Do It…Now or Never! Procrastination As a Backlog to Employee Productivity

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Abstract

Procrastination has become a part and parcel of life nowadays. People are becoming lazy due to one and the other reason and use to delay work to latest possible time which eventually lead to messing up the whole schedule as well as affect physical as well as psychological well-being of a person also. This research is conducted to find out the major factors that induce procrastination tendency in the workplace. Based on observation and available literature, a questionnaire was made. In this study, a sample of 100 employees was collected from people working in Business Process Outsourcing (BPO) companies of the Chandigarh region. SPSS 25 was used for the purposes of analysis. By using exploratory factor analysis, three factors i.e., the number of alternatives available, level of anxiety, and cyberslacking, have been explored that cause delay in work and are the major cause of low productivity. These factors were confirmed later on using confirmatory factor analysis using AMOS 23.0.

Keywords: Procrastination, number of alternatives available, level of anxiety, cyberslacking, employee productivity.

INTRODUCTION

Everybody tends to delay the work from time to time. Nevertheless, certain individuals appear to hesitate habitually, irrespective of the circumstance. They are considered procrastinators, while people without this habit may be labelled punctual (Dewitte, & Schouwenburg,2002). Individuals tend to procrastinate despite recognition of its negative consequences (Steel, 2007) which eventually lead to unsatisfactory performance (Ferrari, O'Callaghan, & Newbegin, 2005; Solomon & Rothblum, 1984). Exploration of a massive body of literature has demonstrated that procrastination is not just a problem of time management (Chun Chu & Choi, 2005). In the procrastinating process, preferences often play a significant role. These models presume that a potential procrastinator is assumed with only one task and, thus, the only difficulty is whether the person completes the task (O'Donoghue & Rabin, 2001). It is a complicated mechanism involving affective, emotional, and modules of the actions (Fee & Tangney, 2000). It can be stated as a habitual or intentional delay of starting or finishing a task despite knowing it might have negative implications (Wikipedia contributors, 2020). Procrastination is defined as a "voluntary delay of an intended course of action despite expecting to be worse off for the delay" (Steel, 2007, p. 66). Procrastination has been studied as a dysfunctional, self-effacing behavior that inevitably leads to unintended outcomes (Choi and Moran,2009). Often individuals who score high on the scale of procrastination have tendencies such as arousal, boredom-proneness, and sensation seeking (Ferrari, O'Callaghan, and Newbegin, 2005). The fear phenomenon also leads to procrastination. Fear of failure or perceiving a lack of adequate skills to perform tasks can lead to procrastination. The present paper gives a glance at how the tendency of procrastination is influenced by the number of alternatives available, the anxiety level of a person, and cyberslacking. Further, it describes its impact on employee performance. The results will be of particular value to the domestic as well as international organizations seeking to tackle this issue among their employees.

OBJECTIVES OF THE STUDY

1. To provide a conceptualization of procrastination and the factors inducing the phenomenon;
2. To assess the reliability and validity of the measures.

REVIEW OF LITERATURE

Several studies have linked procrastination to individual work performance, with the procrastinator showing the poor overall performance (Steel, 2007; Steel, Brothen, & Wambach, 2001; Williams, 2010; Wesley, 1994). Solomon & Rothblum (1984) explore that procrastination is not only a deficit in the patterns of research or time management but also includes physiological, emotional, and affective elements of interaction. Ellis and Knaus (1977) found that 70% of college students were involved in academic procrastination. Men tend to procrastinate slightly more than women, and this tendency seems to reduce with age (Steel, 2007; Steel & Ferrari, 2012). To Lay & Schouwenburg (1993) the higher the commitment to set goals and targets, the better the likelihood of work being completed. Lay (1986) examined that procrastination was positively correlated to disorganization and independent of need-achievement, energy level, and self-esteem. O'Donoghue and Rabin (2001) presented a model that assumes that a procrastinator chooses only one alternative and is unaware of self-control problems. An attractive option is forgotten, so they prepare for a more appealing solution that will never come to an end.

A study by Sirois, Van Eerde & Argiropoulou (2015) found that procrastination has substantial indirect effects on the quality of sleep by stress. Only a few respondents were diagnosed with a mental health disorder, while the most commonly recorded mental health conditions were depression and anxiety. Kroese, De Ridder, and Adriaanse (2014) demonstrated that sleep delay induces inadequate sleep. It can cause problems related to emotional and physical well-being.

