latest studies explored that applications received through emails are mostly blamed as a source for procrastination (Lavoie & Pychyl, 2001; Meier et al., 2016). However, it is true that the use of technology may provide workers an excuse to shift their concentration away from work, technology cannot be solely blamed for procrastination but it is the human fear of failure during work (Lenhart, 2015). In the present study, we planned the degree to which workers involve in the use of technology particularly at night that causes procrastination.

Research data establishes that people with more job demands engage in stress-related presenteeism and procrastination at work (Sarwat et al., 2021). Furthermore, it is reported that bankers face job stress and mental health issues due to heavy workload demands, that lead to procrastination (Rehman & Qamar-ul-Islam, 2019). However, Job demands play a major part by draining physical strength and employ stress on work performance, while the use of technology plays a minor role by buffering the impact of the job demands (Bakker et al., 2003). This is a fact that job demands are not always negative, they may shift into major job stressors if great effort is required to complete the task. Job efforts are, resultanty, related to elevated costs that brings about the undesirable consequences related to mental health issues. So, more efforts are mandatory to fulfill job demands.

Despite its huge contribution to human output, job related intentional delay has nor received considerable attention of researchers to address the issue (DeArmond, et al., 2013).
The role of the use of technology at night causes procrastination and is a big barrier to meeting job demands particularly in highly demanding jobs like bank managers. The personality of the individual plays an important role in the relationship between the use of technology at night, job demands, and procrastination. Bank management is a demanding job that requires a lot of concentration as it deals with money matters. However, there is a scarcity of literature to check the moderating role of personality dimensions in the impact between the use of technology at night, job demands, and procrastination in bank managers.

Latest data supports the notion that self-regulatory mishandling of using social media devices at night often causes procrastination in bank (Exelmans & van den Bulck, 2016). Representing that it may particularly be a relevant problem area to target procrastination in bank managers (Hagger, 2009). In a recent survey conducted on bank employees, it appeared that around 80% of all employees’ recipients were self-identified “procrastinators.” Similarly, a study explored that 100% of bank employees reported that they procrastinate due to the use of technology such as smartphones, TV, and laptops. It was also reported that 100% of the bank employees admitted that procrastination was highly destructive to their jobs (Kühnel et al., 2018). The previous literature approves that still there is a lot more to do for the deep understanding of procrastination in bank managers, particularly the use of technology at night and to study this concerning personality dimensions.

After a careful examination of the literature review, the researchers came to know that there is no study available on the subject before this. Particularly to the population from the public banks of a South Asian country. In this study, we aimed to investigate whether various personality dimensions have an impact in procrastination by employing the big-five model whereby differences in personality can be attained through five major division of personality dimensions. These include conscientiousness (competitiveness and self-discipline), openness to experience (divergent thinking) extraversion (tendency to seek energy by social relations and diverse outdoor activities), neuroticism (tendency to experience negative emotions such as depression) and agreeableness (characterized by altruism and a helpful person).

2 Literature Review
2.1 Procrastination

Procrastination is an intentional delay of a planned course of action despite the expectation of negative or worse-off outcomes (Buro, 2006; Howell, et al., 2006; Hines, 2023 Steel, 2007). Procrastination has also been defined as a form of self-regulatory failure, where an employee fails to complete tasks, or assignments correctly or on time due to a lack of motivation, skills needed for the job, and interest (Ismail, 2022). This delay is also thought to be an irrational one (DeArmond, et al., 2014). Procrastination, as Steel (2011) describes, is related to the lesser levels of well-being and health. Therefore, procrastination behaviors, can result in employees’ poorer job performance.
2.2 Technology and procrastination

In modern times, where technology hovers over everything we do, and there has been a trend that people start to blame technology for the delay in their due assignments rather than themselves. Not only working people do this practice but students also blame the use of technology for the delay in their assignments (Meier et al., 2016). Therefore, it does not seem appropriate to blame technology for procrastination because technology is becoming a part and parcel of our lives on daily basis (Reinecke, et al.,2018). More latest studies explored that applications received through emails are mostly blamed as a source for procrastination (Lavoie & Pychyl, 2001; Meier et al., 2016). Zhao,et al.(2022) examines that use of technology is positively correlate with procrastination. In the present study, we planned the degree to which workers involve in the use of technology particularly at night that causes procrastination.