Sirois (2014) conducted a study that shows that lower levels of self-compassion can explain some of the stress faced by procrastinators and others. Therefore, strategies that foster self-compassion could be helpful for these people.

Even in the setting of academics, excessive usage of smartphones has been linked to a wide range of detrimental behaviors and results. Procrastination could be a factor in the situation (Rozgonjuk, Kattago, & Täht, 2018). Lavoie and Pychyl (2001) examined the extent to which individuals procrastinate because of web-based media. Results revealed that cyberslacking is widespread among participants sampled. Attempts to improve efficiency by producing and sharing information more efficiently by leveraging technology did not work absolutely.

Przepiorka, Błachnio & Díaz-Morales (2016) did research that indicates that all forms of procrastination, both general and decision-making, are connected to Facebook intensity as well as Facebook intrusion and that decision-making procrastination correlates with age and sex in predicting Facebook intensity and intrusion.

Although the above studies mentioned the various reasons why procrastination among individuals has enhanced and the outcome of the phenomenon is in the form of low productivity. No research paper has depicted the association between various variables causing procrastination. The present study will show the associations due to which procrastination has become a long-lasting phenomenon. The result of the study would be of utmost use for the organization whose productivity has been hampered due to the aforesaid reasons.

CONCEPTUAL FRAMEWORK OF THE STUDY

Procrastination, a tendency to delay, is a normal phenomenon nowadays. It could be bearable in normal home life but when it comes to work-life, it can create great obstacles and simultaneously make the daily routine haphazard too. In this study, we will study some variables that impact the tendency of procrastination among people. These variables are -

1. *Number of alternatives available*
Everything in the world can be used in several ways. Whether it is cooking some dish from an ingredient or making plans for construction on the land, there is a variety of choices available

to the decision-maker. Here comes the biggest problem, i.e., to choose one option out of the alternatives available. The decision maker needs to have some skills in order to make a rational decision. Every decision has an opportunity cost. An opportunity cost is defined as "the value placed on the most highly valued of the rejected alternatives or opportunities." (Buchanan, 2008) or "when one solution is selected at the expense of all other choices when one solution is selected at the expense of all other choices" (Oxford English Dictionary, 2010). In this situation, the decision-maker may face some stress and get confused while making the decision. This can delay the actual work and eventually lead to procrastination.

2. *Level of anxiety*

It is generally assumed that anxiety is the main reason for the tendency of procrastination although the relationship between these variables is not direct. Some researchers have studied the big five model of personality dimensions especially neuroticism and correlate that with procrastination (Scher, Ferrari, & Nelson, 2002; McCown, Petzel, & Rupert, 1987; Schouwenburg, 1995; Aitken, 1982; Rothblum et al., 1986). A person with high anxiety issues faces problems like oversensitivity, worry, fear, lack of confidence while socializing, and lack of an ability to concentrate (Scher and Osterman, 2002). This could be a major factor affecting the tendency of procrastination among individuals.

3. *Cyberslacking*

Cyberslacking refers to the use of work computers and other resources by employees during working hours for non-work-related purposes. When employees are cyber-slacking, they use their employer's device, internet connection, or other resources for personal matters or entertainment (Kenton, 2021). Social media has grown pervasive and critical for social networking and information sharing in recent years (Asur & Huberman, 2010, August). Even while social media technologies are largely used to interact and distribute information, researchers have only just started to investigate their potential as learning tools. Consequently, they were unable to find a large quantity of literature regarding the use of social media to support informal learning and the acceptability of media platforms as a set of tools that contribute to and improve workplace learning (Thomas & Akdere, 2013; Shepherd, 2011; Sakshi & Sandhu, 2021). But along with this, it is affecting the workplace adversely because employees use it for personal purposes and consume a lot of time scrolling on social media. It has become a necessity nowadays for people. They feel stressed if they are not able to check their smartphones or social media once in a while. The number of individuals using social media is expected to rise to about 4.41 billion by 2025, from the current level of over 3.6 billion users (Statista Research Department, September 10, 2021). This factor also induces a tendency of procrastination among people.
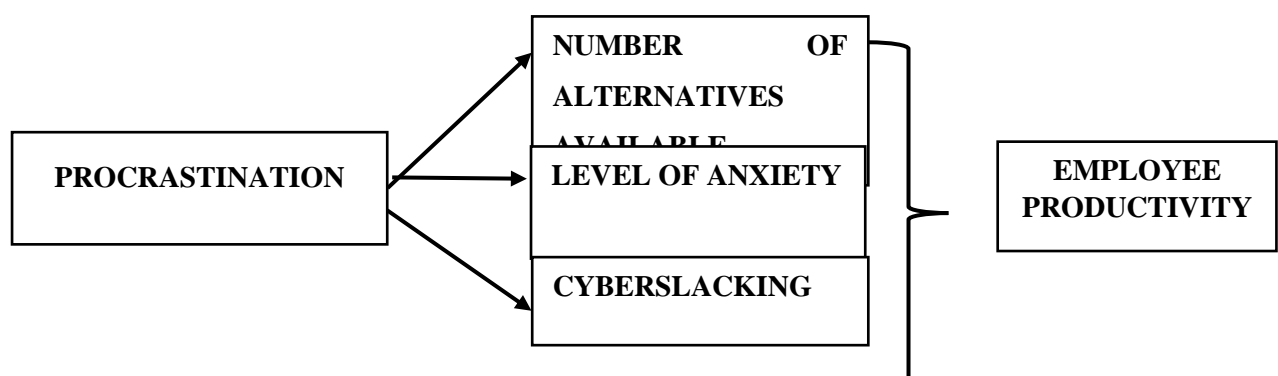