2.3 Role of Personality Dimensions in Moderating the Relationship between Job Demands and Procrastination

Job demands are defined as the physical, social, psychological, and organizational facets of the work that demands persistent struggle and are correlated with certain physical or emotional costs (Demerouti et al., 2009). Research data establishes that people with more job demands engage in stress-related presenteeism and procrastination at work (Sarwat et al., 2021). Furthermore, it is reported that bankers face job stress and mental health issues due to heavy workload demands, that lead to procrastination (Rehman & Qamar-ul-Islam, 2019).

However, Job demands play a major part by draining physical strength and employ stress on work performance, while the use of technology plays a minor role by buffering the impact of the job demands (Bakker et al., 2003). This is a fact that job demands are not always negative, they may shift into major job stressors if great effort is required to complete the task. Job efforts are, resultantly, related to elevated costs that brings about the undesirable consequences related to mental health issues. So, more efforts are mandatory to fulfill job demands.

Despite its huge contribution to human output, job related intentional delay has nor received considerable attention of researchers to address the issue (DeArmond, et al., 2013). As mentioned above, the role of the use of technology at night causes procrastination and is a big barrier to meeting job demands particularly in highly demanding jobs like bank managers. The personality of the individual plays an important role in the relationship between the use of technology at night, job demands, and procrastination. Bank management is a demanding job that requires a lot of concentration as it deals with money matters. However, there is a scarcity of literature to check the moderating role of personality dimensions in the impact between the use of technology at night, job demands, and procrastination in bank managers.

**Personality Dimensions and Procrastination**

The Big Five traits are the ingredients that makeup everyone’s disposition. An individual may be more composite of openness, more conscientiousness, greater extent of extraversion, high agreeableness, and very less neuroticism. Contrarily, others may be more
introverted, disagreeable, conscientious, neurotic and scarcely open at all (Irfan et al., 2015). Recent research found a reverse interaction between procrastination with some personality dimensions such as agreeableness, conscientiousness, and openness to experience, and a positive correlation with personality traits such as extraversion and neuroticism (Kim et al., 2017). Another study elucidated that procrastination is affected by personality traits. Whereas, neuroticism appeared to be positively correlated with procrastination, and conscientiousness appeared to be inversely correlated with procrastination (Huang et al., 2023). There has been a latest trend to conduct research to build connectivity between personality traits and procrastination.

Still there is a lot of things to learn about the inclination to procrastinate as a function of individual variations. procrastination as defined by the differential psychology view, is understood as a personality trait (Klingsieck, 2013). Personality plays an important role to cope negative effects of job demands (Schaufeli & Bakker, 2004). Procrastination at work is a type of failure due to lack of self-regulation to perform a due workplace assignment (Nguyen et al., 2013). Hence, it is assumed that personality traits have a significant impact in procrastination. The following hypotheses for the current study were generated from the literature

H1: There will be a positive relationship of procrastination with the use of technology at night and neuroticism in bank managers.

H2: There will be a negative relationship of procrastination with job demands, extroversion, agreeableness, conscientiousness, and openness in bank managers.

H3: Personality traits will be playing moderating relationship between technology use at night and job demands and procrastination in bank managers.

3 Method

3.1 Research Design

The current study intended to find the relationship between the use of technology at night, job demands, personality traits, and procrastination in private sector bank managers by using a correlation research design.

3.2 Sample

The sample of the study consisted of N= 180 (all men) from private sector bank managers with the age range of 30 to 45 years (M = 35.5, SD = 5.34). Inclusion criterion included they would have been working as managers for at least two years.

3.3 Instruments

The following instruments were used in the current research. Scale of Lanaj et al. (2014) was used to measure respondents’ behavior in using mobile technology at night. The scale comprised 7 items based on Likert scale type of scoring from 1 to 5, where 1 = I hour of using mobile before sleep, 2 = use of mobile for 2 hours before sleep, 3 = 3 hours use of mobile for 3 hours before sleep at night, 4 use of mobile for 4 hours before sleep at night, and 5 = use of mobile phone for 5 hours before sleep at night. In the present study use of technology at night
was taken as an independent variable. Scale of Demerouti et al. (2001) was used to assess the job demands of research participants. It is a 7 items scale measuring job demands. Responses are taken on a Likert-type scale from 1 = never to 5 = always. Job demand was taken as an independent variable in the current research.