Figure 1: Conceptual Framework of the Study (Source: Researcher)

RESEARCH METHODOLOGY

The present research study is exploratory in nature where an attempt has been made to study the impacts of the number of alternatives available, level of anxiety, and cyberslacking on procrastination in the workplace. The convenience sampling method is used for data collection. On the basis of observation and available literature, a questionnaire was made. In this study, a sample of 150 employees was collected from people working in Business Process Outsourcing (BPO) companies of the Chandigarh region. The first sample of 150 people from Punjab is used for evaluating the factors out of which 50 unengaged responses were removed while data cleaning. A self-made questionnaire was used for data collection. Data was collected from the online method hence the respondents were unable to miss any response. The demographic information of both of the samples is contained in table 1.

Table 1 – Demographic Information of Respondents

Variables		Frequency	Percentage	Cumulative Percentage
Gender	Male	69	69	69
	Female	28	28	97
	Others	03	03	100
Age	20-30	55	55	55
	30-40	32	32	87
	40-50	10	10	97
	50 and above	03	03	100
Area	Urban	65	65	65
	Rural	35	35	100
Marital Status	Married	60	60	60
	Unmarried	40	40	100

ITEM GENERATION AND CONTENT VALIDITY

A comprehensive literature survey was performed for framing constructs and specifying the domain. A pool of 09 items was created based on the tentative factors. All the items were reflective which means removing an indicator does not affect the real meaning of a factor. A structured questionnaire was formed in which each item was measured on 5-Point Likert Scale; where 1 means Strongly Disagree and 5 means Strongly Agree. A pilot study was conducted with a sample 30 respondents which simply ensure the content validity of the statements. The procedure also suggests the minor alteration of the items. SPSS 25 and AMOS 23.0 was used for analysis purposes. The simple mean approach was used to highlight the different factors behind procrastination. The mean value of more than 3 signifies a higher level of representation of the variable. Table 2 reveals that the respondents acknowledged that each factor may be the cause of procrastination, as the mean value of each factor was found to be more than 3. In the next step, exploratory factor analysis was applied with the 9 items.

Table 2- Descriptive Statistics

Factors	Mean	Std. Deviation	Analysis N
C1	5.90	1.823	100
C2	5.90	1.673	100
C3	5.81	1.756	100
A1	6.15	1.266	100
A2	6.10	1.446	100
A3	6.28	1.319	100
S1	5.24	2.060	100
S2	5.64	1.957	100
S3	5.83	1.758	100

ANALYSIS

EXPLORATORY FACTOR ANALYSIS

EFA is a technique that is used to find out the underlying information in the data. It is used to explore the factors which are representing the maximum variance of the data. Before applying the EFA it is necessary to meet the two assumptions i.e., Kaiser-Meyer-Olkin Measure should be greater than 0.7, and Bartlett's Test of Sphericity should be below 0.05. Table 3 displays two tests that recognize the adequacy of data for structure detection. The Kaiser-Meyer-Olkin sampling adequacy measurement is a descriptive statistic that displays the proportion of variances in your variables affected by the underlying factors. High values (near to 1.0) normally demonstrate that the data can be used for factor analysis. The effects of factor analysis may not be very useful when the value is less than 0.50. This study is having a KMO of 0.811 which means data is suitable for research.

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.811
Bartlett's Test of Sphericity	Approx. Chi-Square	492.899
	df	36

	Sig.	
		.000

Testing hypothesis:

H0: There is no significant relationship between the variables in the population.

H1: There is a significant relationship between the variables in the population.

The sphericality test by Bartlett measures the idea that your correlation matrix is an identity matrix that will prove that your variables are incompatible and thus inappropriate to structure detection. Small values of significance levels (less than 0.05) prove that the data can be of interest to factor analysis. We have 0.000 significance which means the data is adequate. Bartlett's Test of Sphericity was applied to test the hypothesis which showed that the P value was 0.000 which is less than the 0.05 and hence the null hypothesis (H0) was rejected and hence it can be concluded that there is a significant relationship between the variables in the population. The main purpose of the study was extraction of factors. So, thereafter, Principal component method was applied to extract factors having eigen value of more than 1. The eigenvalue is the most common method to determine the number of factors to be retained. Using eigenvalues > 1 is only one indication that the scores on the component are having positive reliability (Cliff, 1988). The factors having the highest eigenvalues have the most variance. In table 4, the first three components are displaying the highest eigenvalue and explain 77.9 % of the variance. Hence, they are retained factors.

Table 4- Factor Analysis Summary

Initial Eigenvalues			
Component	**Total**	**% Of Variance**	**Cumulative %**
1	4.523	50.257	50.257
2	1.464	16.267	66.524
3	1.026	11.401	77.925
4	.481	5.350	83.275
5	.459	5.099	88.374
6	.405	4.499	92.873
7	.264	2.932	95.805

8	.212	2.353	98.158
9	.166	1.842	100.000

In table 5, the rotated component matrix shows the factors and the loadings of the items. Factor 1, Factor 2, and Factor 3 contains 3 items each. In the next step, the reliability of the factors was determined. For this purpose, Cronbach's Alpha values were used. It is considered a measure of internal consistency. It displays how closely the components within the data are attached with each other. Cronbach's Alpha value of 0.70 is considered good for data

analysis. The three factors that we extracted with factor analysis are having Cronbach's Alpha values of 0.861, 0.863, and 0.795 respectively. It reveals that the data has a high level of internal consistency. The results show that all three factors have a Cronbach alpha value of more than 0.70 which confirms their reliability.

Table 5: Rotated Component Matrix

	Components			Cronbach's Alpha
	1	2	3	
A3	.891			0.861
A2	.842			
A1	.726			
C3		.857		0.863
C1		.822		
C2		.817		
S2			.866	0.795
S1			.847	
S3			.684	

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

LABELING OF THE FACTORS

After exploring the factor structures in the data, the next step was to label them. As on the basis of the review, we hypothesized three factors namely- the number of alternatives available, level of anxiety, and cyberslacking. Based on these factors, the items of the questionnaire were framed and it was expected that these items will constitute a factor. As table 5 shows which factor contains the items that collectively represent the factor which finally suggests that the name of the factor. Finally, we took again the expert advice from 5 experts for labeling the factors and they confirmed the labeling of the factors. Therefore, we labeled the factors

named as – the number of alternatives available, level of anxiety, and cyberslacking for the factors 1, 2, and 3 respectively.