The Scale of Lay (1980) was used to evaluate research respondents' procrastination behaviour. This scale comprises 20 items and response was collected on a 5-point Likert-type scale. A higher score indicates a greater inclination to procrastinate. The mean values of the respondents' responses were calculated and used to represent the respondents' procrastination scores. Before their mean scores were calculated, some items that are reverse-scored had been changed accordingly. Reverse scoring items are 3, 4, 6, 8, 11, 13, 14, 15, 18, and 20. The validity of the scale has been confirmed in a variety of contexts (Lay, 1987, 1988; Kusyszyn, 1990).

Big five inventory (BFI) is a 44 items inventory that was used to assess the personality of research participants. Big Five Inventory comprised of five subscales which are “Agreeableness (2R, 7, 12R, 17, 22, 27R, 32, 37R, 42)”, “Extraversion (1, 6R, 11, 16, 21R, 26, 31R, 36)”, “Conscientiousness (3, 8R, 13, 18R, 23R, 28, 33, 38, 43R)”, “Neuroticism (4, 9R, 14, 19, 24R, 29, 34R, 39)” and “Openness (5, 10, 15, 20, 25, 30, 35R, 40, 41R, 44)”. Sixteen items are formed on a reverse scoring method of calculation. Reliability alpha coefficients for different subscales is “E= .80, A= .75, C= .83, N= .85 and O = .68” (Sherry et al., 2007). It is structured on Likert-type five-point scoring with numerical weightage as 1 (strongly disagree), to 5(strongly agree). A higher score on any item would indicate a high level of that particular personality trait of the research participants. Big Five Inventory subscales were considered as moderator variables in the relationship between Technology Use at Night Job demands (IVs) and procrastination (DV).

3.4 Procedure

Data was collected from different private-sector banks in Lahore city of Pakistan. The researchers obtained permission from the human resource departments of the head offices of all banks before data collection. Participation was voluntary and no compensation was given to them for participating in the research. The researchers approached the managers during the bank's hours break period and all information related to the filling of questionnaires was given to them. They were given the assurance that any information gathered from them would solely be kept confidential and used for the study. They were provided with the research questionnaires. Lastly, respondents were thanked for their participation in providing data for the current study.

3.5 Analytic strategy:

The preliminary profile of the research participants was assessed by using the descriptive statistics. Correlation was run to find the relationship between study variables. Moderation analysis was run to explore the interactive effect of technology use at night and personality dimensions on the procrastination behavior of respondents. Similarly, the
interactive effect of job demands with personality dimensions on procrastination was also explored by using moderation analysis.

4 Results & Discussion

4.1 Results

Descriptive statistics comprised the measurement of standard deviations and means for all independent, moderating, and dependent variables on a sample of bank managers. The normality of the respondents’ data was assessed by taking the values of skewness (a source of asymmetry in the probability distribution) and kurtosis ("a mean of the peakedness of normal distribution"). The results of the current study depicted that these values fall in the range of 0.04 to -1.03. The values showed that there was not a single item with severe normality issues because problematic items' suggested values range between greater than -7 and less than 7 (Bandalos & Finney, 2010; Byrne, 2010). A reliability test was run to check the alpha coefficient for each variable.

Table 1: Correlation of personality traits with technology use at night, job demands and procrastination, and descriptive statistics of the bank managers.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Procrastination</th>
<th>M</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology_use_Night (IV)</td>
<td>.25***</td>
<td>10.80</td>
<td>4.21</td>
<td>1.38</td>
<td>1.79</td>
<td>.78</td>
</tr>
<tr>
<td>Job Demands (IV)</td>
<td>-.23***</td>
<td>23.19</td>
<td>4.16</td>
<td>.07</td>
<td>.68</td>
<td>.68</td>
</tr>
<tr>
<td>Extroversion (W)</td>
<td>-.17*</td>
<td>25.83</td>
<td>8.27</td>
<td>1.87</td>
<td>1.34</td>
<td>.76</td>
</tr>
<tr>
<td>Agreeableness (W)</td>
<td>-.32***</td>
<td>31.75</td>
<td>4.91</td>
<td>-.05</td>
<td>-.19</td>
<td>.62</td>
</tr>
<tr>
<td>Conscientiousness (W)</td>
<td>-.33***</td>
<td>31.50</td>
<td>4.88</td>
<td>-.04</td>
<td>-.08</td>
<td>.75</td>
</tr>
<tr>
<td>Neuroticism (W)</td>
<td>.14*</td>
<td>22.60</td>
<td>5.06</td>
<td>-.49</td>
<td>-.43</td>
<td>.67</td>
</tr>
<tr>
<td>Openness to Experience (W)</td>
<td>-.34***</td>
<td>34.73</td>
<td>4.28</td>
<td>-.04</td>
<td>-.19</td>
<td>.66</td>
</tr>
<tr>
<td>Procrastination (DV)</td>
<td>-.68</td>
<td>-</td>
<td>-1.03</td>
<td>-</td>
<td>.76</td>
<td></td>
</tr>
</tbody>
</table>

Note: M = mean of scores, SD, Standard deviation, α = alpha reliability coefficient, IV = independent variable, DV = dependent variables, W = moderating variable

First, correlation analysis was run to see the direction of the relationship and the results showed that a significant association exists between variables of interest. Next, taking into consideration the work of Baron and Kenny (1986) regression analyses were carried out to test for moderation effects to provide an early set of preliminary findings. Nevertheless, while applying moderation by using regression, interaction effects were also entered into the equation. To remove the multicollinearity the predictor variable and the moderator variables were "centered" before checking the interaction (Baron & Kenny, 1986). It is advised that if the variable that acts as a moderator is continuous, it is preferable to represent their effect using interaction terms in a way similar to that used in multiple regression analysis (Baron & Kenny 1986) (Bollen 1989; Hayduk 1987). Another vital recommendation is that if the moderator variable is an observed variable, one method of modeling involves making a new variable which is the product of two variables, one of which is the moderator variable (Bollen, 1989; Hayduk, 1987). The main caution kept in mind while using moderation is that the observed variables which interact must themselves be multi-normally distributed (Bollen, 1989). We had already obtained values of Skewness and Kurtosis which fall within the normal range,
therefore, we moved further to produce interaction variables, and interaction effects were tested by using a complete data set of variables.

To test the interaction hypotheses initially all independent variables were standardized and product variables were created. Interaction variables were generated by computing all traits of personality ‘(Extraversion, Agreeableness, Conscientiousness, Neuroticism, Openness to experience)” with two IVs (a) Technology use at Night and (b) Job Demands. To achieve this, Inter1_Tech_Extrovert and Inter2_Job_Extrovert were created by computing Extravert Personality Trait multiplied by Technology Use (Interaction 1) and by Job Demand (interaction 2). Following, two new variables of Interaction and Interaction2 were generated with Extrovert Personality Dimension. The same practice was done by multiplying the other four personality traits with both independent variables. Thus, 9 interaction variables were obtained from Interaction 1 to 9.

Next, structural equation modeling (SEM) was carried out because earlier findings suggest that it brings more accurate estimates and less bias, as each effect is estimated while partially out the other effects (Iacobucci, 2008). Therefore, SEM is considered a better option because it reduces the problems with multicollinearity (Iacobucci, 2008).

**Figure No 1: Impact of Technology use at Night and Job Demands on Procrastination under the influence of Extrovert**

[Diagram showing relationships between Technology use at Night, Job Demand, Inter1_Tech_Extrovert, Inter2_Job_Extrovert, and Procrastination]

**Table No 2: Regression weights of Extravert Personality Trait for Technology use at Night and Job Demands on Procrastination**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Estimate</th>
<th>S.E</th>
<th>C.R</th>
<th>P</th>
<th>label</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZProcrast ← ZTechnology_Use_Night</td>
<td>.250</td>
<td>.174</td>
<td>7.751</td>
<td>***</td>
<td>Par_1</td>
</tr>
<tr>
<td>ZProcrast ← ZJob-Demands</td>
<td>-.191</td>
<td>.227</td>
<td>-2.794</td>
<td>.005</td>
<td>Par-2</td>
</tr>
<tr>
<td>ZProcrast ← Inter_Technology x Extrovert</td>
<td>-.262</td>
<td>.006</td>
<td>-6.600</td>
<td>***</td>
<td>par_3</td>
</tr>
<tr>
<td>ZProcrast ← Interaction_Job x Extrovert</td>
<td>.173</td>
<td>.008</td>
<td>2.207</td>
<td>.027</td>
<td>par_4</td>
</tr>
</tbody>
</table>