CONFIRMATORY FACTOR ANALYSIS

Confirmatory factor analysis studies the relationship between observed values and latent variables. It primarily deals with measurement models (Brown and Moore, 2012). After exploratory factor analysis, confirmatory factor analysis was also applied in the study to validate the factors. Confirmatory factor analysis using AMOS 23.0 was carried out to test the measurement model presented in Figure 2
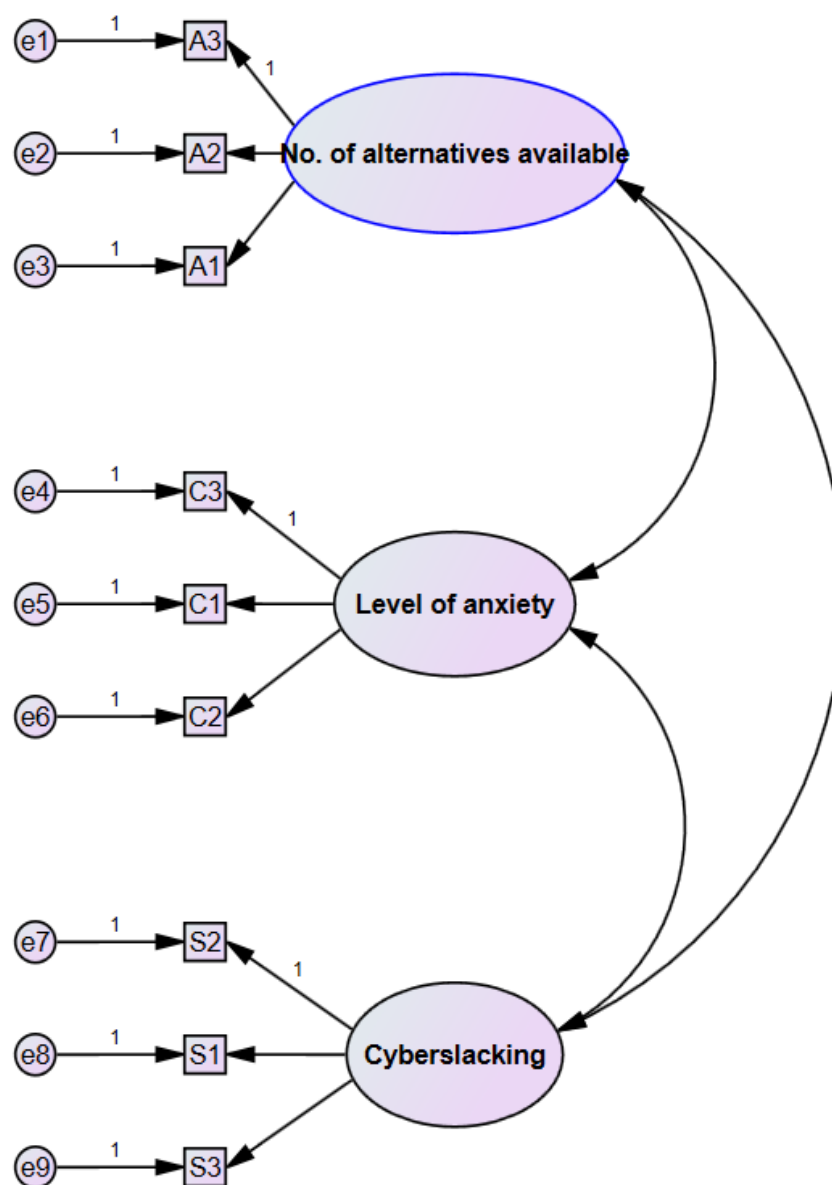
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Figure 2- Measurement Model

MODEL FIT

Model fit measures the degree to which the structural model is appropriate for sample data. There is a mixed view of whether the model fit indices should be used or not. Therefore, following the previous guidelines to report results of CFA some important model fit indices are reported with their threshold values. Table 6 depicts the CMIN/DF (minimum discrepancy divided by degrees of freedom) ratio of 2.163, which is within the recommended range of less than 5, which

indicates that it is an excellent fit between the hypothetical model and the sample data (Carmines et al., 1981). The Root Mean Square Error of Approximation (RMSEA) was 0.108, which does not fall within the cut-off value of 0.06 (Hu & Bentler, 1999). This could be improved further by removing C1 based on the standardized residual covariances. The Comparative Fit Index (CFI) was 0.941 which is also under the acceptable limit of 0.95. Standardized Root Mean Square Residual (SRMR) for good model fit should be less than 0.08. This study is having an SRMR value of

0.07 which is an excellent fit for the model. P of Close Fit (PCLOSE) provides the p-value of the null hypothesis that the estimate is below 0.05. A P-value of 0.013 shows that it is statistically significant. Our results have matched this criterion. It indicates that the study has a good model.

Table 6: Model fit measures

Measure	Estimate
CMIN	51.905
DF	24
CMIN/DF	2.163
CFI	0.941
SRMR	0.070
RMSEA	0.108
PClose	0.013

Reliability and Convergent Validity

Table 7 shows the reliability and convergent validity of the constructs. The reliability of the constructs was ensured with the calculated value of the composite reliability. According to Kock (2020), the CR value for each construct should be greater than 0.70. Table 7 shows that each construct has more than 0.70 value of CR which confirmed the reliability of all the constructs. The convergent validity of the constructs was determined with the value of AVE (Average Variance Extracted). The convergent validity of the construct is manifested through the average variance extracted. AVE measures the amount of variance in the construct regarding the amount of variance due to measurement error (Fornell & Larcker, 1981). The higher the value of variance extracted, the higher will be the representation of latent construct (Hair et al., 1998). Any construct having an AVE value of more than 0.50 is regarded as appropriate (Bagozzi and Yi, 1988). Our results have matched this criterion.