Note: Estimate = coefficient, S.E. = standard error of mean scores, C.R. = critical ratio, P = p-value (.05, .01, .000)
The result shows Estimate, S.E. (standard error), and C.R. (Critical Ratio) numbers that are computed assuming a normal distribution of the observed variables. In the current study each covariance is significant ($p < .001$). The path coefficient between Technology Use at Night and Procrastination is .25 ($p < .001$) which is a significant positive correlation, indicating that bank managers adopt the habit of Tech_use_Night, and their adaptation increases the procrastination of bank managers. The second path coefficient between Job Demands and procrastination is -.19 ($p < .01$) which is a significant negative correlation, depicting that bank managers pass through high Job Demands (JD), this increase of JD decreases the habit of Procrastination of bank managers. When Technology Use at Night was entered with the Extravert personality dimension, this reveal that Extrovert moderates the effect of independent variables (Technology use at Night and Job Demands) on the dependent (Procrastination) variable. The regression weights generated from the regression analysis are also shown in Table 2, which indicates that the product term of InterTechnology x Extrovert and Interaction Job x Extrovert is significant. The results indicate that the interaction of Technology use at Night and Extroverts has a significant positive effect on Procrastination and the Interaction of Job Demands x Extrovert has a significant negative effect on Procrastination. Model fit was good ($\chi^2/DF = 1.091; CFI= 0.941; GFI= 944; RMSEA=0.021$) for the moderated model depicted in Figure 1.

Figure No 2: Impact of Technology use at Night and Job Demands on Procrastination under the influence of Conscientiousness

![Figure 2](image-url)

Table no 3: Regression weights of Conscientiousness Personality Trait for Technology Use at Night on Procrastination

<table>
<thead>
<tr>
<th>Variables</th>
<th>Estimate</th>
<th>S.E</th>
<th>C.R</th>
<th>P</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZProcrast ← ZTechnology_Use_Night</td>
<td>.176</td>
<td>.072</td>
<td>2.430</td>
<td>.009</td>
<td>par_1</td>
</tr>
<tr>
<td>ZProcrast ← Zconscientiousness</td>
<td>-.182</td>
<td>.069</td>
<td>-4.058</td>
<td>.000</td>
<td>par_-2</td>
</tr>
<tr>
<td>ZProcrast ← Inter_Technology x Conscientiousness</td>
<td>-.191</td>
<td>.077</td>
<td>-2.64</td>
<td>.023</td>
<td>par_3</td>
</tr>
</tbody>
</table>

Note: Estimate = coefficient, S.E. = standard error of mean scores, C.R. = critical ratio, $p=$ p-value (.05, .01, .001)

The results given in Table 3 show that the coefficient in path 1 between Technology use at Night and Procrastination is 0.18 ($p < .01$) which is positive and statistically significant,
indicating that the bank managers with Technology use at Night, adapt the habit of Procrastination. Similarly, the second path between Conscientiousness and Procrastination is negative and statistically significant \(-0.28 \quad (p < .001)\), indicating that managers having Conscientiousness personality traits would not procrastinate. The last path presents the result of the Interaction effect of Technology use at Night and Conscientiousness is \(-0.16 \quad (p < .05)\), which has reduced the effect of the independent variable (TUN) by moderating Procrastination which is DV. A significant effect did not appear on the 4\textsuperscript{th} path which was \(\text{Inter}_\text{Job}_\text{Con}\) with Procrastination, therefore, the path was removed from the model. The model fit was good \((\chi^2/DF = 1.031; \text{CFI}= 0.957; \text{GFI}= 0.951; \text{RMSEA}=0.022)\) for the current moderation model shown in Figure 2.

Figure No 3: Impact of Technology use at Night and Job Demands on Procrastination under the influence of Neuroticism

![Diagram showing the relationship between Technology use at Night, Job Demands, Neuroticism, and Procrastination with regression weights and critical ratios]

Table No 4: Regression weights of Neuroticism Personality Trait for Technology use at Night on Procrastination (Figure 3)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Estimate</th>
<th>S.E</th>
<th>C.R</th>
<th>P</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Z\text{Procrast} \leftarrow Z\text{Technology}<em>\text{Use}</em>\text{Night})</td>
<td>.176</td>
<td>.072</td>
<td>2.430</td>
<td>.009</td>
<td>par_1</td>
</tr>
<tr>
<td>(Z\text{Procrast} \leftarrow Z\text{Job}_\text{Demands})</td>
<td>-.213</td>
<td>.073</td>
<td>-2.912</td>
<td>.004</td>
<td>par_2</td>
</tr>
<tr>
<td>(Z\text{Procrast} \leftarrow Z\text{Neuroticism})</td>
<td>.131</td>
<td>.071</td>
<td>1.854</td>
<td>.064</td>
<td>par_3</td>
</tr>
<tr>
<td>(Z\text{Procrast} \leftarrow \text{Inter}<em>\text{Job}</em>\text{Demands} \times \text{Neuroticism})</td>
<td>-.152</td>
<td>.064</td>
<td>-2.359</td>
<td>.018</td>
<td>par_4</td>
</tr>
</tbody>
</table>

Note: Estimate = coefficient, S.E. = standard error of mean scores, C.R = critical ratio, P = p-value (.05, .01, .001)

The results in Table 5 show that in path 1 coefficient between Technology use at Night and Procrastination is 0.18 \((p < .01)\) which is positive and statistically significant, indicating that managers have neuroticism personality traits and use Technology at Night Procrastinate. In addition, coefficients of the second path Job Demands in combination with Neuroticism personality trait leads to not Procrastinate their due assignments -0.22 \((p < .01)\). Significant negative correlation appeared between managers with Neurotic personality and Procrastination \((B = .13, \; p < .05)\). The regression weights from this regression analysis indicate that the product-term of Job Demands and Neuroticism is significant with Procrastination and the
direction is negative -0.16 ($p < .05$). Significant effect did not appear on the $4^{th}$ path which was Inter_Job_Neo with Procrastination, therefore the path was removed from the model. The model fit was good ($\chi^2/DF = 1.261; CFI= 0.932; GFI= 920; RMSEA=0.032$) for this moderation analysis.

Figure No 2: Impact of Technology use at Night and Job Demands on Procrastination under the influence of Openness

Table No 5: Regression weights of Neuroticism Personality Trait for Technology use at Night on Procrastination

<table>
<thead>
<tr>
<th>Variables</th>
<th>Estimate</th>
<th>S.E</th>
<th>C.R</th>
<th>P</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZProcrast ← Openness to Experience</td>
<td>-.33</td>
<td>.068</td>
<td>-4.832</td>
<td>.000</td>
<td>Par-1</td>
</tr>
<tr>
<td>ZProcrast ← Inter_Technology x Openness</td>
<td>-.24</td>
<td>.068</td>
<td>-3.595</td>
<td>.000</td>
<td>par_2</td>
</tr>
</tbody>
</table>

Note: Estimate = coefficient, S.E. = standard error of mean scores, C.R. = critical ratio, P = p-value (.05, .01, .001)

The results in Table 5 show that in path 1 when Openness to Experience goes up by 1, Procrastination will go down by -0.33 ($p < .001$). The regression weights from this regression analysis indicate that the product-term of Technology use at Night and Openness is significant regarding Procrastination and the direction is negative -0.20 ($p < .01$). This means that when Technology use at Night x Openness will go up by 1, Procrastination will go down by -0.24 times. Two paths remained non-significant (1) Tech_use_Night to Procrastination and (2) Inter10_JobDemand x Openness, therefore they were removed from the model. The model fit was good ($\chi^2/DF = 1.310; CFI= 0.941; GFI= 931; RMSEA=0.021$) for the current moderation model shown in Figure 4.

4.2 Discussion

The current research had two major objectives. Firstly, it aimed to have a considerable knowledge of procrastination by directing its correlation with imperative constructs like personality dimensions, the use of technology at night, and job demands in bank managers.

Secondly, to identify whether personality traits moderate the relationship between the use of technology at night, job demands, and procrastination in bank managers. By addressing this objective, the aim was to have an understanding of the associates of procrastination and the particular part played by the variables.