Table 7: Reliability and Convergent Validity

Variables	λ	λ^2	$1-\lambda^2$	CR	AVE
	0.891	0.793881	0.206119	0.967035728	0.67664
	0.842	0.708964	0.291036		
No. of alternatives available	0.726	0.527076	0.472924		
	0.857	0.734449	0.265551	0.871039263	0.692541
Level of anxiety	0.822	0.675684	0.324316		

	0.817	0.667489	0.332511		
	0.866	0.749956	0.250044	0.843653695	0.645074
	0.847	0.717409	0.282591		
Cyberslacking	0.684	0.467856	0.532144		

DISCUSSION

The results of the study elucidate the relation between procrastination and various variables such as health, stress, fear, social media, choices, sleep delay, etc. Studies say that 15-20 percent of the general population chronically procrastinate (Harriott and Ferrari, 1996) with similar results have been found around Australia, United Kingdom, United States of America, Spain, Peru, and Venezuela (Ferrari et al.,2005, 2007). Confusion of priorities among different tasks can lead to stress as well as procrastination. Anxiety can simultaneously lead to health issues like sleep delays, depression, and illness. It can affect the working efficiency of a person which will also reduce their morale. More than 40 million adults (19.1%) in the United States suffer from anxiety disorders. Currently, about 7% of children over the age of 317 suffer from anxiety each year. Most people develop symptoms before the age of 21 (National Alliance on Mental Illness, n.d.) Cyberslacking is also a crucial reason for procrastination. All these variables create a cycle of issues like difficultly in choice will lead to stress, then sleep delays, health issues, anxiety, and then eventually low performance. Cyberslacking is like fuel to the fire. It makes the performance of employees worse. Hence, it implies that in order to break the cycle of procrastination, in the initial phases the delays should be avoided.

IMPLICATIONS

The findings of this study are of utmost importance for organizations. Despite giving the best facilities and chances to the employees, still, the productivity was lacking behind the expected criteria. The Board of Managers of the companies is not able to understand why the company is facing such a decline. For them, giving timely training, promotions, a good environment, etc. are sufficient to make employees devoted towards the company. But they need to understand that it is a natural human tendency to delay things. They are used to easy working style rather than working hard. In this paper, the three factors, i.e., the number of alternatives available, level of anxiety, and cyberslacking were extracted that were the main causes of procrastination in any organisation. In order to enhance employee's performance, the management needs to control these variables and these variables can be controlled only through some strict surveillance over employees and assisting them at right time in case of any confusion instead of blaming them for all the decisions. In this way, by reducing the confusion among employees, their anxiety level can also be reduced. They will be able to work more efficiently. Strict surveillance can decrease the tendency of cyberslacking among them (Lee, 2017). Hence, the results will be of immense help to the organisations to control the downfall in the employee's performance.

CONCLUSION

This research specifies the scientific ramifications from a theoretical perspective. The study hypothesized three immediate reasons among the employees for procrastination in the workplace and finally confirmed these as factors. The study pivot around the three factors i.e., number of alternatives available, level of anxiety, and cyberslacking. The results empirically confirmed these factors and provide a scale for future research. The circular association among various variables gives a glimpse for handling this phenomenon to the organizations. For example- avoiding providing multiple choices to employees can scrutinize their work and reduce stress. Surveillance at the right level is also necessary to reduce procrastination among employees. The massive explosion of previous literature and the interrelation between

variables provide insights to the researchers for further research. However, one major limitation of the paper is that it is limited to the Chandigarh region only. Further research can be done by using a wider region or by using some other variables.

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ANNEXURE

ITEMS	STATEMENTS
A3	It is difficult for me to choose one option among various alternatives.
A2	Choosing between the alternatives take so much time and led to delay in work.
A1	I got stressed when I am not able to select between options.
C3	I have to woke up late nights to complete my work.
C2	I got anxious on the last days because of the pressure of completion of work.

C1	I feel relaxed whenever I complete my work on time.
S3	I scroll social media whenever I got chance.
S2	I use internet for personal use in the office hours.
S1	Using internet while working hours lead to delay in completion time of work.