The results of the study demonstrate that managers with extrovert, conscientious, and/or neuroticism personality types had a negative moderating effect on the relationship between
technology use at night and procrastination. Previous researchers only depicted the correlation of personality types with procrastination and did not completely explore the underlying phenomenon of procrastination (Gopinath et al., 2021; Nguyen et al., 2013). The current research extended its utility by finding that managers with extrovert and conscientious personality types can work with full vigor and strength without procrastination even when they are using technology at night. The unique variables of technology use at night and job demands were an addition to understanding the complete relationship between personality types and procrastination behavior. The results further showed the moderating effect of personality traits in the association between job demands and procrastination. Extrovert personalities were more prone to procrastinate compared to managers with neurotic personalities when they have high job demands. Extraverts’ preference for social interactions have been explored which might be a common distraction, which helped procrastination and they do not care about their job demands (Haycock, 1993; Strongman & Burt, 2000, Zhao, 2018).

Conscientiousness is the ability to meet the deadline and is a good predictor of long-term success in life (Peterson, 2016). It seems to be particularly good at predicting outcomes for people who are working in managerial, administrative, and process management occupations. The current research found that managers with conscientiousness will not procrastinate though they use technology at night. People with more conscientious appears to be more task-oriented and task completion, and, therefore, are more job-oriented (Karatas & Bademcioglu, 2015; Kim et al., 2017). Certainly, procrastination has been conceived as a weak dimension of personality (Firouzeh & Jalil, 2011), whereas, conscientiousness is the sense of complete awareness regarding responsibilities (Pychyl & Flett, 2012). People with more conscientiousness are more attentive on the completion of their assignments and hence are more effective at controlling the pace and timing of the work at hand (Ngamaleu & Nke, 2021; Zhao, 2018).

Some researchers reported that greater levels of neuroticism (less emotional control) is associated with greater procrastination (e.g., Di Fabio, 2006; Karataş & Bademcioglu, 2015; Kim et al., 2017; Lee, et al., 2006) as individuals with neurotic personality trait usually doubt their competence and analyze events negatively. Therefore, these people are predisposed to self-handicap and procrastinate without any reason (Steel, 2007). This implies that managers with neuroticism personality traits may defer their due assignments because of excessive use of technology at night (Rice et al., 2012; Gallagher, 1996). The research also explored that managers with neurotic personalities will not procrastinate if job demands are high.

Openness to new experiences had a negative moderating effect on procrastination in the current research. Managers with openness to new experience personality dimension are receptive to attaining new experiences in their daily lives, therefore the use of technology at night will not force them to procrastinate their assignments. Literature also supports this finding and has shown that agreeableness and openness to experience are not associated with procrastination (Irfan et al., 2015; Watson, 2001). Hence, both these two traits of personality were not appeared as correlates of procrastination that is why more studies addressing this particular area are vital in future.
Individuals with more agreeableness appears to be more responsible, effectively schedule their work and time, thus utilizing their energies by directly focusing on the task (Cañadas-De la Fuente et al., 2015; Zhao, 2018). Therefore, they are always more eager to arrange tasks for efficient work completion. No significant relationship between agreeableness was explored with procrastination in the current research project (Bushra & Suneel, 2021).

Conclusion

In this current research, the relationships between procrastination and personality traits were explored. The use of technology and job demands were also studied regarding procrastination. The analysis of the results needs certain cautions. First, the sample size remained small due to the non-cooperation of bank managers. Second, procrastination was measured only once in the present study. Presumably, bank managers’ procrastination levels may vary over time, especially as deadlines for a task. It is, thus, viable to assess procrastination in bank managers at various time intervals. Third, data was collected from male bank managers only and gender differences could not be sought out which is a great limitation of the present study.

Implications: The research findings will help in understanding procrastination in bank managers. It deepens our knowledge of the crucial part that personality variables play in understanding procrastination and lays a solid framework for future investigation. Organizational psychologists could use the data to better understand how technology is used at night and how work demands can contribute to procrastination.

Declaration of interest: No potential conflict of interest

Research Funding
The authors received no research grant or funds for this research study.

References

Byrne, B. M. (2010). Multivariate applications series. Structural equation modeling with AMOS: Basic concepts, applications, and programming (2nd ed.). Routledge/Taylor & Francis Group


